



Memorandum

TO: HONORABLE MAYOR AND
CITY COUNCIL

FROM: Nadine N. Nader

SUBJECT: SEE BELOW

DATE: October 23, 2007

Approved

Nadine Nader

Date

10/23/07

SUBJECT: AUDIT RECOMMENDATION FOLLOW-UP: THE SAN JOSÉ POLICE DEPARTMENT'S STAFFING AND DEPLOYMENT [Public Safety, Finance and Strategic Support Committee referral 10/18/07 – Item (e)]

On October 18, 2007 a report was presented to the Public Safety, Finance and Strategic Support Committee on Audit Recommendation Follow-up: The San José Police Department's Staffing and Deployment.

Upon motion by Council Member Constant, seconded by Council Member Williams, the Committee accepted the Police Department's report to include comments to continue to monitor staffing, continue to utilize the Police Staffing Software, and monitor the inputs and outputs for efficient and effective tracking purposes.

The following language combines the report's recommendation and the outcomes noted in the report. In addition, the recommendation includes the Police Chief's statement during the Committee meeting that the Department would continue to use the police staffing software.

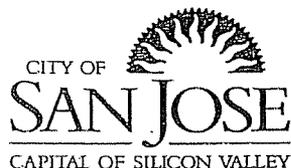
Recommendation:

- (a) Approval to continue use of the police staffing software known as Staff Wizard;
- (b) Approval to close out the remaining recommendation resulting from the audit of the SJPD's Bureau of Field Operations Patrol Division's Staffing and Deployment (2000 Audit); and
- (c) Reaffirmation of the City Council's previous acceptance of SJPD's Five-Year Staffing Plan: 2007-2012.

Attached you will find the report that was presented to the Public Safety, Finance and Strategic Support Committee.

Nadine Nader
NADINE N. NADER
Agenda Services Manager

Attachment



Memorandum

TO: Office of the City Auditor

FROM: Robert L. Davis

SUBJECT: SJPD RESPONSE TO STAFFING
AUDIT RECOMMENDATION
FOLLOW-UP

DATE: October 9, 2007

Approved

Ray Winer

Date

10/10/07

COUNCIL DISTRICT: City-Wide
SNI AREA: N/A

RECOMMENDATION

It is recommended the City Council accept the San Jose Police Department's (SJPD) response to the City Auditor's Office (AO) report entitled "Audit Recommendation Follow-Up: The SJPD's Staffing and Deployment" (AO Follow-Up Report).

OUTCOME

Acceptance of the SJPD report will close the remaining recommendation resulting from the audit of the "SJPD's Bureau of Field Operations Patrol Division's Staffing and Deployment" (2000 Audit), which was conducted in accordance with the AO's 1998-99 work plan. This action will also reaffirm Council's acceptance of the Department's "Proposed SJPD Five-Year Staffing Plan: 2007-2012" (Staffing Plan) at the November 28, 2006 Budget Study Session.

BACKGROUND

Based on an audit conducted in 1999, the AO recommended SJPD to "Negotiate with the San Jose Police Officers' Association to modify shift-starting times to provide sufficient flexibility to deploy officers in the most efficient and effective manner." A recent AO Follow-Up Report by the AO further recommended that SJPD present alternative staffing deployment options and respective cost implications to the City and Council for consideration and discussion purposes.

The purpose of this memorandum is to provide the Public Safety, Finance and Strategic Support Committee with the Department's responses and clarification to issues presented in the AO's Follow-Up Report. This report begins with background information on the 2000 Audit, followed by a

discussion of Department's response to the AO's Follow-Up Report. In addition to resolving a remaining recommendation from the 2000 Audit, separate issues raised by the AO pertaining to the Department's utilization of staffing software, employed as part of the San Jose Police Department's (SJPD) Staffing Plan, will also be addressed.

Background of 2000 Audit

The 2000 Audit was conducted in accordance with the AO's 1998-99 work plan, as the AO sought to explore whether possible efficiencies could be realized through alternative patrol staffing models. The 2000 Audit resulted in one top-level finding and recommendation that *"The SJPD Needs To Acquire Patrol Staffing Software To Assess The Efficiency And Effectiveness Of Its Patrol Staffing"* and two additional Priority 2 recommendations. The below listed recommendations from the 2000 Audit have been completed:

00-01 Audit Recommendation #3: Status: Closed

Investigate the feasibility of using federal or state grant funds to procure police staffing and deployment software. If federal or state grant funds are not available, we recommend that the SJPD, through the annual budget process, develop a budget proposal to purchase the software. (Priority 2)

SJPD Response

In 2002, the Department complied with the AO's top level finding and recommendation to utilize grant funding to purchase the specialized patrol staffing software program, *Staff Wizard*. As stated in the AO Follow-Up Report, at that time, the Department was unable to utilize the staffing software due to technical challenges experienced during the transition from the legacy Computer Aided Dispatch (CAD) System to the new Intergraph (CAD) System. Beginning in 2005, the Department utilized the StaffWizard software in support of the semi-annual Bureau of Field Operations (BFO) shift changes to assist division commanders in allocating officers to patrol teams.

