



# Memorandum

**TO:** PUBLIC SAFETY, FINANCE &  
STRATEGIC SUPPORT  
COMMITTEE

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**SUBJECT:** SEE BELOW

**DATE:** January 7, 2010

Approved

*Deanna Sifer*

Date

1/7/10

**SUBJECT: 2008-2009 FINAL REPORT ON FIRE DEPARTMENT VACANCY AND  
ABSENCE RATES AND THEIR IMPACT ON OVERTIME**

## PURPOSE

In response to the City Auditor's April 2001 "Audit of the City of San José Fire Department's Overtime Expenditures" (Overtime Audit), an annual report on the Fire Department's absence and vacancy data is provided to ensure that overtime funding and relief staffing levels are annually reviewed to ensure they are appropriately measured, funded, and managed. This report provides an analysis of 2008-2009 absence and vacancy data for the Fire Department, outlines current staffing levels and projected attrition, and provides a discussion of relief staffing based on five years of data (2004-2005 through 2008-2009).

## BACKGROUND

Prior to 2005-2006, the Fire Department was unable to bring overtime expenditures within its annual overtime budget allocation. Concern regarding the Fire Department's over-expenditures led to the release of the 2001 Overtime Audit.

However, in the past three years, the Fire Department's overtime year-end expenditures were lower than budgeted estimates. The higher staffing level (i.e., lower than budgeted vacancies in the department) was the primary driver for this occurrence. In order to maintain service levels, the Department conducted Firefighter Recruit Academies based on projected vacancies. When actual vacancies fell below budgeted levels, vacancy savings were not realized, resulting in higher than budgeted expenditures for salaries and benefits, but lower than budgeted overtime expenditures. Higher staffing levels enabled the Department to utilize staffing to fill absences in duty positions, in lieu of overtime usage. Firefighters utilized for relief staffing reduced overtime expenditures that would otherwise have been required to meet daily minimum staffing requirements.

## ANALYSIS

### **Overtime Analysis**

To meet daily minimum staffing levels established in the "Memorandum of Agreement Between the City of San José and the International Association of Firefighter's Local 230" (MOA), the Fire Department in 2008-2009 required 204 line positions in the ranks of Battalion Chief, Fire Captain, Fire Engineer, and Firefighter (Firefighter-Paramedic and Firefighter-EMT) on each daily shift (A, B, C). This required staffing level is commonly referred to as daily minimum staffing (DMS). On a daily basis, the DMS level has to be maintained. When absences or vacancies occur, relief personnel and/or off-duty personnel who are brought back to work on overtime back-fill DMS assignments.

In 2008-2009, the Fire Department's modified overtime budget was \$13.9 million; about \$9.5 million (69% of budget) was allocated to meet DMS requirements. Other components of the Fire Department's overtime budget included funding for fee-related activities, training to meet skill requirements, fire dispatch coverage, and discretionary overtime such as recruitment and testing and other miscellaneous activities. This report will be limited to drivers of overtime usage to meet DMS requirements, notably absences and vacancies in line duty positions. Finally, an analysis of overtime funding and relief staffing is presented to provide a comprehensive analysis of the Department's overtime usage for 2008-2009.

For operational and cost effectiveness, a certain number of relief staff positions are budgeted for each classification, in addition to the number of duty positions, to provide DMS back-fill and meet DMS levels. This relief staffing model minimizes the impact on off-duty line personnel who would otherwise be required to be held-over or to return to work on their days off to back-fill any DMS absences or vacancies. In 2008-2009, this model continued to provide cost efficiencies for the City, as the salary, benefit, and retirement costs of line positions, depending on rank/step and health plan coverage, were on average 7% less costly than the cost of overtime at one-and-one-half times the salary of the rank. However, there are limitations to the model. Relief personnel are assigned to shift positions (A, B or C) and fill vacancies on their shift assignments. If vacancies and absences in the A Shift DMS exceed the number of A Shift relief personnel, overtime will be required. However, if vacancies and absences on the A Shift are lower than the number of relief personnel available to provide back-fill, the Department would find itself overstaffed.

The average benefit ratio for sworn positions increased in 2008-2009 to 42.9% from the prior year ratio of 41.4%. For 2009-2010, the average ratio shows a slight decline to 42.3%. As long as the benefit ratio remains below 50%, use of relief staff (in lieu of overtime) to fill minimum staffing needs would result in savings, assuming all relief personnel are fully deployed for shift duties.

