



Memorandum

TO: PUBLIC SAFETY, FINANCE &
STRATEGIC SUPPORT
COMMITTEE

FROM: DARRYL VON RAESFELD
LARRY D. LISENBEE

SUBJECT: SEE BELOW

DATE: June 21, 2007

Approved

Rag Winer

Date

6/11/07

SUBJECT: 2006-2007 PRELIMINARY REPORT ON FIRE DEPARTMENT VACANCY AND ABSENCE RATES AND THEIR IMPACT ON OVERTIME

PURPOSE

In March 2005, the Fire Department and City Manager's Budget Office provided a comprehensive report to the then Making Government Work Better (MGWB) Committee in response to the City Auditor's April 2001 "Audit of the City of San José Fire Department's Overtime Expenditures" (Overtime Audit). As part of this March 2005 report, Fire Department staff committed to return to the Committee on an annual basis with a report on Fire Department absence and vacancy rates for the prior completed fiscal year to ensure that overtime funding and relief staffing levels are annually measured, funded, and managed. This report also includes staffing levels and anticipated retirements, as well as a discussion on relief staffing based on four years of data: actuals for 2003-2004 through 2005-2006 and projected 2006-2007 data.

RECOMMENDATION

1. Staff recommends that the Public Safety, Finance and Strategic Support (PSFSS) Committee accept this preliminary annual report (based on projected 2006-2007 absence and vacancy data) and direct Fire Department staff to return to the PSFSS Committee in January 2008 for a final 2006-2007 report that would include an analysis of relief staffing.
2. In addition, upon conclusion of the ongoing contract negotiations between the City and International Association of Firefighters (IAFF), Local 230, the Fire Department should report back to the PSFSS Committee with an update on the status of Overtime Audit Recommendations 8 and 9:

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.

Recommendation #9: Evaluate the feasibility of implementing a comprehensive Wellness-Fitness Initiative Program for the SJFD and prepare a budget proposal should the initiative appear cost beneficial.

BACKGROUND

In the past, the Fire Department had been unable to bring in its overtime expenditures at or under its annual overtime budget. Concern regarding the Fire Department's over-expenditures led to the release of the Overtime Audit.

In March 2005, the Fire Department and City Manager's Budget Office presented a comprehensive report to the MGWB Committee to address the Overtime Audit Recommendations (with items 8 and 9 pending). The report was accepted by the MGWB Committee and referred by the MGWB Committee to the City Council for final review. As a result of this March 2005 report and the comprehensive analytical data that it provided, the Fire Department's overtime Base Budget was adjusted upward by \$3.1 million as part of the 2005-2006 Operating Budget process.

The Fire Department and City Manager's Budget Office have been closely monitoring the Fire Department's 2006-2007 overtime budget. With ten months of the current fiscal year now completed, staff is pleased to report that the Fire Department's overtime budget for 2006-2007 is tracking below budget and is anticipated to end the year below the budgeted level. This is the second consecutive year that the Fire Department's budget has been on track in over 10 years.

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 currently must staff 193 line positions in the ranks of Battalion Chief, Fire Captain, Fire Engineer, Firefighter-Paramedic, and Firefighter-EMT. This required staffing level is commonly referred to as daily minimum staffing (DMS). On a daily basis, the DMS level has to be supplemented with relief personnel and/or off-duty personnel who are brought back to work on overtime to back-fill DMS assignments due to absences and vacancies.

For operational effectiveness as well as to reduce costs, additional relief staff positions exist in addition to the numbers required to meet DMS levels to provide DMS back-fill. 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 cover the DMS position. Currently, this model also provides cost efficiencies for the City, as the salary, benefit, and retirement costs of line positions, depending on rank and health plan coverage, are 3% to 8% less costly than the cost of overtime at one-and-one-half times the salary of the rank.

This report contains projected absence and vacancy data for 2006-2007. For 2006-2007, year-end projection includes actual data through May 5, 2007, with the remaining three periods in the fiscal year projected. This report also includes staffing levels and anticipated retirements, as well as a discussion on relief staffing based on four years of data (2003-2004 through 2005-2006 and projected 2006-2007).