00-01 Audit Recommendation #2 Status: Closed

Use the information in this report to develop, and forward to the City Council for concurrence, a strategic, multi-year, community policing-based plan and a staffing proposal for the SJPD Bureau of Field Operations patrol division that is responsive to both officer and public safety needs and calls for service demand. The report should include the advantages, disadvantages, and cost implications of the following policy decisions:

A full 4th Watch, and

An appropriate basis for calculating free patrol time. (Priority 2)

SJPD Response

The Department issued its 2002-2007 strategic five-year plan entitled, "Neighborhood Policing Operations Plan" (NPOP) to Council and the AO in September, 2002. The comprehensive NPOP report represented the Department's first effort to chart a formal course for its community policing efforts and was the Department's formal response to this audit recommendation. The NPOP addressed community and Department member perceptions, growth and development projections and analysis, staffing issues, neighborhood policing training strategies, and crime prevention efforts.

Additionally, during the time of the ongoing audit in 1999/2000, an interim Fourth Watch had been in effect since 1997, supplementing patrol staff to assist the Third Watch with the surge of unit-intensive calls that occurred during the late evening and early morning hours. The Fourth Watch issue, also addressed in the NPOP, explained that in response to Patrol Division staffing shortages, as well as the considerable communication and oversight problems stemming from a decreased supervisory span of control, the Department elected to eliminate the Fourth Watch effective November 4, 2001. In June, 2003, the fourth watch was removed during contract negotiations through the "meet and confer" process in conjunction with the Office of Employee Relations (OER) and the Police Officers Association (POA). This allowed the redeployment of the 22 officer and 4 sergeant positions to the Third Watch. At the time, due to preexisting vacancies on the Fourth Watch, the actual number of personnel redeployed was 17 officers and 4 sergeants.

The NPOP also addressed the AO's recommendation for SJPD to justify the 40% proactive patrol time¹ (PPT) calculation, stating in part, "One of the primary goals of the 1999 Redistricting Project was to achieve 40% free patrol time for all beat officers." The NPOP further stated, "When developing the Redistricting Project, David M. Griffith & Associates, the consulting company who assisted in this project, recommended utilizing a 50% Proactive Patrol Time (PPT) factor to comport with an established industry standard. To reduce overall personnel demands, the project's leaders elected to proceed with a 40% proactive patrol time goal applied to all patrol teams and officers."² The Department's community and neighborhood-based policing business model, which emphasizes sufficient proactive patrol time to enable officers to engage and problem-solve with community members, has long been supported by Council's approval of the Department's budget on a year-to-year basis.

Supporting this position, the International Association of Chiefs of Police (IACP) also stated the following in regard to proactive policing time targets: "Police agencies should consciously choose a policing style, recognizing that modifications have direct effect on staffing requirements. Agencies coping with budget constraints can choose to reduce uncommitted, prevention-focused time, thus expanding the time committed to respond to calls. This strategy reduces patrol staffing requirements, which may risk public safety. Alternatively, agencies can choose to be more proactive, allocating, for example, 40%, 45%, or 50% of each officer's time to crime prevention, problem solving, community relations, and other proactive activities. This strategy intensifies

¹Proactive patrol time (PPT) is used for such activities as: directed patrols, identifying and resolving causal factors for crime and disorder issues, conducting partnering and problem-solving through community policing initiatives, attending neighborhood meetings, and being present and visible in neighborhoods and commercial areas.

² SJPD Neighborhood Policing Operations Plan (NPOP), September 2002, p. 70

(increases) manpower requirements. The IACP management survey staff prefers this more proactive approach to policing.”³

As stated in the Staffing Plan, “For the Staffing Plan, the Department set a proactive patrol time (PPT) standard of twenty-four minutes per hour per officer. The availability of time for PPT varies by shift and usually comes in ten to twelve minute increments. The goal of PPT is to provide officers with ongoing opportunities for collaborative or directed work with City staff and residents on neighborhood-level problem solving. Conventional uses of PPT generally involve officers focusing directed efforts on high-crime locations, conditions or offenders during periods in which there are no calls-for-service response requirements. While yielding a preventive effect, the Department aims to have officers utilize PPT prior to and when crimes actually occur. In so doing, officers can develop near-real-time leads for use by follow-up investigators, special operations officers, crime prevention personnel, and prosecutors.”⁴

The remaining recommendation below from the 2000 Audit was for the Department to "Negotiate with the San Jose Police Officers' Association to modify shift-starting times to provide sufficient flexibility to deploy officers in the most efficient and effective manner."

