



Office of the City Auditor

**Report to the City Council
City of San José**

**AUDIT OF 9-1-1 AND 3-1-1:
CHANGES TO CALL
HANDLING AND
INCREASED HIRING
EFFORTS COULD IMPROVE
CALL ANSWERING TIMES**

**Report 19-01
February 2019**

This page was intentionally left blank

February 14, 2019

Honorable Mayor and Members
Of the City Council
200 East Santa Clara Street
San José, CA 95113

Audit of 9-1-1 and 3-1-1: Changes to Call Handling and Increased Hiring Efforts Could Improve Call Answering Times

When callers in San José dial 9-1-1, they reach emergency call takers in the San José Police Department. These emergency call takers are responsible for processing the call, forwarding information to police dispatchers, and/or transferring the call to the appropriate agency. Calls regarding fire or medical emergencies are transferred to emergency call takers in the San José Fire Department, who then dispatch fire personnel. In addition to handling 9-1-1 and police emergency calls, emergency call takers also handle non-emergency and 3-1-1 calls, and police call takers take some crime reports over the phone.

Finding 1: Opportunities to Improve Call Answering Times. The State of California requires that 95 percent of 9-1-1 calls be answered within fifteen seconds. In October 2017, CalOES notified San José that it was not meeting the minimum call answering time. Police Communications is now closer to meeting State call answering times by reducing the time a call waits in the answering queue.

In the first quarter of FY 2018-19, Police Communications' average emergency call answering time was 5.8 seconds; however, Fire Communication's average emergency call answering time was 11.9 seconds. We recommend that Fire Communications implement different answering processes to reduce the call ring time by up to 5 seconds, and regularly monitor its call answering time. We also recommend that Fire Communications work with Santa Clara County to eliminate the need to call the County to confirm every ambulance dispatch, thereby freeing up staff to answer incoming calls quicker.

Finding 2: Growing Call Volume and Workload Has Increased the Urgency to Hire Qualified Communications Staff. With a growing population and an increase in the number of wireless calls, San José's call volume has increased. Added responsibilities have also contributed to increased workload for Communications staff. Nonetheless, budgeted staffing has stayed relatively steady while vacancies remain a problem. As a result, Police and Fire Communications have increasingly relied on overtime to staff their call centers and meet call answering times. In our opinion, aggressive recruiting and hiring is needed to fill vacancies. Communications should also consider improvements to the work environment, such as safe parking options, and dedicated call-taking positions for Fire Communications.

Finding 3: Staffing Non-Emergency Phone Calls with Emergency Call Takers is Inefficient.

In addition to their emergency work, Police Communications handles non-emergency police calls, and Fire handles after-hours calls to DOT, ESD, Public Works, and PRNS. Non-emergency call-taking imposes significant workload on Police Communications staff – about 40 percent of incoming calls to Police Communications are not emergencies. Even though emergency calls are prioritized, the City should reconsider how it handles non-emergency phone calls, given the challenge of hiring emergency call takers, reliance on overtime, job stress, and overall increase in emergency call volume. We recommend that Police Communications works with the City Customer Contact Center to determine service overlap so some non-emergency calls can be diverted to the City Customer Contact Center. Additionally, the Police Department should modify its non-emergency call tree to direct general City requests to the City Customer Contact Center. Further, we recommend the Police Department publicize online reporting options, and determine if any additional reports can be handled online.

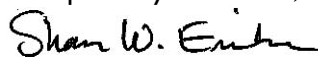
Finding 4: The City Could Improve Customer Service for Non-Emergency Calls and Better Utilize 3-1-1.

The Police Department's non-emergency lines do not provide a seamless customer experience for many calls. Callers are directed to a lengthy phone tree which does not always direct them to the appropriate resource, and a technical glitch prevents customers from receiving complete information. In reaction, fifty percent of non-emergency callers request to connect to a call taker. Furthermore, the non-emergency lines do not provide language accessibility; callers are informed that translation services are only available for emergency calls.

Finally, 3-1-1 does not work for many wireless callers, making the service unavailable for a large number of customers. While other major cities have modified the role of 3-1-1 to provide more expansive customer service, San José continues to use 3-1-1 as a police non-emergency line. We recommend the City explore moving 3-1-1 to the City Customer Contact Center and expanding the services available through 3-1-1. Wait times and call volume at the City Customer Contact Center should be monitored to address resource issues if needed.

This report has 19 recommendations. We plan to present this report at the February 21, 2019 meeting of the Public Safety, Finance, and Strategic Support Committee of the City Council. We would like to thank the Police and Fire Departments for their time and insight during the audit process. The Administration has reviewed the information in this report, and their response is shown on the yellow pages.

Respectfully submitted,



Sharon W. Erickson
City Auditor

finaltr
SE:lg

Audit Staff: Gitanjali Mandrekar
Alison McInnis Pauly
Chris Bernedo
Leonard Hyman
Jourdan Janssen
Robert Rodrock

cc:	Dave Sykes	Robert Sapien	Michelle McGurk	Jennifer Burnham
	Edgardo Garcia	Jerry Maas	Rob Lloyd	Margaret McCahan
	Jennifer Maguire	Dave Knopf	Claudia Chang	Peter Hamilton
	Rick Doyle	Mark Bustillos	Desiree Jafferries	
	Carl Mitchell	Joey McDonald	Michael Wodnick	

This report is also available online at www.sanjoseca.gov/audits

This page was intentionally left blank

Table of Contents

Cover Letter	3
Introduction	11
Background	11
Audit Objective, Scope, and Methodology	20
Finding I	
Opportunities to Improve Call Answering Times.....	23
The State of California Sets Minimum Emergency Call Answering Standards.....	23
Police Communications Has Improved Average Answering Times.....	24
Police Communications Reduced Call Answering Times But Fire Communications Can Make Improvements	26
Monitoring and Reporting Call Answering Performance	28
Police Communications' Call Answering Target.....	29
Fire Communications Calls the County to Confirm Every Ambulance Dispatch, Reducing the Staff Time Available to Answer Calls	30
Finding 2	
Growing Call Volume and Workload Has Increased the Urgency to Hire Qualified Communications Staff	33
Call Volume Has Increased	33
Added Responsibilities Have Contributed to Increased Workload	35
Budgeted Staffing for Both Police and Fire Communications Have Stayed Relatively Steady	37
Vacancies in the Police and Fire Communications Call Center Persist	39
Police and Fire Communications Are Relying on Overtime to Meet Desired Staffing Levels and Call Answering Times	40
Recruiting Efforts to fill Communications Staff Vacancies Have Not Been Prioritized.....	43
Improvements to the Work Environment.....	47
Finding 3	
Staffing Police Non-Emergency Phone Calls With Emergency Call Takers Is Inefficient.....	51
Non-Emergency Calls Make up About Forty Percent of Police Communications' Call Volume	51
Using Highly Trained 9-1-1 Emergency Call Takers to Handle Non- Emergency Calls Is Inefficient.....	53

Transitioning Additional Non-Emergency Calls.....	54
Making It Easier and Less Expensive to Take Non-Emergency Crime Reports	56
Filing Crime Reports Online	57
Finding 4	
The City Could Improve Customer Service for Non-Emergency Calls and Better Utilize 3-1-1	59
Fifty Percent of Non-Emergency Calls Request to Connect to a Call Taker	59
Interactive Voice Response Phone Tree Does Not Always Transfer Customers to the Appropriate Resources.....	60
Police Non-Emergency Calls Should Provide Language Accessibility	61
3-1-1 Does Not Work for Many Wireless Callers and May Be Underutilized....	62
3-1-1 in San José Has Historically Been Designated to Handle Only Police Non-Emergency Calls	63
Other Cities Use 3-1-1 More Extensively for City Customer Services	64
Conclusion.....	67
Administration's Response.....	yellow pages

Table of Exhibits

Exhibit 1: Call Answering Flow Chart	13
Exhibit 2: City of San José Emergency and Non-Emergency Numbers	16
Exhibit 3: Fire and Police Communications Divisions Are Close to Meeting State Call Answering Times Following the 2016 Phone System Upgrade (95 Percent Within 15 Seconds)	24
Exhibit 4: Police Communications' Emergency Call Answering Time Has Improved	25
Exhibit 5: Components of Answering Time	26
Exhibit 6: Police Communications Average Emergency Call Answering Time Is About 6 Seconds	27
Exhibit 7: Fire Communications Average Emergency Call Answering Time Is About 12 Seconds.....	27
Exhibit 8: Fire Communications' Ring Times Average Over 5 Seconds More Than Police.....	28
Exhibit 9: Fire Communications' Queue Times Average 2 Seconds More Than Police.....	29
Exhibit 10: Outgoing Calls to the County Made Up About 40 Percent of Total Fire Communications' Call Volume in FY 2017-18.....	31
Exhibit 11: Police Communications Total Call Volume Increased by 25 Percent, But Emergency Call Volume Is 65 percent Higher Than It Was 10 Years Ago	34
Exhibit 12: Fire Communications Emergency Call Volume Is 32 Percent Higher Than 10 Years Ago	34
Exhibit 13: City of San José PD Communications Division Timeline	36
Exhibit 14: In 2017, in California, 80 Percent of Calls to 9-1-1 Were Made Using a Wireless Phone.....	37
Exhibit 15: Police and Fire Communications Authorized Staffing Has Changed Only Slightly Since 2004-05.....	38
Exhibit 16: Emergency Calls per Budgeted Staff Has Increased.....	39
Exhibit 17: Police Communications Division Continues to Have Vacancies	39

Exhibit 18: Fire Communications Division Continues to Have Vacancies	40
Exhibit 19: Overtime Hours for the Police Department Communications Division More Than Tripled in the Last 10 Years.....	42
Exhibit 20: Fire Communications' Overtime Hours More Than Tripled in the Last 10 Years.....	43
Exhibit 21: Non-emergency Calls Make up Approximately 40 Percent of Police Communications Division Call Volume	52
Exhibit 22: 3-1-1 May Be Underutilized	62
Exhibit 23: City of San José Website Acknowledges That 3-1-1 Services Are Unavailable on Some Cellphones.....	63

Introduction

The mission of the City Auditor's Office is to independently assess and report on City operations and services. The audit function is an essential element of San José's public accountability, and our audits provide the City Council, City management, and the general public with independent and objective information regarding the economy, efficiency, and effectiveness of City operations and services.

In accordance with the City Auditor's Fiscal Year (FY) 2018-19 Audit Work Plan, we have completed an audit of 9-1-1 and 3-1-1. The audit was conducted in response to councilmember concerns about call answering times, customer service, vacancies and hiring issues.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. We limited our work to those areas specified in the "Audit Objective, Scope, and Methodology" section of this report.

The Office of the City Auditor thanks the management and staff of the Police Department, Fire Department, and Information Technology Department for their time, information, insight, and cooperation during the audit process.

Background

In 2018, 9-1-1, the official emergency number in the United States, turned 50 years old. The first call was placed in Haleyville, Alabama in 1968 but it wasn't until 1999 that the U.S. Congress directed the Federal Communications Commission to make it the universal emergency number for all telephone services.

Dialing 9-1-1 connects the caller to a nearby Public Safety Answering Point (PSAP), which routes the call to a local emergency medical, fire, and/or law enforcement agency. There are 441 PSAPS in the State of California. In 2017, in California, there were over 28 million 9-1-1 phone calls; 80 percent of 9-1-1 phone calls were made using wireless devices.

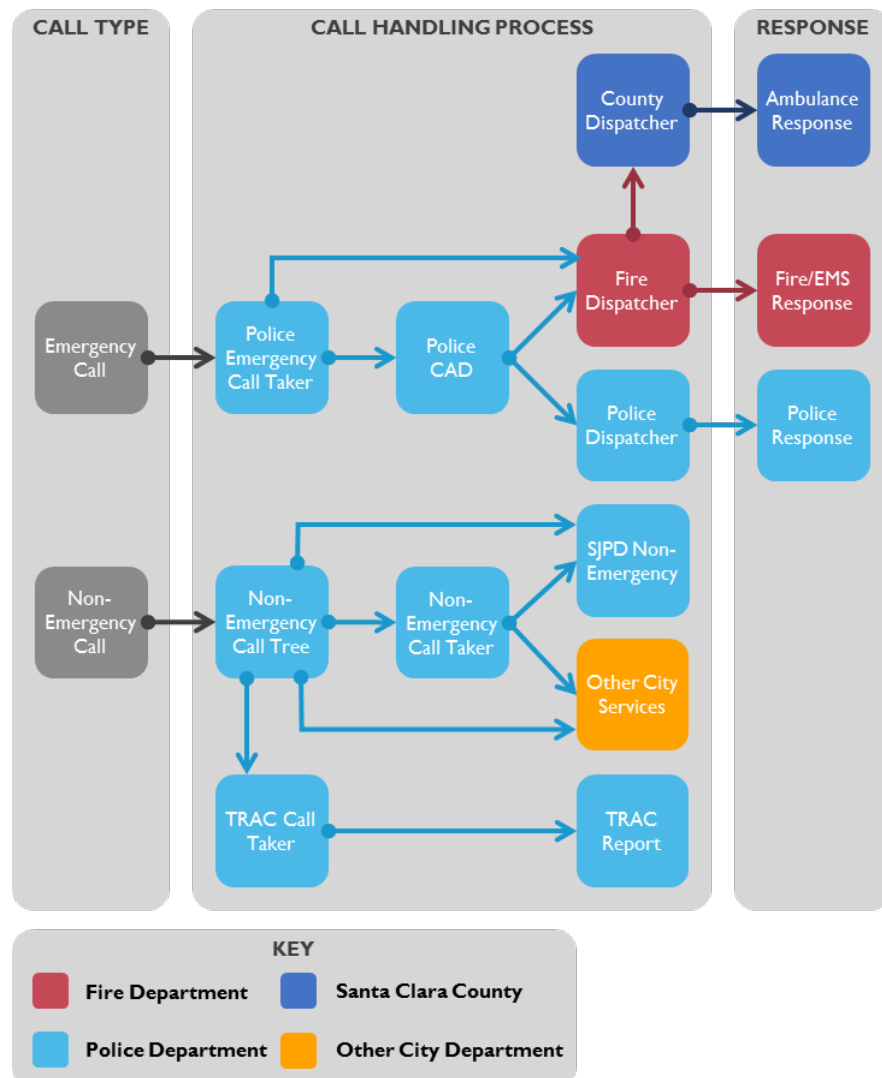
The City of San José Police and Fire Departments manage emergency calls and dispatching of public safety resources for calls made within the geographic boundary of the city. The City of San José's 9-1-1 Emergency Communications

Center (Police Communications) is located in the San José Police Department and serves as the City's Primary PSAP.¹ The mission of Police Communications is to:

Provide for 24-hour emergency and non-emergency police calls, which include but are not limited to crimes against persons and property, disturbances, traffic accidents, disasters, and medical emergencies.

9-1-1 calls for police, fire, and ambulance services are initially processed through Police Communications. Police call takers process calls to obtain information from callers in order to prioritize events and relay information to police dispatchers. Calls for service requiring fire or medical response are transferred to Fire Communications.

¹ The 9-1-1 emergency communication system is defined in the municipal code as: *An enhanced emergency telephone service which automatically connects a person dialing the digits 9-1-1 to an answering point established within a city department, and includes all aspects of the call delivery system, the call processing system and initial call dispatch, including, but not limited to, selective routing, automatic number identification (ANI), automatic location identification (ALI), and wireless 9-1-1.*

Exhibit I: Call Answering Flow Chart²

Source: Auditor analysis based on interviews and communications policies and procedures.

Note: TRAC (Telephone Report Automation Center) handles crime reports taken by telephone. CAD refers to Computer-Aided Dispatch, as described later in this report.

Police Communications

San José Police Communications is part of the Bureau of Administration (BOA) in the San José Police Department (SJPd) and has an FY 2018-19 adopted budget of \$26.6 million and 162.5 full-time employees including:

- 1 Division Manager

² Police non-emergency call takers will also take overflow emergency calls when needed. Police emergency call takers can transfer calls to non-emergency call takers if the situation is immediately determined as a non-emergency. As noted later in this Background, Fire Communications is also responsible for after-hours non-emergency calls for Department of Transportation (DOT), Public Works, PRNS, and ESD.

- 1 Assistant Communications Manager
- 60 Public Safety Communications Specialists (call takers)
- 80.5 Public Safety Radio Dispatchers (dispatchers)
- 14 Senior Public Safety Dispatchers, and
- 6 Supervising Public Safety Dispatchers.

The goal of Police Communications is to:

- Answer emergency and non-emergency telephone calls as quickly as possible;
- Dispatch events as quickly as possible; and
- Support officers in the field.

As described below, Police Communications is comprised of four units:

- Operations Unit consists of Public Safety Communications Specialists (call takers), Public Safety Radio Dispatchers (dispatchers), and supervising staff. Dispatchers and call takers staff the “Control Room” answering 9-1-1, 3-1-1, and other emergency and non-emergency lines 24 hours a day, 7 days a week, 365 days per year. Staff generally serve 10-hour workday shifts, 4 times per week.

Public Safety Communications Specialists (Call takers): Answer emergency and non-emergency calls and are the primary point of contact with the caller. Call takers answer a call, enter the information in the Computer Aided Dispatch (CAD)³ system which is then automatically routed to a radio dispatcher based on call type, priority, and geographic location.⁴ Call takers often stay on the line while updating radio dispatchers and responders. In addition, call takers also process and accept some police reports over the phone.

Public Safety Radio Dispatchers (Dispatchers): Dispatch police on routine and emergency calls using the CAD system, radio consoles, and related equipment based on the call priority. Dispatchers are also responsible for coordinating and inter-communications for field officers who are on scene.

³ Per the Standard Functional Specification of Law Enforcement Computer Aided Dispatch (CAD) Systems recommended by the National Institute of Justice, a Computer Aided Dispatch system allows public safety operations and communications to be augmented, assisted, or partially controlled by an automated system. It can include, among other capabilities, computer-controlled emergency vehicle dispatching, vehicle status, incident reporting, and management information. All aspects of a CAD system must be optimized for rapid response time and system reliability. Since time is of the essence, the CAD system must accurately provide a date and time stamp for every activity. CAD systems collect the initial information for an incident and then provide the information to one or more records management systems.

⁴ The CAD system automatically populates the address if a caller is calling on a landline however, if a caller uses a cell phone the call taker only receives approximate caller location and must confirm the accuracy with the caller.