***Absence Rates***

The Department's TeleStaff system is a staffing and data collection software program that allows the Fire Department to coordinate daily minimum staffing and gather related data. TeleStaff enables staff to track sworn absences by staff rank and absence type. Displayed below are 2008-2009 absence hours by type of absences and by rank. Absence hours are hours that assigned personnel were not available to fill daily minimum staffing slots due to either vacation, illness, disability, modified duty, compensatory time, funeral leave, jury duty, and/or administrative assignment. For 2008-2009, the Fire Department's absence hours for sworn line personnel in the ranks of Battalion Chief, Fire Captain, Fire Engineer, and Firefighters totaled 346,566 hours. It should be noted however, that the absence hours detailed in the chart below do not include the absence hours of line personnel who participated in special operations training (Airport Rescue Firefighting, Emergency Hazardous Materials Operations, and Urban Search and Rescue).<sup>1</sup>

**Chart No. 1**  
***Absence Hours by Type & Rank: 2008-2009<sup>2</sup>***

<b>Rank</b>	<b>Vacation</b>	<b>Sick Leave</b>	<b>Disability*</b>	<b>Modified Duty</b>	<b>Comp. Time</b>	<b>Funeral Leave</b>	<b>Jury Duty, Witness &amp; Military</b>	<b>Admin**</b>	<b>Total Hours</b>
Battalion Chief	3,044	1,149	2,917	672	281	0	0	8,624	16,688
Fire Captain	29,205	17,491	33,426	15,344	623	621	45	17,472	114,226
Fire Engineer	30,993	21,376	31,591	18,928	1,500	874	51	112	105,424
Firefighter	33,902	25,615	29,127	19,712	362	1,277	235	-	110,228
<b>Total Absence Hours (2008-2009)</b>	<b>97,144</b>	<b>65,631</b>	<b>97,061</b>	<b>54,656</b>	<b>2,765</b>	<b>2,771</b>	<b>330</b>	<b>26,208</b>	<b>346,566</b>
<i>Total Absence Hours (2007-2008)</i>	<i>116,468</i>	<i>70,584</i>	<i>85,678</i>	<i>34,868</i>	<i>1,337</i>	<i>4,250</i>	<i>393</i>	<i>5,117</i>	<i>318,695</i>

\* Disability hours only for line personnel on 56-hour assignments.  
 \*\* Details on administrative assignments provided in the next page

<sup>1</sup> Absences from line duty due to special operations training are excluded in order to compare absence rates in 2008-2009 with prior years. The City's 2004-2009 Memorandum of Agreement with the International Association of Fire Fighters requires a Hazardous Incident Team (HIT) and Urban Search and Rescue (USAR) training certification special pay. Department policies and procedures were developed in 2008-2009 which included minimum training, and a timeline for completing this training for all assigned personnel to ensure that a company is staffed by the appropriate number of trained personnel. To comply with the Federal Aviation Administration (FAA) requirements for Airport Rescue and Firefighting (ARFF) and to meet the MOA provision on special operations (HIT and USAR), the Department conducted several special operations training programs in 2008-2009. It is estimated that over 220 personnel participated in about 16,000 hours of ARFF, HIT, and USAR training. Overtime costs for personnel participating in the training, as well as overtime costs to backfill for personnel in training is roughly \$908,000, of which \$150,000 was funded by revenue from the Airport to the General Fund. Another \$160,000 was submitted for grant reimbursement, though funds have not been received by the City as of December 2009.

<sup>2</sup> Table displays information rounded to the nearest hour. The total column is the sum of data, including fractions of an hour.

With 710 line positions<sup>3</sup> in 2008-2009, total absence hours between July 2008 and June 2009 were equivalent to 488 absence hours per line person (compared to 453 in 2007-2008). Although these hours of absence are not always taken in full-shift (24-hour) increments, the 2008-2009 absence level was equivalent to about 20.3 shifts per line person (compared to 2007-2008's 18.9 shifts).

At about 2,920 hours per line person per year, absence hours in 2008-2009 would translate to the following absence rates:

Battalion Chief	33.6%
Fire Captain	23.6%
Fire Engineer	15.4%
Firefighter	12.9%

The average absence rate in 2008-2009 was 16.7%. Details are provided in Attachment A. In 2007-2008, the average absence rate was 15.5%.

Total absence hours (including absences due to temporary administrative assignments) increased by 27,871 hours from 318,695 hours in 2007-2008 to 346,566 hours in 2008-2009. A primary driver was administrative assignments, which represents 76% of the increase.

Absence hours for administrative assignments increased by 21,091 hours compared to 2007-2008 levels. In 2008-2009, the Fire Department was budgeted for 34 sworn personnel in administrative assignments to manage the following programs: Emergency Dispatch, Safety, Facilities, Emergency Medical Services, Training, Fire Prevention, Special Operations, Arson, Vehicle, Public Information, and Wildland. As described below, additional personnel were required to manage and complete priority departmental projects. When additional personnel are pulled from the line for unbudgeted administrative assignments, and, as in 2008-2009, special operations trainings (please refer to footnote #1 on page 3), these actions would have a significant impact on the Fire Department budget and potentially the General Fund.

In 2008-2009, vacancies in the Deputy Fire Chief positions required the Department to assign two Battalion Chiefs to fill these vacancies. In addition, a Battalion Chief was assigned to administrative duties for about eight months to develop TeleStaff background structures, complete operating manuals, and train Fire personnel.