00-01 Audit Recommendation #1

Status: Open

Negotiate with the San Jose Police Officers' Association to modify shift-starting times to provide sufficient flexibility to deploy officers in the most efficient and effective manner. (Priority 2)

SJPD Response

The Department generally agreed to consider this recommendation in its formal response to the City Auditor in February 2000. However, after lengthy consideration, the Department found fundamental problems with the AO's recommendations concerning start time, staffing, and deployment issues. The 2000 Audit Report stated, "The best overall deployment plan should be one that balances efficiency with practical considerations, such as public and officer safety. Therefore, the models should be viewed as a tool for achieving the best overall deployment plan, not the definitive deployment plan." Even though the AO's 2000 Audit utilized industry standard analytical tools available at the time and precise mathematical calculations to develop statistically optimal staffing and deployment models, the Auditor's models significantly discounted the Department's professional experience, numerous concerns for community and officer safety, and operational practicality. The Administration recognizes that decisions pertaining to police service delivery issues are complex and must be informed by real, front-line experience. As such, the Department's concerns and objections to the AO's recommendation for the SJPD to deviate from demonstrably effective patrol shifts and address related "meet and confer" issues have been reiterated in great detail to AO staff on numerous occasions during the six-year span following the 2000 Audit. These stated concerns, dealing with

³ Patrol Staffing and Development Study (guide), IACP, p.3

⁴ SJPD Proposed 5-Year Staffing Plan: 2007-2012, November 17, 2006, pp. 9-10

operational practicalities and sensitivities to officer working conditions have been largely dismissed by the AO in favor of framing the issues as statistical or financial in nature.

The Department has provided regular status updates on the remaining 2000 Audit recommendation via the City's Audit Recommendation Status Reports on a twice-yearly basis.

New City wide goals were set at the February 20, 2007 Priority Setting Session, for the purposes of identifying ongoing projects and to ensure these projects were in alignment with new Council priorities as well as to remove items from department work plans that may not align with Council priorities. The outcome of this process was to ensure departmental work plans and FY 07-08 Business Plans aligned with the newly adopted 3-year goals set during the Priority Setting Session.

In response to the Mayor's March 2007 Budget Message, the City Manager was directed to make recommendations on prioritizing and possibly eliminating old directives and report to Council. Accordingly, Council approved the list of recommended project removals from departmental work plans at the June 26, 2007 Council session. In this action, Council approved the removal of the remaining AO 2000 Audit recommendation, as evidenced in statements below derived from the City's Administration Project System (CAPS) log (#632):

Description: Any changes in shift change start times is a meet and confer issue to be negotiated with the Police Officer's Association (POA) during contract negotiations. PD and IT staff worked with the software vendor to resolve the previously stated concerns related to the transition to the new Intergraph CAD system. As a result, six-months worth of calls for service (CFS) data from March through September 2005 were utilized for the March 2006 shift change. The results of this first phase better positions the PD to consider optimal resource deployment as part of a comprehensive public safety planning in the most cost-effective and practical manner. The Department is currently working in concert with command staff to actively consider opportunities for informed decision making for the upcoming shift change. Department staff will continue to work with the Auditor's Office as extended studies and analysis continue.

Council approved the removal of this project from the Departmental work plan at the June 26, 2007 Council session.

ANALYSIS

The above information provides background detail for the 2000 Audit and actions taken by the Administration since the 2000 Audit was issued. The more recent AO Follow-Up Report re-states the AO's position and recommendation for consideration of alternative patrol staffing and deployment models.