- *Administrative Services Unit* provides support to the Communications manager and the Control Room. They develop staffing plans, act as the time keepers, and communicate with the City's Human Resources Department if needed. One Supervisor oversees the Administrative and Support Services Unit. One Senior Dispatcher is also assigned to this Unit.
- *Support Services Unit* has two primary functions. The first is telecommunications technology acquisition, design, installation, and support. The second is storing and processing call data. The media custodian responds to requests for recordings and CAD records. Along with the Supervisor, Support Services Unit includes one Dispatcher and one Call Taker. The Division also recently hired a retiree-rehire to assist in the Unit.
- *Training Unit* develops curriculum, schedules, conducts, and tracks trainings. In addition, they support recruitment efforts and provide 9-1-1 education and facility tours.

Fire Communications

The Fire Department Communications Division (Fire Communications) serves as the Secondary Public Safety Answering Point (Secondary PSAP) for the City.⁵ Fire Communications receives calls from 9-1-1 transferred by Police Communications call takers and other sources, dispatches appropriate resources, coordinates ambulance dispatch through the Santa Clara County's Communications System, triages calls using the Medical Priority Dispatch System (MPDS) and the Fire Priority Dispatch System (FPDS), relays critical information, provides detailed life safety assistance and instructions to callers (e.g. CPR, childbirth, choking), and provides critical communications support for Incident Commanders.

In addition to responding to emergency calls, Fire Communications is also the designated after-hours call answering service for Department of Transportation, PRNS, ESD and Public Works.

Fire Communications is part of the Bureau of Field Operations (BFO) of the San José Fire Department, and is responsible for the management of Fire Department emergency dispatch. In FY 2018-19, Fire Communications has an adopted budget of \$7.5 million and 45.48 full-time employees. This includes:

- 30.48 Public Safety Radio Dispatchers,
- 11 Senior Public Safety Dispatchers,
- 3 Supervising Public Safety Dispatchers, and

⁵ Not all cities and counties have the same PSAP structure. Some jurisdictions only have one PSAP with staff cross-trained to handle fire, medical, and police incidents. However, according to a 2010 9-1-1 strategic plan from California's Chief Information Officer, 14 percent of the State's PSAPs were Secondary PSAPs. The majority of those Secondary PSAPs were in fire department dispatch centers, for fire or medical assistance.

- 1 Senior Office Specialist.

A Division Chief within the Fire Department Bureau of Field Operations manages Fire Communications.

Like Police, Fire Communications dispatchers use a CAD system. The Fire CAD system contains maps and addresses of the entire City and is utilized to recommend appropriate fire emergency units to respond to a call. The fire stations and equipment in the field are notified of emergency calls via a station alerting package.

The Fire CAD system, upon dispatch of a call, opens vocals at the proper station allowing firefighters to hear the details of the call they are being dispatched to. The system also transmits a printed message on the station printer, activates the lights, bells, and automatically turns off the station stove.

On weekends, holidays and after hours, fire dispatchers are responsible for processing non-emergency calls for the Department of Transportation (DOT), Public Works, PRNS, and ESD. These calls range from sewer problems to debris in the roadway to malfunctioning traffic signals. Fire dispatchers also dispatch the appropriate City crews to handle these calls for service.

Call Handling

San José's 9-1-1 Emergency Communications Center manages numerous different phone numbers and received about 1.1 million calls in FY 2017-18.⁶ Exhibit 2 shows the phone numbers available to residents to reach Police Communications.

Exhibit 2: City of San José Emergency and Non-Emergency Numbers

Emergency Numbers	Non-Emergency Numbers
<ul style="list-style-type: none">• 9-1-1• (408) 277-8911• San José Airport red alarms• Alarm company use lines (408) 277-8939• CHP transfer (408) 277-8929	<ul style="list-style-type: none">• 3-1-1• (408) 277-8900• Non-emergency Airport lines• Bureau transfer lines (408) 277-8949• Auto Desk and PAB ring-down lines

Source: Police Communications policies and procedures and Fire Communications website. There are additional non-public internal numbers that the Communications staff handles. This includes calls received by dispatchers from police and fire personnel in the field.

⁶ Accounting for emergency calls received by Fire that were transferred from Police as additional calls, the total would be 1.2 million calls. In 2017-18, the Communications Center, including both Police and Fire emergency and non-emergency lines, handled a total of 1.3 million calls.

Police Communications Staffing Roles

Police Communications call takers are assigned a login for each shift that determines the types of calls that they will answer that day. All emergency and non-emergency calls are routed through an automatic call distributor (ACD). Emergency calls are treated as the priority and are the central focus. All other non-emergency lines are lower priority.

Staff rotate through the call taking positions and are cross-trained so that they can handle both non-emergency and emergency phone calls. Call takers on any given day may be assigned to work one of the following:

- A. Emergency:** 9-1-1 calls and calls to other emergency telephone lines are routed to call takers logged in as primary call takers. These phone calls are considered priority calls. If all lines are busy, the system will automatically assign the call to call takers logged in to the secondary or the TRAC call lines (described below).
- B. Non-emergency:** These Police call takers are responsible for answering non-emergency phone calls, which are considered lower priority calls. These include 3-1-1 calls as well as the other non-emergency seven digit lines.
- C. Telephone Report Automation Center (TRAC):** Call takers are responsible for processing some types of crime reports over the phone. The department has made this non-emergency line available to callers on a reduced schedule from noon to 4 PM, Monday through Friday. Residents are also able to file some crime reports online.⁷

If all Police communications emergency call takers are busy and non-emergency call takers are available, they can respond to overflow emergency calls. Similarly, if non-emergency call takers are busy, call takers assigned to taking telephone crime reports may also receive emergency overflow calls.

Fire Communications Staffing Roles

Fire Communications does not have a separate call taking position. All staff is cross-trained in call taking and dispatch positions. However, each staff member is assigned a call taking or a call dispatch role on a given shift.

⁷ Crime reports accepted at the Communications Center include credit card fraud, harassment, or vandalism. If the designated call taker is unavailable, the caller is advised to call back during scheduled hours. Some of these reports may also be filed online. There are a few mandatory reports that Police Communications accepts any time of day, such as missing persons or stolen license plates. If the designated call taker is unavailable, any available call taker may file these reports.

The State of California Provides Oversight and Funding for 9-1-1 Services

The California Office of Emergency Services (CalOES) provides oversight, funding, and administration of 9-1-1 activities for more than 400 state and local PSAPs across California, including San José's PSAP.

The California Public Utilities Commission (CPUC) requires every telecommunications carrier offering service in California to provide access to 9-1-1. As such, CalOES provides cost-recovery funding to those carriers for delivery of the wireline and wireless 9-1-1 services.

Phone Infrastructure Requirements and Funding

The California Governor's Office of Emergency Services (CalOES) provides about \$100 million per year in funding for PSAPs and emergency call answering equipment and network infrastructure. The funding covers equipment and systems used within the emergency call answering work area to answer 9-1-1 calls, including: telephony computers, controllers, servers, cabling, and/or ancillary systems, services, and products associated with the delivery of a 9-1-1 call.⁸ It is expected that each PSAP is expected to change out its emergency call answering equipment every five to seven years with State Customer Premise Equipment (CPE) funding.⁹

In 2016, the San José PSAP upgraded its 9-1-1 system, using one of the State's nine awarded 9-1-1 systems and services master purchase agreements. The equipment purchased had a 5-year lifecycle and included a 2-year extension.¹⁰ The San José PSAP uses call handling equipment to manage incoming and outgoing calls and data collection. The San José PSAP has a data system to generate internal statistical reports for call-handling data.

⁸ This funding covers PSAP Network Services for qualifying 10-digit emergency lines, 9-1-1 infrastructure, Automatic Location Identification (ALI) circuitry, and alternate answer circuits. Foreign Language Emergency Interpretation Services and call answering software can also be eligible for funding.

⁹ To aid PSAPs, the State offers CPE contract agreements with competitive pricing, that will vary between contractors. PSAPs are not required to use one of the CPE contract agreements. The equipment typically has a 5-year lifecycle with extensions available; as such, PSAPs will utilize CPE funding to upgrade their equipment every five to seven years.

¹⁰ There are different funding levels, depending on the PSAP's call volume, of up to the replacement cost of a complete 9-1-1 system. The San José PSAP is one of the State's largest. The San José PSAP experiences high call volume, so its CPE allotment is based on Funding Level Four. CPE funding is allocated based on a calculation which considers each PSAP's 9-1-1 call volume and call duration.

The State uses a management information system known as the Emergency Call Tracking System (ECaTS) to collect and report emergency call data.¹¹ The State provides PSAPs with access to the State's data network to produce call reports and to determine CPE funding allotments. Using ECaTS, a PSAP can produce performance reports on a variety of measures, including call volume, call answering times, call duration, etc.

When a San José caller dials an emergency number on his or her phone, that call goes to the phone provider's system infrastructure. The phone provider then sends the call to the San José PSAP via "trunks". Finally, the PSAP system sends the call to a call taker workstation, via "lines", where the call taker can answer the call.

Next Generation 9-1-1 Upgrades Are Planned

California's 9-1-1 systems have served the State for the last 40 years,¹² however changes in the way people communicate and changing communication technologies are placing demands on the existing legacy 9-1-1 systems beyond what they were designed and built to support. In a 2018 report to Congress entitled "Next Generation 911 Cost Estimate," the National Highway Traffic Safety Administration wrote:

Communication forms have become increasingly digital – texts, photos, videos, and Voice over Internet Protocol (VoIP) – and many "phone" systems rely on technologies that have become obsolete and unserviceable. Public safety and industry leaders agree that upgrading to Next Generation 911 (Next Gen 911) systems across the country is needed to ensure that every request for emergency help can be received, located, and responded to in the way that best meets the needs of the public and first responders.

Because Next Gen 911 systems are Internet Protocol (IP)-based and broadband-enabled, they make it possible for 9-1-1 telecommunicators and first responders to receive not only voice calls but also data relevant to an emergency – such as photos, streaming video, and even building plans. Being able to receive and process such data – which is simply not possible with legacy 9-1-1 systems – will provide first responders with more complete

¹¹ ECaTS is a statewide 9-1-1 call data collection system. Data is collected at the PSAP system, and ECaTS pulls that data every 15 minutes. At no cost to the PSAPs, CalOES uses ECaTS to directly run reports, check call answering times, and determine funding level allocations. PSAPs have access only to the ECaTS data for their own PSAP. CalOES does not allow for PSAPs to view the data of other PSAPs; the only way to do this is if a PSAP specifically allows another PSAP access to their data.

¹² The California State Emergency Telephone Number Program has been in existence since 1979. Under the authority of California Government Code Sections 53100-53120, known as the Warren-9-1-1-Emergency Assistance Act, the California 9-1-1 Branch has statewide oversight authority for the California State Emergency Telephone Number Program.

real-time information and thereby make them more effective in responding to emergencies. This will lead to faster response and more lives and property saved—and will make both the public and first responders themselves safer.

CalOES is leading planning efforts for planning and implementation of Next Gen 9-1-1. Next Gen 9-1-1 is a fundamental change in the technology used to deliver and process 9-1-1 calls. Switching from legacy systems to an internet-based network, Next Gen 9-1-1 will allow 9-1-1 systems to handle larger call volumes, and receive text, video, pictures, and email. The San José PSAP is currently in the planning stage of a roll-out of a text-to-9-1-1 service.

Audit Objective, Scope, and Methodology

The objective of our audit was to review the workload, call answering times and customer service of the Police/Fire Communications Center. To meet our audit objectives, we did the following:

- Reviewed historical documents to understand 9-1-1 and non-emergency calls
- Reviewed ECaTS call data reports and Power MIS reports to understand call answering performance from FY 2008 to FY 2018
- Reviewed the Police Department's internal Performance Management Reports (PMRs) for FY 2016-17 and FY 2017-18
- Reviewed overtime, vacancy, and tenure reports from the City's PeopleSoft system
- Analyzed Police and Fire Communications budget for FY 2008 to FY 2018 from Adopted Budget documents;
- Reviewed the Police Department's Rules Directive Manual and the Communications Policies Manual
- Reviewed Fire Communications Procedure Manual
- Reviewed the Police and Fire Department's process for hiring and recruiting Communications staff including:
 - Interviewing staff from the Police Recruiting Unit and Fire staff responsible for recruiting Communications staff
- Reviewed State and National guidelines related to emergency call answering including upcoming State requirements for 9-1-1 (Next Gen 911)
- Interviewed 9-1-1 Fire and Police call taking and dispatch staff and conducted observations of the 9-1-1 Communications Center

- Interviewed AT&T staff and ECaTS staff about the City’s software and call answering data
- Reviewed and tested the Police Communications’ 3-1-1/277-8900 call tree to understand resident perspective and test accuracy
- Interviewed CalOES to understand State requirements and City performance
- Interviewed the following jurisdictions to benchmark to San José:
 - Santa Clara County Communications Center
 - Riverside County Sheriff’s Office
 - City of Sunnyvale Emergency Dispatch Center
 - City of Los Angeles Police Communications
 - City of Los Angeles Fire Communications
 - City and County of San Francisco (9-1-1 and 3-1-1)

This audit focuses on the call answering performance in Police and Fire Communications. This audit was initiated after requests from multiple councilmembers, who were concerned about call answering times, staffing, and customer service. We reviewed the 2010-11 Santa Clara County Civil Grand Jury Report “Can you hear me now? Emergency Dispatch in Santa Clara County,”¹³ but did not consider the issues of regional consolidation or interoperability in this audit.¹⁴

¹³ http://www.sccourt.org/court_divisions/civil/cgi/2011/EmergencyDispatch.pdf

¹⁴ In June 2018, the Fire Department presented a status report on the feasibility of a regional fire and/or fire and emergency medical services dispatch center within Santa Clara County. The report is available online at: <https://sanjose.legistar.com/LegislationDetail.aspx?ID=3508953&GUID=C15E2BA6-F4BA-4F61-9B41-35EE200900F4&Options=&Search>.

This page was intentionally left blank

Finding I Opportunities to Improve Call Answering Times

Summary

The State of California requires that 95 percent of 9-1-1 calls be answered within fifteen seconds. In October 2017, CalOES notified San José that it was not meeting the minimum call answering time. Police staff have recently reduced the time a call waits in the answering queue, and call answering times are now closer to meeting State standards.

In the first quarter of FY 2018-19, Police Communications' average emergency call answering time was 5.8 seconds, and Fire Communication's emergency call answering time was 11.9 seconds. We recommend that Fire Communications implement different answering processes to reduce the call ring time by up to 5 seconds and regularly monitor its call answering time. Additionally, we recommend that Fire Communications work with Santa Clara County to eliminate the need to call the County to confirm every ambulance dispatch, thereby freeing up staff to answer incoming calls quicker.

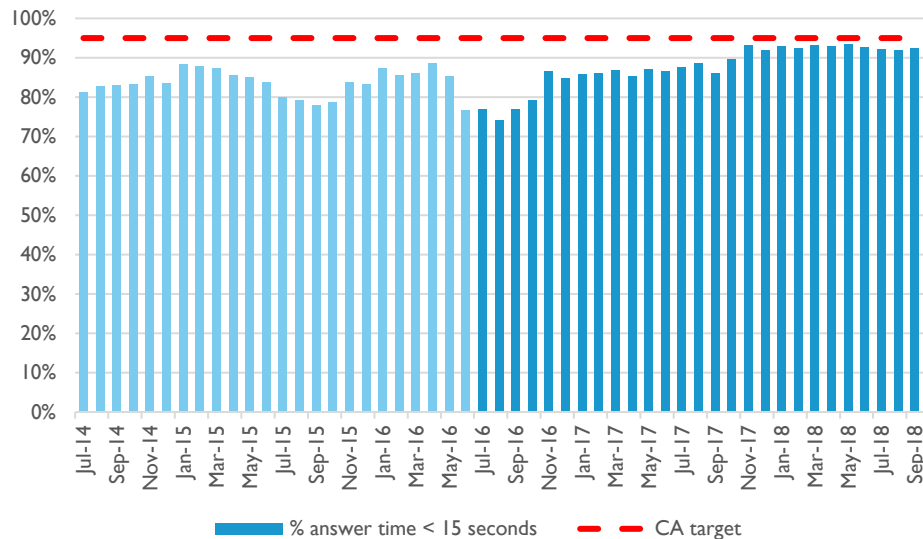
The State of California Sets Minimum Emergency Call Answering Standards

CalOES requires that 95 percent of 9-1-1 calls be answered within fifteen seconds. This standard is based on the National Emergency Number Association (NENA) and National Fire Protection Agency (NFPA) call answer standards. If any system does not meet pre-set minimum standards, CalOES is required to notify the public agency of that deficiency in writing.

San José's Call Answering Times

In October 2017, CalOES notified San José that it was not meeting the minimum call answering time. The State warned the City that failure to comply with the requirements could result in the State Attorney General's Office's engagement with both the CalOES and the local agency to ensure compliance, with the potential to affect funding for the PSAP. However, since then (as shown in Exhibit 3) call answering times have improved.

Exhibit 3: Fire and Police Communications Divisions Are Close to Meeting State Call Answering Times Following the 2016 Phone System Upgrade (95 Percent Within 15 Seconds)



Source: Emergency Call Tracking System (ECaTS) quarterly PSAP Answering time reports.

Note: The San José 9-1-1 equipment upgrade was implemented in 2016, which is indicated by the change in color in the chart.

The improvement in answering times can be attributed in part to a State-funded technology and phone system upgrade in 2016. Older system hardware may have been partially responsible for slower answering times.

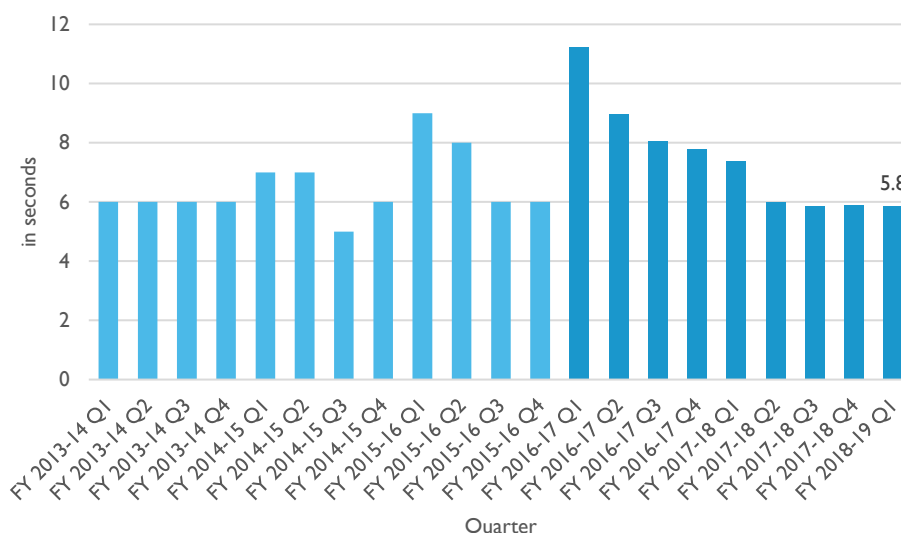
In addition, as described later in this report, Police and Fire Communications have increased use of overtime to staff the primary and secondary PSAPs, and Police Communications re-deployed staff from non-emergency to emergency positions. Nonetheless, as shown above, the PSAPs still struggle to meet State call answering standards.