In order to complete capital projects, fill essential training and public information duties, and support new program initiatives (Heart Safe City, Records Management System); seven Fire Captains were temporarily reassigned from line duties to Fire administration over the course of 2008-2009. Described below are additional details of the administrative duties that required the temporary assignment of Fire Captains.

For the Public Safety Capital Program, the Department assigned two Fire Captains to oversee the design and construction of five fire stations in 2008-2009. The complexities and coordination required dedicated resources who were familiar with fire station and personnel needs and who

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<sup>3</sup> 710 line positions is 204 daily minimum staffing over three shifts (A, B, C) for a total of 612 duty positions (204 x 3 shifts), and dedicated relief staffing estimated at about 0.5 full-time equivalent per line staff. In 2008-2009, there were 98 relief personnel (or 0.48 full-time equivalents per line staff).

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could effectively communicate these needs with other City departments and contractors. The cost of one of the two positions was supported by capital funds. With the completion of the projects, sworn staff support for capital program management has been returned to previous year levels during 2009-2010, with one Fire Captain assigned to complete the Department's capital bond program.

The temporary assignment of one Fire Captain to the Department's Training Division was necessary to assist 2008-2009 Firefighter-Paramedic recruits in successfully completing training and accelerating the paramedic accreditation process. In 2010-2011, the Target Safety Program is expected to include both the Advanced Cardiac Life Support and Pediatric Advanced Life Support modules of the paramedic accreditation training. It is expected that this would provide some capacity in the department's training staff to assist in Firefighter-Paramedic recruit training and accreditation activities. The temporary administrative assignment for this activity would no longer be required in 2010-2011.

In September 2008, the Fire Captain assigned as the Department's Public Information Officer was out on disability leave. Due to essential services provided to the public by this position, the redeployment of a Fire Captain was necessary for about five months. In February 2009, the Department successfully utilized assignment of personnel on modified duty to reduce the use of line personnel to fulfill the duties of the Public Information Officer.

The Mayor's March 2007 Budget Message for 2007-2008 directed the Administration to bring forward a plan for the City to become a Heart Safe City and present it to the Public Safety, Finance, and Strategic Support Committee. During 2008-2009, the Fire Department continued its work developing a plan to meet the criteria for San José to become a Heart Safe City, with a Fire Captain assigned to spearhead the Heart Safe City Program. There were no overtime costs associated with the assignment, as the position's previous duties as EMS Captain were backfilled by staff on modified duty.

In addition, the timely completion of the TeleStaff and the Records Management System<sup>4</sup> program elements (including programming, testing, documentation, and training) required the redeployment of a two Fire Captains (combined time for administrative assignments of both Fire Captains was equivalent to one full time position for the year). Major updates have been completed and sworn personnel performing these functions have returned to line duties. Should minor programming adjustments be further required, the Department will implement measures to reduce overtime costs.

In order to minimize the overtime implications of reassignment of personnel from line duties, the Department has sought measures to reduce the overtime cost impact of these reassignments including the use of modified duty personnel, where feasible. Although civilian staff was also utilized to some degree in these projects, the technical skills and knowledge of line operations required for these projects limited the department's ability to more fully utilize civilian staff. The administrative assignments were one-time projects in 2008-2009 and are not expected to continue beyond 2009-2010. The Department is committed to managing overtime expenditures and

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<sup>4</sup> *Records Management System program elements included Patient Care Report and National Fire Incident Report*

limiting administrative assignments to the 33 sworn administrative positions<sup>5</sup> authorized in 2009-2010. Beginning 2010, the Department will include an update on the status of administrative positions in its Bi-Monthly Financial Report (BFR) to the Public Safety, Finance and Strategic Support Council Committee. This report would include information on special unbudgeted administrative assignments.

Excluding absence due to temporary administrative assignments, increase in absence hours were driven by absences due to disability and modified duty hours. Referring to Chart 1, although total disability hours increased by 11,383 hours, disability hours for the Battalion Chief, Fire Captain, and Firefighter ranks increased by 19,931 hours, offset by an 8,548 reduction for Fire Engineers. Disability hours for the Battalion Chief and Fire Captain ranks increased by 15,984 hours, or 79%, from 2007-2008 levels. (108 personnel had total disability hours of more than 224 hours, or were out on disability for at least one month). Modified duty hours increased in 2008-2009 for all ranks.

Attachment B provides absences by rank for 2007-2008 and 2008-2009. In this chart, significant increases in absence hours for the Battalion Chief and Fire Captain ranks were primarily due to administrative assignments and higher disability hours. For the Fire Engineer rank, overall absence hours decreased by 13% in 2008-2009 (from 2007-2008 hours of 121,398), due to significant decreases in absence hours resulting from lower vacation and sick leave usage, disability hours, and miscellaneous absences (funeral, military, jury duty, witness); offset by an increase in modified duty hours and compensatory time. In the Firefighter rank, total absence hours were higher in 2008-2009 due to increased disability and modified duty hours. (Fire Department line absences for a five-year period are included as Attachment C.)