This analysis section will focus on comments and the newly proposed recommendation in the AO's Follow-Up Report. The Administration is concerned that the AO Follow-Up Report essentially commingles two different issues, namely the remaining recommendation from the 2000 audit and

assumptions utilized in the Department's recent Staffing Plan. The commingled issues are evidenced in the below statement from the Audit Follow-Up Report:

Audit Recommendation Follow-Up Report: SJPD's Staffing and Deployment - Page 1-2

"In November 2006, based on direction contained in the Mayor's June Budget Message for Fiscal Year 2006-2007, the SJPD issued the Proposed Five-year Staffing Plan: 2007-2012 (Staffing Plan)." . . . However, the SJPD did not fully use the software to identify potential opportunities to deploy its patrol staff more efficiently. Instead, the SJPD used the software to develop and present to the City Council only one deployment scenario. This deployment scenario used the existing labor and management provisions within the current Memorandum of Agreement between the City of San Jose and the San Jose Police Officers' Association; past practices such as established schedules, team integrity, number of shifts, shift starting times, and established team overlap days; and select operational goals related to call saturation (the probability that a call for service will be received when all patrol units are busy), proactive patrol time, and response time. In our opinion, the SJPD should use all of its patrol staffing software capabilities, together with the department's operational expertise, to develop additional patrol staffing deployment alternatives."

SJPD Response

The above AO statements "However, the SJPD did not fully use the software to identify potential opportunities to deploy its patrol staff more efficiently. Instead, the SJPD used the software to develop and present to the City Council only one deployment scenario" implies that the direction from the 2000 audit, to specifically consider alternative deployment staffing models, should have been adhered to for the Staffing Plan. This was not the case. The Staffing Plan was an aid to the City budget planning process, and separate from the 2000 Audit. The Staffing Plan was developed to account for sworn and non-sworn staffing needs based on the existing service delivery model and labor agreement. In order for the Department to complete the Staffing Plan with such a short turn around time, and for the Staffing Plan to be relevant to the current operating environment and budget, a staffing proposal based on existing MOU provisions was advanced.

With oversight from a consultant, previously a senior staff member from the City Manager's Office (CMO), the Department worked collaboratively with staff from the Budget Office, senior staff from the AO, and the specialized staffing software vendor to jointly consider all related staffing issues. The Department sought to ensure that AO's staff had direct access to SJPD decision makers, as well as the software vendor, in order to pose questions, conduct trial analyses and observe the effects of varied assumptions on the staffing model so that the working group could achieve consensus for the Staffing Plan.

Each assumption incorporated into the staffing model was discussed in great detail with staff from the AO and CMO. The assumptions made by the Department were executive decisions based on more than 16 years of evolving community-based crime prevention and neighborhood-based policing practices, as well as existing Department performance goals and other operational constraints. The Department emphasized to AO staff that while attempting to express beat patrol staffing needs through mathematical calculations, the assumptions made clear in the Staffing Plan

served as discretionary choices that reflect a desired service delivery level amidst a period of identified staffing shortfalls.

During the Staffing Plan process, at the request of AO staff, the Department tested the assumptions at varying levels to take into account the effects of different variables on the model. After several meetings and ample dialogue, Department and AO staff, in conjunction with the CMO and the software vendor, agreed on the majority (9 out of 11) of user-adjusted variables incorporated into the staffing model for beat patrol operations

The following table lists the user-adjusted variables and assumptions considered by the Department and the AO for the beat patrol staffing model:

Issue	SJPD	AO	Difference
Source Data Source data for the beat patrol staffing model was a six month calls-for-service data set consistent with the semi-annual BFO shift change period from March, 2006- September, 2006. Only CAD events that were identified as being generated by citizens were considered. Only events handled by patrol units were considered. All time recorded by every unit on every call was computed.	Agree		None
Availability Factor and Staffing Factor The availability factor (.77) is time when an officer is expected to appear for duty. The staffing factor (1.167) is the number of officers who must be scheduled for each officer expected to appear for duty. These factors reflect consideration of personnel factors impacting total available time for scheduling, including total unavailable time due to vacation leave, compensatory time taken, sick time, state and federal mandated training, military leave, disability leave, and modified duty.	Agree		None
Non-CFS Time 11 minutes for non-calls-for-service (CFS) time per hour per officer (e.g., report writing, driving to and from PAB/PAC, meals, administrative meetings, court, and training).	Agree		None
Supplemental Units Policy The assignment policy for a CFS that arrives when no primary CFS unit is free.	Agree		None
Staffing Period The staffing period is the period of time a team is in the field without any overlap coverage from other shifts.	Agree		None
Minimum Team Size four (4) officers	Agree		None
Average Response Time Target for Patrol Officers to Arrive at Emergency (Priority 1) Calls-For-Service 6 minutes	Agree		None
Average Response Time Target for Patrol Officers to Arrive at Urgent (Priority 2) Calls-For-Service 8 minutes	Agree		None
The Probability of All Units Being Busy Simultaneously The threshold was set at 10% (also referred to as call saturation).	Agree		None
Proactive Patrol Time (PPT) Proactive Patrol time is used for such activities as: directed patrols, identifying and resolving causal factors for crime and disorder issues, conducting partnering and problem-solving through community policing initiatives, attending neighborhood meetings, and being present and visible in neighborhoods and commercial areas. Target PPT: 40%	40%	40%	While both SJPD and AO target 40% PPT, two different methods were employed. SJPD aims to protect 40% of the 570 ⁵ minutes