Police Communications Has Improved Average Answering Times

In addition to tracking compliance with the CalOES standard,¹⁵ staff in Police Communications track average call answering times. Average call answering time for Police Communications spiked and then improved after the new phone system was implemented in 2016-17. Exhibit 4 shows Police Communications' total call answering time, by quarter, over the past 5 years.

¹⁵ The City's performance metric for call answering time that is included in both the City's Adopted Operating Budget and the City Auditor's Annual Services Report, historically has been the percent of calls answered in 10 seconds (target: 90 percent). This is the former NENA measure. In 2017-18, 86 percent of calls were answered within 10 seconds. Going forward, staff would prefer to use the CalOES target of 95 percent of calls answered in 15 seconds.

Exhibit 4: Police Communications' Emergency Call Answering Time Has Improved



Source: PSAP phone system answering time reports. The San José 9-1-1 equipment upgrade was implemented in 2016, which is indicated by the change in color in the chart.

A shorter call answering time means that call takers can more quickly connect to callers and address potential emergencies. This allows them to determine the priority of the call sooner, and either dispatch first responders or forward the call to the appropriate agency. Responding to emergencies quickly begins with a fast call answering time.

Components of Call Answering Time

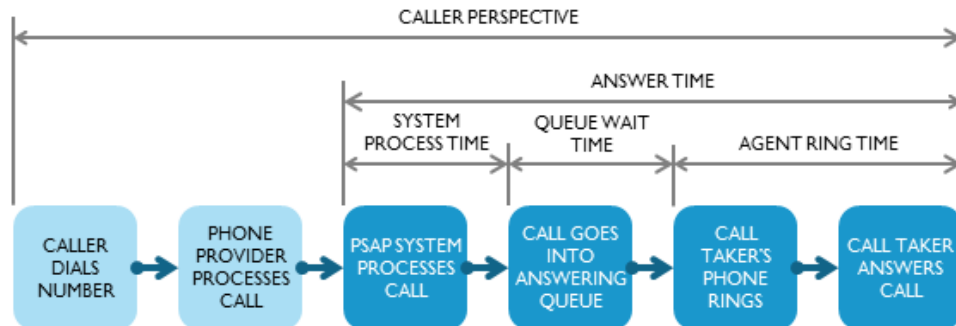
When a San José caller dials an emergency number on his or her phone, that call goes to the caller's phone provider's system network. The caller's phone provider then sends the call to the San José PSAP network (managed by AT&T). The City's PSAP system automatically directs the call to a call taker workstation,¹⁶ where the call taker can answer the call.

Each component of this process takes time. The City's call answering system is capable of measuring call answering time beginning from when the San José PSAP system receives the call. That system currently reports the total answering time and three of its components: (1) the PSAP system processing (set-up) time, (2) the queue waiting time, when the call goes into the answering queue until a call taker is available, and (3) the agent ring time, when the call taker's phone rings and the

¹⁶ The San José PSAPs use Automatic Call Distribution (ACD) which directs incoming calls directly to the next available call taker.

call taker answers. Together, each of these three component times equals the “answering time”.¹⁷

Exhibit 5: Components of Answering Time



Source: Auditor summary of PSAP call answering reports and interviews with staff.

As discussed in the background section of this report, Police Communications answers all calls, and then transfers calls for fire and medical emergencies to Fire Communications. Police Communications’ call answering time begins when the call first reaches the PSAP and ends when a Police call taker answers the call.

Fire Communications’ call answering time begins when the call is transferred from Police Communications to Fire’s Secondary PSAP. It ends when a Fire call taker answers the call.

Police Communications Reduced Call Answering Times But Fire Communications Can Make Improvements

In addition to the system improvements discussed above, Police Communications has reduced the average call answering time by reducing queue wait times, as shown in Exhibit 6. In the first quarter of FY 2018-19, Police Communications’ average answering time for emergency calls was 5.8 seconds (compared to 11.2 seconds in the first quarter of 2016-17). According to staff, this is the result of changes to staff assignments and the use of overtime to fill shifts. The use of overtime, and its impacts on division staff, is described in Finding 2.

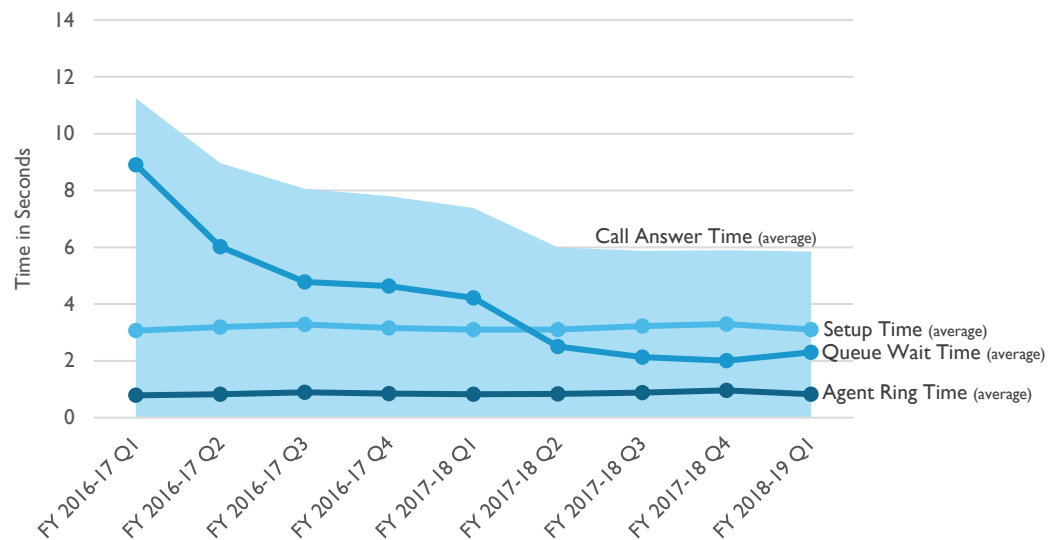
Police Communications also uses “off-hook answering,” whereby calls are automatically connected to a call taker’s headset without the need for the phone to ring or the call taker to answer the call. This helps reduce the agent ring time.

For calls transferred to Fire Communications on the other hand, the average answering time for the first quarter of FY 2018-19 was 11.9 seconds for emergency

¹⁷ The system performance reports are currently set up to provide average times for each of these measures. The reported averages may not necessarily sum to the total average answer time.

calls. The following Exhibits provide breakdowns of the answering times for both Police and Fire, by component.

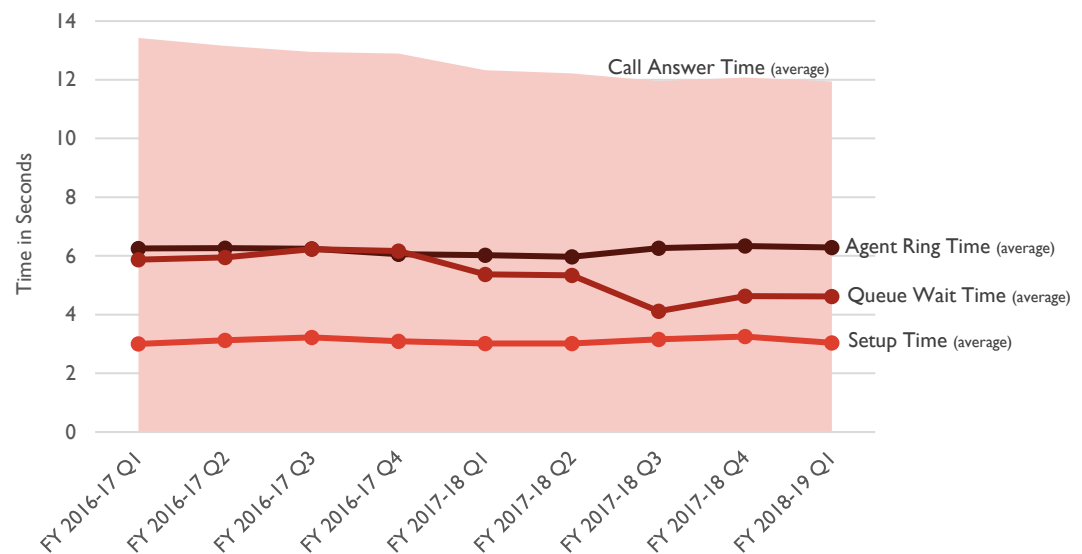
Exhibit 6: Police Communications Average Emergency Call Answering Time Is About 6 Seconds



Source: PSAP phone system answering time reports.

Note: Due to report configurations, the components may not add to total call answering time.

Exhibit 7: Fire Communications Average Emergency Call Answering Time Is About 12 Seconds



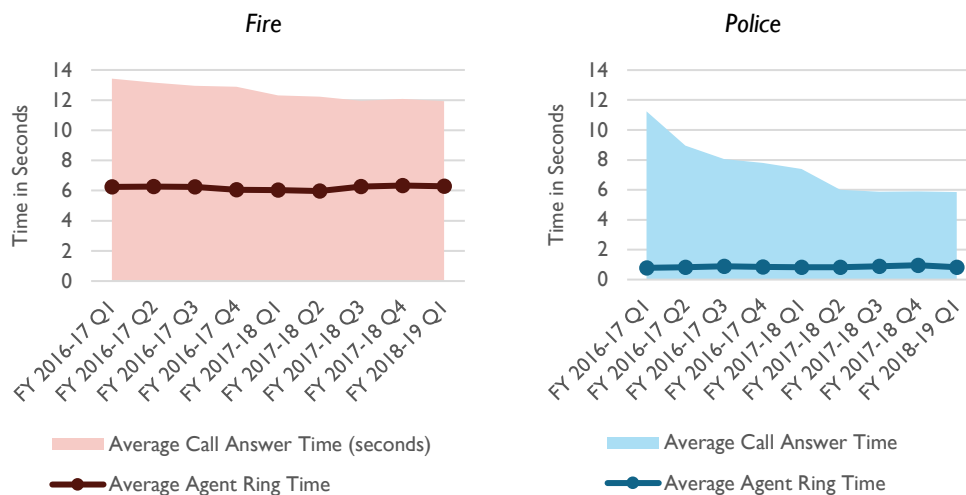
Source: PSAP phone system answering time reports.

Note: Due to report configurations, the components may not add to total call answering time.

Improving Fire Ring Times

For Fire Communications, the agent ring time—that is, the amount of time that the call rings at a call taker’s desk before it’s answered—has been around 6 seconds since the beginning of FY 2016-17. Unlike Police Communications, which has calls automatically connect to a call taker’s headset, calls in Fire Communications ring at a call taker’s desk. According to Fire Communications staff, this may account for the difference between Fire Communications agent ring time and Police Communications agent ring time (which is typically less than one second).

Exhibit 8: Fire Communications’ Ring Times Average Over 5 Seconds More Than Police



Source: PSAP phone system answering time reports.

To decrease the call answering time, we recommend that Fire Communications utilize technology to automatically connect calls to call takers’ phones. Given that this “off-hook” answering is used by Police Communications, this should be a configuration possible in the phone answering system, though staff protocol will have to be updated to account for this change. This could cut 5 seconds off Fire Communications’ call answering time.

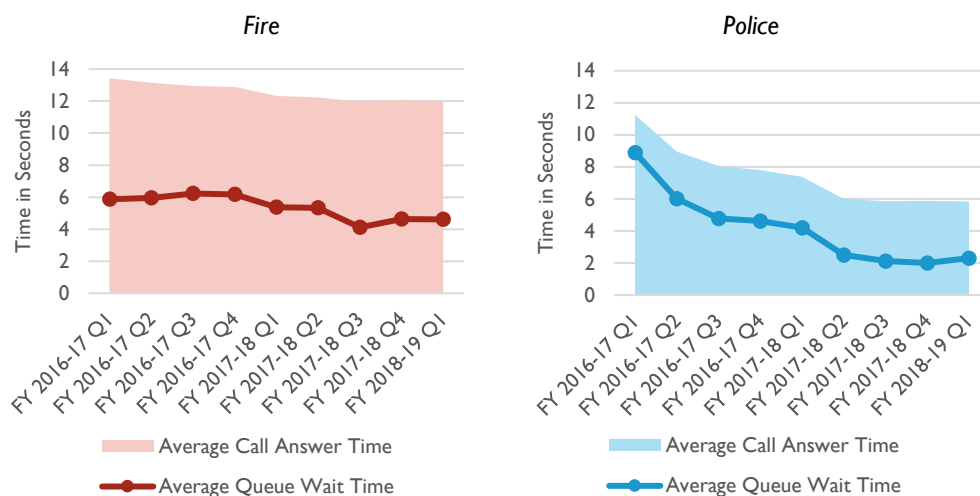
Recommendation #1: Fire Communications should implement technology to automatically connect calls to call takers’ phones through off-hook answering.

Monitoring and Reporting Call Answering Performance

Data about call answering times are not typically compiled or reported by Fire personnel, though such information can be instructive in ways to reduce call answering time.

For example, while the queue wait time has recently decreased, it remains higher than Police Communications' queue wait time. Fire Communications' queue wait time is about 4.6 seconds, an improvement from early FY 2017-18, but 2 seconds longer than Police's queue wait times. This may be due to differences in staffing, such as the lack of dedicated call-takers (as discussed in Finding 2).

Exhibit 9: Fire Communications' Queue Times Average 2 Seconds More Than Police



Source: Source: PSAP phone system answering time reports.

Police Communications publishes quarterly performance reports that include data on call answering times. These internal reports inform management staff about the performance of the call center and provide an opportunity to respond accordingly.¹⁸ We recommend that Fire staff similarly monitor call answering times by component, along with other existing performance measures through regular performance reports.

Recommendation #2: Fire Communications should pull regular performance reports and monitor average answering times.

Police Communications' Call Answering Target

The City's Annual Operating Budget includes a series of performance targets for emergency call answering time. The target for "Average time in which emergency calls, including 9-1-1 calls, are answered" is 2.5 seconds. This is also included in Police Communications' quarterly performance management report.

¹⁸ Police and Fire Communications report that they regularly meet with representatives of their phone system to discuss any issues.

Police Communications has been calculating and reporting this measure based on its queue wait time. Though the queue wait time is the component most under the Police Communications' control,¹⁹ reporting on the entire call answering time provides important information about customer service for 9-1-1 callers.²⁰

Going forward, we recommend that Police Communications clarify its call answering time performance measure. This will likely require the adjustment of the 2.5 second target, as it may no longer be realistic when including all aspects of call answering time (system processing time, queue wait time, and agent ring time).

Recommendation #3: Police Communications should clarify its call answering time performance measure, include all components of call answering, and adjust its target accordingly.

Fire Communications Calls the County to Confirm Every Ambulance Dispatch, Reducing the Staff Time Available to Answer Calls

When an ambulance is required, Fire Communications will contact Santa Clara County Communications through their CAD systems. The City and the County operate two separate CAD systems that are tenuously connected by a hardware data link on either end. On occasion this link may break, and information may not transfer across CAD systems.

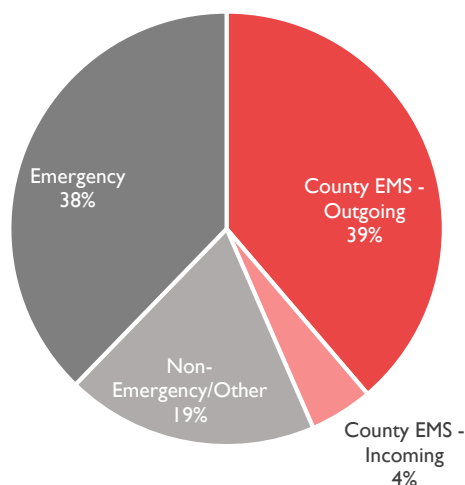
This can lead to the County not receiving critical information for medical emergency dispatch. Because the County's CAD system cannot automatically confirm if a transfer from the City was successful, it is Fire Communications' policy to call Santa Clara County Communications to confirm the transfer every time an ambulance dispatch is required.

In FY 2017-18, the San José Fire Department made 97,000 calls to the County to ensure that the link between CAD systems was functioning properly and that medical dispatch information was received. These outgoing calls accounted for about 40 percent of all incoming and outgoing calls combined for Fire Communications. Although staff report that these calls are short (only requiring a quick call to confirm receipt), it does require time from dispatchers.

¹⁹ According to phone company staff, this system processing time is due to the default configuration settings in the City's PSAP answering system. The average system processing time has consistently remained at just over 3 seconds.

²⁰ The City Auditor's Annual Services Report includes average emergency call answer time metric that includes all components of call answering time. In 2017-18, the average call answering time was 6.3 seconds.

Exhibit 10: Outgoing Calls to the County Made Up About 40 Percent of Total Fire Communications' Call Volume in FY 2017-18



Source: San José Fire Communications' management information system

The County plans to procure and begin implementing a new CAD system in FY 2018-19. According to County staff, their ranking of vendors will take into consideration the connection with other PSAP CAD systems.²¹ If this issue is solved, it could have a significant impact on Fire workload and staffing strategies – potentially freeing up staff to help reduce queue wait times.

Recommendation #4: To eliminate the need to call the County to confirm every ambulance dispatch, the Fire Department should work with the County of Santa Clara to prioritize automated ambulance dispatching.

²¹ It should be noted that this may require San José Fire Communications to procure a fix for the link on their own CAD system, to ensure the data transfer is reliable between the two systems.

This page was intentionally left blank

Finding 2 Growing Call Volume and Workload Has Increased the Urgency to Hire Qualified Communications Staff

Summary

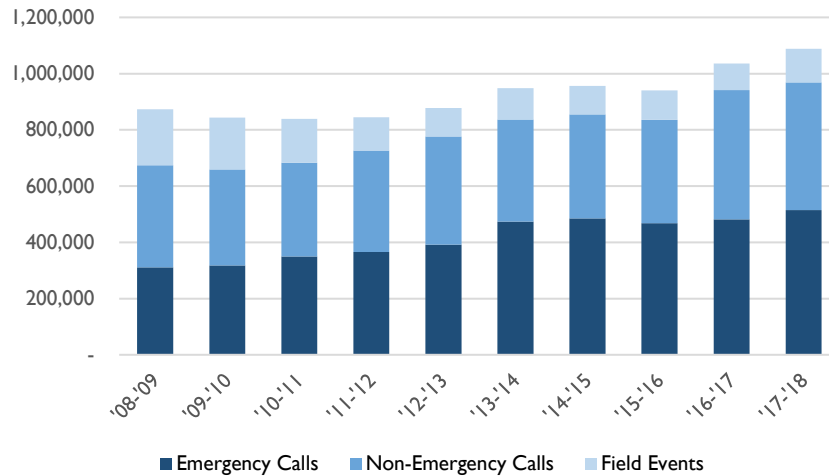
With a growing population and an increase in the number of wireless calls, San José's call volume has increased. Added responsibilities have also contributed to increased workload for Communications staff. Nonetheless, budgeted staffing has stayed relatively steady while vacancies remain a problem. Police and Fire Communications have increasingly relied on overtime to staff their Communications Centers and meet call answering times. Aggressive recruiting and hiring is needed to fill Communications vacancies. Communications should also consider improvements to the work environment, such as safe parking options and dedicated call taker positions for Fire staff.