The Department has been coordinating with the Human Resources Department and other City departments to reduce injury-related absences. Fire Administration staff members actively engage in discussions with the Human Resources Department on Workers' Compensation claims and in the City's Safety Committee. In addition, Fire Administration staff members participate in monthly Fire Department Safety Committee meetings (e.g. monitoring annual medical appointments, review of injuries, and review of operating procedures related to safety).

To reduce lifting strain and injuries, the Department purchased lifting equipment to assist Fire personnel in delivering patient care. To effectively use the equipment and reduce injuries, the Department's Safety Officer has provided video training and station training on lifting mechanics. The Department is currently implementing options to better enforce the Department's Injury, Illness Prevention Plan.

In 2008-2009, absences due to disability increased by some 11,400 hours (when compared to prior year). In 2007-2008, disability hours increased by 16,600 hours from 2006-2007 level (Attachment C provides disability hours for a five-year period). The higher level of retirements in 2008-2009 (86 sworn retirements) could suggest some correlation between disability and retirement. The City Auditor's April 2009 *Audit of the City of San José's Workers' Compensation Program* noted observations that some police officers and firefighters who were nearing retirement filed multiple workers' compensation claims in the years leading up to their retirement. For 2003-

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<sup>5</sup> In 2009-2010, one administrative position was eliminated

2004, the Auditor's Office found that "all of the Police and Fire employees who retired in that year on service-connected disability did file workers' compensation claims and also that all these employees filed multiple claims". Based on the Fire Department's 2008-2009 disability and retirement data, the trend identified by the City Auditor appears to have continued.

As previously discussed, to maintain daily minimum staffing (DMS), absences are filled by relief staff and when no relief is available, duty positions are filled by overtime. The information below provides annual salary costs as well as hourly salary rate for 2008-2009. Hourly rate for sworn line personnel is calculated at 112 hours per pay period. Overtime for backfilling absences and vacancies is calculated at 1.5 times base hourly salary rate as displayed below.

Rank <sup>6</sup>	Base Annual Salary	Base Pay per Pay Period	Base Hourly Rate <sup>7</sup>	Overtime Hourly Rate
Battalion Chief	\$ 157,601.60	\$ 6,061.60	\$ 54.12	\$ 81.18
Fire Captain	\$ 125,881.60	\$ 4,841.60	\$ 43.23	\$ 64.85
Fire Engineer	\$ 109,366.40	\$ 4,206.40	\$ 37.56	\$ 56.34
Fire Fighter	\$ 98,238.40	\$ 3,778.40	\$ 33.74	\$ 50.61

### *Vacancy Rates*

Due to minimum staffing requirements, vacancies have the same impact as absences on overtime costs. Vacancies in sworn ranks occur due to retirement from the organization or separations from employment. In 2008-2009, the Fire Department's emergency response line positions were vacant for a total of 60,144 hours<sup>8</sup>. In 2006-2007 and 2007-2008, the Department made significant improvements in filling vacancies when they occur, and has successfully filled paramedic duty positions to meet service level needs. In 2008-2009 however, retirements were higher than previously experienced, and mainly occurred in January and July, which impacted how quickly staff were able to complete promotions and hiring to fill vacancies. In the chart below, although a vacancy rate of 2.9% is displayed, it should be noted that in at the end of 2008-2009, the Department had 30 recruits in the Firefighter Academy. (These recruits graduated in August 2009 and were able to fill minimum staffing vacancies.)

*Chart No. 2  
 Vacancy Hours and Rate by Rank: 2008-2009*

Rank	Line Positions	Annual Hours Worked *	Vacancy Hours	Vacancy Rate
Battalion Chief	17.0	49,640	336	0.7%
Fire Captain	166.0	484,720	15,008	3.1%
Fire Engineer	235.0	686,200	33,488	4.9%
Firefighter	292.0	852,640	11,312	1.3%
<b>Total</b>	<b>710.0</b>	<b>2,073,200</b>	<b>60,144</b>	<b>2.9%</b>

\* Based on 2,920 hours worked per year

<sup>6</sup> Salary Information provided at top step for each rank

<sup>7</sup> Due to shift schedule, total hours worked for sworn line personnel for a year could either be 2,904 hours or 2,952 hours. Using an average of 2,928 total annual hours and 26.07 pay periods, average hours worked per pay period is 112.3 hours

<sup>8</sup> Vacancy hours in 2007-2008 = 32,032; in 2006-2007 = 72,016; and in 2005-2006 = 134,064

At the end of 2008-2009, although the overall vacancy rate was at the budgeted estimate of about 3%, vacancies in Battalion Chief and Firefighter ranks were lower than the budgeted estimate. This lower vacancy rate created overages in the full-time salaries and benefits allocations, offset by savings in the overtime allocation.

***Back-Fill for Duty Positions***

On a daily basis, the DMS level is supplemented with relief personnel and/or off-duty personnel who are brought back on overtime to back-fill DMS assignments due to absences and vacancies.

