



City of Sacramento City Council

915 I Street, Sacramento, CA, 95814
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Title: Fire Innovation and Efficiency Study

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Recommendation: Receive and file.

Contact: Max Fernandez, Director, Community Development Department, (916) 808-7940

Presenter: Max Fernandez, Director, Community Development Department, (916) 808-7940

Department: City Manager

Division: Executive Office

Dept ID:

Attachments:

- 1-Description/Analysis
- 2-Background
- 3-Fire Innovation and Efficiency Study

City Attorney Review

Approved as to Form
Matthew Ruyak
5/10/2012 9:44:16 AM

City Treasurer Review

Reviewed for Impact on Cash and Debt
Russell Fehr
5/9/2012 2:27:25 PM

Approvals/Acknowledgements

Department Director or Designee: Max Fernandez - 5/10/2012 8:44:29 AM

Description/Analysis

Issue: In December 2011, the City of Sacramento retained Management Partners to conduct a study of the Fire Department to assess opportunities for innovation and efficiency. The study resulted in 13 recommendations that, if implemented, would generate approximately \$8 million in annual savings and approximately \$1 to \$2 million in new revenues. Key opportunities include:

- Discontinuing the practice of including other forms of leave time for overtime calculations
- Reducing the number of incentive pays provided
- Modifying the deployment of staff in ambulances and engine companies
- Reducing staffing on seven of the City's 24 engine companies from four to three persons.

Policy Considerations: The City continues to experience a structural deficit caused by declining revenues and increasing costs. This study identifies opportunities for cost savings as well as strategies for increasing revenue that can assist the City sustainably aligning expenses with revenues.

Environmental Considerations: Not applicable

Sustainability: Not applicable

Commission/Committee Action: Not applicable

Rationale for Recommendation: The final report identifies opportunities for cost-savings and efficiencies that can help the City sustainably align expenses with revenues in FY 2012/13 and beyond.

Financial Considerations: The study resulted in 13 recommendations that, if implemented, would generate approximately \$8 million in annual savings and approximately \$1 to \$2 million in new revenues.

Emerging Small Business Development (ESBD): Not applicable

Background

■ In December 2011, the City of Sacramento retained Management Partners to conduct a study of the Fire Department to assess opportunities for innovation and efficiency. Management Partners is a professional management consulting firm specializing in helping local governments improve their operations. The study was guided by a Project Steering Committee consisting of the Community Development Director, Fire Chief, Office of Emergency Services Director and Special Projects Manager.

The study included gathering and reviewing background information about the Fire Department's operations and Emergency Medical Services (EMS) delivery system to identify its current strengths and limitations. In addition to gathering and examining operational data and documents, Management Partners conducted 17 interviews with Fire Department executive staff, senior managers and union leaders. The interviews were used to gather ideas for revenue enhancements, service delivery changes, expenditure controls and shifts, and other opportunities and constraints for improving the efficiency of the Department.

Financial and organizational benchmarking was also conducted with six peer agencies to assist in comparing how Sacramento's operations compare generally with similar organizations in terms of size as well as geography. The six agencies included:

- San Jose
- Sacramento Metro Fire
- Oakland
- Long Beach
- Fresno
- Roseville

Sacramento Metro Fire and Roseville are local agencies selected because of proximity to Sacramento.

As the Final Report notes, benchmarking is useful "to determine whether an agency is at the polar ends of a scale or somewhere in the middle, and it is especially useful in identifying the reasons that others may be more efficient in performing the same operations." The Report cautions, however, that benchmarking data has its limitations.

"Although helpful...benchmarking data should be used carefully. Every agency is unique and consequently, attempts to compare are always imprecise. As a general rule benchmarking data provides information to assist in decision making processes, but should not be used to create formulas or ratios for determining budgeting or staffing allocations."

The study resulted in 13 recommendations that, if implemented, would generate approximately \$8 million in annual savings and approximately \$1 to \$2 million in new revenues.



City of Sacramento Fire Innovation and Efficiency Study

May 2012





May 9, 2012

Mr. John Shirey
City Manager
City of Sacramento
915 I Street, 5th Floor
Sacramento, CA 95814

Dear Mr. Shirey:

Management Partners is pleased to transmit this report containing our recommendations to increase the operational efficiency of the Sacramento Fire Department while maintaining service levels being provided to the community. Our analysis identified a variety of opportunities to improve efficiency by changing the deployment protocols for fire and emergency medical services (EMS), negotiating with labor associations to control certain personnel costs, streamlining operational procedures for dispatch and station assignments, and civilianizing positions that do not require sworn staff. Opportunities to increase revenues associated with fire and emergency medical services also were identified.

This report contains 13 recommendations designed to help the Sacramento Fire Department achieve greater efficiency while providing quality services the community has come to expect. Implementing these recommendations would generate approximately \$8 million in annual savings and between \$1 million and \$2 million in new revenues. Achieving savings in the delivery of services will require not only a concerted effort by the City's elected and appointed leadership, but also collaboration with the Sacramento Area Fire Fighters, Local 522. We hope that the recommendations in this report provide a useful framework for that collaboration to begin.

Thank you for the opportunity to serve the City of Sacramento by assisting with your efforts to improve efficiency in the provision of public services.

Sincerely,

A handwritten signature in black ink, appearing to read "Gerald E. Newfarmer".

Gerald E. Newfarmer
President and CEO

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Executive Summary

Management Partners was retained by the City of Sacramento in December 2011 to conduct an innovation and efficiency study of the Fire Department. Sacramento continues to experience a structural budget deficit caused by declining revenues and increasing costs. Although funding and staffing in the Sacramento Fire Department have been reduced in recent years along with the budgets of other departments, the City was interested in identifying additional opportunities to reduce costs or generate revenues without compromising the service quality of fire and emergency medical response.

Management Partners used a variety of analytical and management techniques in completing this study. We examined a myriad of documents and conducted 17 interviews with Fire Department (SFD) executive staff and senior managers and representatives from the department's labor association. We also conducted benchmarking with comparable cities and fire protection districts. The work was guided by a Project Steering Committee consisting of the community development director, fire chief, special projects manager and Office of Emergency Services director.

Comparison with other agencies indicates that the Sacramento community is paying less per capita for fire and EMS response than most relevant peers. SFD's operating cost per FTE is lower, even though the total number of sworn staff is above median. The SFD also is within the norm for total EMS responses and calls per 1,000 population. The lower operating cost per FTE is likely a function of SFD's higher number of sworn personnel.

Like many public agencies in California, some of Sacramento's most significant cost drivers come from negotiated provisions in agreements with labor associations. For example, memoranda of understanding (MOUs) for Sacramento's various bargaining groups currently dictate that an employee's leave time is counted as time worked and contribute toward calculating overtime. This exceeds the standard established by the Fair Labor Standards Act (FLSA), which excludes leave time from

overtime eligibility calculations. If paid leave time was not included in the overtime calculation, overtime costs could be reduced by approximately 23% for fire personnel or approximately \$1,842,760 per year.

Additional savings could be realized by reducing the number of incentive pays provided. A comparison of base salaries shows that firefighters, engineers and captains have lower base salaries than other peers. Converting incentive pays received by most personnel to base salary would make salaries more competitive with the market without significantly increasing costs.

A major opportunity for improved efficiency is possible by changing the deployment of staff in ambulances and engine companies. Currently ambulances are staffed with two firefighter/paramedics. Although a settlement agreement with Sacramento County requires that all ambulances providing advanced life support (ALS) services be staffed with at least one certified paramedic, the City could reduce costs without compromising service quality by replacing one firefighter/paramedic with a non-sworn certified emergency medical technician (EMT). This staffing model is being utilized successfully in other communities and would generate approximately \$3,314,310 in savings.

Analysis of call volumes, population density and calls for service indicates that Sacramento could reduce staffing on seven of its 24 engine companies from four to three persons in more suburban areas with minimal impact on service capability or response times. This would result in the reduction of 21 sworn personnel at an annual estimated savings of \$2,913,750.

Efficiency also would be increased by implementing tiered dispatch protocols, optimizing public safety information technology functions with civilian staff, simplifying roll call procedures, and replacing roll call software with a program that integrates with the City's central payroll system. Consolidating weed abatement responsibilities under the City's Code Enforcement Division could also improve efficiency, although additional analysis is needed to determine the potential impact on workload and staffing, as well as to quantify potential cost savings.

Management Partners also examined opportunities to increase revenues associated with fire and emergency medical services. These include analyzing user fees to ensure that full costs, including overhead, are reflected in fee amounts, and implementing new fees. As we reported in 2010, establishing a paramedic/ambulance subscription program could

generate between \$1 million and \$2 million per year. The City may wish to collaborate with other fire agencies in the area to provide such a program on a regional basis.

This report contains 13 recommendations which, if fully implemented, would provide a positive financial benefit to Sacramento ranging from \$8.6 to \$9.6 million per year. An attachment provides a summary of the recommendations.

Background

The Sacramento Fire Department (SFD) is a full-service provider of fire suppression, fire prevention, advanced life support (ALS) paramedic service and ambulance transport services. The SFD serves a total population of approximately 530,000 within a geographic area of approximately 146 square miles. In addition to serving the City of Sacramento, the department provides contract services to the Natomas Fire Protection District and the Pacific Fruitridge Fire Protection District.

Service is provided from 24 stations using the following apparatus: 23 engines staffed with four-person crews and one engine with a three-person crew; nine trucks staffed with four-person crews; and 13 ambulances, staffed with two firefighter/paramedics. The SFD also has six specialty units for rescue, hazardous materials response, and water response. All sworn fire personnel are trained and certified as emergency medical technicians. Approximately 347 (out of a total of 547 sworn) or 63.4% also possess paramedic certification.

The City of Sacramento has been buffeted by the most challenging fiscal times to face local government since the Great Depression of the 1930s. Like most cities, the revenue base has been decimated by the recession as major general revenue sources declined after several years of robust growth. At the same time, operating expenses continued to grow, largely fueled by increases in employee pension costs and multi-year labor contracts granted in good revenue years. In addition, the state continued to find ways to extract local revenue and use it for state functions, making a bad situation worse. Together these factors created a structural budget deficit challenge for the City.

In response to decreased revenue and increased costs, the City has significantly reduced spending and staffing levels in recent years. The City addressed a \$39 million budget gap in the general fund for 2011-12, representing 20% of discretionary expenditures, by making service cuts to libraries, parks and public safety, including the Sacramento Fire Department. The adopted general fund budget of \$356 million includes 2,796 authorized full-time equivalent (FTE) positions, a reduction of 330

positions. Staffing in the Fire Department was reduced by 65 FTE. The Fire Department's budget is currently \$98.8 million, about 27.7% of total general fund expenditures.

Management Partners conducted a citywide financial and operational review of the City in 2010 that resulted in 49 recommendations for increasing revenues and improving efficiency. Eight of the recommendations were applicable to the SFD. They were:

1. Adopt an implement and ambulance subscription program.
2. Establish a fee schedule for Fire Department company inspections.
3. Implement three persons per engine at stations where the suburban nature of the primary service area and call volumes makes this a feasible alternative.
4. Replace two truck companies with one additional engine company and one additional ambulance unit.
5. Change the initial response configuration for fire calls to reduce the number of equipment and vehicles initially dispatched.
6. Add one ambulance unit with the expectation that costs will be fully offset by additional revenues.
7. Review dispatch criteria and protocols prior to implementing changes in apparatus staffing and initial response numbers,
8. Eliminate one duty battalion (three positions) and restructure fire companies into three battalions.

Recommendations 4, 6 and 8 were subsequently implemented. The purpose of this project was to build upon our 2010 work and conduct a more in-depth analysis of opportunities for innovation and efficiency available to the Sacramento Fire Department.

Project Approach

Management Partners used various analytical and management techniques in completing this study. We reviewed numerous documents, conducted interviews with SFD and Finance Department staff, conducted benchmarking with comparable agencies and collaborated with a project steering committee. The following sections summarize our approach for each of these components.

Document Review

During the course of this study Management Partners analyzed numerous documents including budget and financial reports, SFD annual reports, staffing policies, labor association agreements, vendor contracts, and suppression and EMS statistical and performance data.

Interviews

Management Partners conducted a total of 17 interviews with SFD senior staff, union leaders, and budget staff from the City's Finance Department. The purpose of the interviews was to gather ideas for revenue enhancements, service delivery changes, expenditure controls and shifts, and other opportunities and constraints for improving the efficiency of the department.

Benchmarking

Financial and organizational benchmarking was conducted with six peer agencies. Criteria used to identify relevant agencies for comparison included population, total service area, fire department operating budget, number of stations, number of high-rise buildings, and the provision of fire services outside the agency's jurisdictional boundaries.

Two agencies, Roseville and the Sacramento Metropolitan Fire District (Sacramento Metro), were included because of their geographical proximity. Table 1 below shows the relevant peers, their size and populations served and FY 2011-12 general fund and fire department budgets.

Table 1. Peer Agencies, Size and Populations Served and General Fund and Fire Department Budgets

Agency	Total Service Area (Square Miles)	Total Population Served	Total General Fund Budget	Total Fire Department Budget
Sacramento	146	530,327	\$356,824,000	\$98,869,430
Fresno	336	525,000	\$214,775,200	\$44,651,800
Long Beach	50	463,894	\$392,004,602	\$95,778,565
Oakland	56	392,932	\$391,440,413	\$110,552,310
Roseville	36	120,593	\$111,669,465	\$24,178,005
Sacramento Metro	417	640,000	Not applicable	\$134,621,510
San Jose	205	1,006,892	\$906,458,009	\$153,948,635

Because organizations have complexities that cannot be completely understood by reviewing financial and organizational data alone, Management Partners conducted telephone interviews with the fire chief and/or deputy chief of each peer agency to obtain information about fire and EMS deployment and staffing, personnel and other cost drivers, and cost recovery mechanisms.

Benchmarking is used to identify where an agency stands in comparison with similar organizations. It is useful to determine whether an agency is at the polar ends of a scale or somewhere in the middle, and it is especially useful in identifying the reasons that others may be more efficient in performing the same operations. Although helpful, this benchmarking data should be used carefully. Every agency is unique and consequently, attempts to compare are always imprecise. As a general rule benchmarking data provides information to assist in decision making processes, but should not be used to create formulas or ratios for determining budgeting or staffing allocations.

Project Steering Committee

To provide guidance and oversight, a project steering committee was established. Management Partners held three meetings with the Steering Committee to share information, receive feedback, and obtain additional information critical to our analysis. The Steering Committee consisted of the following individuals.