Call Volume Has Increased

Due to changes to State policy (described below), re-rerouting of calls, the increasing prevalence of wireless phones, and population growth in the City of San José, the City's Communications Center receives significantly more calls than it did ten years ago.

Police Communications receives approximately 1,400 emergency calls per day. In FY 2017-18, the Division answered a total of 1.1 million calls – compared to about 875,000 ten years ago. Of these, 515,000 calls were to the emergency lines, while around 40 percent were to the non-emergency lines. As shown in Exhibit 11, total call volume, including emergency calls, has steadily increased over the last decade.

Exhibit 11: Police Communications Total Call Volume Increased by 25 Percent, But Emergency Call Volume Is 65 percent Higher Than It Was 10 Years Ago

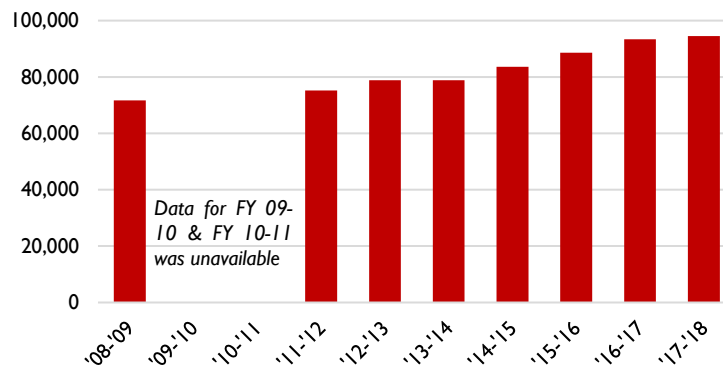


Source: Auditor analysis of ECaTS and Police Communications' management information system reports.

Note: This chart shows call volume for only Police Communications. Emergency call volume adjusted to exclude transfers to Fire Communications, as ECaTS combines 9-1-1 call volume for both PSAPs in its reports to the State.

Fire Communications handled a total volume of around 250,000 calls in 2017-18.²² Of those, nearly 95,000 were emergency calls. Like Police, emergency calls to Fire Communications have increased over time.

Exhibit 12: Fire Communications Emergency Call Volume Is 32 Percent Higher Than 10 Years Ago



Source: Auditor analysis of San José Fire Communications management information system reports.

Note: In June 2016, the Department implemented a new management information system with capacity to report both emergency and non-emergency lines. Prior to 2016-17, the management information system could not report non-emergency call data. As such, Exhibit 12 only shows emergency calls to Fire Communications.

²² This includes about 97,000 outgoing calls to County EMS, as noted in Finding I.

Added Responsibilities Have Contributed to Increased Workload

In 1990, the Police Communications Division assumed responsibility for emergency call handling for the City of San José, from Santa Clara County.

In May 1995 San José Police Communications assumed responsibility for Telephone Report Automation Center (TRAC/non-emergency crime reports). Per the Police Communications Policy and Procedure Manual:

TRAC is responsible for processing a variety of non-emergency crime reports by telephone and the Internet. Most are misdemeanor offenses, but can also include prior, non-life threatening felony reports.

In 1997, San José Police Communications added the number 3-1-1 for non-emergency police related matters to help manage emergency call volume.

Beginning in 2006-07, Police communications assumed responsibility for responding to all wireless 9-1-1 calls made within the geographic boundaries of San José. In 2009 the State's Routing on Empirical Data (RED) project resulted in the transfer of additional calls from the California Highway Patrol to local jurisdictions.²³

The last substantial increase in staffing occurred in 2006 when local PSAPs statewide, including San José Police Communications, assumed responsibility for wireless calls following a change in State policy.

²³ In 2007 the California (CA) 9-1-1 Division identified that 4.9 million (42.4%) of the 11.6 million wireless enhanced 9-1-1 (E9-1-1) calls received a busy signal. State law (California Public Utilities Code 2892, (PUC 2892)) requires that all wireless calls be routed to the CHP unless additional criteria is met, which then allows calls to be routed to a local PSAP. However, in 2007, the CHP had only 24 call centers with 167 call taking positions, not enough to handle the unanticipated exponential increase in wireless calls routed to the CHP call centers, resulting in a high volume of busy calls that were never answered. To improve emergency response, the CA 9-1-1 Division initiated a project to route the high volume of wireless 9-1-1 calls directly to local PSAPs that had 1,776 call taking positions.

Exhibit 13: City of San José PD Communications Division Timeline

1968	First 9-1-1 call was placed in Haleyville, Alabama
1990	City of San José took over police dispatching from Santa Clara County
1994	9 additional budgeted public safety dispatchers added to staff the Telephone Report Automation Center (TRAC) program, previously handled by Operations Division
1995	City of San José Police Communications assumes responsibility for non-emergency report-writing (TRAC)
1997	San José pilots 3-1-1 to handle non-emergency, staffed by Communications Division call takers
2006	San José Communications Division assumes responsibility for answering all wireless calls made within the geographic boundary of San José
2006	Additional budgeted staff are added to assist with re-routing of wireless calls
2009	California State RED study results in the transfer of additional calls from CHP to local jurisdictions
2010	3.5 vacant positions are eliminated in Police Communications
2014	Assistant Communications Manager position added
2016	San José upgraded its phone system with funding from the State
2017	San José Police/Fire PSAP received a warning letter for not meeting the state call answering standard
2018	Police/Fire PSAP monthly average answering times are nearly meeting the state standard

Source: Auditor timeline based on review of 9-1-1 literature, staff interviews and previous audits.

Wireless Calls Have Increased Workload

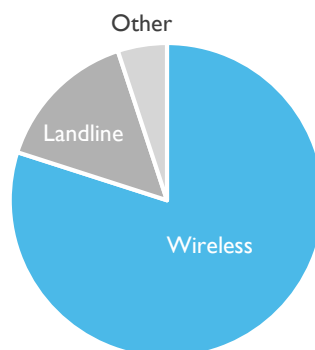
Across the U.S. mobile phone usage is increasing, and with that, the number of reported wireless emergency calls is also increasing. Specifically, in 2009, more than 20 percent of U.S. households were “wireless only” but by 2018, according to the Centers for Disease Control and Prevention, that percentage had increased to nearly 55 percent.

In 2017, in California, 80 percent of calls to 9-1-1 were made using a wireless phone. The main challenges to workload for 9-1-1 centers associated with this increase in wireless usage are:

- receiving accurate location information;²⁴
- a higher number of abandoned calls from unintentional dialing; and
- the overall increase in call volume because of the proliferation of mobile phones (i.e. for many incidents, such as traffic accidents, several people will call 9-1-1).

²⁴ Many jurisdictions have recently begun using a new web tool—RapidSOS Lite which allows PSAPs to receive more accurate location data for wireless calls. The City is in the process of working with the vendor to procure this technology.

Exhibit 14: In 2017, in California, 80 Percent of Calls to 9-1-1 Were Made Using a Wireless Phone



Source: CalOES Presentation: CA 9-1-1 Branch Updates California National Emergency Number Association 2018.

Note: Other includes VoIP, text to 9-1-1, and other including telematics

Abandoned Calls Increase Workload

About 11 percent of 9-1-1 calls to Police Communications in 2017-18 were abandoned. In keeping with National Emergency Number Association (NENA) best practices, San José call takers attempt to call back when a 9-1-1 call is routed to the PSAP and the call disconnects or is abandoned. The original call taker or someone assigned to the secondary or non-emergency phone lines will call back and may attempt to call back one or two times if the call is busy or there is no answer.

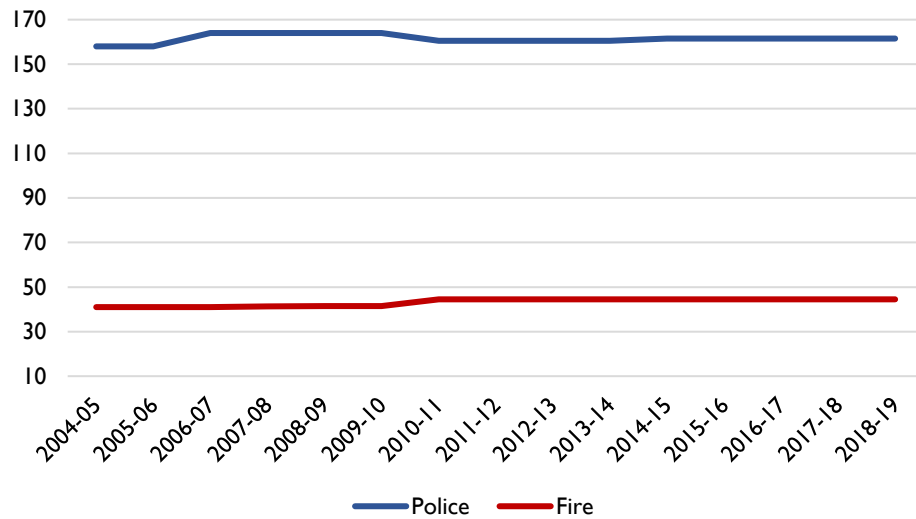
In 2017-18, there were over 51,000 abandoned calls out of over 450,000 9-1-1 calls to Police Communications. For Fire Communications, there were over 5,000 abandoned calls out of their 69,000 9-1-1 calls. Communications staff believe that the proliferation of cell phones and unintentional dialing has also led to an increase in abandoned calls. In 2008-09, for comparison, there were only 10,000 abandoned calls out of about 269,000 9-1-1 calls to Police Communications.

Budgeted Staffing for Both Police and Fire Communications Have Stayed Relatively Steady

Even though call volume has increased, budgeted staffing has remained relatively steady. Police Communications added six additional call takers in 2006-07 to address the potential call volume as a result of changes to State policy, but in 2010-11, 3.5 FTE vacant positions were eliminated due to the budget crisis. As described later, vacancies remain a persistent problem in both Fire and Police Communications.

Budgeted staffing levels for Police Communications in 2018-19 are lower than the 2006-07 levels. Fire Communications staffing has also remained relatively steady since 2004-05.

Exhibit 15: Police and Fire Communications Authorized Staffing Has Changed Only Slightly Since 2004-05

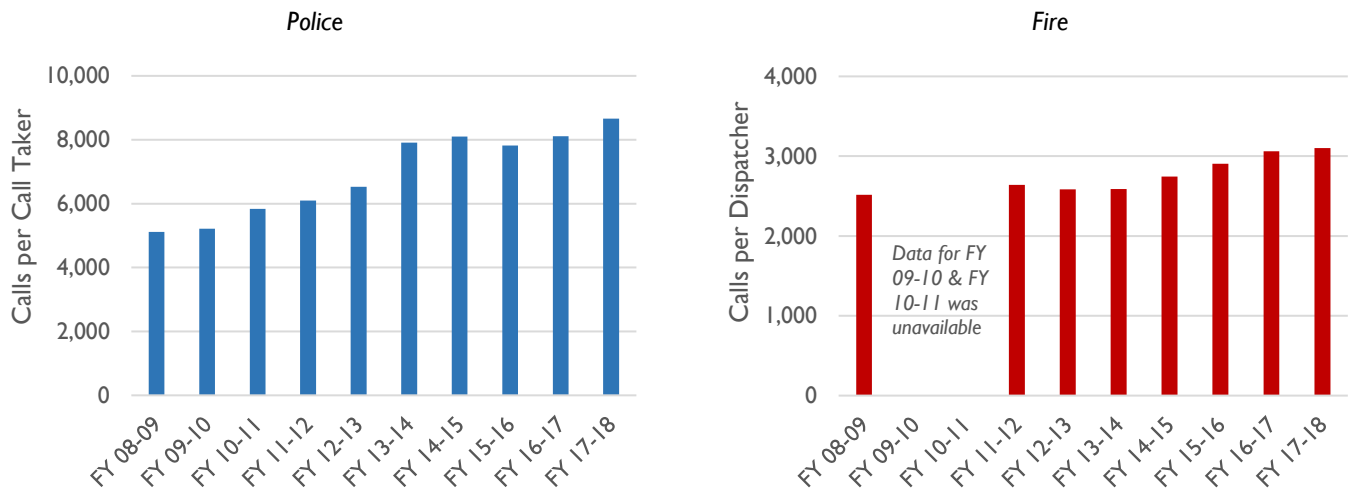


Source: Police and Fire Adopted Operating Budgets

As noted previously, call volume rose over the past decade but staffing did not increase commensurately. In FY 2008-09, there were 5,100 emergency calls per budgeted call taker for Police Communications; in FY 2017-18, that had grown to 8,700 emergency calls per budgeted call taker.

Fire Communications also saw an increase: in FY 2008-09, there were 2,500 emergency calls per budgeted dispatcher. Ten years later, it was up to 3,100 calls per budgeted dispatcher.

Exhibit 16: Emergency Calls per Budgeted Staff Has Increased



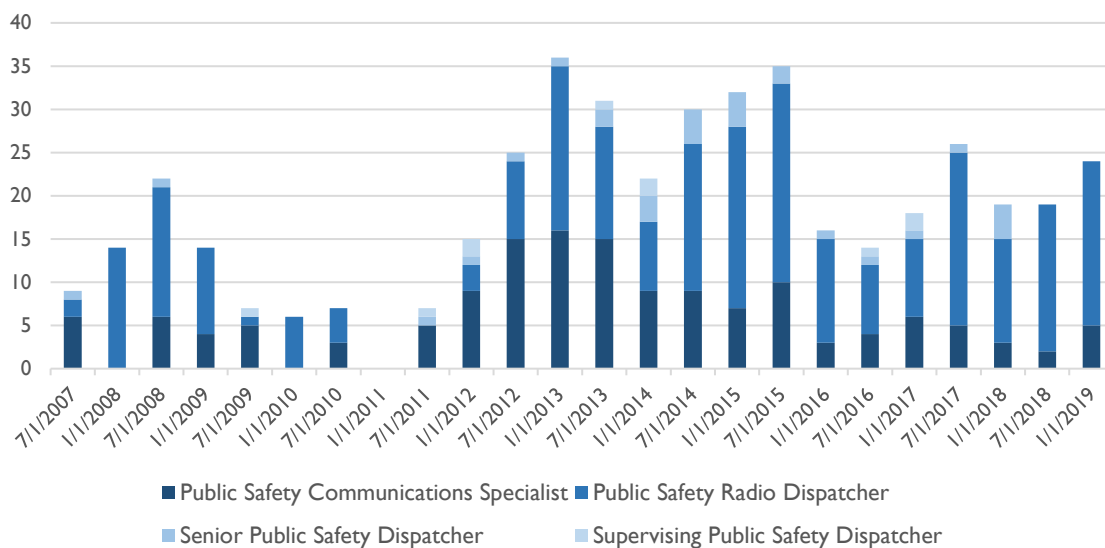
Source: PSAP management information system call data and Adopted Operating Budget authorized staffing data.

Note: Data shows only emergency calls. For Police, data is shown by authorized Public Safety Communications Specialist positions. For Fire, data is shown by Public Safety Radio Dispatcher positions, as there are no Communications Specialist positions dedicated solely to call taking.

Vacancies in the Police and Fire Communications Call Center Persist

The Police Communications Division has been largely unable to hire for all open vacancies in recent years.

Exhibit 17: Police Communications Division Continues to Have Vacancies



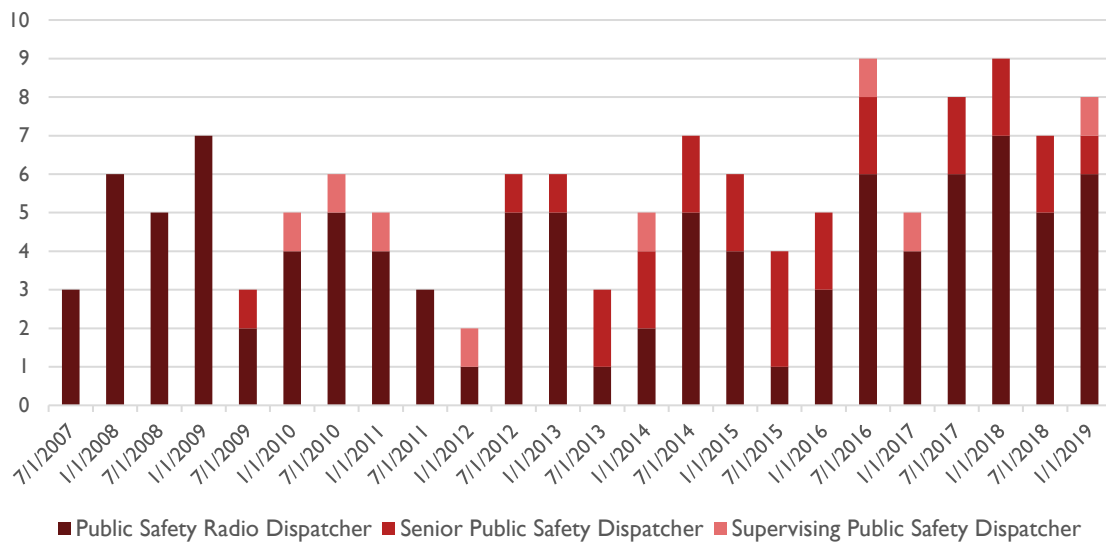
Source: Auditor analysis of Peoplesoft employment records.

Note: This includes only vacancies for full-time positions.

In addition to vacant positions, not all staff are available for full-duty work because they are on leave or in training. For example, in November 2018, there were 27 vacancies among full- and part-time call takers and dispatchers, along with 13 employees in training and 9 employees on temporary duty or leaves of absence. This left only 90.5 employees who were “control-room ready” and available to work in the Police Communications Center.²⁵

Not including staff that were on leave or in training, Police Communications had 24 full-time vacancies in January 2019 (a 15 percent vacancy rate)—pointing to the need to actively fill these vacancies. The Fire Communications Division has also had an ongoing problem with vacant positions. Fire Communications had 8 full-time vacancies in January 2019, or an 18 percent vacancy rate.

Exhibit 18: Fire Communications Division Continues to Have Vacancies



Source: Auditor analysis of Peoplesoft employment records.