*Chart No. 3  
 Absence and Vacancy by Rank: 2008-2009*

<b>Rank</b>	<b>Absence Hours</b>	<b>Vacancy Hours</b>	<b>Hours Requiring Back-Fill</b>	<b>Total Absence &amp; Vacancy Rate</b>
Battalion Chief	16,688	336	17,024	34.3%
Fire Captain	114,226	15,008	129,234	26.7%
Fire Engineer	105,424	33,488	138,912	20.2%
Firefighter	110,228	11,312	121,540	14.3%
<b>Total</b>	<b>346,566</b>	<b>60,144</b>	<b>406,710</b>	<b>19.6%</b>

Previously, in 2007-2008 total absence (318,695) and vacancy (32,032) hours required 350,727 hours of overtime for back-fill, for a total absence and vacancy rate of 17.1%. In 2008-2009, factoring out adjustments in staffing related to station 34, the hours requiring backfill increased by 11% or 38,463 hours compared to the prior period. As previously discussed, a combination of an increase in vacancies (due to an unprecedented number of retirements experienced in 2008-2009) and an increase in absences (notably due to increase in administrative assignments, and disability hours) resulted in an increase in the number of hours requiring back-fill.

***Staffing Levels and Anticipated Retirements***

Attachment D (Fire Department Sworn Staffing Levels) details the 2007-2008 and 2008-2009 authorized sworn staffing levels and vacancies through July 16, 2009. A total of 86 sworn personnel retired in 2008-2009, and as of July 2009, the Department had a total of 46 sworn vacancies, offset by 30 Fire Recruits who were available to fill vacancies in August 2009.

In preparing projections of near-term and long-range vacancies, staff has analyzed the Fire Department's line staff's years of service and age ranges. Staff estimates retirements that could occur based on the following criteria for current employees: 30 years of service at any age, 25 years of service at age 50, and 20 years of service at age 55.

By January 2010, 49 sworn personnel will be within the window of years of service and age when members of the Fire Department typically file for retirement. (Please refer to Attachment E: Projected Fire Department Retirement Eligibility.)

At this time, the Department does not anticipate issues in filling vacancies. Since August 2009, 30 Firefighter Paramedics from the April 2009 Firefighter Recruit Academy have been on line duty

and are currently undergoing Paramedic accreditation. The 30 Firefighter EMT Recruits in the October 2009 Academy will complete training in February 2010 and be available to fill vacancies. As more information is available on actual retirements, the Department will evaluate whether another academy is necessary in 2009-2010.

### ***Relief Staffing***

To summarize the earlier overview, when a daily minimum staffing (DMS) position is unfilled, either due to an absence or a vacancy, to meet DMS levels, the position must be back-filled. There are three ways in which this can occur: overtime, relief personnel, or by higher-classing someone in a lower rank to back-fill the position (which also then requires back-fill).

On shifts where there are 204 line personnel or more available to work, someone in a rank lower than the rank where the absence or vacancy occurs could work in the higher rank to back-fill the position. This practice accomplishes two things. First, it allows the Fire Department to back-fill the position cost-effectively with an incrementally less expensive rank and, second, provides career development opportunities for the individual who is working in the higher rank.

On shifts where there are less than 204 line personnel available to work, overtime or relief personnel must be used to meet the DMS levels. To determine the most cost effective and operationally efficient method to back-fill DMS absences and vacancies, the following considerations are made:

- Comparison of overtime to relief position costs;
- Impact of shift assignments for relief personnel; and
- Flexibility in redeploying resources to meet critical Department needs.

In 2008-2009, salary, benefit, and retirement costs of line positions, depending on rank/step and health plan coverage, were 0% to 15%<sup>9</sup> less costly than the cost of overtime at one-and-one-half times the salary of the rank. Within certain limits, relief positions to back-fill for front line absences and vacancies (versus overtime usage) were the least costly method. However, the art of determining the right mix of relief and overtime is based on how absences and vacancies occur. To arrive at an appropriate staffing model, absence and vacancy hours were calculated using data from 2008-2009 for each rank, per pay period. To ensure that there are not too many relief positions during shifts with low absence or vacancy rates, the relief model budgets the number of relief positions needed to back-fill absences and vacancies when there are the fewest hours of absence and vacancy during the year (baseline).

There is a different baseline for each rank. This is largely due to the total number of positions per rank and the years of seniority per rank. The baseline is the lowest number of absence and vacancy hours used by the personnel in each rank in the 2008-2009 pay periods. The hours may vary due to the number of personnel in each rank and because personnel in higher ranks generally have more seniority and more vacation hours available. The baseline is set at the fewest hours used.

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<sup>9</sup> Retirement and other benefits for line personnel in 2008-2009 were on the average 7% less costly than overtime (at 1.5 times hourly rate)

Once the baseline is established based on the actual absence and vacancy data, it can then be determined, by rank, how many relief positions should be staffed to ensure the most cost-effective staffing model. In analyzing the absence and vacancy data for all ranks, the baseline methodology appears to be a sound tool for the Fire Captain, Fire Engineer, and Firefighter ranks. The larger number of positions "smooths out" the impact of shift assignments. For the Battalion Chief rank, the smaller number of positions (17) lends itself to more spikes per pay period.