⁵ 570 minutes reflects 600 total minutes per 10 hour patrol shift less thirty (30) minutes for patrol briefing

Issue	SJPD	AO	Difference
			over 9.5 hours of each officer's shift (result: 24 minutes). The AO aims to protect 40% of the 465 ⁶ minutes of 9.5 hours of each officer's shift (result: 20 minutes).
<p>Staffing Requirement Both the SJPD and the AO used average hourly workload data. SJPD used the highest average hourly workload data in order to staff teams to meet most workload demands during the staffing period. The AO utilized the average hourly workload data to staff teams to meet average workload demands during staffing period. By staffing to meet the average hourly demand for service, patrol teams will be consistently understaffed during busier than average shift periods, potentially resulting in cross-district dispatching that may cause disruption to district and team-based integrity, as well as an additional burden to police dispatchers.</p>	Highest Average Hour	Average Hour	By using the average demand during a staffing period, the AO calculation allows there to be consistent periods when on-duty staffing will not be sufficient to achieve service goals. The SJPD calculation seeks to meet the service demands for most periods during shifts.

In the AO's Follow-Up Report, it is noted that the prior City Auditor advised Council that SJPD's assumptions utilized in the Staffing Plan produced specific results and emphasized that by varying the assumptions, different results would be realized. While this is true, the issues and assumptions considered for the beat patrol staffing model listed in the table above were purposefully selected and jointly considered as part of the Staffing Plan process.

As stated in the Department's Staffing Plan, "It is important to note that these numbers were not solely derived from a computer model or by simply polling Department members. Instead, the Department's most experienced police practitioners directed a broader planning process in which the software, data and feedback were used as tools to help determine optimal staffing levels to meet existing and future workload."⁷

As demonstrated, with the array of tangible and non-tangible variables in a large police department, development of a patrol deployment plan that is cost-effective, while maintaining community and officer safety levels, is a very complex issue. It is not a cut and dry process of simply looking at numbers or a multitude of 'what-if' scenarios that, in the end, are unrealistic to implement. It is for this reason that the Department remains steadfast in its position against the following new

⁶ 465 minutes reflects 600 total minutes per 10 hour patrol shift less 30 minutes for patrol briefing, 30 minutes for lunch, 20 minutes for breaks, 30 minutes for returning to station, and 25.42 minutes for combination of training, court, and other status activity

⁷ SJPD Proposed Five-Year Staffing Plan: 2007-2012, November 17, 2006, p. 4

recommendation from the AO Follow-Up Report to develop alternative staffing deployments that would become a "meet and confer" issue:

Audit Recommendation Follow-Up: Recommendation #1

Fully use its Staff Wizard together with the department's operational expertise to develop alternative staffing deployments. In addition, the SJPD should survey other jurisdictions regarding model assumptions and use varying assumptions related to the number of shifts, shift starting times, call saturation (probability of all patrol units busy), proactive patrol time, and other model components, while keeping its response time goals constant. The SJPD should then present these alternative staffing deployment options and their respective implications and costs to the City Council for consideration and discussion purposes. (Priority #3)

The City Council accepted the Staffing Plan and 10 additional officers have been approved for FY06-07 and 15 officers for FY 07-08.

The Department believes that the recommendation in the AO Follow-Up Report to survey other law enforcement agencies of comparable size and jurisdictional responsibility as a point of comparison would not be helpful. As presented in the Staffing Plan, the SJPD's 2005 workforce in both sworn (1.48) and non-sworn (.40) position ratios per capita are the lowest in comparison to 23 other cities (average sworn and non-sworn ratios of 2.64 and .72 respectively) with populations over 500,000.⁸ Even if the total sworn complement requested in the 2007-2012 Five-Year Staffing Plan were added all at once, the Department would still be below the average for all cities in the comparative ranking. To use any of these cities as a preferred model, without the Department having the benefit of an equal workforce, would be an unrealistic and an unfair basis to make recommendations for changes to the Department's patrol staffing model.

Furthermore, based on ongoing surveys with six other California law enforcement agencies (Oakland, Sacramento, Fresno, Long Beach, Riverside, and San Diego), it was determined that shift configurations (watch 1, watch 2, watch 3) and team integrity (consistent supervisor) are consistent with the SJPD patrol staffing model.