Note: This includes only vacancies for full-time positions.

Police and Fire Communications Are Relying on Overtime to Meet Desired Staffing Levels and Call Answering Times

Police Communications has four 10-hour shifts. Depending on the time of day/shift, Police Communications maintains a desired staffing level of 9 to 15 call takers and 10 to 12 call dispatchers.²⁶ In an effort to maintain those staffing levels, Police Communications makes use of both mandatory and voluntary overtime to fill positions until proper staffing levels are achieved. As outlined in the

²⁵ This does not include senior or supervisory staff in the Communications Division.

²⁶ In 2006 the Police Department conducted an internal staffing study that resulted in the current staffing and shift model.

Communication Division Policy and Procedures Manual, Police Communications uses two types of overtime:

White Page Overtime: This is pre-scheduled or planned overtime which covers desired staffing levels only. This includes those watches at shift change that were left short initially—without anyone off. It also covers for personnel off due to pre-bid vacation leave, medical leave of absence or FMLA, resignations, and promotions and mandatory training.

Blue Page Overtime: Voluntary overtime that is posted in the “blue pages” also covers desired staffing levels, but if it is not voluntarily filled is not assigned. Blue page overtime is usually posted to allow employees to take time off requested outside the bidding process or to grant release time to attend non-mandatory training.

Fire Communications Staffing

Fire Communications staffs three 8-hour shifts. The minimum desired staffing level for day and swing shifts is 5 dispatchers and for the night shift is 4 dispatchers. Of these staff, there is at least one person designated as a call taker for the shift, at least two designated as radio dispatchers (one of which is also responsible for confirming ambulance dispatches with the County). Each shift has one senior public safety dispatcher as well. Senior public safety dispatchers are required to provide general dispatcher or call taker duties as well as supervisory duties, and act as break relief for other staff.

Like Police Communications, Fire Communications uses mandatory overtime to reach desired staffing levels. Overtime shifts are bid and staff can choose which overtime slots to work. Though filling these shifts can be done completely voluntarily through staff sign-ups, Fire Communications may require staff to work overtime if slots are not filled.

High Levels of Overtime Use to Meet Call Answering Times

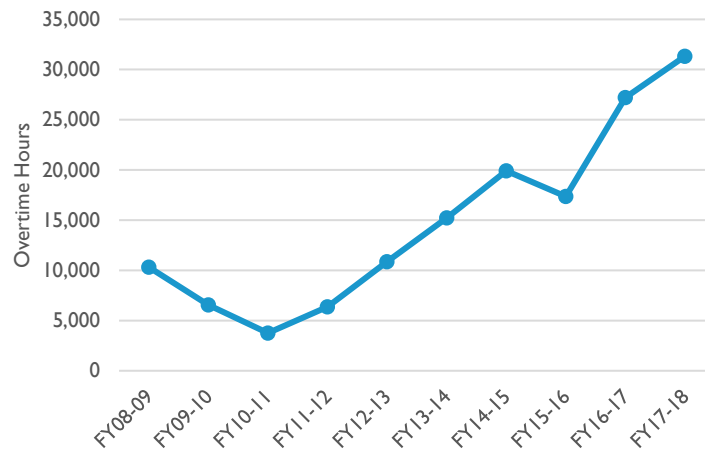
As previously discussed, the City has not been able to meet State call answering standards. While call answering times have improved, this has come at a high cost. Police and Fire Communications have increasingly relied on overtime to staff the primary and secondary PSAPs.

Police Communications’ management, with input from supervisory staff, develops desired-staffing levels. Monthly *planned overtime* hours for Police Communications’ call takers ranged from 10 hours in September 2017 to 32 hours in May 2018. Similarly, Police Communications dispatchers were also required to work additional hours—five hours in September 2017 to 29 hours in May 2018.

The mandatory hours do not include unplanned overtime used to make up for unexpected absences and last-minute staffing changes. On average call takers and

dispatchers worked almost 30 overtime hours per month—nearly three additional 10-hour shifts. Staff we talked to were concerned about exhaustion, lack of time with their family and the resulting low morale.

Exhibit 19: Overtime Hours for the Police Department Communications Division More Than Tripled in the Last 10 Years



Source: Auditor analysis of PeopleSoft earnings data

For FY 2017-18, Police call takers and dispatchers worked overtime hours equivalent to about 15 additional FTE.²⁷ For context, in July 2018, Police Communications had 19 full-time vacancies.

In addition to increased overtime usage, the Division also reduced time for staff briefings, simulcast radio channels,²⁸ reduced its non-emergency crime report operations, and reduced service for non-emergency phone lines. The Police Department reported in its 2017-18 internal Program Management Report (PMR) that wait times for non-emergency crime report calls were 3.6 minutes.

²⁷ Calculated assuming that an FTE is 2,080 hours of work per year.

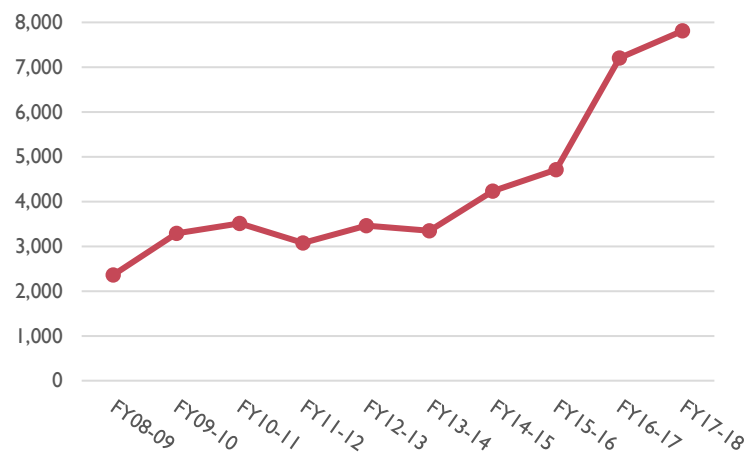
²⁸ Simulcasting is the simultaneous transmission on the same frequency from multiple sites. Each dispatcher manages more than one radio channel. The number of radio channels that dispatchers manage varies by shift—during low call volume hours (when there are fewer dispatchers on a shift), each dispatcher manages more radio channels. As the number of police officers increases due to a hiring push, the Department is concerned that simulcasting may be more challenging.

Fire Communications Relies on Overtime to Meet Desired Staffing Needs

Like Police Communications, Fire Communications has increasingly relied on overtime to meet staffing needs. To accommodate the need for increased overtime, Fire Communications currently work five 8-hour shifts.

The number of shifts worked per pay period can be high. For example, over sixteen days in late 2018 to early 2019, Fire Communications dispatchers worked an average of 15.5 hours of mandatory overtime. This is more than three additional 8-hour shifts per month. Though some staff worked no overtime or only a few hours, several staff worked more than 25 hours of mandatory overtime and one person worked more than 40 hours.

Exhibit 20: Fire Communications' Overtime Hours More Than Tripled in the Last 10 Years



Source: Auditor analysis of PeopleSoft earnings data

In FY 2017-18, the control room staff worked overtime hours equivalent to about 3.8 additional FTE.²⁹ For context, in July 2018, Fire Communications had 7 full-time vacancies.

Recruiting Efforts to fill Communications Staff Vacancies Have Not Been Prioritized

Filling vacancies in the Police and Fire Department Communication Divisions is critical. Police Communications has assigned responsibility for recruiting and hiring call takers and dispatchers to two staff within its Communications Division. These staff members have additional responsibilities including training, continuing education, oral and hiring boards, sit-alongs, facility tours, and conducting credit

²⁹ Calculated assuming that an FTE is 2,080 hours of work per year.

checks for new hires. The staff attend hiring/recruiting events in addition to their everyday responsibilities.

The Police Department has a Recruiting Unit that focuses entirely on hiring and recruiting. The Department has assigned sworn staff to this Unit—two sergeants and two officers as needed. The Recruiting Unit's primary focus is recruiting police officers; however, it is also responsible for Communications staff recruiting. Recruiting Unit staff hand out flyers during its police recruiting events. However, because of the high vacancies among police officers, the Unit has almost entirely focused its efforts on recruiting and hiring police officers.³⁰

Police Communications staff report that they recently began attending some recruiting events that the Police Recruiting Unit hosts (Women's Career Day for women in law enforcement). However, Communications' staff attendance at these events is infrequent due to their other responsibilities. Further, the Recruiting Unit does not appear to have much on-going communication with the Communications Division to understand status of current academies, and testing requirements for Communications staff. Staff report that going forward, the Recruiting Unit intends to prioritize Communications staff hiring and outreach.

Fire Communications relies on the City's Human Resources staff for its hiring. Recruiting, on the other hand, is entirely up to Fire Communications' staff. One to two Fire Communications staff are assigned to training and are also responsible for recruiting and hiring along with their other training responsibilities. Fire Communications' staff told us that because of limited staffing, it has not focused on aggressively recruiting and hiring to fill its vacancies.

Hiring Standards for Public Safety Call Takers and Dispatchers

Minimum entry standards for call takers and dispatchers are high. According to the California Peace Officer Standards Training (POST) requirements, candidates at a minimum have to be assessed on verbal, reasoning, memory, and perceptual abilities. These include a written test and an oral interview. Additionally, POST requires:

[A] thorough background investigation is required of all public safety dispatchers before being hired to verify that the applicant has no past behaviors indicative of unsuitability to perform public safety dispatching duties.

POST regulations also outline the procedures for background investigation which must include:

³⁰ See our 2015 Audit of Police Hiring: <http://www.sanjoseca.gov/DocumentCenter/View/46250>.

a check of motor vehicle records, a search of local, state, and federal fingerprint files to determine any criminal record, contacts with references, as well as other areas of investigation. [...]

[Further] all public safety dispatchers [are required to] undergo a medical examination prior to hire. The goal of the medical examination is to determine whether the applicant has any medical condition which would preclude the safe and efficient performance of dispatcher duties.

Long Hiring Times

Hiring new Communications staff for Police and Fire takes 9 to 10 months from the time the job is posted to when the individual begins training. Interested applicants undergo a written test (Criticall) which tests call taker and dispatcher applicants in job related skills such as data entry, multi-tasking, position-locating, and decision-making. Per Communications staff, many applicants do not pass this initial test. After applicants pass Criticall, they appear before an oral board for an interview. Successful candidates then undergo a rigorous backgrounding process. Once backgrounding is successfully completed, the candidate can be hired.³¹

All training is done at the Communications Center, and can take several months. For example, for Police Communications, the first eight weeks of training are general to the police department, five weeks are San José specific and three weeks are spent on Peace Officer Standards and Training (POST) curriculum. After graduation from the communications training, trainees will participate in four rotations that are a minimum of five weeks long.

If the individual has been hired as a radio dispatcher, there is an additional five weeks of classroom training followed by four six- week rotations for dispatchers.³²

Opportunities to Coordinate Police and Fire Recruiting

Like Police sworn candidates, the number of applicants who actually end up with a final job offer is small due to the rigorous process. For example, Police Communications reported that in a recent hiring cycle about 700 candidates applied for the job but only 5 candidates received a final job offer—a less than one percent success rate. This success rate implies that expanding the applicant pool would be beneficial.

³¹ The Fire hiring process may be slightly different.

³² Dispatchers are required in the California Code of Regulations section 1018 to “satisfactorily complete the POST-certified Public Safety Dispatchers’ Basic Course as set forth in PAM Section D-I-5 before or within 12 months after the date of appointment, promotion, reclassification, or transfer to a public safety dispatcher position; or possess the Public Safety Dispatcher Certificate.” The POST training for Public Safety Dispatchers entails a minimum of 120 hours of training, divided into 14 topics which include: professional orientation and ethics, introduction to law, domestic violence, telephone technology and procedures, critical incidents, wellness management, and community policing/cultural diversity/hate crimes/gang awareness.

Combining Police and Fire Recruitments

The City has the same job requirements for both Police and Fire dispatchers. Specifically, a Public Safety Radio dispatcher,

performs the full range of dispatching for police, fire, and emergency medical personnel and equipment. Answers the telephone and receives emergency, non-emergency, and 9-1-1 requests for assistance. Analyzes information received and dispatches police and fire personnel and equipment. Performs related work as required.

Even though the basic job requirements and minimum qualifications are the same, Police and Fire dispatcher recruitments are not coordinated. As discussed above, they use different staff and different processes. In our opinion, combining these recruitments could provide a larger candidate pool and also provide candidates with more positions for applying.

Opportunities to Utilize Recruiting Strategies Used by Police Recruiting Unit

In combination with City Council-approved increases in pay and benefits, the Police Recruiting Unit has successfully utilized many strategies to fill police officer vacancies. These include one-stop testing and oral board events, making training available to interested applicants to help them pass the physical testing, and making easily available online applications.

Recruiting staff attend recruiting events most likely to be attended by people interested in police officer jobs. Once police officer applicants express interest, Recruiting Unit staff make regular email contact to ensure that the applicants maintain their interest and are kept abreast of upcoming steps in the application process. Further, while the Department requires applicants to do a written test, it accepts different types of written tests, offering applicants more flexibility in the testing date, time, and location.

Both Los Angeles and San Francisco emphasized the need to aggressively fill vacancies in order to reduce mandatory overtime. Both jurisdictions indicated that once they began aggressively hiring to fill vacancies, they were able to reduce mandatory overtime substantially.

Recommendation #5: To increase focus on outreach and recruiting for Communications staff, Police Communications and Fire Communications should each develop a recruiting plan for their respective divisions, and explore opportunities for collaboration and joint recruitment opportunities.

External Advertising Has Been Mainly Utilized for Police Officer Hiring

Police Communications reports posting job openings for call takers and dispatchers on the City of San José jobs website, the Police Department's recruiting website (which is currently in the process of being updated), and the CalNENA and POST websites. However, as discussed below, there does not appear to be any targeted marketing for Communications staff through its Recruiting Unit.

Similarly, Fire recruiting staff post job openings on online job boards. They occasionally attend career fairs at colleges, but recruitment efforts are in addition to their other responsibilities. Further, staff have indicated that their outreach efforts do not necessarily reach the best candidates for this line of work.

The Police Department's contracted professional marketing firm (Civilian, Inc.) conducted an advertising effort for the Police Department's police officer recruiting campaign (April through September 2018). The campaign strategy was designed to reach audiences representing the diversity of San José's residents, women, military, college students, LGBT-identifying individuals, and police officers employed at other agencies. This strategy included the use of social media tools (advertising through Indeed, Facebook, Google) and using programmatic display tactics (banners). In our opinion, the marketing firm should also be utilized for Police and Fire Communications staffing recruiting.

We should note that the Police Recruiting Unit and Police Communications have started work on new display and social media advertisements featuring Communications opportunities. The Department has additionally reported that its video unit is working to create features on the Communications Center and opportunities in Communications.

Recommendation #6: The Police and Fire Department should utilize external marketing firms to bolster marketing efforts to recruit communications staff for both Police and Fire staff.

Improvements to the Work Environment

According to a recent Wall Street Journal report,

Cities across the U.S. are struggling to find 9-1-1 dispatchers as a historically tight labor market makes it harder to fill a job that was already a tough sell. [...] Emergency call center jobs can be emotionally taxing.

Additionally, a 2013 report stated: "Concern about the impacts of 9-1-1 work-related stress has increased in recent years among the membership of the National

Emergency Number Association (NENA).”³³ The Police Department recognizes this concern and makes various resources available including training on recognizing stress and unlimited counselling services. In addition to these resources, there are additional changes that could have a positive impact to the work environment, including improving staff morale and providing hiring flexibility.

Upcoming Initiatives

There is currently an initiative to classify 9-1-1 call takers and dispatchers as first responders.³⁴ The classification change, championed by California Congresswoman Norma Torres, would give 9-1-1 call takers and dispatchers access to more opportunities to apply for grants for training and recruitment purposes. Changing the status of 9-1-1 call takers and dispatchers would also protect them during times when workers are placed on mandatory leave due to state or federal budget issues.

Facility in Need of Upgrade

Police and Fire Communications is located in an old building that has not recently been upgraded. In November 2018, San José voters approved Measure T, a \$650 million general obligation bond measure. Bond proceeds are to be used to acquire land or construct public improvements identified in the measure related to public safety and disaster preparedness. One of the projects slated is to “upgrade 911 communications, police, fire, and paramedics facilities to improve emergency and disaster response”.

Communications Staff Have Limited, Potentially Unsafe Parking Options During Night Shift

Fire and Police Communications staff oftentimes work late hours—shifts can end at 2 AM. Given their proximity to the Santa Clara County jail, staff reported feeling unsafe walking to their assigned parking as people are released from the County jail, and in one instance finding an individual hiding in their vehicle late at night.

Recommendation #7: The Police and Fire Departments should work with the Public Works Department to make closer parking options available to Communications staff that work night shifts.

³³ NENA Standard on 9-1-1 Acute/Traumatic and Chronic Stress Management: https://cdn.ymaws.com/www.nena.org/resource/resmgr/Standards/NENA-STA-002.1-2013_9-1-1_Ac.pdf

³⁴ EMSI, “Congresswoman Takes Up Fight to Classify 911 Operators as First Responders,” November 17, 2018: <https://www.emsi.com/2018-year-review/articles/392951048-Congresswoman-takes-up-fight-to-classify-911-operators-as-first-responders/>

Availability of Part-Time Work

Police Communications has 1.5 FTE budgeted part-time call taker positions and 2 FTE budgeted part-time dispatcher positions. These positions are available for part-time benefitted and unbenefitted employees. Additionally, the Police Communications can re-hire retired employees (“retiree rehires”) who are fully trained but are only permitted to work 120 working days or 960 hours, whichever is greater per year. Police Communications has used part-time employees and retiree rehires to respond to non-emergency calls, such as taking crime reports, which frees up other employees to answer emergency calls.

Increasing the number of part-time positions (without reducing the number of full-time positions in Police Communications) may provide additional staffing options. The Department has expressed concern with increasing the number of part-time positions because of (a) the impact it could have on full-time positions (e.g. the ability for part-time employees to choose schedules, and the lack of mandatory overtime for part-time positions), and (b) the requirement for the same amount of training for staff to be “field ready” even though they would only be interested in part-time work.

The Department’s concern about training requirements can be alleviated by making the part-time positions available to staff with previous experience such as retiree-rehires.

Recommendation #8: The Police and Fire Departments should work with the City Manager’s Budget Office and Human Resources department to make additional part-time and/or retiree-rehire opportunities available to qualified staff.

The Fire Department is Only Authorized to Hire for Dispatchers Despite Informally Staffing Call Taker Positions

Police Communications staffing includes both Public Safety Communication Specialists and Public Safety Radio Dispatchers. A public safety dispatcher has a higher pay scale and requires additional training. The Department reported that having both call takers and call dispatchers provides employees with options to work in the field of their liking and also allows for employee retention because a dispatcher can move to a call taker position if they are so inclined.