- Max Fernandez, Community Development Director
- Ray Jones, Fire Chief
- Rick Martinez, Office of Emergency Services Chief
- Mark Prestwich, Special Projects Manager

Analysis and Recommendations

The analysis of the Sacramento Fire Department and opportunities to improve efficiency is organized into the following sections:

- Comparisons with Other Agencies
- Labor Cost Drivers
- Achieving Efficiencies through Deployment
- Additional Efficiency Opportunities
- Revenue Enhancements

Each is presented in detail below.

Comparisons with Other Agencies

Sacramento was compared through benchmarking with several other agencies providing fire and EMS as a way of ascertaining its relative position with respect to expenditures, staffing and workload. Management Partners used publicly available resources to obtain adopted FY 2011-12 budget data. Information about staffing and workload was confirmed through data provided by each relevant peer.

The results of the benchmarking analysis are summarized below. Data comparisons that would be affected by unique service delivery models are footnoted in the applicable figures.

Budget and Staffing Comparisons

Figure 1 below compares Sacramento's total general fund budget with the relevant peers on a per capita basis. Although the City's total general fund budget is slightly above the median, it is below the median when measured on a per capita basis. Sacramento Metro is a special fire protection district. Because its total budget is equal to the total fire operations budget, Sacramento Metro has been excluded from this particular comparison.

Figure 1. General Fund Budgets per Capita

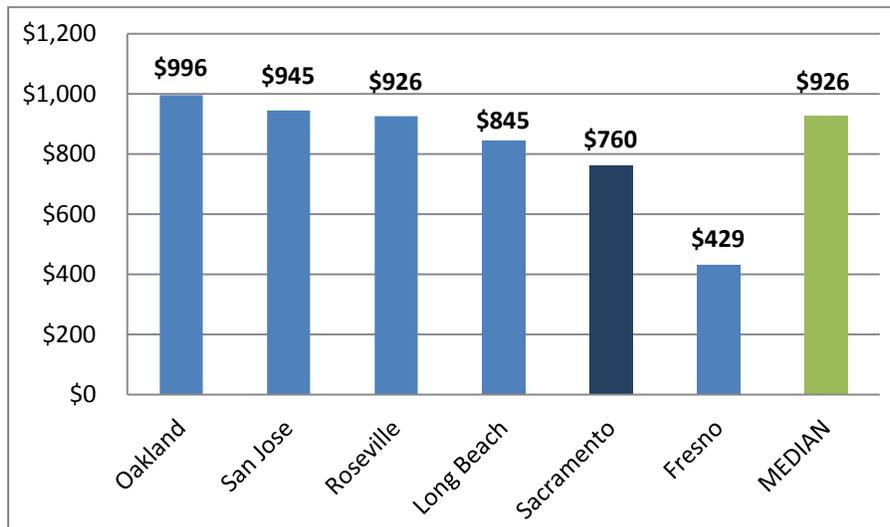
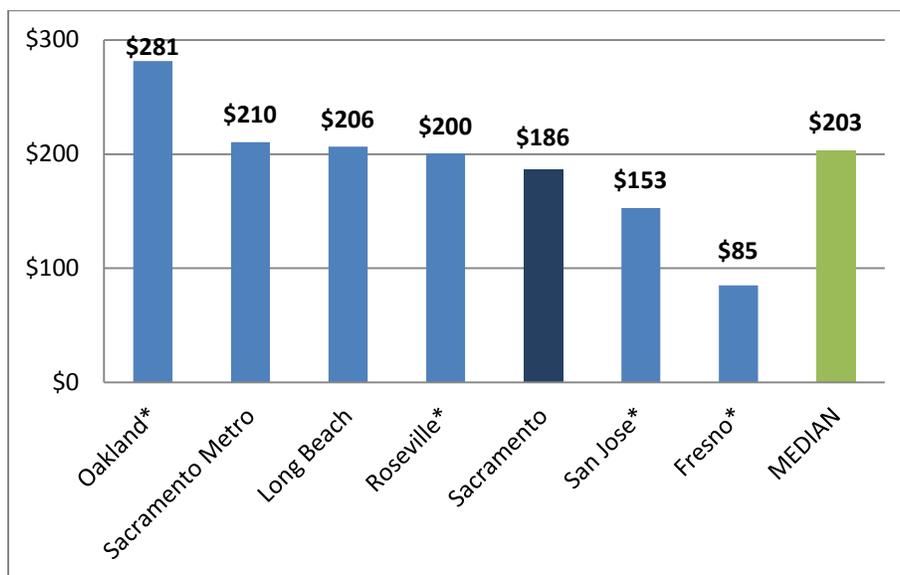


Figure 2 compares fire department operating budgets per capita based on total population served. It is important to note that only Long Beach, Sacramento Metro and Sacramento Fire Departments provide ambulance transport services. Figure 2 shows that the SFD's budget per capita is below the median and that only San Jose and Fresno are lower.

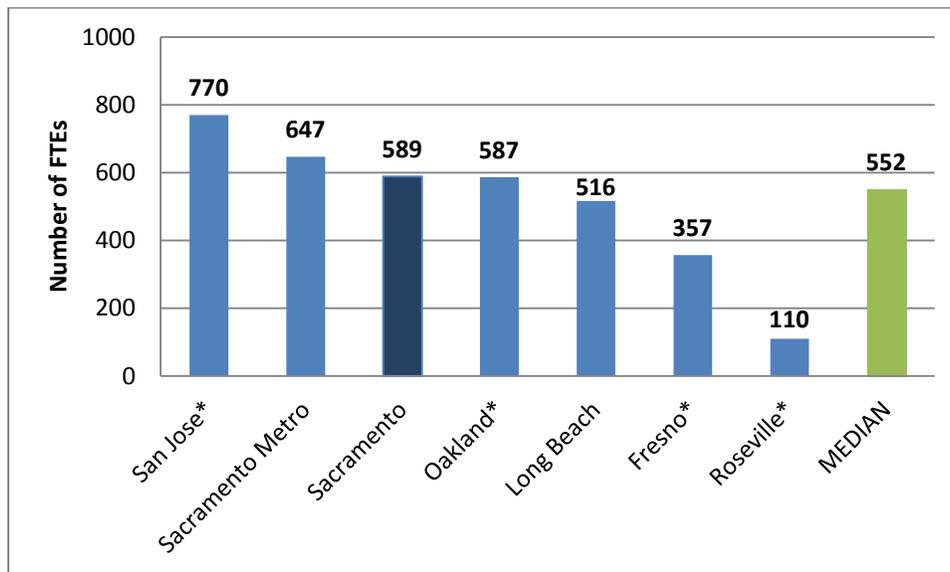
Figure 2. Fire Operating Budgets per Capita



*City does not provide ambulance transport.

Figure 3 compares total fire department staffing for each agency. It shows that Sacramento is above the median for total staffing, along with San Jose and Oakland, neither of which provide ambulance transport. Total staffing for Long Beach includes 27 FTE lifeguard positions.

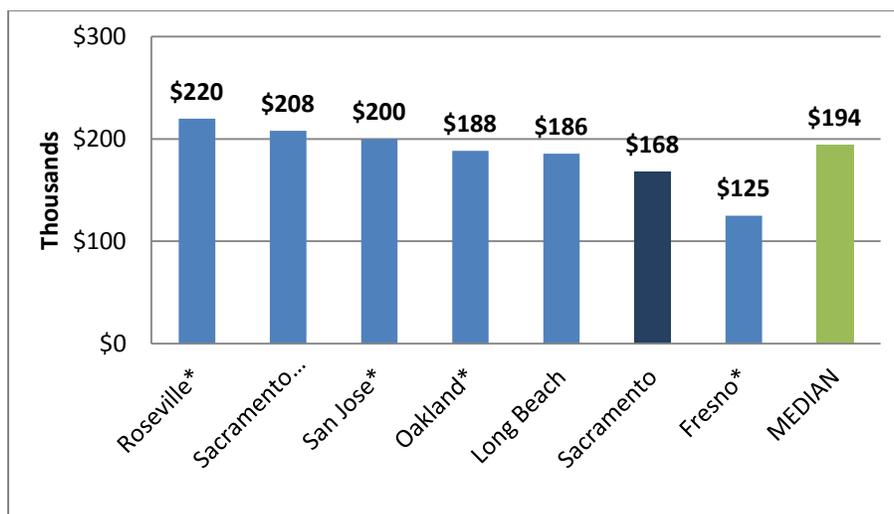
Figure 3. Total Fire Department Staffing



*City does not provide ambulance transport.

Figure 4 presents fire operating costs per FTE and shows that Sacramento has a lower operating cost per employee than the majority of its peers. Only Fresno, which does not have paramedic staff, is lower.

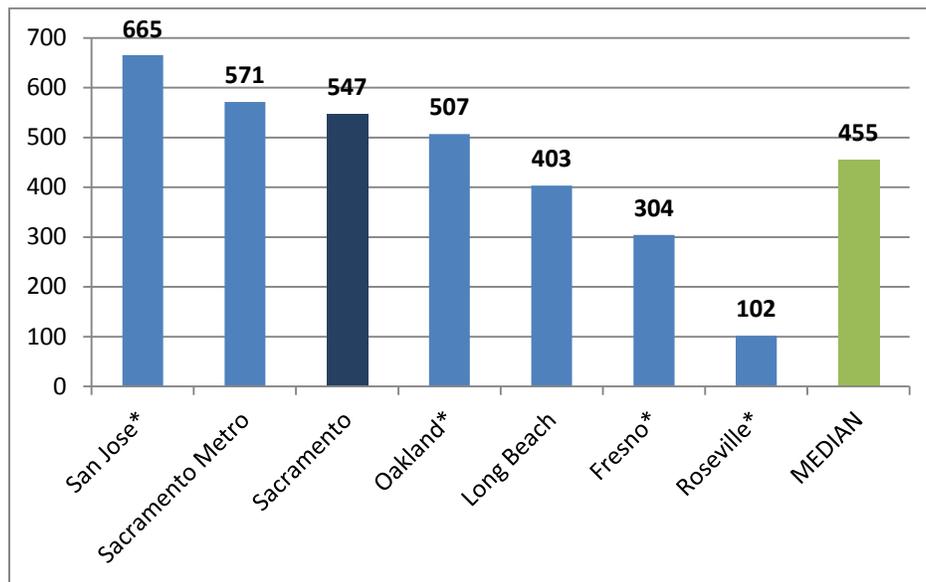
Figure 4. Fire Operating Costs per FTE



*City does not provide ambulance transport.

Figure 5 compares the number of sworn staff. In addition to being above the median for total staff, Sacramento is also above the median for sworn personnel.

Figure 5. Total Sworn Staffing



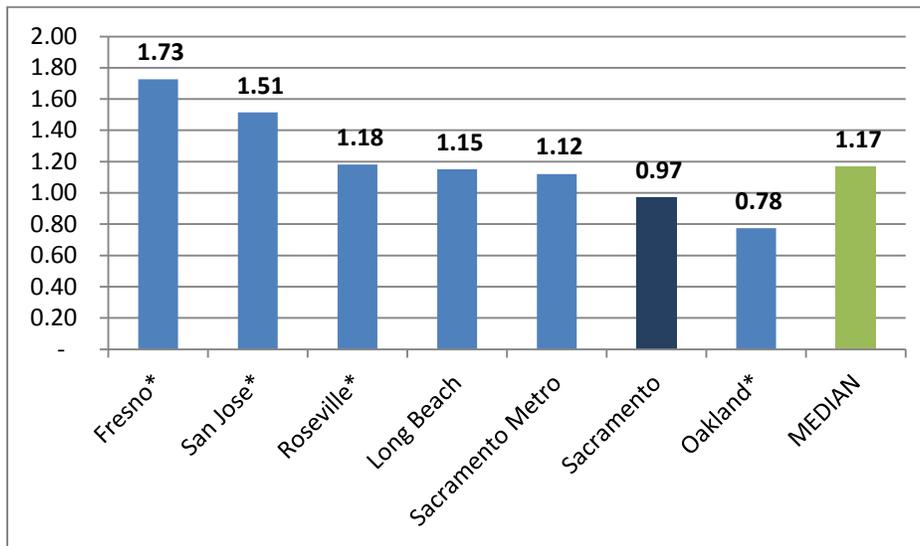
*City does not provide ambulance transport

Note: Long Beach sworn FTE includes 27 lifeguards

Source: Peer agency surveys, agency websites

Although total sworn staffing is higher than the median, Sacramento falls below the median for FTE staffing per 1,000 served, as shown in Figure 6 below. Only Oakland has fewer staff per 1,000.

Figure 6. Sworn FTE Staffing per 1,000 Served



*City does not provide ambulance transport.

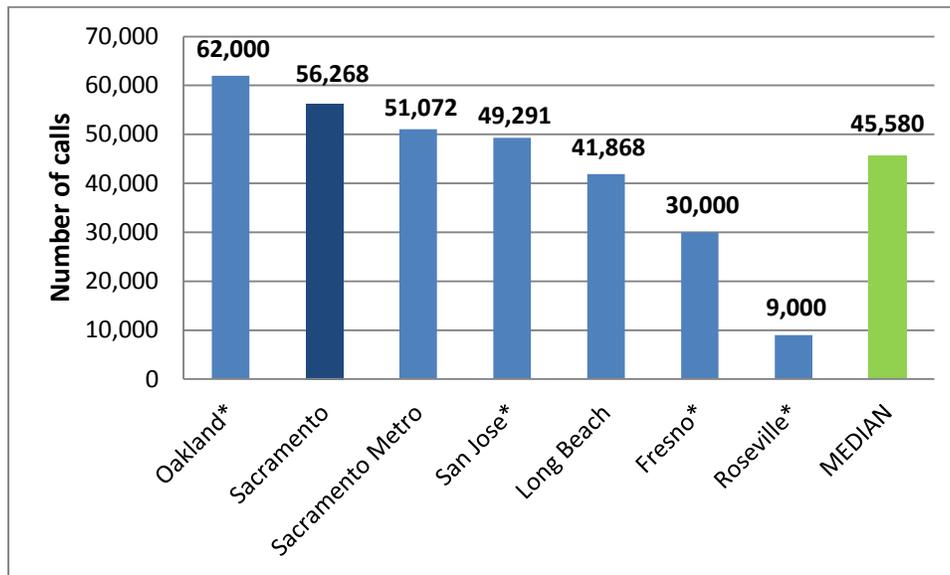
Workload Comparisons

The SFD responded to 66,053 calls for service during calendar year 2011. Of these, approximately 5,500 were calls for mutual aid. Because emergency medical services typically represent the majority of calls for service, Management Partners obtained data on total EMS calls from Sacramento and the relevant peers.