The San Jose Police Department appreciates the efforts of the Auditor's Office in preparing the Audit Recommendations Follow-up Report. Although both Departments have differing professional opinions regarding the important patrol staffing issues contained in this memo, the Department looks forward to the opportunity to discuss related issues with the Public Safety, Finance and Strategic Support Committee on October 18, 2007.

⁸ SJPD Proposed Five-Year Staffing Plan: 2007-2012, November 17, 2006, pp. 11-12

PUBLIC OUTREACH/INTEREST

- Criteria 1:** Requires Council action on the use of public funds equal to \$1 million or greater. **(Required: Website Posting)**
- Criteria 2:** Adoption of a new or revised policy that may have implications for public health, safety, quality of life, or financial/economic vitality of the City. **(Required: E-mail and Website Posting)**
- Criteria 3:** Consideration of proposed changes to service delivery, programs, staffing that may have impacts to community services and have been identified by staff, Council or a Community group that requires special outreach. **(Required: E-mail, Website Posting, Community Meetings, Notice in appropriate newspapers)**

The above report completes the Department's response to the AO's Follow-Up Report and will be posted to the City's website. Any action taken to initiate a "meet and confer" or change the Staffing Plan will require significant outreach and coordinated work with the POA and community.

COORDINATION

This report has been coordinated with the City Manager's Office.

CEQA

Not a project.



Robert L. Davis
Chief of Police

RLD:GLK:SD:CE

For questions please contact Gary Kirby, Captain, 277-5219



Memorandum

TO: Honorable Mayor and City Council
FROM: Steven Hendrickson,
Interim City Auditor

SUBJECT: *Audit Recommendation Follow-Up:
The SJPD's Staffing and Deployment*
DATE: September 27, 2007

Summary

In February 2000, the City Auditor's Office issued "An Audit of the Police Department -- Bureau of Field Operations Patrol Division's Staffing and Deployment" (2000 Police Audit). In the 2000 Police Audit, we recommended, and the San Jose Police Department (SJPD) agreed, that the SJPD purchase patrol staffing and deployment software. Patrol staffing and deployment software can be used to identify inefficiencies in the manner in which patrol officers are deployed. One recommendation from the 2000 Police Audit regarding negotiating with the San Jose Police Officers' Association to modify shift-starting times, is still outstanding.

In November 2006, based on direction contained in the Mayor's June Budget Message for Fiscal Year 2006-2007, the SJPD issued the Proposed Five-year Staffing Plan: 2007-2012 (Staffing Plan). The Staffing Plan proposed adding 351 patrol positions over five years at a cost of almost \$192 million. In the Staffing Plan, the SJPD confirmed that it had used patrol staffing software as we recommended to help assess patrol staffing levels. However, the SJPD did not fully use the software to identify potential opportunities to deploy its patrol staff more efficiently. Instead, the SJPD used the software to develop and present to the City Council only one deployment scenario. This deployment scenario used the existing labor and management provisions within the current Memorandum of Agreement between the City of San Jose and the San Jose Police Officers' Association; past practices such as established schedules, team integrity, number of shifts, shift-starting times, and established team overlap days; and select operational goals related to call saturation (the probability that a call for service will be received when all patrol units are busy), proactive patrol time, and response time. In our opinion, the SJPD should use all of its patrol staffing software capabilities, together with the department's operational expertise, to develop additional patrol staffing deployment alternatives. Specifically, the SJPD should analyze the impact that differing assumptions, such as the number of shifts, shift-starting times, call saturation, proactive patrol time, and other model components, have on the number of patrol officers, within the constraint of the City's response time targets. After this has been accomplished, the SJPD should present the San Jose City Council (City Council) with several alternative staffing deployment options and their respective implications and costs.

The 2000 Police Audit Recommended The SJPD Procure Patrol Staffing Software

Our objectives in the 2000 Police Audit were 1) to validate the SJPD computerized staffing model's key components and assumptions and 2) to develop computerized staffing models to demonstrate if opportunities existed to deploy the patrol staff more efficiently. Our analysis of SJPD's deployment of patrol officers showed staffing peaks occurring almost daily (with the exception of Fridays and Saturdays) during times of the day when the calls for service workload was declining. In other words, there were times during the day when the highest number of patrol officers were working, but the calls for service workload was lower than other times of the day. To analyze this condition further, we prepared alternative deployments in which we varied the deployment models' assumptions for shift-starting times, number of shifts, and proactive patrol time. We identified opportunities in the alternative deployments that appeared to improve the efficiency of patrol staffing and deployment. However, our analysis was limited by data limitations. To overcome the data limitations in the future, we recommended that the SJPD procure patrol staffing software. In response to our recommendation, in 2003 the SJPD purchased Staff Wizard patrol staffing software (Staff Wizard). However, the SJPD could not use Staff Wizard until 2006 because of the implementation of the Integraph CAD system. In March 2006, the SJPD first used Staff Wizard as a tool to assist in staffing configurations during its semi-annual shift changes.