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Absence Rates

With the implementation of TeleStaff (a staffing and data collection software program that allows the Fire Department to fill its daily minimum staffing needs and gather related data), staff is able to track absences by rank and type (vacation, sick, disability, modified duty, compensatory time, funeral, and jury duty). Using projected data for 2006-2007, the Fire Department's estimated absence hours for line personnel in the ranks of Battalion Chief, Fire Captain, Fire Engineer, Firefighter-Paramedic, and Firefighter-EMT are projected at 285,436 hours. The absence type is shown below by rank:

Chart No. 1
Absence Hours by Type & Rank - Estimated 2006-2007

Rank	Absence Hours By Type							Total Hours
	Vacation	Sick Leave	Disability	Modified Duty	Comp. Time	Funeral Leave	Jury Duty	
Battalion Chief	4,705	2,027	1,947	2,688	120	120	6	11,613
Fire Captain	37,161	14,295	25,151	8,512	403	600	65	86,187
Fire Engineer	43,724	24,141	20,823	12,320	598	1,392	165	103,163
Firefighter								
Firefighter-Paramedic	18,699	10,853	10,723	5,476	290	617	23	46,681
Firefighter-EMT	17,631	10,233	10,110	5,164	274	581	22	44,015
Subtotal-Firefighter	36,330	21,086	20,833	10,640	564	1,198	45	90,696
Total Absence Hours	121,920	61,549	68,754	34,160	1,685	3,310	281	291,659

With 677.3 line positions in 2006-2007, total absence hours estimated at 291,659 between July 1, 2006 and June 30, 2007 translate into 431 absence hours per line person, per year. This represents a 2.3% decrease in absence hours per line person (or 10 fewer absence hours per line person) as compared to the 441 absence hours per line person during 2005-2006. Absence hours per line person were 425 in 2004-2005 and 441 in 2003-2004. Although these hours of absence are not always taken in full-shift (24-hour) increments, this estimated 2006-2007 absence level is equivalent to approximately 18 shifts per year per line person.

As displayed in Chart 2 (Absence Rates by Rank), when 2006-2007 estimated absent hours are translated into an absence rate by rank, the weighted average absence rate for line personnel in the ranks of Battalion Chief, Fire Captain, Fire Engineer, and Firefighter is 14.7%.

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*Chart No. 2
Absence Rates by Rank - Estimated 2006-2007*

Rank	Line Positions	Annual Hours Worked *	Absence Hours	Absence Rate
Battalion Chief **	17.3	50,516	11,613	23.0%
Fire Captain	160.0	467,200	86,187	18.4%
Fire Engineer	228.0	665,760	103,163	15.5%
Firefighter				
Firefighter-Paramedic	147.0	429,240	46,681	10.9%
Firefighter-EMT	125.0	365,000	44,015	12.1%
Subtotal-Firefighter	272.0	794,240	90,696	11.4%
Average	677.3	1,977,716	291,659	14.7%

* Based on 2,920 hours worked per year

** A Battalion Chief was reassigned from relief to administrative position (Fire Communications) in September 2006

The chart below provides a comparison, by rank, of the absence rates for 2005-2006 and for 2006-2007 (estimated). Overall, absence hours estimated for 2006-2007 show a 2.4% decrease when compared to 2005-2006. It should be noted however that absence rates for Battalion Chief and Fire Captain ranks show an increase when compared to 2005-2006.

*Chart No. 3
Comparison of Absence Hours by Rank
Fiscal Year 2005-2006 to Fiscal Year 2006-2007 **

Rank	Fiscal Year 2005-2006	Fiscal Year 2006-2007*	Variance Increase/ (Decrease)	% Change Increase / (Decrease)
Battalion Chief	8,715	11,613	2,898	33.3%
Fire Captain	80,045	86,187	6,142	7.7%
Fire Engineer	113,966	103,163	(10,803)	(9.5)%
Firefighter				
Firefighter-Paramedic	49,391	46,681	(2,710)	(5.5)%
Firefighter-EMT	46,568	44,015	(2,553)	(5.5)%
Subtotal-Firefighter	95,959	90,696	(5,263)	(5.5)%
Average	298,685	291,659	(7,026)	(2.4)%

* Estimated

The total absence hours per year is impacted by several factors including the frequency and nature of job-related injuries and the seniority of line personnel who accrue more vacation time off. With data collection tools now available, staff tracks absence rates on a pay period basis and will continue, on an annual basis, to evaluate absence rates to ensure the most cost efficient and operationally effective means for developing a relief-to-overtime ratio.