The 2008-2009 baseline hours (lowest absence and vacancy hours that occurred in any pay period) are as follows:

- Fire Captain – 3,398
- Fire Engineer – 3,855
- Firefighter – 3,203

Attachment F displays the number of duty and relief positions per rank for 2009-2010. The relief staffing as displayed in this chart reflects the relief staffing formula developed in 1992. The Department continues to evaluate on an annual basis the configuration of relief staffing and overtime to meet minimum staffing requirements to ensure operational effectiveness and fiscal efficiencies. Due to the dynamic nature of the absence and vacancy rates and considering vital organizational/operational requirements, staff will continue to track the trends and conduct staffing and overtime analysis.

Over the last six years, the Department made a concerted effort to promote and fill vacant positions. As a higher number of retirements are expected to occur over the next two years, the Fire Department will continue to hire new Firefighters and promote to fill vacancies to help stabilize vacancy rates and minimize the demand for overtime. Despite these efforts, the heavy wave of retirements will impact vacancy and absence rates making this annual relief staffing and overtime analysis an important tool.

When staffing has stabilized, absences and vacancy data could be analyzed for relief staffing and overtime. Should analysis support a change in the staffing and overtime configuration, the Department will present proposals to adjust relief staffing and overtime for minimum staffing.

Using five years of absence and vacancy hours (2004-2005 through 2008-2009), a comparison of the vacancy/absence baseline hours and coverage hours by relief staff is presented below:

**Chart No.4**  
**Average Five-Year Baseline Data and Relief Personnel (Hours)**

	Average Vacancy/Absence Baseline	Coverage by Relief Staff	Difference in Coverage by Relief <sup>10</sup>	(Decrease)/Increase in Estimated Number of Relief Needed to Cover Average Baseline Absence/Vacancy <sup>11</sup>
Fire Captain	2,715	2,800	85	0.75
Fire Engineer	3,905	2,800	(1,105)	(9.87)
Firefighter	3,420	5,152	1,732	15.46
<b>Total</b>	<b>10,040</b>	<b>10,752</b>	<b>712</b>	<b>6.34</b>

The five-year average for baseline hours per rank is the same methodology used in 2007-2008 in order to smooth out staffing events that occur in only one year. It should be noted however that the use of this methodology does not reflect current operational staffing and needs. Fire Department staff will continue to work with the City Manager's Budget Office on refining the baseline methodologies currently used.

The above chart would indicate that an adjustment in relief staffing may be required for the Fire Engineer and Firefighter ranks. Filling vacant Fire Engineer positions has been challenging due to position requirements and other promotional opportunities open such as Fire Prevention Inspector, Arson Investigator, and Fire Captain. There are also merits to maintaining a higher number of relief Firefighter positions. Greater flexibility in deployment could be realized with a higher number of lower ranked staff. Firefighters could fill higher class vacancies at costs lower than that of an equivalent rank. It should also be noted that the impact of 2009-2010 budget actions on Airport Staffing will reduce the number of line positions by six (3.0 Fire Engineers and 3.0 Firefighters). Considering these factors, the Department is not presently recommending changes in the Fire Engineer and Firefighter relief configuration.

### Update on Audit Recommendations

Included in the April 2001 Audit Report is the following recommendations. The Department will continue to work with the City Auditor's Office to complete work products to meet these recommendations.

- *Recommendation #7 – Review sick leave data to establish benchmarks for sick leave use and identify possible patterns of abuse and take appropriate follow-up actions.*
- *Recommendation #8 - Implement a proactive sick leave reduction program to inform line personnel of the benefits of conserving sick leave and rewarding personnel with perfect attendance.*

<sup>10</sup> Positive variance implies there are more relief coverage hours than required to fill vacancies and absences. It should however be noted that the analysis does not consider staffing by shifts.

<sup>11</sup> A positive number could indicate more relief personnel than baseline analysis would require, and a negative number could indicate the need for additional relief staffing. It should be noted however that in evaluating relief personnel and overtime, the Department will be considering this baseline methodology in addition to other factors such as salary-benefit ratio.

In an effort to address concerns that there may be individual abuse of sick leave, the Fire Department is developing a new sick leave review process to ensure that line managers (Battalion Chiefs) periodically review individual sick leave usage and work with line supervisors (Fire Captains) to follow-up on any usage anomalies by specific employees. In addition to these efforts, the Fire Department has undertaken a review of routine operational procedures in order to ensure that the sick leave policies and procedures reflect the latest IAFF MOA. An initial data report, covering July-September 2009 is in the final stages of completion. It is expected that this approach will encourage appropriate use of sick leave and address concerns regarding possible sick leave abuse by line personnel.