The SJPD Staffing Plan

In November 2006, the SJPD issued its Staffing Plan to address staffing needs for both sworn and non-sworn personnel. According to the Staffing Plan, the SJPD used Staff Wizard to assess optimal team-based patrol staffing levels. Specifically, the Staffing Plan stated that

Beat Patrol

As the single largest division within the Department and most readily visible within the community, the Patrol Division warranted singular analysis. To help assess optimal team-based patrol staffing levels based on workload, geographic layout, personnel availability factors, and select operational goals, the Department utilized a specialized software application from Corona Solutions called StaffWizard. The purpose for using this software application is that patrol complements can be designed to safely meet existing and projected workload as well as performance goals. This software program was acquired as a result of a San Jose City Auditor Patrol Staffing Audit recommendation to analyze important factors such as response time performance targets, proactive patrol time and call queuing (pending).

The computerized model takes into consideration a number of labor and management provisions within the current Memorandum of Agreement (MOA) between the City of San Jose and the San Jose Police Officers' Association (POA), as well as past practices such as established schedules, team integrity (supervisory oversight), the number of shifts, the

shift starting times, and the established team overlap days. Additionally, select operational goals related to proactive patrol time, response time targets and the threshold for the probability of all units being busy are also used in the model and have a significant impact on the number of beat officers, which is calculated to be necessary.

As stated in the Staffing Plan, the SJPD used Staff Wizard to analyze important staffing deployment model components, including some that we were unable to analyze in our 2000 Police Audit because of data limitations. At the City Council's November 28, 2006 Budget Study Session to discuss the Staffing Plan, the prior City Auditor discussed some of the components and assumptions in the computerized staffing deployment model. The City Auditor emphasized that it was important that City Council members understood that some of the factors that were in the computerized staffing deployment model could be varied and that these changes would also change the resulting staffing levels. The City Auditor discussed the staffing model's call saturation factor, which is the probability that a call for service will be received when all units are busy. Varying the call saturation factor has a profound effect on staffing levels. During the Study Session, the City Auditor also discussed using peak or average workload and smoothing of peak workloads. Furthermore, the City Auditor indicated that varying certain factors would have a noticeable impact on the number of officers needed to staff the deployment. Finally, the City Auditor commended the SJPD on procuring the staffing software and noted that the City now had the capability for running different scenarios and obtaining different results.

In addition to the above factors, there are other model inputs to consider. For example, the staffing model includes the City's service goals for response time. While we do not recommend a less rigorous response time goal, we do believe that other factors can and should be varied, such as the number of shifts, shift-starting times, and the percentage of time allocated for proactive patrol time, to afford the City Council with additional information for policy and budget decision purposes. We recognize that some of these factors may be subject to the meet and confer process.

The SJPD Should Use All Of Its Patrol Staffing Software Capabilities, Together With The Department's Operational Expertise, To Develop Additional Deployment Alternatives

The SJPD can also take fuller advantage of its Staff Wizard by using one of its other features to generate efficiency scores to compare staffing deployments with varying shift-starting times and/or number of shifts. By doing so, the SJPD could identify opportunities to improve the efficiency of its patrol staffing deployment and improve its matching of staffing to workload.

The SJPD has voiced strong concerns about varying some of the key computerized staffing deployment model components and assumptions. For example, the SJPD is

reluctant to change the number of shifts and shift starting times. The SJPD previously experimented with a new configuration for deploying patrol officers, by adding a fourth watch for four days of the week. However, in November 2001, the SJPD eliminated its fourth watch, citing significant problems with the proper supervision of patrol officers. The SJPD's experience with a fourth watch notwithstanding, we recommend the SJPD survey other jurisdictions to learn how they have added additional shift(s) while maintaining team integrity. Also, the SJPD has concerns about varying the shift-starting times to times that might not be attractive to patrol officers or potential recruits. Here again, we recommend that the SJPD survey other jurisdictions regarding shift-starting times.