In contrast, Fire Communications only hires for call dispatchers. Dispatchers are cross-trained as call takers and job duties are divided into call taker and call dispatch positions each shift. As part of our review, Fire Communications expressed interest in establishing a call taker position. Staff reported multiple instances of being unable to retain employees because they were not able to complete the dispatcher training despite being competent call takers. As

mentioned previously, the hiring and training process for call taking and dispatching, which involves an extensive testing and backgrounding process, is long. Allowing flexibility to retain staff that have been successful through much of the process should be considered.

Any changes to the current budgeted staffing will need to be evaluated in conjunction with the City's Budget Office and Human Resources. This may involve establishing the Public Safety Communications Specialist classification in the Fire Department and determining how to appropriately allocate staffing resources to the new classification.

Recommendation #9: To retain qualified staff that are more inclined to call taking versus dispatch, the Administration should explore the creation of a call taker position in the Fire Department.

Finding 3 Staffing Police Non-Emergency Phone Calls With Emergency Call Takers Is Inefficient

Summary

Emergency call takers also handle non-emergency calls. Police Communications handles non-emergency police calls, while Fire handles after-hours calls to DOT, ESD, Public Works, and PRNS. Non-emergency call-taking imposes a significant workload on Police Communication staff – about 40 percent of incoming calls to Police Communications are not emergencies. Even though emergency calls are prioritized, the City should reconsider how it handles non-emergency phone calls, given the challenge of hiring emergency call taker, reliance on overtime, job stress, and overall increase in emergency call volume. We recommend that Police Communications works with the Information Technology Department's City Customer Contact Center to determine the appropriate customer service response to non-emergency calls, and modify the Police Department's non-emergency call tree to direct general City requests to the City Customer Contact Center. Further, we recommend the Police Department publicize online reporting options, and determine if additional reporting can be handled online.

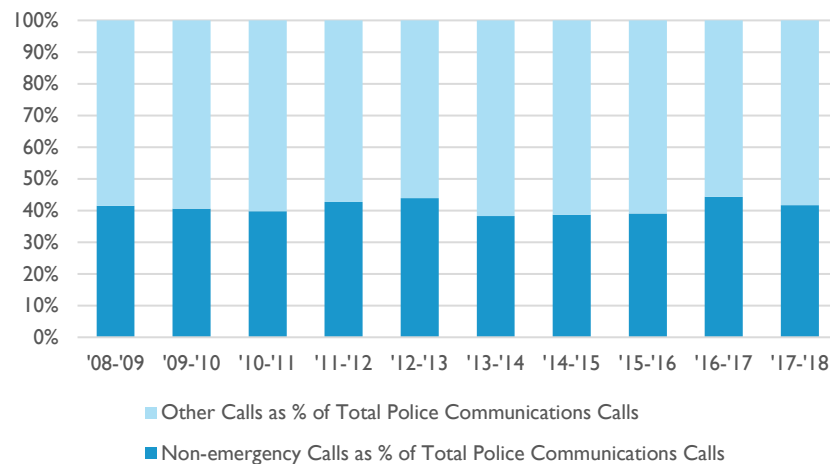
Non-Emergency Calls Make up About Forty Percent of Police Communications' Call Volume

Police Communications' call takers accept different types of incoming calls, not just emergency calls – non-emergency calls make up 40 percent of all incoming calls.³⁵

Callers can reach a police non-emergency number by dialing 3-1-1 or (408) 277-8900. Dialing either of these numbers directs callers to the same call tree (discussed more fully in Finding 4 of this report) after which their call is answered by emergency call takers who have been assigned to handle non-emergency calls. Residents call to file police reports, request general police information, report abandoned vehicles, report stolen/lost cell phones, etc.

³⁵ Non-emergency lines allow a call center to divert calls and leave emergency lines open to receive incoming emergencies.

Exhibit 21: Non-emergency Calls Make up Approximately 40 Percent of Police Communications Division Call Volume



Source: Police Communications' Program Management Reports

While emergency calls are the number one priority of the Communications Center, call takers are also assigned to staff non-emergency lines and take non-emergency crime reports over the phone. Even though these call takers are able to handle overflow emergency calls as needed, they will not be able to pick up an overflow 9-1-1 emergency call if they are busy handling a non-emergency or taking non-emergency crime reports.

Staffing Priorities

San José's prioritization of calls is in accordance with national 9-1-1 standards:

It is the responsibility of on duty telecommunicators to answer all in-coming calls. All phone calls will be answered in order of priority. 1st priority will be the 9-1-1 and emergency 7/10 digit phone lines; 2nd priority will be non-emergency lines and 3rd priority will be the administrative and/or internal phone lines.³⁶

In order to make sure that Police Communications was consistently meeting its State goals for emergency call response times, it has experimented with emergency/non-emergency staffing ratios. For example, when Police Communications attempted to staff shifts 70 percent for 9-1-1/emergency calls and 30 percent for 3-1-1/non-emergency, it found that this negatively impacted emergency lines because residents called 9-1-1/emergency lines for assistance in order to avoid wait times on the non-emergency lines. This negatively impacted

³⁶ National Emergency Number Association (NENA) call answering standards.

queue time for emergency phone lines. Thus, to avoid non-emergency calls clogging their emergency call lines, Police Communications assigns 40 percent of on duty call takers to non-emergency calls.³⁷

Using Highly Trained 9-1-1 Emergency Call Takers to Handle Non-Emergency Calls Is Inefficient

As mentioned in Finding 2, San José's call takers undergo extensive training and hiring process to become 9-1-1 call takers. This includes extensive, POST-certified training on handling emergency situations. Fire Communications' staff are trained to respond to medical situations—from a choking baby to a stabbing.

These same highly-trained staff are also assigned to staff police non-emergency phone lines which include processing less-urgent calls about directions, graffiti, and police department lobby hours.

In other jurisdictions, such as San Francisco, highly-skilled emergency call takers do not handle non-emergency police calls and instead only focus on emergency calls.

Fire Communications Is in the Process of Transferring DOT After-Hours Calls to the City Customer Contact Center

Since 1990, Fire Communications has provided after-hours call answering services for some City departments including Transportation (DOT), Environmental Services (ESD), Public Works, and Parks, Recreation, and Neighborhood Services (PRNS). Some of the services requested include sewer issues, roadway hazards, tree limbs down, Municipal Water Company issues, City parks issues, etc.

Fire Communications has concluded that addressing these types of calls may impact its response times for emergency calls. The City Customer Contact Center currently acts as a backup support for the DOT Dispatch during business hours.

The Fire Department, along with IT, has proposed that after-hours calls should also be transitioned to the City Customer Contact Center to be answered by IT's after-hours service. While discussions have been ongoing, this transition has not been finalized and may require further coordination with the City Manager's Budget Office.

³⁷ When call takers are not handling a 3-1-1/non-emergency phone calls, and all 9-1-1/emergency call takers are occupied, non-emergency call takers are able to answer 9-1-1/emergency calls in the queue.

Recommendation #10: The Fire Department should finalize the transition of non-emergency after-hours calls to the City Customer Contact Center in the Information Technology department, and work with the relevant departments to develop policies and procedures on roles and responsibilities, processes to contact relevant staff, and expectations for response times, if any.

Transitioning Additional Non-Emergency Calls

One option to reduce police non-emergency workload and the number of non-emergency calls coming into Police Communications would be to move additional non-emergency services to the City Customer Contact Center.

The City Customer Contact Center Also Handles Non-Emergency General Queries

The City's main telephone number is 408-535-3500. Calls to this number are answered by the City Customer Contact Center located in the City's Information Technology Department (IT).

The City Customer Contact Center answers about 175,000 calls annually which range from utility and garbage related calls to request for information on City services. City Customer Contact Center staffing includes:

- 1 Program Manager
- 3 Principal Office Specialists, and
- 9 Office Specialists

The City Customer Contact Center Staffing Has Been Reduced

The City Customer Contact Center staffing has been significantly reduced from 47 positions in 2007-08 to 13 positions in 2018-19. Staffing was reduced significantly in 2015-16 when the City moved revenue collections to the Santa Clara County property tax collection program. Call volume for that same period went down from over 300,000 calls in 2007-08 to just over 175,000 calls in 2017-18.

In July 2017, IT also rolled out the My San José app which would give residents an additional resource to report concerns. IT also manages DOT sewer-related calls from 4pm to 5pm. IT contracts with an after-hours service (SourceHOV) to respond to resident concerns after-hours.

Lack of Data on the Types of Non-Emergency Calls

While 40 percent of the Police Communications' call volume is for non-emergency calls, the Communications Center does not keep data on their non-emergency calls once the caller is connected with a call taker. It is unclear what resources these callers may be seeking and whether their call would be better placed elsewhere—perhaps to the City Customer Contact Center.

We understand that the types of non-emergency calls that emergency call-takers handle include questions about utilities, garbage services, noise disturbances, abandoned vehicles, homeless services, and others. Emergency call takers have noted that in many cases, customers will contact Police Non-Emergency (or even 9-1-1) because they do not know the appropriate contact within the City. Unfortunately, this imposes additional workload on highly-trained emergency call takers whose priority is emergency call taking.

The City Customer Contact Center reports they handle similar types of calls. If a customer has a request or question that could be handled by the City Customer Contact Center, it would be preferable for this division to handle the call. This would be less expensive and free up highly-trained emergency call takers.³⁸

Identifying Service Overlaps

We recommend the Police Department work with the City Customer Contact Center to determine areas where their services overlap, so some non-emergency calls could be diverted from Police Communications to the City Customer Contact Center. Because data about the number, type, and duration of non-emergency calls is limited, a phased approach to transitioning these calls may be needed. For example, if it is determined that the City Customer Contact Center will handle all calls related to utilities, the Police phone tree could be updated to transfer callers to the City Customer Contact Center. Then, once those calls have been absorbed and the City Customer Contact Center has a clearer sense of its resource needs to absorb additional calls, those services could be added to divert additional calls. This would help avoid the City Customer Contact Center facing a significant jump in call volume that could result in long hold times for its customers.³⁹

³⁸ A Public Safety Communications Specialist pay ranges from \$62,275 to \$75,670 whereas call takers at the City Customer Contact Center are primarily Senior Office Specialists, whose pay ranges from \$48,380 to \$58,843, or Principal Office Specialists, whose pay ranges from \$53,851 to \$65,478.

³⁹ It should be noted that implementing other recommendations in this report may decrease some types of police non-emergency calls while increasing other types of calls. For example, modifying the phone tree to enable customers to find their desired resource would likely decrease the number of calls transferred to call takers, while making 3-1-1 available to wireless customers (which will be discussed in Finding 4) would likely increase call volume. This makes it difficult to predict the magnitude of impact that implementing these recommendations would have on non-emergency call volume if it transitions to the City Customer Contact Center.

Recommendation #11: To reduce the workload on the Police Department's call takers, the Police Department should (a) work with the City Customer Contact Center to determine areas of overlapping service delivery and determine the appropriate customer service response, and (b) re-direct commonly requested general City requests to the City Customer Contact Center by modifying the call tree.

Making It Easier and Less Expensive to Take Non-Emergency Crime Reports

Customers who call the Police non-emergency phone number to file a police report will be transferred to a call taker who handles police reports. Responsibility for answering these types of calls began in 1994 and was moved from the Operations Division to Communications in 1995.

There are a handful of crime reports that are considered “*mandatory*” and must be taken by the City 24/7 whether or not the phone line for crime reports is operating. These include missing persons, lost or stolen license plate, Tarasoff threats,⁴⁰ reports from hospitals and schools, reports from care facilities, and lost or stolen passports.

For all other non-emergency police reports, residents have to call back between 12 p.m. to 4 p.m. Mondays to Fridays, and endure long wait times to file the relevant reports. In 2017-18, there were nearly 11,000 calls to file a police report. This volume has remained relatively steady over the last 10 years. Although the FY 2017-18 average call answering time for non-emergency police reports was 3.6 minutes, we observed that wait times on one day were almost 30 minutes.

Emergency Communications Centers in Los Angeles and San Francisco no Longer Take Non-Emergency Crime Reports

Los Angeles on the other hand reported that their 9-1-1 emergency communications center stopped taking police reports 15 years ago to focus on the emergency calls. Los Angeles residents have the option of either filing a police report in person or calling their local police station to file the report. Similarly, San Francisco does not take any police reports in the 9-1-1 emergency center. Instead, SF311 (San Francisco 3-1-1) reports their employees are able to take the following types of police reports: harassing phone calls, lost property, theft (including mail), vehicle burglary, vehicle tampering, and vandalism/graffiti. Freeing up additional emergency trained call takers to answer emergency calls will decrease mandatory overtime requirements, improve staff morale, and lead to better customer service.

⁴⁰ Per Police Communications Manual: “The *Tarasoff* statute is a California law that mandates psychotherapists to report a serious threat of physical violence against a reasonably identifiable victim(s).”

Police Department Community Service Officer Duties Include Taking Reports

The Police Department has Community Service Officers (CSOs) who work under supervision to perform non-hazardous police functions. CSO duties include completing routine police reports, receiving, and responding to resident inquiries, performing routine office functions, and assisting law enforcement in taking reports and searching for persons reported as missing.⁴¹

As such, accepting non-emergency crime reports appears to fall within a CSO's scope of work and would be less expensive and free-up emergency trained communications personnel.⁴²

Recommendation #12: To remove report-taking responsibilities from emergency call takers, the Police Department should assess and potentially distribute report-taking responsibilities that could be handled by (a) the City Customer Contact Center, (b) police officers on modified duty, (c) retiree rehires, or (d) Community Service Officers.

Filing Crime Reports Online

The Police Department's Records Division (Records) is responsible for processing online crime/incident reports. Responsibility for online reports was transferred from Communications to Records about two years ago.

To process reports submitted online, Records staff log in to the CopLogic database and filter reports based on when they were submitted. Records reviews the reports for accuracy and an automated email is generated to the reporting person if any required information is missing. When the report is approved it goes into the "records transcription queue."

Online reports are submitted and processed largely for insurance purposes and will not usually result in an investigation by a police officer. Department staff estimated that approximately 90-95 percent of online reports are for insurance purposes only. Records will only forward a report to be investigated if there is suspect information or the report is related to gang graffiti.

⁴¹ Other CSO duties can include: assisting patrol teams with non-enforcement duties, non-hazardous investigations of crimes, collecting crime scene evidence, stolen vehicle recovery, responding to and investigating traffic complaints, directing and controlling crowds and traffic at accidents or special events, protecting crime scenes, evidence transport, administering first aid, among others.

⁴² A Public Safety Communications Specialist pay ranges from \$62,275 to \$75,670 whereas a Community Service Officer I pay ranges from \$60,861 to \$73,944.

No Records Division staff are specifically assigned to handle online reports.⁴³ According to staff, reports are generally processed within a week, more frequently if they begin to accumulate. Records estimated that each online report required 15-20 minutes of staff time for processing.⁴⁴

The Police Department's website states that the Department accepts online reports for the following incidents:

- Fraud
- Theft
- Lost or stolen property
- Theft from a vehicle
- Forgery
- Fraudulent use of credit or debit cards
- Identity theft, and
- Harassing communications

The number of reports submitted online has increased over the last several years. In FY 2017-18, there were over 30,000 online reports, an increase of 86 percent over the last five years.⁴⁵ This has likely resulted in substantial cost savings to the department. The Police Department estimated that online reports saved about \$1 million in the first six months of 2018.⁴⁶

Recommendation #13: To lessen SJPD Communications Center staff workload and provide the public with additional service/reporting options, the Police Department should publicize online reporting options to the community and review current online reporting options and determine if additional reporting can be handled online.

⁴³ At the time of this audit, the Department reported that ten out of 57 Records employees have been trained on how to process online reports. Training for handling online reports is included for new staff. Such training for other employees is done as time permits.

⁴⁴ Department staff estimated that it can take three to four hours to process a day's worth of reports.

⁴⁵ It should be noted that to add supplemental information to an existing San José police case number the reporting person must call TRAC, they cannot do it online. Also, if there is suspect information the person is told to call the communications center non-emergency phone line.

⁴⁶ The Police Department calculates the cost savings of online reporting compared to having police reports taken directly by officers. They estimate it takes 1.5 hours per report if taken by an officer, or \$70 per report.

Finding 4 The City Could Improve Customer Service for Non-Emergency Calls and Better Utilize 3-1-1

Summary

The police non-emergency lines do not provide a seamless customer experience for many calls. Callers are directed to a lengthy phone tree, though fifty percent of non-emergency callers request to connect to a call taker. The phone tree does not always direct callers to the appropriate resource, and a technical glitch prevents customers from receiving complete information. Furthermore, the non-emergency lines do not provide language accessibility; callers are informed that translation services are only available for emergency calls. Finally, 3-1-1 does not work for many wireless callers, making the service unavailable for a large number of customers. While other major cities have modified the role of 3-1-1 to provide more expansive customer service, San José continues to use 3-1-1 as a police non-emergency line. We recommend the City explore moving 3-1-1 to the City Customer Contact Center and expanding the services available through 3-1-1. Wait times and call volume at the City Customer Contact Center should be monitored to determine whether any additional resources are required.

Fifty Percent of Non-Emergency Calls Request to Connect to a Call Taker

When a customer calls Police Communications for non-emergency services, either via 3-1-1 or 277-8900 (the seven-digit non-emergency number), they are greeted with the same Interactive Voice Response (IVR) phone tree which is extensive—callers have to listen to 9 options. The purpose of the call tree is so customers' needs are met without having to speak to a call taker.

However, in 2017 an average of 19,000 customers per month pressed zero to speak directly with a call taker. This represents over 50 percent of the calls that police non-emergency lines receive.

This indicates that the non-emergency phone tree is not successfully connecting them with the appropriate contact, or that callers were frustrated by the length of the phone tree. It is unclear how many of these callers may have navigated the phone tree but did not find the resource they were seeking, so they called back.

Interactive Voice Response Phone Tree Does Not Always Transfer Customers to the Appropriate Resources

Our review found that the non-emergency phone tree did not always successfully connect callers with the appropriate contact. For the customers who go through the non-emergency phone tree, one of the most requested options was to contact the California Highway Patrol (CHP) with an average of 230 calls per month.

To contact the CHP, the voice prompt in the call tree provided the phone number 1-888-301-4247. If a customer wrote down this number and called it directly, they would successfully connect with a CHP dispatch center that could provide service within the City of San José. However, if a caller pressed 1 to be transferred directly to the CHP, they would be connected with a different CHP location that did not provide service to San José. Further, that CHP location was unable to transfer the caller to the correct CHP center that could service San José.