It is worth noting that the SFD provided Management Partners with several reports containing data for EMS calls, with the total number of EMS incidents varying between reports. The “2011 Initial Dispatched Call Types” report lists medical calls at 56,268. The “2011 Agency Activity Summary” shows “total number of EMS incidents” of 43,081. This same report, however, indicates the total number of actual patient care records is 44,146. Because peer agencies also provided initial dispatch data, we have used 56,268 as the number of EMS calls responded to by the SFD in 2011.

Figure 7 below compares EMS calls as a workload measure. It shows that Sacramento is well above median.

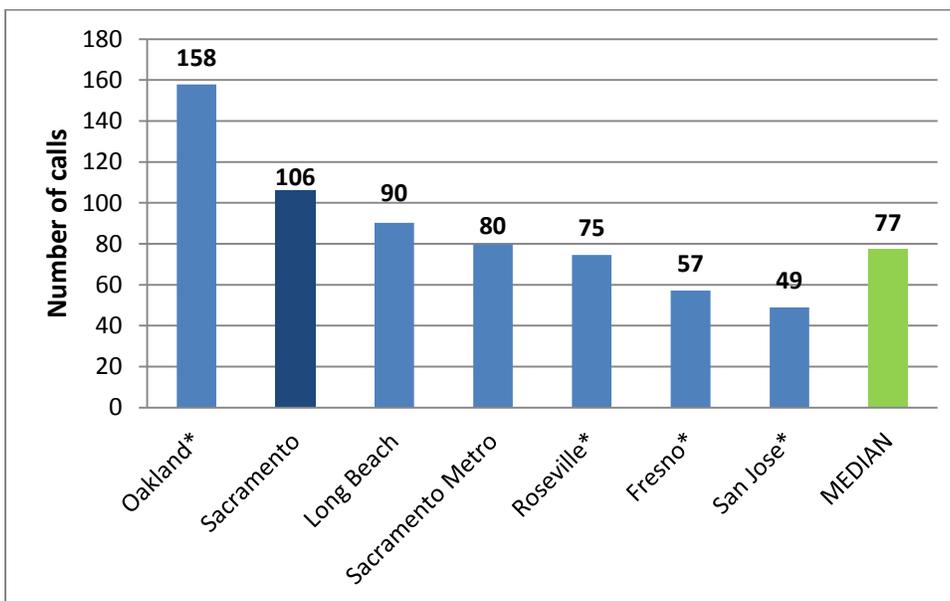
Figure 7. Total Emergency Medical Services Calls in 2011



*City does not provide ambulance transport.

Figure 8 compares EMS calls per 1,000 population. It shows that the SFD is above median. Of note is that the three agencies providing ambulance transport (SFD, Long Beach and Sacramento Metro) are clustered together near the higher end of the workload spectrum.

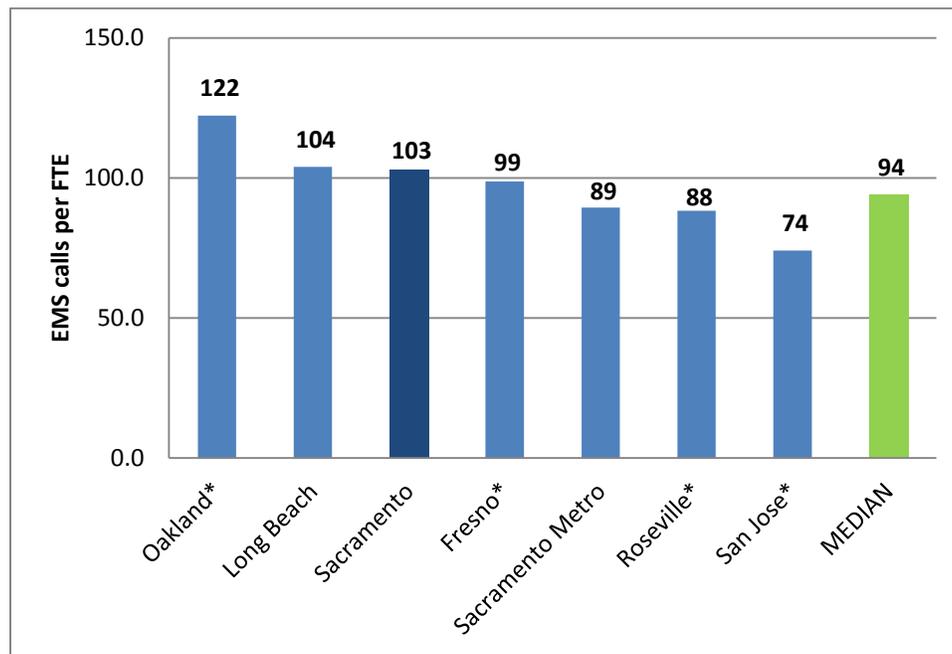
Figure 8. 2011 Emergency Medical Services Calls per 1,000 Population



*City does not provide ambulance transport.

Figure 9 compares EMS calls per sworn FTE. It shows that Sacramento is also above the median for calls per sworn personnel and has a higher ratio than all of its peers, except Oakland.

Figure 9. Emergency Medical Calls per Sworn FTE



*City does not provide ambulance transport

Benchmarking comparisons indicate that the Sacramento community is paying less per capita for fire and EMS response than most relevant peers, including the nearby community of Roseville and those served by Sacramento Metro. SFD's operating cost per FTE is lower, even though the total number of sworn staff is above median.

The SFD also is within the norm for total EMS responses and calls per 1,000 population, but is handling fewer EMS calls per sworn FTE than all of the peer agencies except for San Jose, including agencies that do not provide ambulance transport services. The lower operating cost per FTE is likely a function of SFD's higher number of sworn personnel.

Labor Cost Drivers

Any public organization has a need to balance services to the community with employee compensation and benefits. Personnel costs currently make up 78.2% of Sacramento's total general fund budget. Employee services account for \$87.8 million of the SFD's total \$95.9 million budget for FY 2011-12, or approximately 91%.

Management Partners conducted a detailed analysis of existing memoranda of understanding to identify the most significant cost drivers. For the SFD, the most significant cost drivers include retirement benefits, paid overtime and specialty or incentive pay.

Retirement Benefits

Pension reform is being discussed throughout California because costs are increasing at a rapid pace significantly beyond increases in revenue and are no longer affordable to most public agencies. Efforts to cut costs in California include attempting to reduce pension benefits for existing employees and retirees through a declaration of fiscal emergency and a ballot measure (currently being debated in San Jose), to the creation of a second-tier retirement program for new employees. Two-tier retirement plans do not produce immediate savings when adopted, but over time have a significant impact on obligations for pension costs.

Currently the City offers sworn public safety retirement of 3% at age 55. To its credit, Sacramento has taken steps to require employees to share in the cost of retirement benefits. Effective January 1, 2013, members of Sacramento Area Fire Fighters, Local 522 (SAFF) will begin paying 6% of the employer's percentage contribution to PERS retirement.

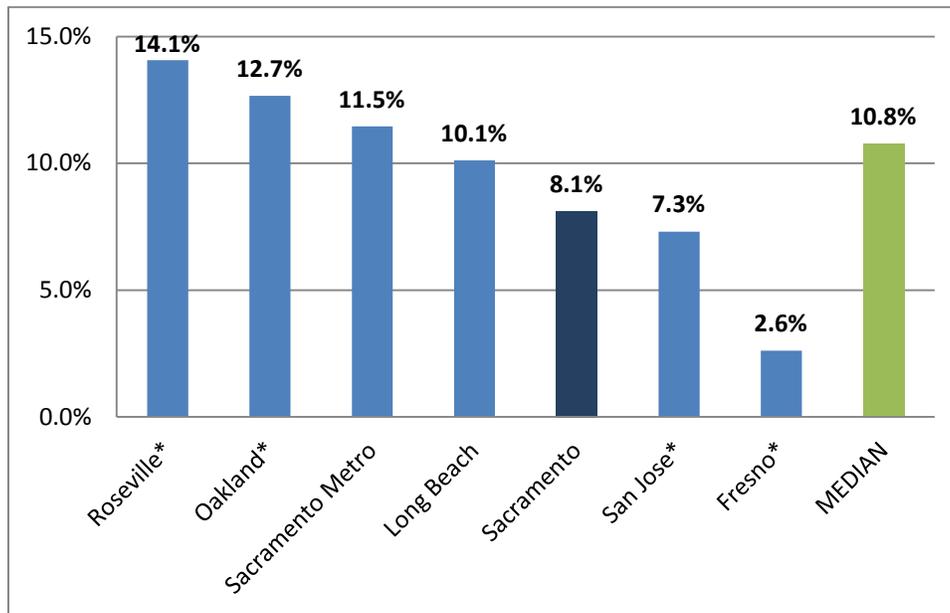
Because the City has recognized the importance of controlling costs associated with retirement benefits, Management Partners focused our attention on costs associated with paid overtime and incentive pay. In addition to reviewing the MOUs of peer agencies, we also obtained benchmarking information about these compensation practices during telephone interviews.

Overtime

Overtime is a necessary and unavoidable cost associated with providing public safety services, including fire and EMS response. Overtime costs are a function of several factors, including the number of sworn staff, minimum staffing requirements, and call back procedures. In general, hiring more staff reduces the need for overtime, while having too few staff increases the need for overtime when personnel are on vacation, sick or engaged in out-of-station training.

Figure 10 below compares overtime costs as a percentage of the fire operating budget for Sacramento and the peer agencies. It shows that Sacramento is below the median and is spending less on overtime as a percentage of the budget than most peers, other than San Jose and Fresno.

Figure 10. Overtime Costs as a Percentage of Fire Operating Budget



*City does not provide ambulance transport

Fresno is an outlier with significantly lower overtime costs than any of the peer agencies. This is because Fresno uses over-hiring to create a relief pool from which to fill shift vacancies, rather than pay overtime. According to Fresno's FY 2011-12 budget,

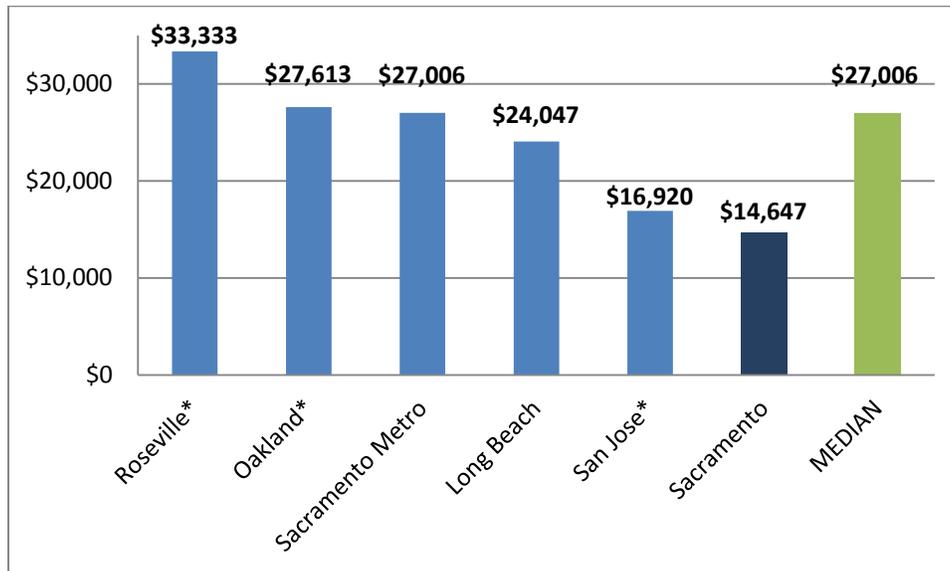
This deployment maximizes the number of individuals in the relief pool that are used to provide shift coverage for vacancies resulting from unscheduled holiday, vacation, leave without pay, sick or injury leaves, thus minimizing overtime/shift replacement expenditures.

On days when on-duty sworn staffing is above the minimum daily staffing needs (66 sworn), individuals may be assigned to perform administrative or fire prevention inspection responsibilities. While this practice contributes to lower overhead costs, it is not necessarily efficient, because the City may be paying personnel who are not needed for an assignment. Fresno is currently in negotiations to establish a process for changing minimum daily staffing and maximum daily absences, including unscheduled holidays and vacation days.

Figure 11 compares overtime costs per sworn FTE. As an outlier, Fresno has been excluded from this particular comparison. It shows that Sacramento's overtime costs per sworn employee are lower than all of the

peer agencies. One reason may be the higher number of sworn staff in the SFD.

Figure 11. Overtime Costs per Sworn FTE



*City does not provide ambulance transport

Although the SFD has significantly lower overtime costs than relevant peers, there is an opportunity to reduce these costs even further. MOUs for Sacramento’s various bargaining groups currently dictate that an employee’s leave time is counted as time worked and contributes toward calculating overtime. If the SAFF MOU were amended to pay overtime based on the Fair Labor Standards Act (FLSA) then only *actual* time worked would count towards calculating overtime. In other words, the City has negotiated to pay for more overtime costs than it is legally required to pay.

Recently two Management Partners’ clients sampled payroll records for 10 police officers and 10 firefighters to estimate the cost of paying overtime based on FLSA, compared with pay based on language in the MOUs. Both of these agencies (a large municipality in southern California and a fairly large city in northern California) follow the same practice that Sacramento does, i.e., counting leave time in calculating overtime. The samples analyzed by both agencies yielded the same result. If paid leave time were not included in the overtime calculation, overtime costs could be reduced by approximately 23% for fire personnel and by about 22% for police personnel.

Actual overtime expenditures for the SFD in FY 2010-11 were \$8,012,003. A 23% reduction equates to \$1,842,760 in savings.

Recommendation 1. Utilize the FLSA-approved methodology for calculating overtime, which excludes leave time as time worked from the calculation.

Implementing this recommendation requires collective bargaining with labor associations. It not only has cost savings implications for fire-related overtime, but for overtime expenditures throughout the City.

Incentive Pay

Incentive or premium pay refers to additional compensation associated with achievement of defined education levels, certifications or assignments. The City paid \$12,107,691 in incentive pay to employees in the SFD during FY 2010-11. Premium pays are largely “PERS-able” which means they are included as compensation counted toward calculating retirement benefits and, therefore, are a factor in the City’s pension costs.