The SJPD is also concerned that the calls for service data in the 2000 Police Audit is outdated; therefore, that analysis may no longer be relevant. Although the calls for service data from the 2000 Police Audit is old, the shift-starting times have not changed, and it appears that opportunities to improve the efficiency of patrol staffing and deployment still exist. Specifically, according to the SJPD's patrol staffing software vendor/consultant, the current shift deployment continues to show excess staff during weekday nights. However, the Police Chief stated that addressing inefficiencies that may occur during the weekday nights creates other inefficiencies in the SJPD's patrol deployment.

We have been working with the SJPD to address the issues and recommendations in the 2000 Police Audit. The 2000 Police Audit's *Recommendation #1 Negotiate with the San Jose Police Officers' Association to modify shift-starting times to provide sufficient flexibility to deploy officers in the most efficient and effective manner* is still outstanding. In March 2007, the SJPD said they would give us access to its dispatch data and patrol software in order to assist them in identifying more efficient schedules necessary to implement this recommendation. Based on our recent meetings and discussions with the SJPD, it appears that the SJPD opposes any modifications to the assumptions in the SJPD's Staff Wizard staffing deployment model based on management, supervision, labor, shift, and scheduling constraints. Also, the Police Chief stated that his staff has varied and analyzed some of the staffing model assumptions, but that the results conflict with the SJPD's service delivery model. Furthermore, he stated that his staff lacks the time to develop alternative staffing deployments because they are currently working on several high priority projects. Nevertheless, we believe the SJPD should fully use its Staff Wizard to develop alternative staffing deployments and use the department's operational expertise to adjust the results to account for factors that cannot be quantified. We recommend that the SJPD use varying assumptions related to the number of shifts, shift starting times, call saturation (the probability that a call for service is received when all patrol units are busy), proactive patrol time, and other model components, while keeping its response time goals constant. The SJPD should then present these alternative staffing deployment options and their respective implications and costs to the City Council for consideration and discussion purposes. Finally, as applicable, the SJPD and

City Administration should implement the 2000 Police Audit *Recommendation #1*
Negotiate with the San Jose Police Officers' Association to modify shift-starting times to provide sufficient flexibility to deploy officers in the most efficient and effective manner.

We recommend that the San Jose Police Department:

Recommendation #1

Fully use its Staff Wizard, together with the department's operational expertise, to develop alternative staffing deployments. In addition, the SJPD should survey other jurisdictions regarding model assumptions and use varying assumptions related to the number of shifts, shift-starting times, call saturation (probability of all patrol units busy), proactive patrol time, and other model components, while keeping its response time goals constant. The SJPD should then present these alternative staffing deployment options and their respective implications and costs to the City Council for consideration and discussion purposes. (Priority #3)

We have discussed this memorandum with the SJPD and the City Manager's Office and they plan to issue a separate response memorandum. We conducted the work in this memorandum in accordance with Generally Accepted Government Auditing Standards.

I will present this memorandum to the *Public Safety, Finance & Strategic Support Committee* at its October 18, 2007 meeting. If you need any additional information, please let me know.

Respectfully submitted,



Steven Hendrickson
Interim City Auditor

0646M
SH:lg

cc: Robert Davis
Debra Figone
Deanna Santana

Gary Kirby
Laurence Ryan
Steven DiNoto

APPENDIX A

DEFINITIONS OF PRIORITY 1, 2, AND 3
AUDIT RECOMMENDATIONS

The City of San Jose's City Administration Manual (CAM) defines the classification scheme applicable to audit recommendations and the appropriate corrective actions as follows:

Priority Class ¹	Description	Implementation Category	Implementation Action ³
1	Fraud or serious violations are being committed, significant fiscal or equivalent non-fiscal losses are occurring. ²	Priority	Immediate
2	A potential for incurring significant fiscal or equivalent fiscal or equivalent non-fiscal losses exists. ²	Priority	Within 60 days
3	Operation or administrative process will be improved.	General	60 days to one year

¹ The City Auditor is responsible for assigning audit recommendation priority class numbers. A recommendation which clearly fits the description for more than one priority class shall be assigned the higher number. (CAM 196.4)

² For an audit recommendation to be considered related to a significant fiscal loss, it will usually be necessary for an actual loss of \$25,000 or more to be involved or for a potential loss (including unrealized revenue increases) of \$50,000 to be involved. Equivalent non-fiscal losses would include, but not be limited to, omission or commission of acts by or on behalf of the City which would be likely to expose the City to adverse criticism in the eyes of its citizens. (CAM 196.4)

³ The implementation time frame indicated for each priority class is intended as a guideline for establishing implementation target dates. While prioritizing recommendations is the responsibility of the City Auditor, determining implementation dates is the responsibility of the City Administration. (CAM 196.4)