Separately, the phone tree transfers customers who want to request a police report in which they were an arrestee to the District Attorney's office. The District Attorney's office informed us that they are not the appropriate resource for arrestees requesting a police report. Instead, the appropriate contact would be their own defense lawyer or the respective law enforcement agency.

Further, the police non-emergency call tree greeting states that the system "*will now guide you to the right person at the police department.*" A substantial portion of callers who navigate the voice prompts are not transferred to a person but to a voice message in a different division. In many cases, those divisions do not answer the phone but instead direct incoming calls to a voice message that provides the caller with additional information – without even the opportunity to leave a voicemail. Some even ask callers not to leave a message.

Our testing revealed additional problems with this system because call tree options did not necessarily align with the resources that callers were directed to. For example, one of the options in the call tree is "*to find out if your report is available for release*". This option transfers the caller to the Records Unit voice message, which provides no information about how to find out if a report is available for release.

Fixing the Interactive Voice Response (IVR) phone tree and making it responsive to residents is important because this provides residents with the service they need and also reduces the number of people that would have to speak to a call taker.

<p>Recommendation #14: Police non-emergency services should inventory its Interactive Voice Response (IVR) Phone Tree to ensure that it connects customers with the appropriate resource that can provide the needed service. Further, it should develop an ongoing management plan to ensure that the IVR stays up to date.</p>

Technical Glitch Prevents Customers From Receiving Complete Information

Due to a glitch in the non-emergency call tree phone system, a call that is connected through the call tree will disconnect roughly 45 seconds after it has been transferred to another police division. This is problematic because the voice messages are usually significantly longer and provide important information for a caller.

For example, the Records Unit voice message is over three minutes long. Callers who connect through the direct 7-digit phone numbers hear the full message. However, if a caller connects through the non-emergency call tree, they will be disconnected after 45 seconds and will not receive information about 1) how to request police reports or 2) how to request a case number—presumably the two reasons why a caller would want to reach the number in the first place.

This same glitch impacted other divisions, such as the Fingerprinting Division and Warrants Division. Callers who connect to those divisions through the phone tree are disconnected after 45 seconds and unable to hear the full voice message.

Recommendation #15: The Police Department should review the non-emergency call tree to resolve technical limitations and errors and provide a seamless transfer to residents.

Police Non-Emergency Calls Should Provide Language Accessibility

When a customer calls 3-1-1 or 277-8900, they are prompted to press a button for the language of their choice: English, Spanish or Vietnamese. An average of 1,000 calls per month request Spanish-language information via the call tree, and an average of 170 calls per month request Vietnamese-language information. However, when a customer chooses either Spanish or Vietnamese, they are advised that translation services are available only for emergency calls, not non-emergency calls, so they are encouraged to have an English speaker with them in order to proceed.

The call tree itself is available in Spanish and Vietnamese. However, after a caller navigates the call tree, they will often be transferred to another division, and they will reach a voicemail that is in English. This does not meet the standards set in the City's Language Access Policy, which advises that "City departments using telephone trees will endeavor to ensure that menus are available in multiple languages."

Police Communications staff expressed concern that providing this service may increase wait times given that calls requiring this service take longer. However, not providing this service not only violates the City's policy but also makes this important City service less accessible to some residents.

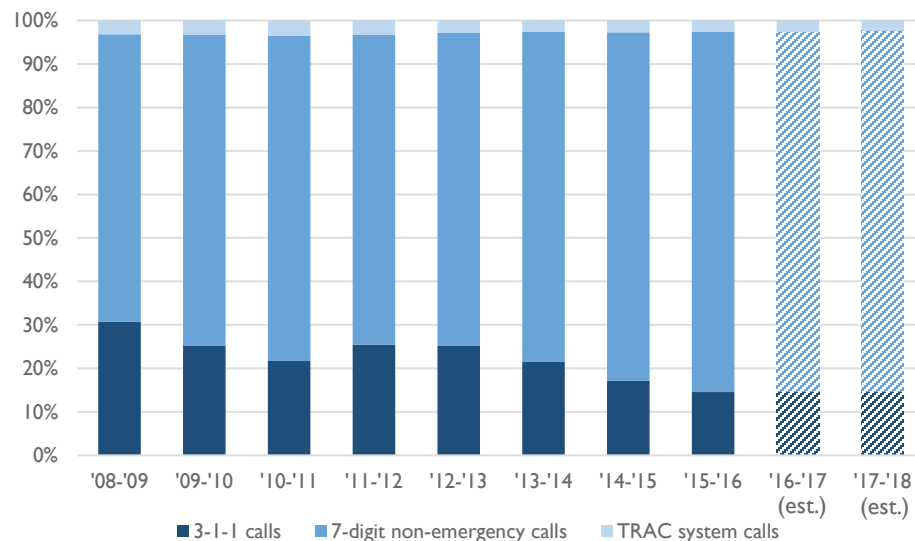
Recommendation #16: Police non-emergency services should provide information and translation services for customers who do not speak English.

3-1-1 Does Not Work for Many Wireless Callers and May Be Underutilized

Police Communications uses both 3-1-1 and the seven-digit police non-emergency number for the same purpose, however, the number of calls made to 3-1-1 has decreased in recent years. A majority of non-emergency police matters were reported using the seven-digit non-emergency number.

By 2015-16, only 15 percent of non-emergency calls answered by Police Communications' staff were from 3-1-1, or six percent of total call volume. Calls to the seven-digit non-emergency number, on the other hand, increased almost 20 percent between 2011-12 and 2015-16. Exhibit 22 shows the breakdown of non-emergency calls over the last decade.

Exhibit 22: 3-1-1 May Be Underutilized



Source: Police Communications management information system.

Note: Prior to 2016-17, the Department's management information system separately tracked call volume for 3-1-1 and the 7-digit non-emergency phone lines. After the implementation of a new phone system in June 2016, 3-1-1 and 7-digit non-emergency call volume data was consolidated. As such, the breakdown of 3-1-1 versus 7-digit non-emergency calls for 2016-17 and 2017-18 are estimates based on prior years' data.

Part of why the 3-1-1 number may be underutilized may be because the City's 3-1-1 phone number is not configured to accept calls from all wireless providers. The City's website acknowledges that this is not always possible (see Exhibit 23). Specifically, when certain callers dial 3-1-1 from a cell phone they receive an error message notifying them that the call cannot be completed as dialed.

Exhibit 23: City of San José Website Acknowledges That 3-1-1 Services Are Unavailable on Some Cellphones

3-1-1 - Police Department's General Information and Non-Emergency Telephone Number
 The non-emergency telephone number for the San José Police Department is 3-1-1 or (408) 277-8900. (311 services are not currently available from calls originating on some cellular telephones.)

This is the number to call to report non-emergency police situations, such as noise disturbances, parking complaints, lost and found property and crimes NOT in progress. The San José Police Department encourages residents to use their own judgment when determining the nature of their situation. When in doubt, however, the Police Department recommends that residents call 9-1-1.

Source: Auditor screenshot of City website, November 16, 2018

Other local jurisdictions have a 3-1-1 line that is accessible to wireless callers. Given the prevalence of cell phone use, the City should make this service available to more cell phone users.

Recommendation #17: The City should work with cell phone carriers to make the City's 3-1-1 line available to wireless callers.

3-1-1 in San José Has Historically Been Designated to Handle Only Police Non-Emergency Calls

3-1-1 began in the late 1990s in jurisdictions around the United States as police non-emergency line as a way to divert calls from 9-1-1. However, starting in Chicago in 1999, some large cities have allowed the phone number to evolve, accepting general city service requests in addition to non-emergency police requests. This model is used today around the country as well as in California jurisdictions including San Francisco and Los Angeles. 3-1-1 provides the public with an avenue for connecting with appropriate city services. In these jurisdictions, 3-1-1 is separate from each city's seven-digit police non-emergency numbers.

In the City of San José, 3-1-1 remains a police non-emergency phone number. 3-1-1 in San José is used by residents to report noise complaints, parking violations, abandoned vehicles, crimes not in progress, and getting information about warrants, among others. As noted previously in this Finding, roughly 50 percent of callers press 0 to speak to a call taker, and Police do not track their non-emergency calls, so there is limited data to indicate the types of non-emergency calls received through 3-1-1.

Other Cities Use 3-1-1 More Extensively for City Customer Services

Many other cities use 3-1-1 to be the centralized one-stop, easy to remember city number to call for city services, get information or report issues. Many cities with centralized call centers have trained customer service agents who are also able to respond to certain non-emergency police calls, such as taking cold crime reports. 3-1-1 can reduce non-emergency calls at 9-1-1, especially during large events or severe weather. Other cities can provide resident request status and provide service usage data to various departments. Having a central, easy-to-remember number enhances the customer experience and allows residents to receive ongoing information about the status of their service request/complaint.

For example, San Francisco uses 3-1-1 as a single point of entry for all information and service requests, including birth certificates, garbage and recycling, homeless concerns, and bus arrival times. Los Angeles uses the number similarly to handle a range of activities, including sanitation billings, parks maintenance, investigations, and illegal dumping.

San Francisco continues to maintain a police non-emergency number that can handle police calls. Further, San Francisco customers are also able to file some basic police reports through 3-1-1, including theft, lost property, and vehicle burglary. In certain situations, such as when there is a witness to the incident, the caller may be transferred to police non-emergency call takers who are able to request a dispatch if necessary. These same reports may also be filed online. The call takers who take these reports do not pass a background check any stricter than other city employees.

Currently, roughly 300 calls to San José's 3-1-1 (or roughly 13 percent of the English-language calls) are diverted by the phone tree to the City Customer Contact Center on a monthly basis for non-police matters. This indicates that a significant portion of callers call 3-1-1 seeking to find general city services.

Having a centralized, easy to remember number would enhance the customer experience and reduce pressure on 9-1-1. As previously reported in our 2014 *Audit of Customer Call Handling: Resident Access to City Services Needs to be Modernized and Improved*,⁴⁷

The City of San José needs to be intentional and strategic in organizing its call centers and services and it needs to determine how it wants residents to perceive and access City services. Further, [m]aintaining individual call centers all across the City that oftentimes are not able to provide a resident with immediate service is not ideal. Cities with 311 call centers have implemented them with a view to enhance customer service and improve

⁴⁷ <http://www.sanjoseca.gov/DocumentCenter/View/33948>

performance. In our opinion, without a coordinated City-wide strategy, the City's call centers may not be able to take full advantage of new technology upgrades, such as more integration and potential collaboration across departments. The Administration should use this opportunity to look at its current call taking model and review whether other systemic changes are needed.

The City should review 3-1-1 usage and explore opportunities to enhance and make it more available for general city services.

Recommendation #18: The City should explore moving 3-1-1 to the City Customer Contact Center and make more City services available through 3-1-1.

City Customer Contact Center Staffing

As discussed in Findings 3 and 4, the City Customer Contact Center is currently the point of contact for general City services and would be well-positioned to take on 3-1-1 as a general City service line. However, staffing at the City Customer Contact Center is currently only suitable for its current call volume. Wait times have been long in the past—in 2012-13 the average wait time was 6.75 minutes. The City Customer Contact Center has used the My San Jose app to move some calls online and an after-hours service to handle overflow resident calls. The average wait time in the City Customer Contact Center in 2017-18 was 3.34 minutes.

The City Customer Contact Center currently has 13 call taker positions that handle over 175,000 calls. If the City does decide to make City services available through 3-1-1 it goes without saying that sufficiency of staffing at the City Customer Contact Center would have to be reviewed.

Recommendation #19: If non-emergency calls are moved to the City Customer Contact Center, the Information Technology Department should continuously review and assess wait times and call volume at the City Customer Contact Center to address resource issues if needed.

This page was intentionally left blank

Conclusion

The City's 9-1-1 Call Center is currently being staffed using overtime. Current efforts to recruit and hire candidates is not sufficient. A large portion of calls that come through the 9-1-1 center are non-emergency calls making it inefficient. The non-emergency number is underutilized and opportunities exist to expand its use and improve customer service. Finally, opportunities exist to improve Fire Communications call answering times through improved use of technology.

RECOMMENDATIONS

Finding 1: Opportunities to Improve Call Answering Times

Recommendation #1: Fire Communications should implement technology to automatically connect calls to call takers' phones through off-hook answering.

Recommendation #2: Fire Communications should pull regular performance reports and monitor average answering times.

Recommendation #3: Police Communications should clarify its call answering time performance measure, include all components of call answering, and adjust its target accordingly.

Recommendation #4: To eliminate the need to call the County to confirm every ambulance dispatch, the Fire Department should work with the County of Santa Clara to prioritize automated ambulance dispatching.

Finding 2: Growing Call Volume and Workload Has Increased the Urgency to Hire Qualified Communications Staff

Recommendation #5: To increase focus on outreach and recruiting for Communications staff, Police Communications and Fire Communications should each develop a recruiting plan for their respective divisions, and explore opportunities for collaboration and joint recruitment opportunities.

Recommendation #6: The Police and Fire Department should utilize external marketing firms to bolster marketing efforts to recruit communications staff for both Police and Fire staff.

Recommendation #7: The Police and Fire Departments should work with the Public Works Department to make closer parking options available to Communications staff that work night shifts.

Recommendation #8: The Police and Fire Departments should work with the City Manager's Budget Office and Human Resources department to make additional part-time and/or retiree-rehire opportunities available to qualified staff.

Recommendation #9: To retain qualified staff that are more inclined to call taking versus dispatch, the Administration should explore the creation of a call taker position in the Fire Department.

Finding 3: Staffing Non-Emergency Phone Calls With Emergency Call Takers Is Inefficient

Recommendation #10: The Fire Department should finalize the transition of non-emergency after-hours calls to the City Customer Contact Center in the Information Technology department, and work with the relevant departments to develop policies and procedures on roles and responsibilities, processes to contact relevant staff, and expectations for response times, if any.

Recommendation #11: To reduce the workload on the Police Department's call takers, the Police Department should (a) work with the City Customer Contact Center to determine areas of overlapping service delivery and determine the appropriate customer service response, and (b) re-direct commonly requested general City requests to the City Customer Contact Center by modifying the call tree.

Recommendation #12: To remove report-taking responsibilities from emergency call takers, the Police Department should assess and potentially distribute report-taking responsibilities that could be handled by (a) the City Customer Contact Center, (b) police officers on modified duty, (c) retiree rehires, or (d) Community Service Officers.

Recommendation #13: To lessen SJPD Communications Center staff workload and provide the public with additional service/reporting options, the Police Department should publicize online reporting options to the community and review current online reporting options and determine if additional reporting can be handled online.

Finding 4: The City Could Improve Customer Service for Non-Emergency Calls and Better Utilize 3-1-1

Recommendation #14: Police non-emergency services should inventory its Interactive Voice Response (IVR) Phone Tree to ensure that it connects customers with the appropriate resource that can provide the needed service. Further, it should develop an ongoing management plan to ensure that the IVR stays up to date.

Recommendation #15: The Police Department should review the non-emergency call tree to resolve technical limitations and errors and provide a seamless transfer to residents.

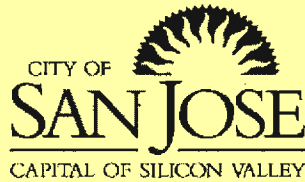
Recommendation #16: Police non-emergency services should provide information and translation services for customers who do not speak English.

Recommendation #17: The City should work with cell phone carriers to make the City's 3-1-1 line available to wireless callers.

Recommendation #18: The City should explore moving 3-1-1 to the City Customer Contact Center and make more City services available through 3-1-1.

Recommendation #19: If non-emergency calls are moved to the City Customer Contact Center, the Information Technology Department should continuously review and assess wait times and call volume at the City Customer Contact Center to address resource issues if needed.

This page was intentionally left blank



Memorandum

TO: SHARON ERICKSON
CITY AUDITOR

FROM: Edgardo Garcia
Robert Sapien, Jr.

SUBJECT: 9-1-1 AND 3-1-1 CALL ANSWERING
AUDIT RESPONSE

DATE: February 4, 2019

Approved

Date

2-13-19

The Administration has reviewed the report from the City Auditor (*Audit of 9-1-1 and 3-1-1: Changes to Call Handling and Increased Hiring Efforts Could Improve Call Answering Times*) and agrees or partially agrees with the 19 recommendations identified in the report. This memorandum captures the Administration's response to each recommendation and presents an overview of the work required to fully implement the recommendations, and the associated timeframes for completion. The Fire and Police Department greatly appreciate the important work of the City Auditor and her staff for this evaluation and looks forward to improving both the current performance and future programs. The following are the Administration's responses to each recommendation.

BACKGROUND

Public Safety Communications Specialists ("call takers") and Public Safety Radio Dispatchers ("dispatchers") are the true first, first responders and are instrumental in keeping the community safe. They answer calls for help every hour of every day. Staffing issues have long plagued both Police and Fire Communications. Qualified applicants who can pass backgrounds are difficult to find, hiring is a lengthy and arduous process, and mastering the necessary skillset is very challenging. Due to the demands of the job and the extremely stressful nature of the work, retention is problematic. These recruiting and retention issues are not unique to San José, but rather reflect a nationwide industry trend. Dispatch staff in San José have been required to work significant amounts of overtime for many years and are finding it increasingly difficult to keep up with the ever-growing call volume. This has contributed to low morale among some employees, high turnover, and answering times that have dipped below City targets and State requirements in recent years. Both the Police and Fire departments value our Communications teams and are committed to addressing these issues with aggressive recruiting, retention strategies, and innovative problem-solving, in addition to the prior steps the City has already taken to try to address these issues. As outlined below, the Administration takes the Auditor's recommendations seriously and looks forward to making progress in future work plans and through the upcoming budget process.

San José Police and Fire Communications jointly operate the City's 9-1-1 Center. Police Communications is the Primary Public Safety Answering Point (PSAP) and is responsible for answering 9-1-1 calls, as well as other emergency lines in the City of San José. Police call takers triage calls, forwarding information to police/fire dispatchers via the Computer Aided Dispatch (CAD) system, if merited, and/or transfer the call to the appropriate agency.

Police call takers are also responsible for answering the non-emergency lines, 3-1-1 or the 10-digit number (408-277-8900), and for taking qualifying reports for the Telephone Report Automation Center (TRAC).

San José Fire Communications is the Secondary PSAP and receives calls from 9-1-1 that are transferred by Police Communications and other sources, provides Pre-Arrival Instructions, coordinates ambulance response with Santa Clara County Communications, and dispatches appropriate resources.

In accordance with the City Auditor's Fiscal Year 2018-2019 Audit Work Plan, the Audit was conducted due to councilmember concerns with call answering times, customer service, vacancies, and hiring issues. The Audit includes 19 recommendations focused on the four findings below:

1. Opportunities to Improve Call Answering Times.
2. Growing Call Volume and Workload Has Increased the Urgency to Hire Qualified Communications Staff.
3. Staffing Non-Emergency Phone Calls with Emergency Call Takers is Inefficient.
4. The City Could Improve Customer Service for Non-Emergency Calls and Better Utilize 3-1-1.