Benchmarking with peer agencies shows that the SFD has 15 types of incentive pay, more than the other fire departments. Table 2 shows incentive pay types by agency.

Table 2. Comparison of Incentive Pays

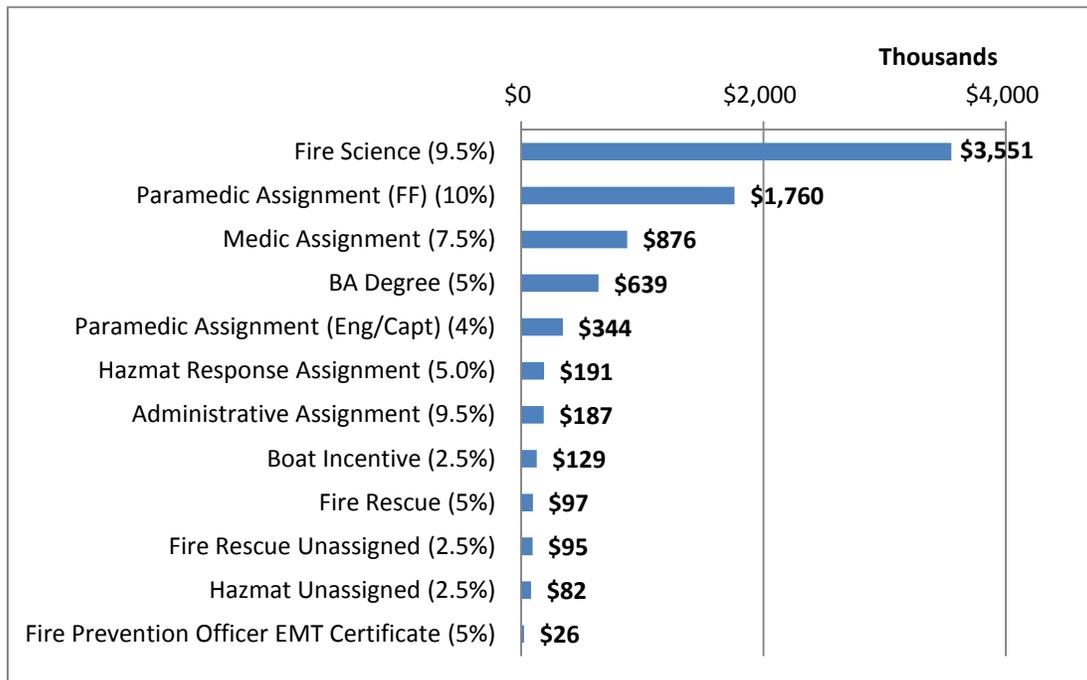
Incentive Pay Type	Sacramento	Fresno	Long Beach	Oakland	Roseville	Sacramento Metro	San Jose
ACLS Certification	X				X		
Administrative Assignment	X	X	X	X		X	X
Arson/Environmental Inspection			X				
Associate Degree	X	X	X		X	X	
Bachelor’s Degree	X	X	X		X	X	
Bilingual Pay	X	X					X
Boat Assignment	X						
EMS Coordination			X				
EMT Certificate	X					X	X
Fire Prevention Officer EMT Certificate	X						
Engineer on Fireboat			X				

Incentive Pay Type	Sacramento	Fresno	Long Beach	Oakland	Roseville	Sacramento Metro	San Jose
Fire Prevention			X				
Fire Science Certificate	X				X	X	
Fireboat Operator			X				
Hazardous Material Response	X	X	X	X	X	X	X
Hazardous Material Response Instructor			X				
Medic Assignment	X						
Medical Quality Assurance Training	X						
Paramedic Assignment	X	X	X	X	X	X	
Rescue Assignment	X	X			X		
Training Officer/Preceptor	X	X				X	
Urban Search and Rescue Instructor			X				
TOTAL	15	8	12	3	7	8	9

The most common types of incentive pay appear to be for administrative, paramedic and hazardous materials response assignments and possession of associates or bachelor’s degrees.

Figure 12 below presents the SFD’s annual cost per incentive pay type, based on amounts paid during FY 2010-11. It shows that the most costly incentive pay is for the possession of a fire science certificate. In Sacramento, most incentive pays are structured to provide additional compensation as a percentage of base salary. Numbers in parentheses represent the percentage of salary associated with the incentive.

Figure 12. Annual Cost per Incentive Pay Type



Four types of incentive pay have been excluded from Figure 12 because there were too few individuals receiving it to make the annual cost relevant. They are:

- ACLS Certification
- Bilingual pay
- Training Officer Preceptor
- Associate Degree

Figure 13 below presents the number of employees receiving incentive pay by type. The reason the Fire Science Certificate incentive pay is so costly is because the majority of personnel in the SFD qualify for it (and the associated 9.5% increase in salary). The second most expensive incentive, paramedic assignment pay is 10% of salary for firefighters, and is received by 251 SFD personnel. Engineers or captains who are certified paramedics receive an additional 4.5% of salary.

Figure 13. Number of Employees Receiving Incentive Pay by Type

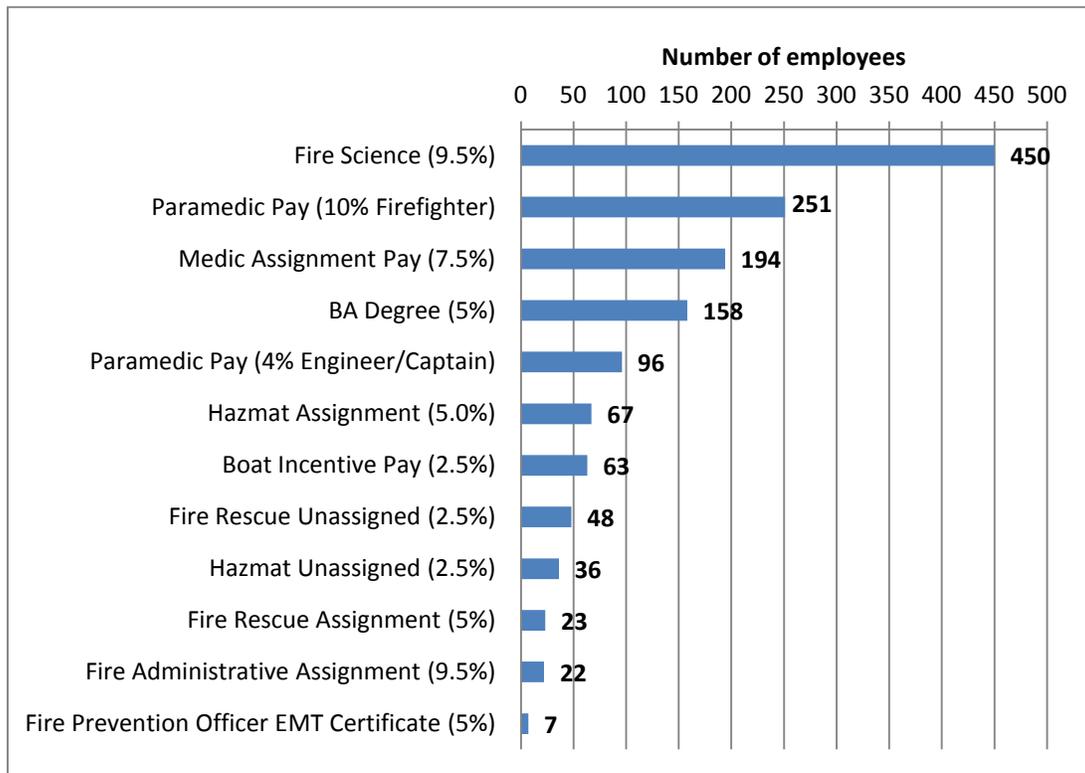
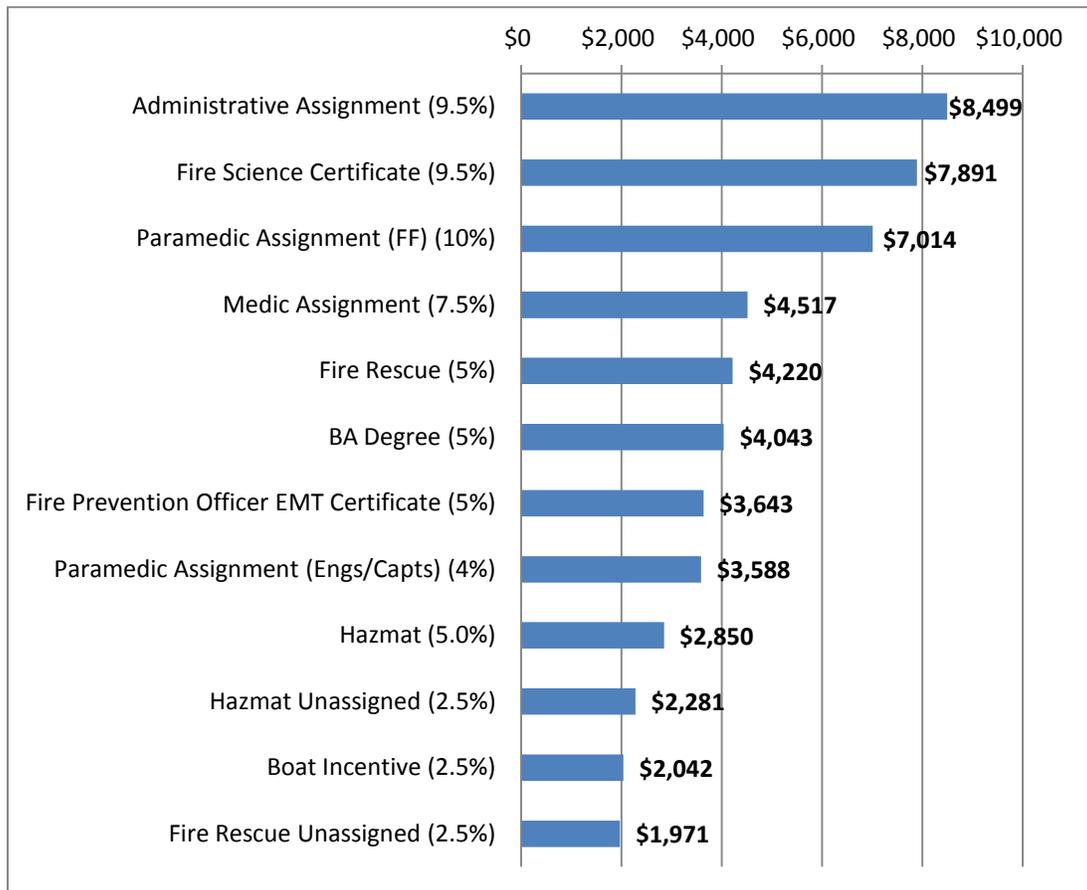


Figure 14 shows the average incentive pay cost per employee. The highest cost per employee is for administrative assignment pay, which provides a 9.5% increase in salary. Only 22 individuals received it in FY 2011-12.

Figure 14. Incentive Pay Average Cost per Employee



Another factor contributing to incentive pay costs for Sacramento is that many of these incentive pays can be compounded. Other agencies employ a variety of strategies for limiting incentive pay, including the following.

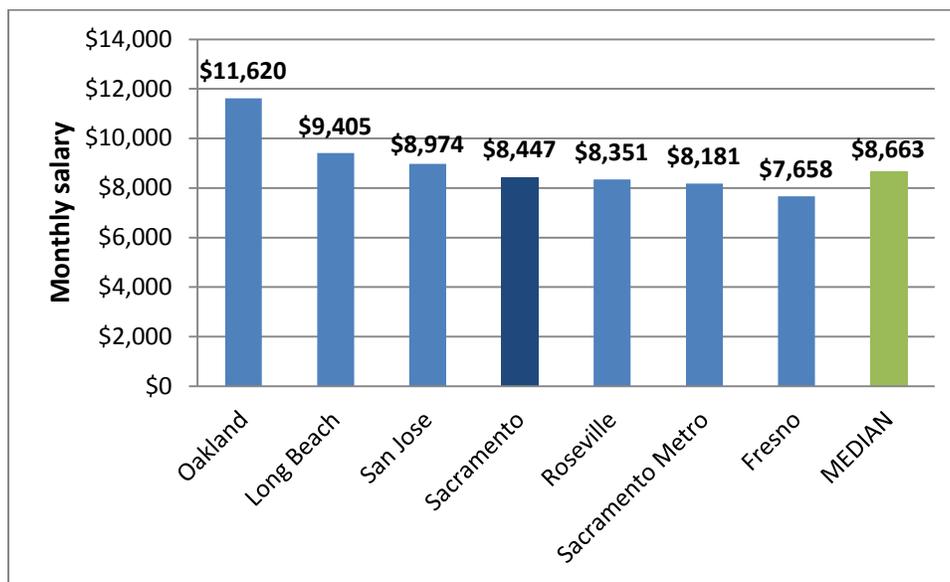
- Oakland fire personnel may qualify for only one incentive pay at a time, and only three are provided. They are for administrative, hazardous materials response and paramedic assignments.
- Long Beach allows employees to qualify for multiple incentive pays but caps the maximum earnings amount at 7.5% of base salary.
- Fresno employees who qualify for more than one type of premium pay receive only the largest of the pay amounts for which they are eligible.
- Roseville and Sacramento Metro do not allow incentive pays to be compounded at all.

Incentive pays should reflect a documented business need and should be considered when making salary comparisons to establish appropriate compensation levels. If an incentive pay is received by virtually all employees in a classification, and the City determines it serves an important business need, it should be added to base compensation to properly reflect it as such.

In the case of SFD, incentive pays may have helped compensate for lower-than-market salary levels. Management Partners obtained base salary information for sworn fire classifications from each of the peer agencies to test this observation.

Figure 15 compares base salaries for battalion chiefs and shows that Sacramento is within the norm, although slightly below the median.

Figure 15. Comparison of Base Salaries for Battalion Chief



However, base salary differences between Sacramento and the relevant agencies are more pronounced below the level of battalion chief. Figure 15 compares base salaries for captains and shows that Sacramento captains have the lowest base salary, with Fresno only marginally higher.