### **CONCLUSION**

The Fire Department's staffing consists of duty positions (in three shifts for 24/7 coverage) and relief positions. When duty positions are not filled due to absences or vacancies, a combination of relief staff and overtime is necessary to meet daily minimum staffing requirements.

In 2008-2009, absence rate was 16.7% and vacancy rate was 2.9%. In 2007-2008, absence rate was 15.5% and vacancy rate was 1.6%. Higher absence rate and vacancy rate in 2008-2009 resulted in about 38,000 additional hours requiring back-fill when compared to 2007-2008. To ensure that expenditures did not exceed budgeted allocation, the Department initiated several changes to reduce overtime usage, including redesigning training schedules to minimize overtime for back-fill and requiring Deputy-level approval for discretionary overtime (such as recruitment outreach activities and committee work on succession planning and deployment/strategic plan).

In addition to previously described periodic review of sick leave usage, department staff is actively engaged in reducing work-related injuries through procedure and equipment changes. Department staff continues to coordinate with the Human Resources Department and other City departments to reduce work-related injuries and to reduce the amount of time employees are off work due to work-related injuries. These efforts include active participation by Fire Administration staff in the City's Safety Committee and in the Fire Department's Safety Committee, employee training, and equipment changes such as lifting equipment to reduce injuries. The Department will continue to monitor absences due to work-related injuries, engage in training line personnel, and implement changes in procedures to more effectively implement the department's Injury, Illness Prevention Plan.

The Fire Department renews its commitment to provide, on an annual basis, a report on staffing levels, absence and vacancy rates, and a forecast of short-term and long-term vacancies. In addition, the Department will continue to review drivers of absences due to illness or injury and continue to work with the Human Resources Department on measures to reduce absences in these areas. Department staff will also continue to work with the City Manager's Budget Office to refine the use of baseline absence and vacancy data in analyzing the complement of relief staff and overtime funding to meet daily minimum staffing requirements for all ranks. As discussed earlier, the Fire Department is committed to managing overtime expenditures and limiting administrative assignments to authorized levels. Beginning 2010, the Department will include an update on the status of administrative positions in its Bi-Monthly Financial Report (BFR) to the Public Safety,

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Finance and Strategic Support Council Committee. This report would include information on special unbudgeted administrative assignments.



DARRYL VON RAESFELD  
Fire Chief



JENNIFER A. MAGUIRE  
Budget Director

Attachments

**Attachment A: Absence Rates by Rank: 2008-2009**

<b>Rank</b>	<b>Line Positions</b>	<b>Annual Hours Worked*</b>	<b>Absence Hours</b>	<b>Absence Rate</b>
Battalion Chief	17.0	49,640	16,688	33.6%
Fire Captain	166.0	484,720	114,226	23.6%
Fire Engineer	235.0	686,200	105,424	15.4%
Firefighter	292.0	852,640	110,228	12.9%
<b>Total</b>	<b>710.0</b>	<b>2,073,200</b>	<b>346,566</b>	<b>16.7%</b>

\* Based on 2,920 hours worked per year

**Attachment B: Absence Rates by Rank**  
*2007-2008 and 2008-2009*

<b>Rank</b>	<b>2007-2008</b>	<b>2008-2009</b>	<b>Change</b>	<b>% Change</b>
Battalion Chief	11,456	16,688	5,232	45.7%
Fire Captain	80,222	114,226	34,004	42.4%
Fire Engineer	121,398	105,424	(15,974)	(-13.2)%
Firefighter	105,619	110,228	4,609	4.4%
<b>Total</b>	<b>318,695</b>	<b>346,566</b>	<b>27,871</b>	<b>8.7%</b>