The Administration agrees with the four findings and has the following responses to the Auditor's 19 recommendations.

RECOMMENDATIONS AND ADMINISTRATION'S RESPONSE

Finding 1: Opportunities to Improve Call Answering Times

Recommendation #1: Fire Communications should implement technology to automatically connect calls to call takers' phones through off-hook answering.

Administration's Response: The Administration agrees with this recommendation.

February 4, 2019

Subject: 9-1-1 and 3-1-1 Call Answering Audit Response

Page 3

Yellow – This automatic “off-hook” answering capability is currently available to Fire Communications and will be implemented following necessary procedures development and personnel training. Full implementation will require the purchase and installation of hardware to signal live caller activity to all control room personnel in the event that a call is directed to an unstaffed console. This expenditure will be referred to the 2019-2020 budget process.

Target Date for Completion: April 2020

Recommendation #2: Fire Communications should pull regular performance reports and monitor average answering times.

Administration’s Response: The Administration agrees with this recommendation.

Yellow - Fire Communications currently generates phone call answering times, phone call volume, and other performance reports. The Fire Department is studying a reorganization of Fire Communications management and support staff to improve effectiveness and increase capacity including performance reporting. The Administration may bring forward this action as part of the 2019-2020 budget process. The Fire Department is looking at adding analytical support by reevaluating existing resources within the Fire Department. Analytical support would allow the Department to provide routine operational performance reports (including call answering times) and monitor average answering times on a regular basis.

Target Date for Completion: March 2020

Recommendation #3: Police Communications should clarify its call answering time performance measure, include all components of call answering, and adjust its target accordingly.

Administration’s Response: The Administration agrees with this recommendation.

Green – This information is readily available and can be included/adjusted beginning with the fiscal year 2018-2019 Quarter 3 Program Manager’s Report. This information will also be incorporated into the Annual Operating Budget.

Target Date for Completion: April 2019

Recommendation #4: To eliminate the need to call the County to confirm every ambulance dispatch, the Fire Department should work with the County of Santa Clara to prioritize automated ambulance dispatching.

Administration's Response: The Administration agrees with this recommendation

Yellow - The Fire Department supports enhancing the link between the Fire Department's Computer Aided Dispatch (CAD) system and the County's CAD system. Specifically, most phone calls between the two agencies could be eliminated by automatic confirmation and status updates between the two CAD systems. Presently, County Communications is undergoing a CAD system upgrade which precludes immediate establishment of a San José CAD to County CAD link. The County is also in the process of relocating its primary dispatch functions to a new facility and will maintain its current facility as well. The selection of a CAD system may be completed in 2020. Once County has completed the CAD installation, funding will be required to configure the San José to County CAD link, which would be brought forward in the 2020-2021 budget process.

Target Date for Completion: 2021, depending on County CAD installation

Finding 2: Growing Call Volume and Workload Has Increased the Urgency to Hire Qualified Communications Staff.

Recommendation #5: To increase focus on outreach and recruiting for Communications staff, Police Communications and Fire Communications should each develop a recruiting plan for their respective divisions, and explore opportunities for collaboration and joint recruitment opportunities.

Administration's Response: The Administration agrees with this recommendation.

Yellow – Recruiting public safety communications staff is an ongoing challenge for both departments and is an issue throughout California and the nation. Both departments agree that it is time to renew recruiting efforts by developing effective recruiting plans and resourcing them appropriately.

The Fire Department is studying a reorganization of Fire Communications management and support staff to improve effectiveness and increase capacity and may bring forward a recommendation in the 2019-2020 budget process. This review will also include an evaluation

February 4, 2019

Subject: 9-1-1 and 3-1-1 Call Answering Audit Response

Page 5

of how to develop and manage an ongoing outreach and recruitment program for Fire Communications.

Growing out of its success in rebuilding sworn staffing, the Police Department's Recruiting Unit is now making Communications recruiting a priority and has developed a new work plan for outreach. In the current (through February 2019) recruitment period, applications increased dramatically. Staff intends to monitor and analyze to determine the methods that get the best results.

Target Date for Completion: June 2020

Recommendation #6: The Police and Fire Department should utilize external marketing firms to bolster marketing efforts to recruit communications staff for both Police and Fire staff.

Administration's Response: The Administration partially agrees with this recommendation.

Yellow – The Police Department has been successful in using external marketing firms to tailor and target recruiting for sworn staff. The Police Department has already begun to use a portion of the recruiting marketing budget for targeted advertisements focused on recruiting dispatchers.

As mentioned above, the Fire Department is studying a reorganization of Fire Communications management and support staff to improve effectiveness and increase capacity, as well as develop and manage an ongoing outreach and recruitment program for Fire Communications. The recruitment program will seek to optimize recruitment reach and will employ appropriate strategies, including potentially using third-party resources. It should be noted that the Fire Communications budget does not currently contain funding for an external marketing firm, and funding augmentations would need to be approved as part of the budget process.

The two Departments will explore opportunities for collaborative outreach and marketing, including discussing the possibilities and opportunities of jointly advertising public safety communications careers with the City of San José with the Police Department's existing marketing firms. These discussions will inform the Departments' individual recruitment and retention workplans discussed above.

Target Date for Completion: June 2020

Recommendation #7: The Police and Fire Departments should work with the Public Works Department to make closer parking options available to Communications staff that work night shifts.

Administration's Response: The Administration agrees with this recommendation.

Yellow - Both departments take this concern seriously, as unsecure parking and building access affects police, fire, and support staff, alike. The Departments will work with Public Works toward achieving secure parking and safe parking-to-building access areas for all PD Campus employees. This may involve capital improvements that would need to be brought forward in the 2019-2020 budget process.

Target Date for Completion: December 2020

Recommendation #8: The Police and Fire Departments should work with the City Manager's Budget Office and Human Resources department to make additional part-time and/or retiree-rehire opportunities available to qualified staff.

Administration's Response: The Administration agrees with this recommendation.

Green – Police Communications currently utilizes part-time benefited (scheduled employees) and part-time unbenefited as well as retiree rehires (both occasional employees) who are former staff. The Police Department notes that the pool of retiree rehires is limited, however, additional and regular outreach will be explored.

The part-time benefited positions are awarded to non-probationary full-time employees based on seniority of interested personnel. The 1.0 full-time equivalent, or FTE, for part-time benefited positions in the Public Safety Communications Specialist rank (PSCS or call takers) are currently filled; for the 1.5 FTE part-time benefited positions for the Public Safety Radio Dispatcher rank (PSRD or dispatchers), one is filled and two are vacant. The Police Department has not filled those part-time positions as it cannot afford to potentially lose a full-time employee to part-time status. However, as staffing stabilizes, the Police Department will explore adding additional part-time positions to both ranks. Once vacancies are filled, Police Communications can expand the number of part-time benefited and unbenefited positions. The Police Department also has the opportunity to convert full-time positions to part-time equivalent positions or vice versa through the Budget Office with the requirement that there is no net change in the position count.

February 4, 2019

Subject: 9-1-1 and 3-1-1 Call Answering Audit Response

Page 7

The Fire Department currently uses retiree-rehire employment to backfill for vacancies to maintain existing programs; these positions are funded by vacancy savings. In addition, retiree-rehire staff are used to advance special projects and maintain existing programs on an as-needed basis and as funding can be made available. The Fire Department also has the opportunity to convert full-time positions to part-time equivalent positions or vice versa through the Budget Office with the requirement that there is no net change in the position count.

Target Date for Completion: Fire: Completed. Police: Partially Completed (Retiree Rehires)/Part-Time Positions 2022

Recommendation #9: To retain qualified staff that are more inclined to call taking versus dispatch, the Administration should explore the creation of a call taker position in the Fire Department.

Administration's Response: The Administration agrees with this recommendation.

Yellow - The Fire Department agrees creating Public Safety Communications Specialist positions to perform call-taking functions has potential to increase the Department's ability to retain qualified staff. Additionally, depending on the overall budget situation and the competing funding priorities, the Administration may bring forward a budget proposal during the 2019-2020 budget process to complete a Communications Staffing study. The staffing study will evaluate operational performance and recommend appropriate staffing levels to meet workload demands and State mandated call answering time requirements.

Target Date for Completion: June 2021

Finding 3: Staffing Non-Emergency Phone Calls with Emergency Call Takers is Inefficient.

Recommendation #10: The Fire Department should transition non-emergency after-hours calls to the City Customer Contact Center in the Information Technology department, and work with the relevant departments to develop policies and procedures on roles and responsibilities, processes to contact relevant staff, and expectations for response times, if any.

Administration's Response 10: The Administration agrees with this recommendation.

Yellow - The Fire Department has been working with other City stakeholder departments to evaluate the transition of non-emergency calls at all hours to the City Customer Contact Center.

Based on this analysis, it is anticipated that transitioning the non-emergency after-hours calls currently handled by Fire Communications could, at the current volume, be handled by the IT Department's City Customer Contact Center. The transition process will include development of policies and procedures to ensure appropriate responsiveness of City resources and final transition details will be provided to the City Manager for approval. Additionally, cost allocation model impacts, after-hours capacity, and call standards will need to be set by departments in advance of changes. The cost of the City Customer Contact Center is currently spread across several funds depending on the call volume. If this change is made, the relative portion of Customer Contact Center costs covered by the General Fund could increase, potentially resulting in an addition cost to the General Fund. This change would need to be explored in the 2019-2020 budget process.

Target Date for Completion: July 2019

Recommendation #11: To reduce the workload on the Police Department's call takers, the Police Department should (a) work with the City Customer Contact Center to determine areas of overlapping service delivery and determine the appropriate customer service response, and (b) re-direct commonly requested general City requests to the City Customer Contact Center by modifying the call tree.

(a) Green – Non-emergency callers are currently referred to the City Customer Contact Center if the nature of the call merits. Police Communications and the City Customer Contact Center will work to identify overlaps and determine what call types can be handled primarily through the City Customer Contact Center and/or through website and My San José mediums.

(b) Yellow - Police staff will review the call tree menu and determine the appropriate modifications to refer general City requests to the City Customer Contact Center. Cost allocation model impacts, after-hours capacity, and call standards will need to be set by departments in advance of any changes. These actions would potentially have a budget impact. For instance, the cost of the City Customer Contact Center is currently spread across a number of funds depending on the call volume. If calls are shifted to the City Customer Contact Center, the relative portion covered by the General Fund would increase, resulting in an addition cost to the General Fund. Any staffing adjustments to address the shift in calls would also have to be analyzed. These changes would need to be factored into the annual budget process.

Target Date for Completion: December 2019

Recommendation #12: To remove report-taking responsibilities from emergency call takers, the Police Department should assess and potentially distribute report-taking responsibilities that could be handled by (a) the City Customer Contact Center, (b) police officers on modified duty, (c) retiree rehires, or (d) Community Service Officers.

Administration's Response: The Administration partially and conceptually agrees with this recommendation.

(a), (b) & (d) – Yellow - Using these individuals to take TRAC reports may constitute a change in duties that could be subject to Meet and Confer per the City Manager's Office of Employee Relations. The proposal to use City Customer Contact Center employees would require further research as City employees are fingerprinted, but do not have DOJ access which may be needed for some report types.

(c) Green – Police Communications currently utilizes Public Safety Communications Specialist retiree rehires for call-taking roles, including TRAC. Recently, a former employee has expressed interest in returning as a retiree rehire for TRAC only and is undergoing the background process. Due to the limitations in hours a retiree rehire may work and the limited availability of retirees to rehire, this would be an interim solution.

Target Date for Completion: June 2020

Recommendation #13: To lessen SJPD Communications Center staff workload and provide the public with additional service/reporting options, the Police Department should publicize online reporting options to the community and review current online reporting options and determine if additional reporting can be handled online.

Green – While online reporting is available on the Police Department's website, staff will work with the Web Coordinators for Police Department and City Manager's Office Communications to better publicize the types of crimes victims are able to report online. Department personnel will also review the current list of online reports types to determine if additional reporting is an option. Departments will examine how the City's data portal can provide access to general data and reports as the hub for community data. This could include coordination with several units within the Department and potentially the City Attorney's Office or the District Attorney's Office.

Target Date for Completion: December 2019

Finding 4: The City Could Improve Customer Service for Non-Emergency Calls and Better Utilize 3-1-1.

Recommendation #14: Police non-emergency services should inventory its Interactive Voice Response (IVR) Phone Tree to ensure that it connects customers with the appropriate resource that can provide the needed service. Further, it should develop an ongoing management plan to ensure that the IVR stays up to date.

Administration's Response: The Administration agrees with this recommendation.

Green – This can be implemented immediately. The Support Services Unit in Police Communications can schedule biannual or quarterly reviews of the menu to ensure information is current and accurate. Additionally, staff will need to determine costs associated with translation services, as changes to the menu must be done in Spanish and Vietnamese, as well as English. If costs exceed the Police Department's ability to absorb within the existing budget, project completion may extend beyond the current fiscal year.

Target Date for Completion: To be completed by June 2019 and reviewed biannually.

Recommendation #15: The Police Department should review the non-emergency call tree to resolve technical limitations and errors and provide a seamless transfer to residents.

Administration's Response: The Administration agrees with this recommendation.

Yellow– Staff plans to begin this review immediately, however, full implementation may take some time. Unknowns include costs associated with potential equipment changes and the need for Police Communications to work with AT&T, the IT Department, and other units within the Police Department to ensure equipment can optimally perform and recordings are succinct, so as not to cut off callers. Additionally, the existing voice tree can only hold a finite number of callers before it reaches capacity, so recordings and transfers need to be as expeditious as possible in order for new callers to be able to access the voice tree.

Target Date for Completion: December 2019

Recommendation #16: Police non-emergency services should provide information and translation services for customers who do not speak English.

Administration's Response: The Administration agrees with this recommendation; however, costs must be reviewed.

Yellow – This is a long-term priority for the Police Department to bring the agency into alignment with the City Language Access Policy. However, implementing this recommendation now will adversely impact call answering times for both emergency and non-emergency calls, as non-emergency calls requiring translation will tie up existing call-taking resources. The implementation of this recommendation could also have significant cost implications as translation services are charged by the minute and non-emergency calls can be detailed and lengthy. The Department will need to assess costs and may need to address through the budget process. In the short term, the Department's first priority is to fill vacancies in the call-taking rank to offset any increased workload.

Target Date for Completion: June 2020

Recommendation #17: The City should work with cell phone carriers to make the City's 3-1-1 line available to wireless callers.

Administration's Response: The Administration agrees with this recommendation.

Yellow – There are two barriers for those seeking to call 3-1-1 from cellphones. First, only AT&T and Sprint offer 3-1-1 service in San José. The other carriers do not. Second, wireless call routing depends on the cell tower receiving the call. This means that San José-based call may get routed via a tower in a neighboring jurisdiction that does not offer 3-1-1. In that case, the call would not go through. As a result, at this time, the most assured way for cellular callers to reach San José Police non-emergency is to directly call 408-277-8900.

The cellular industry is expanding broadband services throughout San José as it prepares to deploy 5G technology. The City Manager's Office of Civic Innovation currently leads the coordination with carriers for the City. Police Communications will coordinate with the Office of Civic Innovation to determine if the carriers not providing 3-1-1 in San José have capacity to offer the service and determine the steps required for implementation. This work would need to include an assessment of the impacts of increasing access to 3-1-1, which likely would increase the number of callers using the system. Should call load significantly increase, it could impact staffing and workloads for the Police Department, City Customer Contact Center, and other departments.

The exploration with the carriers could also include discussion of the issues related to wireless call routing between jurisdictions, although this challenge may be more difficult to resolve in the near term.

Target Date for Completion: December 2019

Recommendation #18: The City should explore moving 3-1-1 to the City Customer Contact Center and make more City services available through 3-1-1.

Administration's Response: The Administration conceptually agrees with this recommendation pending fuller analysis.

Yellow – The Administration is interested in exploring moving 3-1-1 to the City Customer Contact Center, which potentially could connect 3-1-1 callers with a wider variety of City services. Moving non-emergency calls to the City Customer Contact Center would require a thorough review or study of call volume and call types to assess what calls could be feasibly be moved and what resources match the workload. Current operational needs compete with the ability to perform such a review. The Administration recommends a consultant be utilized to determine how many calls to 3-1-1 are public safety related and how many are not, as well as provide a coordinated transition plan, revised performance metrics to be used across contact center activity, cost allocation changes, and changes to after-hours call capacities. Once completed, then Police Communications and the City Customer Contact Center would be better able to assess if moving non-emergency calls is prudent and resourcing the City Customer Contact Center for the increased workload. Funding for the consultant study will be considered as part of the 2019-2020 budget process in context of the overall budget situation.

Target Date for Completion: December 2020

Recommendation #19: If non-emergency calls are moved to the City Customer Contact Center, the Information Technology Department should continuously review and assess wait times and call volume at the City Customer Contact Center to address resource issues if needed.

Administration's Response: The Administration conceptually agrees with this recommendation.

February 4, 2019

Subject: 9-1-1 and 3-1-1 Call Answering Audit Response

Page 13

Yellow - Should it be determined that non-emergency calls will move to the City Customer Contact Center, the Administration would update and standardize call standards and metrics. With these, a continuous review and assessment of wait times and call volume is possible and recommended to ensure customer service standards are being met congruent with any resource allocations.

Moving the non-emergency calls to the City Customer Contact Center will impact workload demands and potential staffing needs that are difficult to accurately predict. ITD would need to work with departments and the City Manager's Budget Office to rebalance for the increased quantity and variety of contacts (e.g., My San José requests, web-chats, emails, and walk-ins to City Hall). If a transition is made, it would be an optimal time to reset service and call handling metrics with customer departments. As stated in an earlier response, the impacts of Fire Communications and 3-1-1 activation by cellular carriers are not fully known. The City may experience a drastic increase with the latter.

Target Date for Completion: December 2020

COORDINATION

This memorandum has been coordinated with the Information Technology Department, the City Manager's Budget Office, the Office of Employee Relations, and the Office of Civic Innovation.

CONCLUSION

The Administration greatly appreciates the comprehensive audit of 9-1-1 and 3-1-1 call-taking prepared by the City Auditor and her staff. The Communications Center and the people it serves will only benefit from the collaboration on a variety of the recommendations and strengthen the great work of the Communications Center.

/s/

Edgardo Garcia
Chief of Police

/s/

Robert Sapien, Jr.
Chief of Fire

For questions, please contact Joey McDonald, Police Communications Division Manager at (408) 537-1753, or Ryan Dulin, Fire Department Deputy Director at (408) 791-6984.