Figure 16. Comparison of Base Salaries for Captains

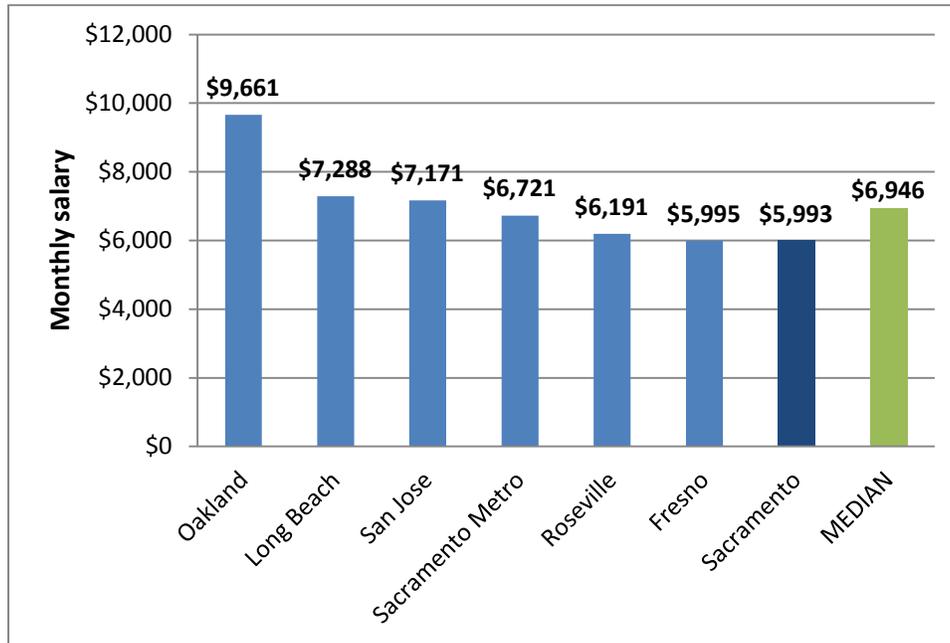
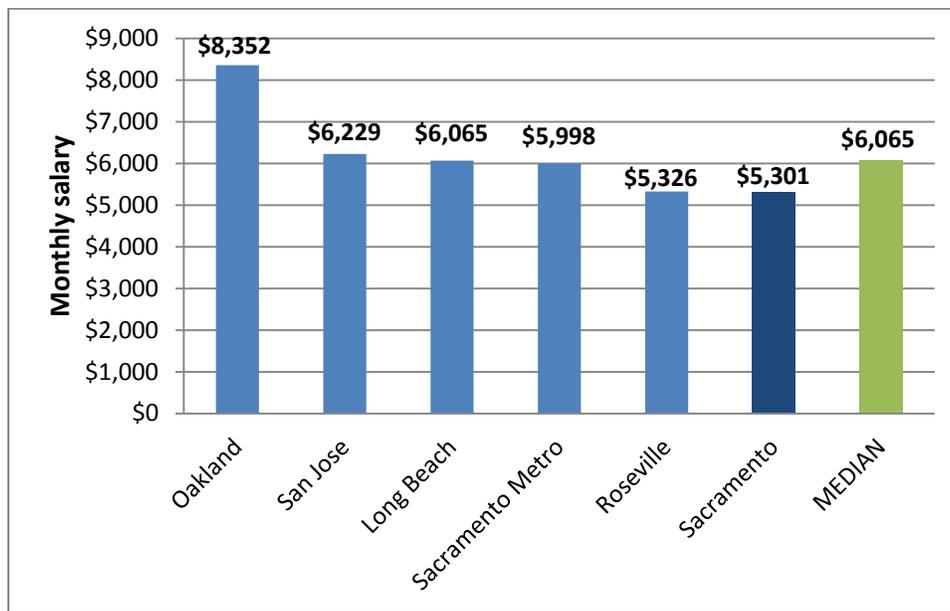


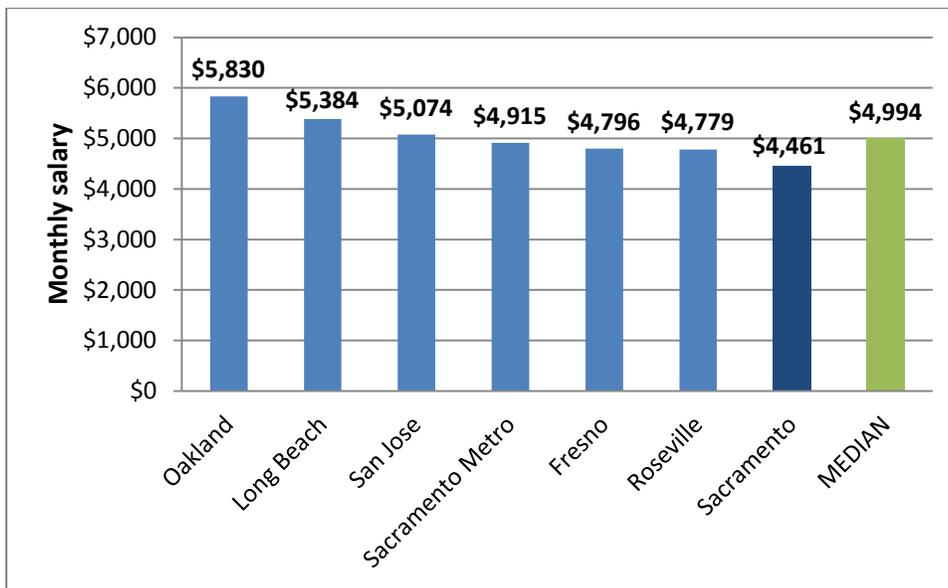
Figure 17 provides the same salary comparison for engineers. SFD engineers also have the lowest base salary, however Roseville is only slightly higher.

Figure 17. Comparison of Base Salaries for Engineers



Finally, Figure 18 compares firefighter base salaries and shows that, once again, Sacramento firefighters receive the lowest base salary.

Figure 18. Comparison of Base Salaries for Firefighters



Oakland, which has the fewest incentive pays, consistently has the highest base salary for each classification considered. It could be that Oakland has negotiated higher salaries in return for limiting the number of incentive pay types and amounts provided to employees.

Negotiating to convert incentive pays that most personnel receive into base pay would make Sacramento's base salaries more competitive without significantly increasing the City's costs. For example, converting the Fire Science Certificate incentive pay (9.5% of salary) would increase the base salary for firefighters from \$4,461 to \$4,885, the base salary for engineers from \$5,301 to \$5,804 and the base salary for captains from \$5,993 to \$6,562. In all cases, Sacramento's base salaries would remain below the median, but closer to the other peers.

Recommendation 2. Renegotiate labor contracts to reduce the number of incentive pays and associated costs. Consider converting an incentive pay to base salary when all of the individuals within the labor association are receiving it.

Achieving Efficiencies through Deployment

Ambulance Staffing

The SFD currently staffs 13 full-time ambulances per day. In addition, there are between two and four “flex” ambulances assigned to work in 12-hour increments during peak demand periods. Each ambulance unit is staffed with two firefighter/paramedics. When responding to medical calls the ambulances are always accompanied by an engine or truck company with additional personnel.

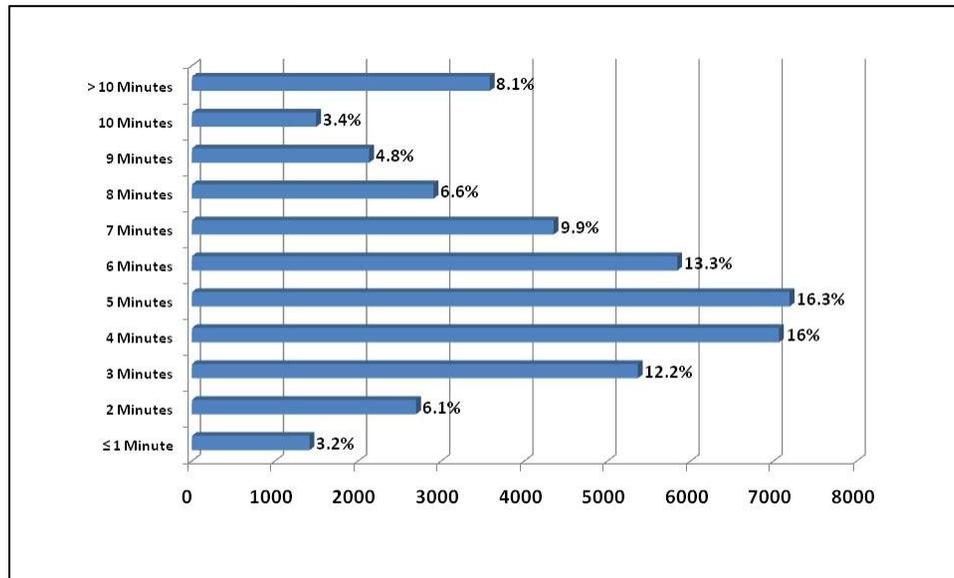
Current EMS Response Profile

The ambulance transport system is supported with 23 ALS engine companies responding from the City’s fire stations. A brief overview of the 2011 EMS call volume in the City (and contracted areas) is as follows.

- According to the “Initial Dispatched Call Types” report for 2011, the total number of EMS calls for service was 56,268.
- The total number calls for service during 2011 was 66,053, of which 5,500 were for mutual aid. Mutual aid call data provided to Management Partners was not categorized by type of call. Excluding the mutual aid calls, the SFD responded to 60,553 calls for service, of which 74.7 percent were EMS related.
- Of the EMS calls dispatched, 75.2% were for BLS response, and 24.8% required an ALS response.
- The percentage of EMS responses that required a Code 3 transport was 5.87%. (Code 3 means the ambulance used lights and sirens to transport a patient with injuries considered to be life-threatening.)

Figure 19 below shows the range of EMS call response times from dispatch to arrival on scene for calendar year 2010. According to City staff, the percentage of EMS responses achieving a response time of eight minutes or less remained at approximately 83% in 2011.

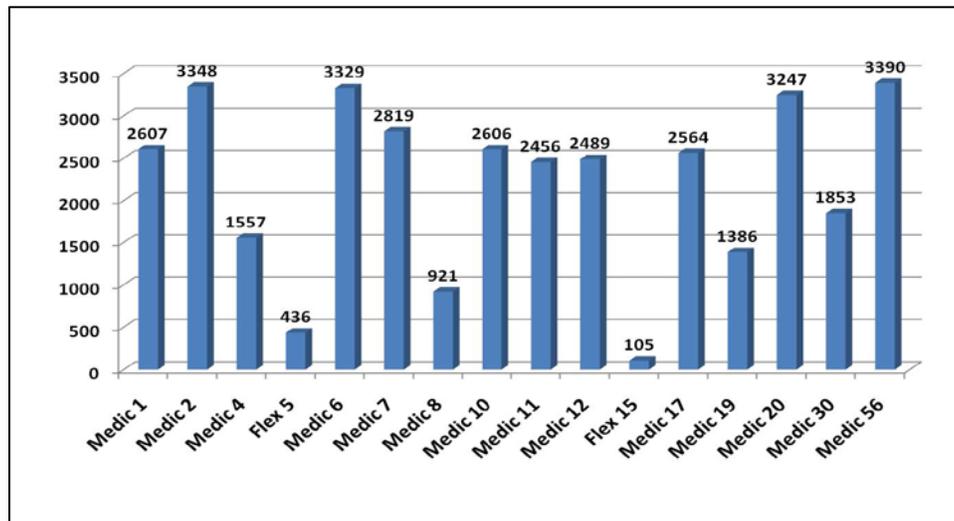
Figure 19. Dispatch to On-Scene Response Time Performance



Source: Sacramento Fire Department Annual Report, 2010

Figure 20 shows the number of transports by ambulance unit for calendar year 2010. The data demonstrate that some units have significantly more calls for service than others, including the flex ambulance units.

Figure 20. Number of Transports by Medic Unit for 2010

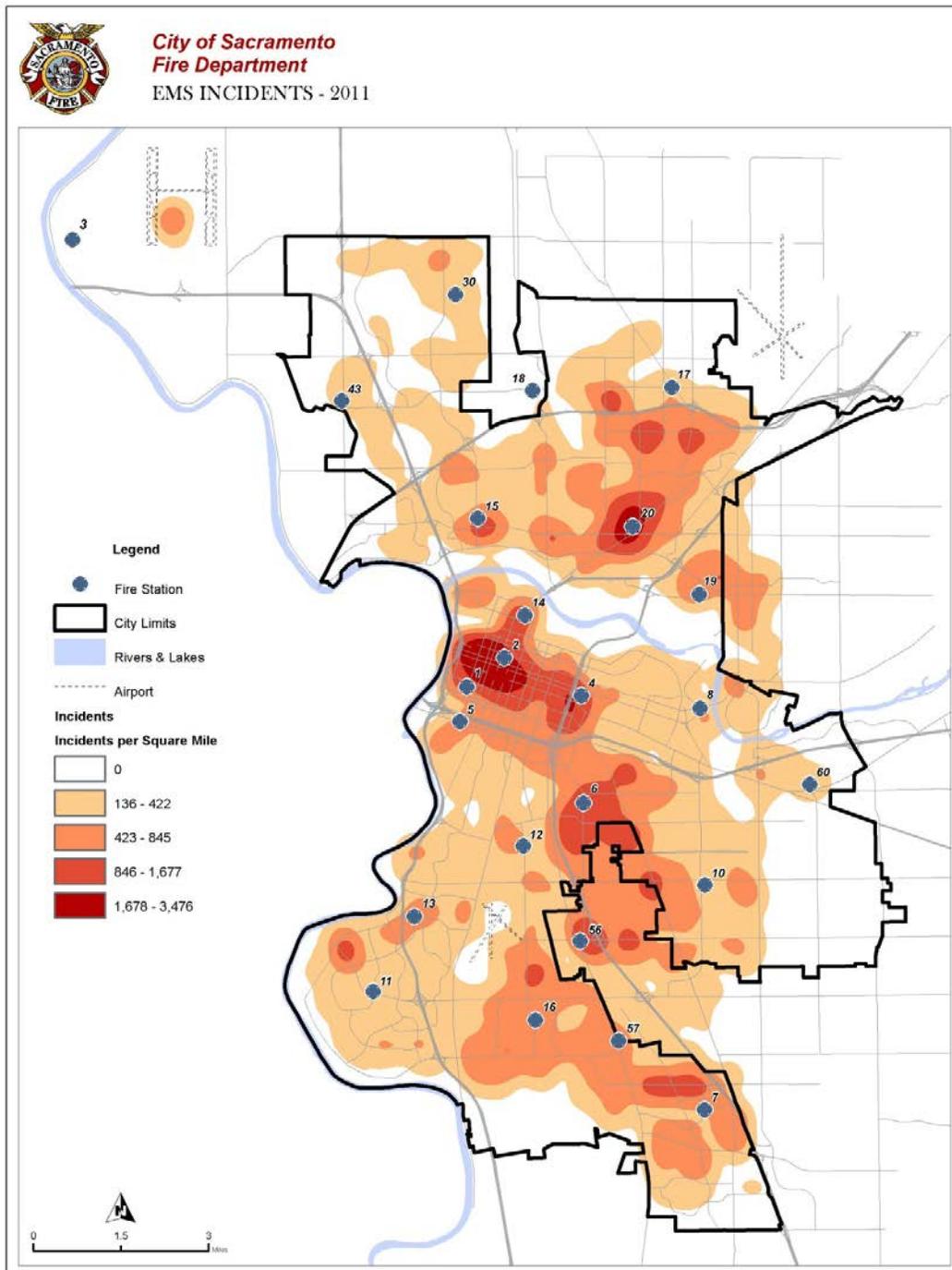


Source: Sacramento Fire Department Annual Report, 2010

Figure 21 shows where EMS incidents were concentrated during 2011. There is a correlation between the transports by medic unit in 2010 and

this more recent data. As in 2010, units at stations 2 and 20 experienced the highest concentration of incidents.