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Vacancy Rates

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. For 2006-2007, it is estimated that the Fire Department's emergency response line positions would be vacant for a total of 71,232 hours as compared to 134,064 hours for 2005-2006. The 2004-2005 emergency response line position vacancies totaled 142,576 hours, with 107,640 hours in 2003-2004. The significant reduction in 2006-2007 estimated vacancy hours is attributed to the Department's efforts to fill vacant Fire Captain and Firefighter positions. Currently, only Fire Engineer vacancies remain unfilled. It is anticipated that vacancies in Fire Engineer ranks will be filled by November 2007. Estimated vacancy hours for 2006-2007 are shown below by rank:

Chart No.4
Vacancy Hours and Rate by Rank – Estimated 2006-2007

Rank	Line Positions	Annual Hours Worked *	Vacancy Hours	Vacancy Rate
Battalion Chief **	17.3	50,516	-	0.0%
Fire Captain	160.0	467,200	3,920	0.8%
Fire Engineer	228.0	665,760	16,240	2.4%
Firefighter				
Firefighter-Paramedic	147.0	429,240	26,690	6.2%
Firefighter-EMT	125.0	365,000	25,166	6.9%
Subtotal-Firefighter	272.0	794,240	51,856	6.5%
Average	677.3	1,977,716	72,016	3.6%

* Based on 2,920 hours worked per year

** A Battalion Chief was reassigned from relief to administrative position (Fire Communications) in September 2006

When these vacancy hours are translated into a vacancy rate, as shown above, the weighted average vacancy rate for DMS line personnel is 3.6%.

The chart below provides a comparison, by rank, of the vacancy hours for 2005-2006 and estimated vacancy hours for 2006-2007. Overall, projected vacancy hours for 2006-2007 decreased by 46.3% from 2005-2006 levels. Vacancy hours declined for all ranks. This is due to promotions and the aggressive hiring of Firefighter Recruits to fill Firefighter vacancies resulting from these promotions. These vacancies in Firefighter ranks have been addressed by Recruit Academies conducted in both 2005-2006 and 2006-2007. Recruits in the December 2006 Academy graduated and filled vacant Firefighter positions in April 2007. The third Firefighter Recruit Academy for 2006-2007 began in April 30, 2007 with recruits expected to complete training by August 2007.

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Chart No. 5
Comparison of Vacancy Rates by Rank
Fiscal Year 2005-2006 to Fiscal Year 2006-2007*

Rank	Fiscal Year 2005-2006	Fiscal Year 2006-2007*	Variance Increase/(Decrease)	% Change Increase/(Decrease)
Battalion Chief	224	-	(224)	(100.0)%
Fire Captain	20,832	3,920	(16,912)	(81.2)%
Fire Engineer	39,984	16,240	(23,744)	(59.4)%
Firefighter				
Firefighter-Paramedic	37,585	26,690	(10,895)	(29.0)%
Firefighter-EMT	35,439	25,166	(10,273)	(29.0)%
Subtotal-Firefighter	73,024	51,856	(21,168)	(29.0)%
Average	134,064	72,016	(62,048)	(46.3)%

* Estimated

In summary, based on the actual data from TeleStaff for 2006-2007, and estimating absence and vacancies for May-June 2007, the total absence and vacancy rate for line personnel is provided below:

Chart No. 6
Absence & Vacancy Hours and Rate by Rank – Fiscal Year 2006-2007*

Rank	Absence Hours	Vacancy Hours	Hours Requiring Back-Fill	Total Absence & Vacancy Rate
Battalion Chief	11,613	-	11,613	23.0%
Fire Captain	86,187	3,920	90,107	19.3%
Fire Engineer	103,163	16,240	119,403	17.9%
Firefighter				
Firefighter-Paramedic	46,681	26,690	73,371	17.1%
Firefighter-EMT	44,015	25,166	69,181	19.0%
Subtotal-Firefighter	90,696	51,856	142,552	17.9%
Average	291,659	72,016	363,675	18.4%

* Estimated

Charts 3 and 5 show the changes in absence and vacancy hours from 2005-2006. When comparing estimated 2006-2007 to 2005-2006 actuals, vacancy hours are estimated to be significantly lower (46.3%) in 2006-2007 and absence hours are expected to show a reduction (2.4%) in 2006-2007.

The estimated decrease in both vacancy and absence hours should bring about a 16% decrease (69,074 hours) in 2006-2007 in the total number of hours requiring backfill. The following comparative chart reflects the total hours requiring backfill for 2005-2006 and 2006-2007. In 2003-2004 and 2004-2005, the total hours requiring backfill were 406,831 and 430,504, respectively.