**Attachment C: Absence Hours By Rank  
2004-2005 to 2008-2009**

	<i>Vacation</i>	<i>Sick Leave</i>	<i>Disability</i>	<i>Modified Duty</i>	<i>Comp. Time</i>	<i>Funeral Leave</i>	<i>Jury Duty, Witness &amp; Military</i>	<i>Admin *</i>	<i>Total Hours</i>
<b>2008-2009</b>									
Battalion Chief	3,044	1,149	2,917	672	281	0	0	8,624	16,688
Fire Captain	29,205	17,491	33,426	15,344	623	621	45	17,472	114,226
Fire Engineer	30,993	21,376	31,591	18,928	1,500	874	51	112	105,424
Firefighter	33,902	25,615	29,127	19,712	362	1,277	235	0	110,228
<b>Total</b>	<b>97,144</b>	<b>65,631</b>	<b>97,061</b>	<b>54,656</b>	<b>2,765</b>	<b>2,771</b>	<b>330</b>	<b>26,208</b>	<b>346,566</b>
<b>2007-2008</b>									
Battalion Chief	3,848	1,304	653	112	182	240	0	5,117	11,456
Fire Captain	33,309	16,800	19,706	9,308	331	754	14		80,222
Fire Engineer	41,827	26,120	40,139	11,123	477	1,434	278		121,398
Firefighter	37,484	26,360	25,180	14,325	347	1,822	101		105,619
<b>Total</b>	<b>116,468</b>	<b>70,584</b>	<b>85,678</b>	<b>34,868</b>	<b>1,337</b>	<b>4,250</b>	<b>393</b>	<b>5,117</b>	<b>318,695</b>
<b>2006-2007</b>									
Battalion Chief	4,747	2,039	1,748	2,688	128	120	6		11,476
Fire Captain	38,124	15,094	24,412	9,520	406	720	75		88,351
Fire Engineer	44,848	25,128	22,231	12,096	615	1,608	134		106,660
Firefighter	36,968	21,736	20,730	11,979	629	1,334	60		93,436
<b>Total</b>	<b>124,687</b>	<b>63,997</b>	<b>69,121</b>	<b>36,283</b>	<b>1,778</b>	<b>3,782</b>	<b>275</b>		<b>299,923</b>
<b>2005-2006</b>									
Battalion Chief	4,321	1,298	2,481	224	284	96	11		8,715
Fire Captain	37,417	16,145	19,110	5,819	661	784	109		80,045
Fire Engineer	45,478	21,820	31,463	12,523	924	1,560	198		113,966
Firefighter	37,961	22,300	26,004	7,321	718	1,511	144		95,959
<b>Total</b>	<b>125,177</b>	<b>61,563</b>	<b>79,058</b>	<b>25,887</b>	<b>2,587</b>	<b>3,951</b>	<b>462</b>		<b>298,685</b>
<b>2004-2005</b>									
Battalion Chief	3,755	1,916	3,369	336	582	48	5		10,011
Fire Captain	35,991	14,924	20,237	8,530	1,405	1,020	287		82,394
Fire Engineer	44,058	21,037	23,441	12,471	1,217	1,416	67		103,707
Firefighter	39,194	22,826	17,884	9,104	1,061	1,464	283		91,816
<b>Total</b>	<b>122,998</b>	<b>60,703</b>	<b>64,931</b>	<b>30,441</b>	<b>4,265</b>	<b>3,948</b>	<b>642</b>		<b>287,928</b>

\* Table displays information rounded to the nearest hour. The total column is the sum of data, including fractions of an hour.

**Attachment D: Fire Department Sworn Staffing Levels**  
*As of July 16, 2009*

Rank	Authorized Positions		Vacancies
	2007-2008 <sup>a</sup>	2008-2009 <sup>b</sup>	
Fire Chief	1	1	0
Assistant Fire Chief	1	1	0
Deputy Fire Chief	4	4	1
Arson Investigator	4	4	0
Fire Prevention Inspector	11	11	2
Battalion Chief	24	24	1
Fire Captain	179	180	11
Fire Engineer	235	235	31
Firefighter	286	293	9 <sup>c</sup>
<b>Total</b>	<b>745</b>	<b>753</b>	<b>46</b>

<sup>a</sup> Includes line and administrative positions, excludes Station 34 positions

<sup>b</sup> Adjusts for 13 new Station 34 positions; elimination of 2 relief Fire Captains, and 3 Fire Engineers in 2008-2009

<sup>c</sup> Excludes 30 overstrength Firefighter Recruits in April 2009 Academy, available to fill Firefighter vacancies in August 2009.

**Attachment E: Projected Fire Department Retirement Eligibility**  
*As of July 2009*

<b>Rank</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Fire Chief	1	1	1	1
Assistant Fire Chief	0	0	1	1
Deputy Fire Chief	1	2	2	2
Battalion Chief	6	10	11	13
Fire Captain	23	36	49	52
Arson Investigator	0	1	1	1
Fire Prevention Inspector	1	1	2	3
Fire Engineer	13	18	18	21
Firefighter	4	5	8	8
<b>Total Eligibility (If No One Retires)</b>	<b>49</b>	<b>74</b>	<b>93</b>	<b>102</b>
<b>Incremental Eligibility</b>	<b>49</b>	<b>25</b>	<b>19</b>	<b>9</b>

**Attachment F: Current (2009-2010) Daily Minimum Staffing and Relief Staffing By Rank**

<b>Rank</b>	<b>Daily Minimum Staffing Positions</b>	<b>Total Minimum Staffing Positions (for 3 shifts)</b>	<b>Total Relief Positions *</b>	<b>Total Line Positions</b>
Battalion Chief	5	15	2	17
Fire Captain	47	141	25	166
Fire Engineer	69	207	25	232
Firefighter	81	243	46	289
<b>Total</b>	<b>202</b>	<b>606</b>	<b>98</b>	<b>704</b>

\* The Department continues to use the relief staffing formula developed in 1992. Relief staffing levels will continue to be evaluated on an annual basis to ensure operational effectiveness and fiscal efficiencies. Due to the dynamic nature of the absence and vacancy rates and considering vital organizational/operational requirements, staff will continue to track the trends to evaluate whether or not the relief staffing levels should be adjusted.