Figure 21. EMS Incident Density Map for 2011



Source: Sacramento Fire Department.

Table 3 shows the number of code 3 transports per unit for 2011, and similar patterns of relative activity as shown graphically in Figures 20 and 21.

Table 3. Number of Code 3 Transports by Medic Unit in 2011

Medic Unit Number	Code Three Transports
1	322
2	246
4	3
5	21
6	224
7	223
8	112
10	177
11	191
12	138
15	8
17	193
19	228
20	159
30	90
43	15
56	241
TOTAL	2591

Source: Sacramento Fire Department.

Alternative Ambulance Staffing Models

As an alternative to staffing ambulance units with two firefighter/paramedics, some agencies have implemented alternative staffing models to reduce costs. In cities like Sacramento where engine companies already have ALS capability (i.e., there are two paramedic/firefighters assigned to each engine), the most efficient method is to staff ambulance units with non-sworn ambulance operators who possess an EMT certificate. Another model is to staff the ambulance with one

paramedic/firefighter and one non-sworn EMT operator, sometimes referred to as a “1:1” staffing pattern.

A settlement agreement between Sacramento County and agencies providing ambulance transport requires any ambulance providing ALS to be staffed with at least one paramedic/firefighter. Consequently, the non-sworn approach to ambulance staffing is not feasible for the City. However, a 1:1 staffing pattern could maintain the SFD’s ALS response capability at a significantly reduced cost.

The model we suggest is based in part on a successful approach utilized by the City of Huntington Beach. All of that City’s ambulances are staffed with non-sworn EMTs. The ambulances are assigned to various fire stations and EMT personnel are rotated among the stations at regular intervals.

Huntington Beach hires hourly ambulance operators through an employee contract with a maximum 36-month term. The contract allows the employees to work full-time hours, but to be considered a “part-time, temporary employee” for purposes of benefits. (The City must provide PERS retirement coverage once the employee exceeds 1,000 hours of work.) At the end of the 36-month contract, the employee is terminated if they have not already found employment elsewhere. The contract also establishes that the ambulance operator is an at-will employee, so s/he may be terminated at any time, particularly if there are disciplinary or performance issues.

Huntington Beach’s ambulance operators are required to have certification as an EMT, a driver’s license and an ambulance endorsement. The recruitment and testing process is similar to that conducted for firefighters, including a modified physical agility test. Eligibility lists are created and applicants are selected for full-time (36-month) positions as they become available. Eligible applicants may also be offered part-time positions while waiting for full-time positions to become available. These part-time positions are used to fill shifts (or partial shifts) as needed.

Application to Sacramento

To create a viable model for Sacramento, we applied the concepts of the Huntington Beach approach to a 1:1 approach. This results in reduced costs for ambulance services while meeting the requirements of the County’s settlement agreement.

There are currently 78 firefighter/paramedics required to support the SFD’s 13 daily ambulance units. (We have excluded the “flex” ambulances because their call volumes are low relative to the full-time units.) The 1:1 model would reduce the total number of sworn positions by 39 FTEs upon full implementation, and replace them with non-sworn EMTs. To provide sufficient coverage for sick and vacation leaves and training, we estimate that the City would need to hire a total of 45 certified EMTs.

The EMTs would be assigned to one of the three existing shift platoons and work the same schedule as sworn shift personnel (i.e., a 56-hour work week). To provide broad-based experience and rotation among stations with different levels of activity, the EMTs would rotate from station assignments at regularly scheduled intervals. (Huntington Beach rotates its ambulance operators every 6 to 12 months.)

New employees would be paid hourly through a 36-month contract, and serve as at-will personnel. They would participate in an 8- to 10-week ambulance operator academy, covering protocols, expectations, driving skills, billing information collection. They would also participate in the City’s Emergency Vehicle Obstacle Course (EVOC) training. The ambulance operators would not perform any firefighting duties.

Table 3 calculates the estimated annual cost for EMTs with the proposed 1:1 model. We assumed a base EMT salary of \$14.00 per hour, applied to the 56-hour fire schedule currently in place at the SFD.

Table 4. Estimated Annual Cost for EMT Ambulance Operators

	Estimated Cost
40 hours per week at \$14.00 per hour	\$560
16 hours per week of overtime at \$21.00 per hour	\$336
Weekly salary per EMT	\$896
Annual cost	\$46,592
Annual cost for 45 EMTs	\$2,096,640

According to the 2012 SFD budget, the annual cost for a firefighter is \$124,103, not including overtime. Adding the average overtime cost per sworn FTE of \$14,647 (shown in Figure 11 above) increases the annual cost to \$138,750. Converting to a 1:1 ambulance staffing model will

eliminate the need for 39 sworn positions at an annual cost of \$5,411,250 and result in annual savings of approximately \$3,314,310.

Cost savings is not the only benefit of converting to a 1:1 ambulance staffing model. Fire departments that have implemented transport programs utilizing civilian EMTs as a part of an ALS ambulance team have typically realized several benefits, including the following.

- Increases access to a more diverse fire service candidate pool.
- Provides opportunities to observe and “try out” EMTs wishing to become potential future fire fighter candidates.
- Mitigates paramedic skill degradation issues by spreading ALS workload to more engine-based paramedics.
- Reduces personnel expenditures while maintaining a department’s ALS transport capabilities.

In addition, such a conversion can be implemented in phases through attrition, which may provide a smoother transition for departmental personnel.

Recommendation 3. Change the current ambulance staffing from two firefighter/paramedic positions on each ambulance to a “1:1” staffing pattern with one firefighter/paramedic and one civilian EMT per unit.

Engine Company Staffing

Until recently, Sacramento has historically staffed all truck and engine companies with four personnel. One engine company is currently staffed with three sworn personnel as a cost savings measure. As we reported in 2010, while four-person engine companies are typical for high-density urban communities, much of Sacramento’s service area is suburban in nature. Because Sacramento is an older city that began with an urban core, the SFD has long operated with four-person engine companies and this staffing pattern has continued even as newer, more suburban areas developed.

However, engines in suburban California fire departments are most typically staffed with three-person crews. The fire departments adjacent to the City who are part of mutual aid agreements (Sacramento Metro, West Sacramento Fire Department and Folsom Fire Department) all staff engine companies with a crew of three.

The number of persons staffing engine and truck companies in fire departments has been the subject of numerous studies. In general “more is better;” that is five persons are better than four, which is better than three. However, higher staffing levels are by far most beneficial in downtown areas with multi-story buildings and higher risk occupancies. There is much less benefit to staffing above a three-person level when dealing with single story occupancies associated with suburban areas.

The most often cited research is that of the “Dallas Study,” conducted by the City of Dallas Fire Department. This study measured the amount of time it took for a first-responder crew to complete key tasks required of a single story residential structure of 2000 square feet. The conclusion after extensive testing was that the average difference between a first responding company with a four-person crew and one with a three-person crew was approximately 40 seconds for individual tasks, but approximately 20 seconds when all tasks were averaged together for the residential structure fire.

Another issue sometimes raised to justify across the board four-person engine company staffing is the National Fire Protection Association’s (NFPA) Guideline 1710, which provides suggested standards for career fire departments regarding a number of response parameters. One standard is to have four firefighters on-scene at a fire incident in four minutes or less. However, this personnel complement does not need to respond in the same unit.

Looking discretely at the nature of the City’s various response environments and avoiding a one-size-fits-all approach provides the opportunity for the SFD to staff some engine companies with three personnel.

To determine which engine companies could be converted to three-person staff without negatively affecting service, Management Partners analyzed the SFD’s current response configuration and staffing patterns. The analysis took into account several factors, including emergency call volume, and degree of urbanization based on population density, and travel time for back up support. Each is discussed briefly below.

Emergency Call Volume

National data and corresponding nationally recognized standards indicate that an engine company responding to 3,450 to 3,650 emergency runs per year should be considered a very active company. With this

statistic as a guideline, Management Partners identified SFD engine companies responding to less than 3,000 calls per year.

Table 5 below compares incident volume by district and unit. Because Station 43 recently opened in October 2011, it was excluded from analysis. Table 5 shows there are 11 engine companies that responded to fewer than 3,000 calls during calendar year 2011. They are engines 1, 3, 5, 8, 11, 12, 13, 14, 18, 30 and 60.

Table 5. Incident Volume by Unit and District for 2011

Unit Dispatched	Total Incidents	Percent of Total for Department	Percent By Type of Unit
Engine 1	2,670	1.81%	4.02%
Engine 2	3,607	2.44%	5.43%
Engine 3*	724	0.49%	1.09%
Engine 4	3,858	2.61%	5.81%
Engine 5	2,078	1.41%	3.13%
Engine 6	3,994	2.70%	6.04%
Engine 7	3,119	2.11%	5.06%
Engine 8	2,439	1.65%	3.67%
Engine 10	3,555	2.41%	5.89%
Engine 11	2,346	1.59%	3.53%
Engine 12	2,227	1.51%	3.35%
Engine 13	2,094	1.42%	3.15%
Engine 14	2,743	1.86%	4.13%
Engine 15	3,579	2.42%	5.39%
Engine 16	3,055	2.07%	4.60%
Engine 17	3,362	2.27%	5.06%
Engine 18	2,226	1.51%	3.35%
Engine 19	3,071	2.08%	4.62%
Engine 20	4,278	2.89%	6.44%
Engine 30	1,618	1.09%	2.44%
Engine 56	3,997	2.70%	6.02%
Engine 57	3,535	2.39%	5.32%
Engine 60	2,256	1.53%	3.40%

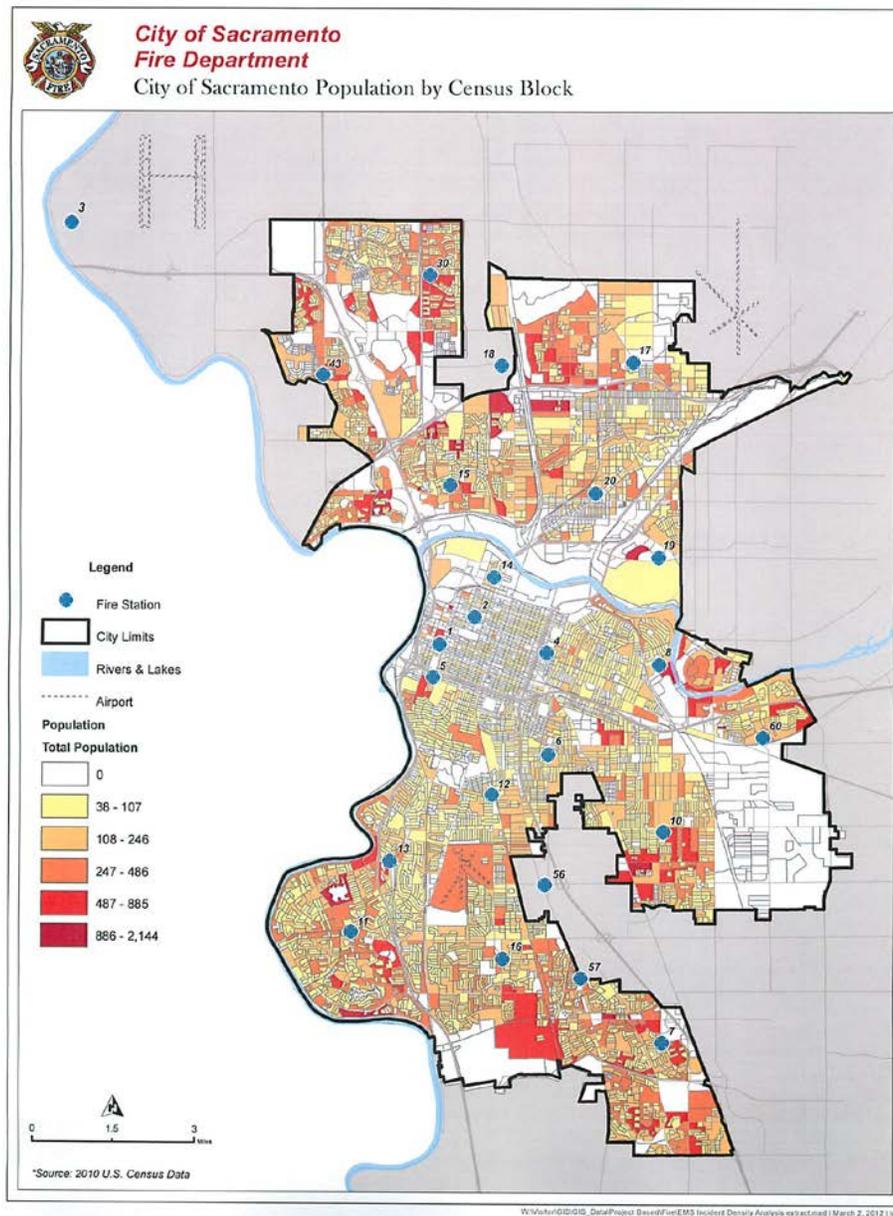
Engines 2, 4, 6, 7, 10, 15, 16, 17, 19, 20, 56, and 57 are responding to more than 3,000 calls per year, and are not recommended for staffing reduction based on call volume. Engine 3 is already operating with a three-person crew and is responding to fewer than 1,000 calls per year. Consequently, we also excluded Engine 3 from further consideration for reduced staffing.