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Chart No. 7
Comparison of Hours Requiring Back-Fill
*Fiscal Year 2005-2006 to Fiscal Year 2006-2007**

Rank	Fiscal Year 2005-2006	Fiscal Year 2006-2007*	Variance Increase/(Decrease)	% Change Increase/(Decrease)
Battalion Chief	8,939	11,613	2,674	29.9%
Fire Captain	100,877	90,107	(10,770)	(10.7)%
Fire Engineer	153,950	119,403	(34,547)	(22.4)%
Firefighter				
Firefighter-Paramedic	86,976	73,371	(13,605)	(15.6)%
Firefighter-EMT	82,007	69,181	(12,826)	(15.6)%
Subtotal-Firefighter	168,983	142,552	(26,431)	(15.6)%
Average	432,749	363,675	(69,074)	(16.0)%

* Estimated

With available data collection tools, staff tracks vacancy rates on a pay period basis and will, on an annual basis, evaluate vacancy rates to ensure the most cost efficient and operationally effective means for developing a relief-to-overtime ratio. With the contract between the City and International Association of Firefighters (IAFF) Local 230 still pending, the anticipated bump in the number of retirements has not yet occurred. Upon execution of the contract, Fire Department staff will revisit the relief-to-overtime ratio and provide updated analysis for the Committee's review in January 2008.

Staffing Levels and Anticipated Retirements

Over the last three years, the Fire Department has made a concerted effort to promote and fill vacant positions. In anticipation of new fire station openings, the Fire Department completed two Firefighter Recruit Academies in 2006-2007, with a third beginning in April 2007.

The following table details the current (2006-2007) authorized and filled staffing levels and number of vacancies as of April 2007. Based on the Department's current 12 Fire Engineer position vacancies, the Fire Department is proceeding with the testing and selection process necessary to fill these vacancies. It is anticipated that these vacancies will be filled by November 2007.

Through the end of April, the Department has 34 overstrength Firefighters, of which 9 are Firefighters on probationary status and are therefore able to fill vacancies in duty spots, while the remaining 23 overstrength Firefighters are recruits currently in the third Firefighter Recruit Academy (April-August 2007). The overstrength Firefighters will be placed in regular Firefighter positions as Firefighter vacancies are created by retirements and promotions. The promotional opportunities include the current 12 Fire Engineer vacancies, as well as an additional 14 vacancies for new positions in the Fire Engineer and Fire Captain ranks that will be created in July 2007 for new fire stations (Fire Stations 33 and 35).

*Chart No. 8
Current Fire Department Staffing Levels
As of April 27, 2007 – 2006-2007*

Rank	Authorized Positions FY 2006-2007*	Current Vacancies Through April 2007
Fire Chief	1	1
Assistant Fire Chief	1	0
Deputy Fire Chief	4	0
Battalion Chief**	23	0
Arson Investigator	4	0
Fire Prevention Inspector	11	0
Fire Captain	172	0
Fire Engineer	228	12
<u>Firefighter</u>	<u>272</u>	<u>0</u>
EMT	125	0
Paramedic	147	0
Total	716	13

* This includes all safety personnel, including those in line and administrative roles

** Excludes one Battalion Chief over-strength position to staff UASI grant-funded position.

In preparing projections of near-term and long-range vacancies, staff has analyzed the Fire Department’s current line staff’s years of service and age ranges. In summary, staff estimates the following retirements by rank could occur. These estimates are based on vacancies through April 2007, and based on those employees who would reach age 50 with 25 or more years of service:

*Chart No. 9
Projected Fire Department Retirement Eligibility
As of April 16, 2007*

Rank	April 2007	January 2008	January 2009	January 2010	January 2011	January 2012
Arson Investigator	2	2	3	3	4	4
Assist Fire Chief	1	1	1	1	1	1
Battalion Chief	8	8	12	14	18	21
Deputy Fire Chief	3	3	3	3	4	4
Fire Captain	31	35	43	53	67	86
Fire Engineer	33	35	38	47	52	54
Firefighter (Paramedic & EMT)	14	15	16	18	19	22
Fire Prevention Inspector	0	0	0	1	1	1
Total Eligible Retirements	92	99	116	140	166	193

This data suggests that in addition to the 13 current vacancies, an additional 116 members of the Fire Department will be, over the next two years, within the window of years of service and age when we typically see members of the Fire Department file for retirement. In order to address additional vacancies and staffing for new fire stations, the Fire Department is budgeted to conduct three Fire Recruit Academies in 2007-2008 and projects two Fire Recruit Academies in 2008-2009. As discussed earlier, the Department will revisit these preliminary projections upon finalization of the City’s contract with IAFF Local 230.