Degree of Urbanization

To distinguish between the urban and more suburban areas of the City, Management Partners reviewed data for population density and types of calls for service. We also considered the general nature of fire fighting complexities associated with high-density commercial buildings commonly found in urban areas, with areas containing primarily single-family residential dwellings.

Figure 22 below is a map showing relative population density.

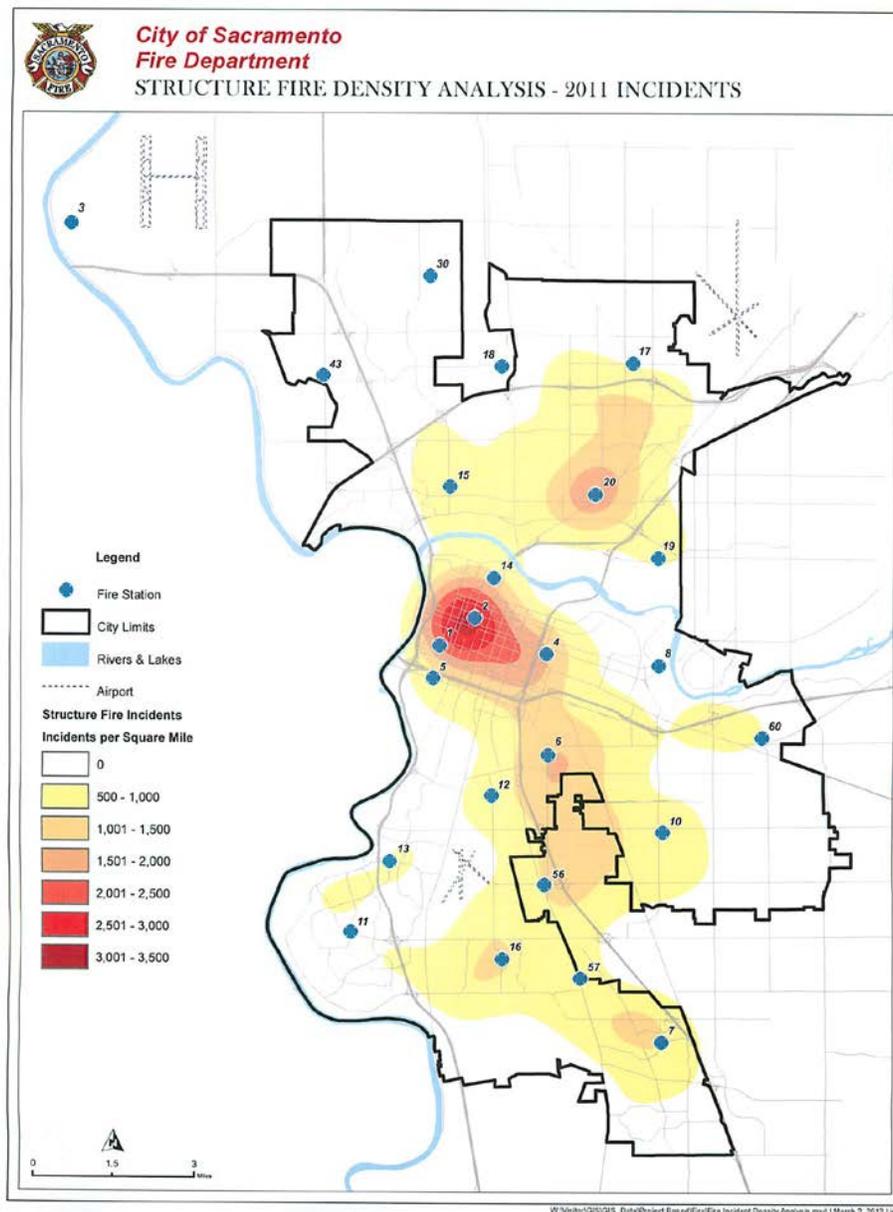
Figure 22. Population by Census Block for 2010



Source: Sacramento Fire Department.

Figure 23 shows where structure fire incidents were concentrated during 2011, and the locations of stations within those areas. Stations 1 and 2 are located in areas with more fire incidents per square mile than the rest of the City.

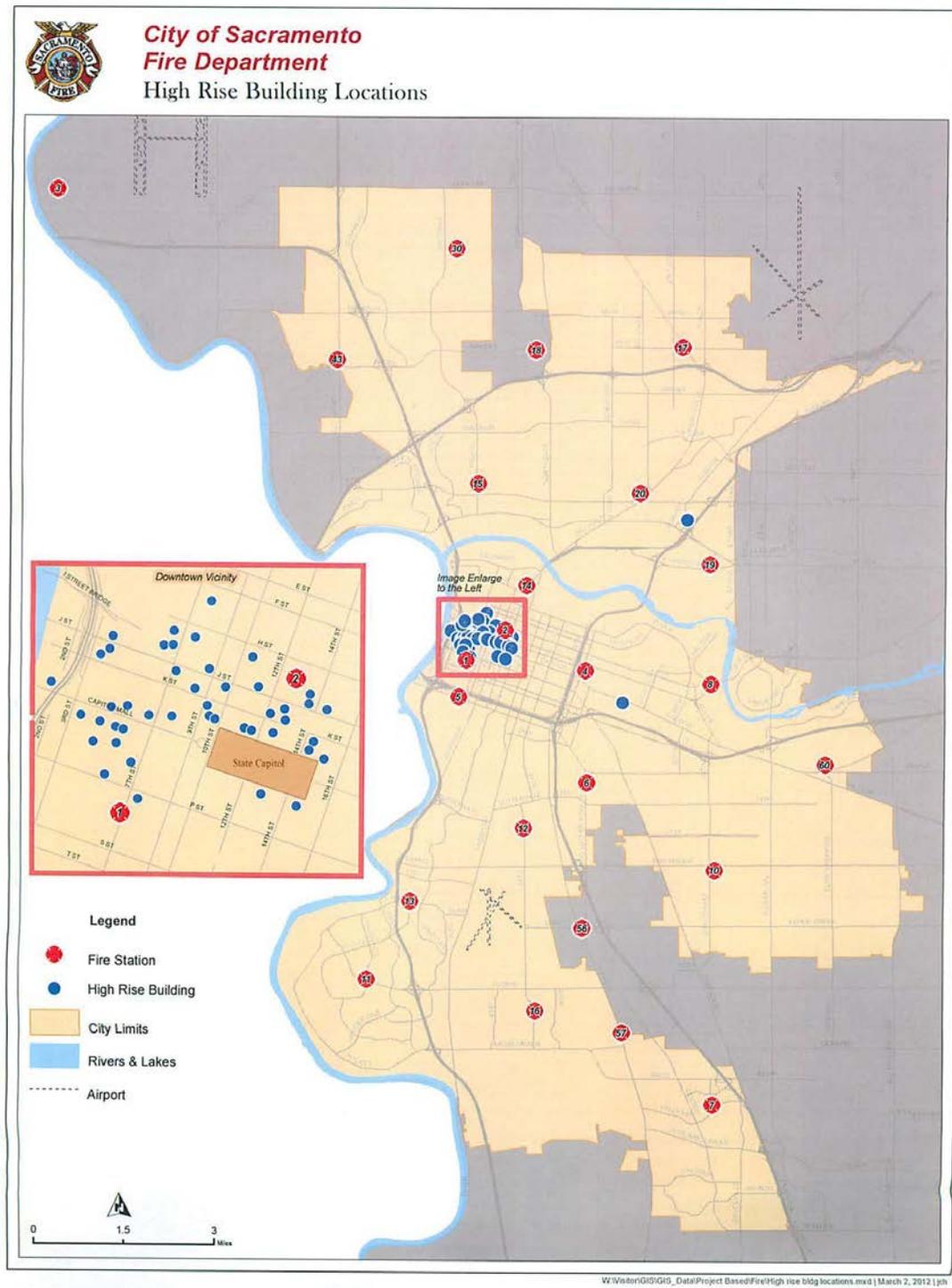
Figure 23. Structure Density Analysis for 2011



Source: Sacramento Fire Department.

Similar data for EMS incidents was previously shown in Figure 21 above. Figure 24 is a map showing the concentration of high-rise structures in Sacramento.

Figure 24. High Rise Building Locations



Source: Sacramento Fire Department.

Based on the factors shown in Figures 21, 22, 23 and 24, Engines 1, 5 and 14 have higher call volumes per square mile and respond to areas in close proximity to the major high-rise building complexes within the City. Therefore engine companies at those stations are not recommended for staffing reductions, in spite of their lower call volumes.

Travel Time for Back-Up Support

Management Partners reviewed historical dispatch data to calculate the average amount of time it takes a particular engine company to receive back-up support from a second engine company. Our review did not include additional responses from truck companies, paramedic units or automatic aid resources that would be involved in a typical structure fire response.

Table 6 shows the average response time for each engine and the average response time for back-up support based on 2011 dispatch data, as well as the difference between the two times.

Table 6. Average Response Times for Second Due Engine

Engine	Average Response Time (minutes:seconds)	Second Due Engine Average Response Time	Difference
1	4:08	4:49	0:41
2	4:06	4:41	0:35
3*	5:00	7:06	2:06
4	4:37	5:07	0:30
5	4:54	4:58	0:04
6	4:48	5:04	0:16
7	5:36	8:18	2:42
8	5:18	6:03	0:45
10	5:40	5:55	0:15
11	5:10	5:53	0:43
12	4:54	5:05	0:11
13	5:34	5:44	0:10
14	5:03	6:01	0:58
15	5:46	6:39	0:53

Engine	Average Response Time (minutes: seconds)	Second Due Engine Average Response Time	Difference
16	4:48	5:32	0:44
17	5:15	6:31	1:16
18	5:48	7:00	1:12
19	5:13	6:13	1:00
20	5:00	7:14	2:14
30	5:50	7:04	1:14
43	6:47	8:11	1:24
56	4:36	5:43	1:07
57	5:21	6:14	0:53
60	5:20	7:17	1:57

Note: All times (with the exception of Station 3 first due default response time) are based on 2011 actual dispatch data. Second due response times do not include automatic aid assistance response times, which in some cases were quicker than available City units.

Exclusive of the 2011 data for automatic aid assistance received, Table 6 shows a time lag for back-up support ranging from 4 seconds (the low) to 2 minutes and 42 seconds (the high).

Based on our analysis of historical data, seven engine companies could be converted to three-person companies with the least amount of impact to the residents served within their respective districts. Table 7 lists them.

Table 7. Engine Companies Suitable for Conversion from Four- to Three-Person Staffing

Engine Company
8
11
12
13
18
30
60

The SFD's current response to a single-family structure fire is three engines, two ladder trucks and two battalion chiefs. This places 22 persons at the fire ground for response. NFPA Guideline 1710 calls for the provision of a minimum of 15 people on this type of response to ensure firefighter safety while the mission is executed.

If the staffing changes recommended for these seven companies are implemented, the total number of firefighting personnel on an initial response would be 19, even if all of the responding engines have been converted to three-person companies. Therefore, converting the seven engine companies to three-person crews would still enable the SFD to exceed these safety standards during residential structure fire responses by a substantial amount.

Reducing staffing on seven engine companies from four to three persons would result in a reduction of 21 sworn positions. At an annual cost of \$124,103 this would create an estimated savings of \$2,606,163 per year, not counting overtime. Taking overtime costs into account, the annual estimated savings is \$2,913,750.

Recommendation 4. Implement three-person staffing on Engine Companies 8, 11, 12, 13, 18, 30 and 60.

Additional Efficiency Opportunities

Changing the deployment for ambulances and engine companies would generate significant savings for the City. Our analysis identified additional opportunities to improve the efficiency of the SFD.

Tiered-Dispatch Protocols

The SFD's current response to a single-family structure fire not only exceeds the NFPA 1710 minimum standard, it also results in more equipment than necessary responding to incidents. The standard protocol is to dispatch the maximum number of units that might be necessary for effective response, regardless of the type of call.

As we reported in 2010, from a risk management perspective, this practice puts an unnecessary number of Code 3 vehicles on the road, which places firefighters and the public at greater risk. It also creates an unnecessary amount of wear and tear on the apparatus, which reduces useful life and increases maintenance repair costs. In many cases a "fire" call is cancelled because no fire is actually taking place.

A more efficient approach is to use a tiered dispatch protocol that sends a smaller number of personnel for initial response based on the type of incident, and adds more units once the need is confirmed by the units arriving first on scene. Implementing a tiered dispatch protocol would reduce the emergency responses for truck companies and provide a more realistic work load of emergency responses. (The current data are distorted by the heavy response numbers generated by “over response” loads to residential structure fires.) It would also keep more pieces of apparatus in place to provide a faster response to multiple incidents.

Implementing tiered dispatch response should also have a corresponding increase in the ability of engines and trucks to manage company inspections and training. It should also have a positive impact on the availability of ambulances, should a review of the alarm responses find that more than one ambulance is being dispatched to unnecessary alarms.

The Sacramento Regional Fire/EMS Communications Center (SRFECC) is a joint powers agency providing fire and EMS dispatch throughout Sacramento County as well as portions of Placer County. Although the Sacramento Fire Chief has authority to request that the SRFECC follow different dispatch protocols for Sacramento than it does for other agencies, it is more effective for regional dispatch operators to follow similar protocols for all agencies.

Recommendation 5. Implement tiered dispatch response protocols in collaboration with the Sacramento Regional Fire/EMS Communications Center.

Information Technology

In the April 2010 Citywide Financial and Operational Review Management Partners recommended that the City conduct an optimization study to identify ways to more efficiently organize information technology (IT) governance, operations, and systems. This would include the Fire Department IT unit and the Public Safety IT unit.

The Public Safety IT Unit (PSIT) is operated by the Police Department. During our interviews, SFD staff expressed concerns that their IT needs receive a lower priority. Evaluating the extent to which this perception is accurate was beyond the scope of this study. However, such perceptions are typical in arrangements where one operational department is providing internal services to another operational department. It is one reason why having internal service operations independent of the departments they serve is a best practice.

Recommendation 6. Conduct an optimization study to identify ways to more efficiently organize citywide information technology governance, operations, and systems, including police and fire.

Such an optimization study will take some time to develop and implement. While this is underway, a procedure is needed to assure that the SFD is receiving the appropriate levels of IT services. A workload priority protocol to categorize tasks and set priorities can be developed. For example, a priority protocol would classify work as software repairs, added/revised features, upgrades, replacements, etc. A committee of police and fire management could be established to review major work to set priorities. What constitutes “major work” would be defined by this committee. This is a good short term solution but does not provide for unified system standardization.

Recommendation 7. Create a workload priority protocol for the Public Safety Information Technology Unit to be used until the IT optimization implementation has been completed. A committee of Police and Fire management would review major projects and would set priorities.

Fire Department Information Technology Staffing

The Fire Department’s Information Technology unit included two sworn staff until recently, when one was recently promoted to a line position and the IT assignment became vacant. In addition, the roll call software program is being maintained by a battalion chief on an overtime basis. A best practice is to use non-sworn staff in areas not directly involved with fire/EMS response.

Utilizing civilian staff for information technology will reduce costs for both the Police and Fire Departments. While the cost savings between sworn and civilian staff is marginal (roughly estimated at \$100,000 annually), civilians in IT functions would create additional sworn staff capacity.

Recommendation 8. Hire civilians instead of sworn personnel to fill information technology positions.

Roll Call Software

The current software used for the roll call process is a standalone system that is being managed on a part-time basis by a battalion chief on

overtime. The PSIT unit staff is unfamiliar with this program and does not know how to make changes. Should the battalion chief managing the roll call software leave the City, the department will be in a very difficult situation. Assigning responsibility to support roll call software to non-sworn staff is anticipated as part of Recommendation 8.

One problem with the roll call software program is that it is used to transmit summary data to the City's payroll system. However, the detail data are not transmitted. For example, not all of the incentive pays are being tracked in the City's payroll system. Shift trades are being tracked manually off line, so that when a firefighter trades a shift, the person working the shift is not shown as actually working in the roll call program data. The lack of an integrated system between roll call staffing and the City's payroll system also makes the ability to track and manage overtime more difficult.

The City and SFD need a program that tracks all detail data in the City's central database. Off-the-shelf roll call software would cost about \$500,000, and would provide the data linkage to the City's centralized payroll and financial accounting systems.

Recommendation 9. Replace the roll call software with a program that will collect all data and appropriately link detail data with the City's IT systems.

Roll Call Process

Further complicating the roll call software issue is the process by which roll call is established. The current roll call process is a labor-intensive effort with numerous rules. Staff reported that the roll call manual is now approximately 50 pages in length, and requires considerable staff time to manage. While evaluating the replacement of the roll call process, some rules could be simplified and matched with the capabilities of the new software.

A review of best practices of other fire departments could be made to identify more efficient methodologies. The roll call process is not specifically proscribed by the MOU but it has been a past practice for the chief to work with a committee of labor representatives to make modifications to roll call rules.

Recommendation 10. Negotiate roll call rules to be a clear management right so that the fire chief has maximum flexibility in assigning staff to meet workload demands.

This will also simplify the requirements for roll call management software and minimize implementation costs.

Consolidation of Weed Abatement Functions

Currently responsibility for weed abatement activities is split between the SFD (for vacant properties) and the City's Code Enforcement Division (for properties with buildings). The SFD has one senior fire prevention officer and 15 fire prevention officer II positions who conduct a variety of fire prevention activities, including inspection and documentation of properties requiring weed abatement. Code Enforcement follows an identical process of seasonally inspecting properties.

In general, economies of scale can be found when identical processes are consolidated. Since there is no difference between the weed abatement process fire prevention inspectors and code enforcement officers must follow, it makes sense to explore consolidating the responsibility in the least costly manner.

Salary rates for fire prevention officers are approximately 15% higher than code enforcement officers. The hourly rate for a fire prevention officer (at the highest step of the salary range) is \$34.76 per hour, compared to \$30.36 per hour for a code enforcement officer. In addition, fire prevention officers are eligible for incentive pay and receive public safety retirement benefits that are more costly than retirement benefits for miscellaneous employees.

Having code enforcement staff patrol the City to identify properties requiring weed abatement would provide an opportunity for them to check for other violations such as abandoned vehicles, trash dumping, and to follow up on the status of noticed properties. Relieving the Fire Prevention Division of weed abatement responsibilities may reduce the number of fire prevention officers needed, or may create capacity for them to work on other important fire prevention activities.

Additional analysis is needed to determine the potential impact of transferring vacant property weed abatement to code enforcement on workload and staffing as well as the potential for cost savings. However the cost differential in salaries and benefits alone makes this concept worth studying further.

Recommendation 11. Evaluate the potential cost savings and impacts on workload and staffing associated with consolidating weed abatement responsibility with the Code Enforcement Division.

Revenue Enhancements

Management Partners conducted a cursory review of existing user fees charged by the SFD to identify opportunities for revenue enhancement.

User Fees

The change in focus of fire departments from fire suppression to medical aid has shifted the rationale for financing fire department operations from primarily property-related taxes to a combination of property taxes and user fees. Property taxes are appropriate for providing funding for the basic response capacity of the department, while user fees are appropriate for non-suppression services that are provided to individuals rather than the entire community. Thus, the use of user fees by fire departments has grown nationally and is quite common. Most of these new fees are intended to recover costs from non-residents or insurance companies. This helps to reduce overall service costs to residents and promotes the user fee mentality that “those who use the service should pay for it.”

The City of Georgetown, Texas, has adopted user fees for all of their service calls except for single-family fires and EMS responses for Medicare and Medicaid (in California, Medi-Cal) patients. This approach assumes that fees are paid by insurance companies and not by the individual users.

The City of Cascade Locks, Oregon, Fire Department’s area of coverage includes about 20 to 30 miles of freeway along I-84 outside the city limits. The City has user fees to collect revenue from non-residents involved in motor vehicle accidents or other fire department responses. Because Cascade Locks is a small town in a rural area, many of their calls for service are from non-residents as a result of freeway accidents. They also implemented a fire response subscription program for residences outside the city limits. The cities of Roseville and Oakland, have also adopted fees for motor vehicle accidents.

Fire suppression service fees are not common, but some U.S. cities hold people responsible for fires when negligence, code violations, or criminal activity is involved in causing the fire. The Ventura, California, Fire Department has established guidelines for recovering costs for certain fire-related incidents: e.g., fires from unlawful use of fireworks; intentionally set fires; malicious false fire alarms; and incidents caused by the misuse of alcohol or a controlled substance, including vehicle accidents.

California cities have relied upon the powers granted to them under Article XIII B of the California Constitution, which authorizes cities to recover the costs reasonably born for public services from user fees. The principal rationale for fire service fees is that local government fire departments have expanded well beyond the traditional fire suppression generally supported by property taxes. More recently, Proposition 26 has categorized fees and taxes with limitations (and exceptions) on how they are charged. Any changes in fees need to be vetted through Proposition 26 limitations and exceptions.

The SFD annually analyzes various fees charged by the department; however, there are opportunities for increasing some fees or establishing new fees within limitations and exceptions of Proposition 26. Calculations of the cost of service for current fees do not include all overhead costs nor the full costs of facilities and equipment, including amortized replacement costs. Federal regulations provide guidelines for cost allocations (OMB Circular A-87).

Some potential fees are designed to discourage the use of services rather than be a source of revenues. Examples of new fees found in other cities include:

- False alarm fees, usually charged for multiple false alarms within specified periods. The purpose is to reduce the number of false alarms which take resources away from potential legitimate responses.
- Motor vehicle accident response, especially for driving under the influence and non-residents.
- Rescue responses when the person rescued has violated a law, such as a trespassing.
- Assisted living/nursing home response fee when the facility is using the Fire Department for frequent responses instead of being properly staffed, e.g. lifting a patient.
- Lockout fee for responding to unlock residences or vehicles for people.
- Fees for fire suppression of fires caused by illegal activities.
- ALS/ambulance subscription program (see below).

Fees to recover the costs of responding to some incidents are appropriate and should not be subsidized by the taxpayers. Separating accidents into common types (e.g., “fender benders”) and those involving criminal action (e.g., driving under the influence) provides a clear delineation of who should pay for the response costs. Similarly, rescue responses can be separated into “accidental” (e.g., boat capsizing) versus those caused by

the rescued person (e.g., cliff rescue of a base jumper). Fees can be developed for those cases where there is a criminal action or planned dangerous activities. These types of fees have been successfully implemented in cities such as Oakland, Santa Monica, Roseville, Tracy, and Ventura.

Recommendation 12. Conduct a fee study to calculate the full cost of providing fire department services and identify opportunities for establishing new fees.

Calculating the full costs will identify the amount of those services being subsidized by taxpayers. The City Council may establish levels of subsidies for different services.

Paramedic/Ambulance Subscription Program

The Sacramento Fire Department does not have a paramedic/ambulance subscription program. Cities have implemented subscription programs that have provided additional revenues and reduced the burden on residents who do not have insurance coverage. Our 2010 report for the City recommended that a subscription program be established. Data from that report on 2008-09 subscription program revenues for seven California cities is included below.

Table 8. Ambulance Subscription Program Revenue for FY 2008-09

Jurisdiction	Population	Annual Membership Revenue	Revenue Per Capita
Corona	148,597	\$1,050,516	7.07
Anaheim	348,467	\$1,710,000	4.91
Fullerton	137,624	\$815,000	5.92
Huntington Beach	202,480	\$1,426,000	7.04
Orange	141,634	\$650,000	4.59
Burbank	108,082	\$180,000	1.67
Santa Ana	355,662	\$155,000	0.44
AVERAGE	206,078	\$855,217	4.52
MEDIAN	148,597	\$815,000	4.91

Based on the experience of other communities, a subscriber rate of 6% of households is a reasonable estimate. With an annual fee between \$35 and \$50, the City could expect revenue of \$1,000,000 to \$2,000,000 annually. As Sacramento ambulance service is an integral part of the Fire Department, this revenue can offset an equivalent amount of general fund revenue that can then be used for other priorities. The City may wish to explore collaborating with other fire agencies in the Sacramento area to ensure that the benefits of a paramedic/ambulance subscription program are offered on a regional basis.

Recommendation 13. Establish a paramedic/ambulance subscription program. Include a cost/benefit analysis of operating the billing and collection program with City staff or by contractor.

Savings from Efficiencies and Innovations

This report contains 13 recommendations representing either efficiencies or innovations which, when implemented, will allow the Sacramento Fire Department to maintain service, save money, or both. Each of the recommendations is listed below in Table 9.

When it is possible to estimate a dollar impact, Management Partners has done so. In some cases, where it is difficult or unduly speculative to quantify the economic impact, no dollar value has been assigned. This does not mean that there will not be a gain in efficiency or innovation, only that it is difficult to estimate such without study and analysis beyond the scope of this assignment.

Table 9. Potential Savings or Revenues from Recommendations

Recommendation	Potential Savings or Revenue
1. Utilize the FLSA-approved methodology for calculating overtime, which excludes leave time as time worked from the calculation	\$1,842,760
2. Renegotiate labor contracts to reduce the number of incentive pays and associated costs	To be determined
3. Change the current ambulance staffing from two firefighter/paramedic positions to a "1:1" staffing pattern with one firefighter/paramedic and one civilian EMT per unit	\$3,314,310
4. Implement three-person staffing on Engine Companies 8, 11, 12, 13, 18, 30 and 60	\$2,913,750
5. Implement tiered dispatch response protocols in collaboration with the Sacramento Regional Fire/EMS Communications Center	
6. Conduct an optimization study to identify ways to more efficiently organize citywide IT governance, operations and systems, including Police and Fire	
7. Create a workload priority protocol for the Public Safety Information Technology Unit to be used until the IT optimization implementation has been completed	
8. Hire civilians instead of sworn personnel to fill information technology positions	\$100,000

Recommendation	Potential Savings or Revenue
9. Replace the roll call software with a program that will collect all data and appropriately link detail data with the City’s IT systems	(\$500,000)
10. Negotiate roll call rules to be a clear management right so that the fire chief has maximum flexibility in assigning staff to meet workload demands	
11. Evaluate the potential cost savings and impacts on workload and staffing associated with consolidating weed abatement responsibility under the Code Enforcement Division	
12. Conduct a fee study to calculate the full cost of providing fire department services and identify opportunities for establishing new fees.	
13. Establish a paramedic/ambulance subscription program.	\$1,000,000 to \$2,000,000
Total Potential Savings	\$8,670,820 to \$9,670,820

Any significant change typically comes with an element of discomfort, no matter how positive the outcome. This innovation and efficiency study has identified a variety of alternatives for improving the efficiency of the Sacramento Fire Department without significant impact to the community it proudly serves. Achieving savings in the delivery of services will require not only a concerted effort by the City’s elected and appointed leadership, but also collaboration with the Sacramento Area Fire Fighters, Local 522. The recommendations in this report provide a pathway to begin that collaborative journey.

Attachment – List of Recommendations

- Recommendation 1.** Utilize the FLSA-approved methodology for calculating overtime, which excludes leave time as time worked from the calculation.
- Recommendation 2.** Renegotiate labor contracts to reduce the number of incentive pays and associated costs.
- Recommendation 3.** Change the current ambulance staffing from two firefighter/paramedic positions on each ambulance to a “1:1” staffing pattern with one firefighter/paramedic and one civilian EMT per unit.
- Recommendation 4.** Implement three-person staffing on Engine Companies 8, 11, 12, 13, 18, 30 and 60.
- Recommendation 5.** Implement tiered dispatch response protocols in collaboration with the Sacramento Regional Fire/EMS Communications Center.
- Recommendation 6.** Conduct an optimization study to identify ways to more efficiently organize citywide information technology governance, operations, and systems, including police and fire.
- Recommendation 7.** Create a workload priority protocol for the Public Safety Information Technology Unit to be used until the IT optimization implementation has been completed.
- Recommendation 8.** Hire civilians instead of sworn personnel to fill information technology positions.
- Recommendation 9.** Replace the roll call software with a program that will collect all data and appropriately link detail data with the City’s IT systems.
- Recommendation 10.** Negotiate roll call rules to be a clear management right so that the fire chief has maximum flexibility in assigning staff to meet workload demands.
- Recommendation 11.** Evaluate the potential cost savings and impacts on workload and staffing associated with consolidating weed abatement responsibility with the Code Enforcement Division.
- Recommendation 12.** Conduct a fee study to calculate the full cost of providing fire department services and identify opportunities for establishing new fees.
- Recommendation 13.** Establish a paramedic/ambulance subscription program.