Relief Staffing

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

On shifts where there are 193 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. In other words, if an absence or vacancy occurs in the rank of Battalion Chief, Fire Captain or Fire Engineer, a Firefighter-Paramedic or Firefighter-EMT could work higher-class to back-fill the absence or vacancy. This practice accomplishes two things. First, it allows the Fire Department to back-fill the position using an incrementally less expensive rank and second, provides career development opportunities for the individual who is working in the higher rank. This practice has a relatively minimal impact on the overall cost of DMS and has been factored into the overall DMS analysis.

On shifts where there are less than 193 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 were made:

- Comparison of overtime to relief position costs;
- Evaluation of the impact of increased overtime activity on work-related injury rates; and,
- Identification of the nature of the absences - partial or whole shifts - requiring only partial coverage, such as three hours off for a doctor's appointment versus vacations, illness, or injury when personnel are absent for one or more full shifts.

Because relief positions currently cost the City approximately 3-8% less than overtime, depending on rank and health plan, and within certain limits to be discussed shortly, currently the least costly approach for meeting DMS is back-fill for absences and vacancies by using relief positions. The art of determining the right mix of relief and overtime is based on how absences and vacancies occur. To determine the correct staffing model, absence and vacancy hours were calculated using data from Fiscal Year 2006-2007 for each rank, per pay period. To ensure that there were not too many relief positions staffed at periods of low absence or vacancy rates, the relief model is based on using relief positions to back-fill absences and vacancies when there are the fewest hours of absence and vacancy during the year. This is referred to as the 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 hours used by the personnel in each rank. 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 was set at the fewest hours used.

In summary, the baseline for each of the ranks is as follows:

- Battalion Chief – 217 absence/vacancy hours per pay period
- Fire Captain – 2,573 absence/vacancy hours per pay period
- Fire Engineer – 3,498 absence/vacancy hours per pay period
- Firefighter-Paramedic – 1,395 absence/vacancy hours per pay period
- Firefighter-EMT – 1,315 absence/vacancy hours per pay period

Once the baseline is established, based on the previous year’s actual absence and vacancy data, it can then be determined, by rank, how many relief positions should be staffed and how much additional overtime funding is required to fill the remaining absence and vacancy hours above the baseline.

Currently, the Fire Department has a total of 98 relief line personnel to back-fill absences and vacancies. This is down from 99 relief line personnel due to the reassignment of a Battalion Chief to administrative assignment in 2006-2007. The chart below shows the existing number of relief positions per rank:

*Chart No. 10
Daily Minimum Staffing and Relief Staffing – By Rank*

Rank	Total Minimum Staffing Positions	Total Existing Relief Positions	Total Line Positions
Battalion Chief	15	2	17
Fire Captain	132	28	160
Fire Engineer	204	24	228
Firefighter-Paramedic	126	21	147
Firefighter – EMT	102	23	125
Total	579	98	677

For the past 14 years, the Fire Department has used 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, staff continues to carefully track the trends to evaluate whether or not the relief staffing levels should be adjusted. Over the last three years, the Department made a concerted effort to promote and fill vacant positions. As the Fire Department hires new Firefighters and promotes to fill vacancies, it is anticipated that the vacancy and absence rates will stabilize. When the final 2006-2007 absence and vacancy data is available, the Department will have four years of data to analyze absence and vacancies and the relationship of these factors to relief staffing levels. Upon execution of the City’s contract with IAFF Local 230, the Department will be in a better position to evaluate the impact of potential changes to the retirement terms and conditions, and will be able to provide updated staffing projections.

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CONCLUSION

The Fire Department renews its commitment to provide the highest quality data and analysis. The Fire Department will continue 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. Upon implementation of the labor contract and with final 2006-2007 absence and vacancy data available, the Department will have four years of data to provide an updated relief staffing analysis. The Fire Department will report back to the Committee by January 2008 on its analysis of relief staffing based on four years of absence and vacancy data. Any adjustments recommended to staffing levels would be offset by a corresponding reduction in overtime funding.



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