CITY OF
SAN JOSE
CAPITAL OF SILICON VALLEY

Memorandum

TO: PUBLIC SAFETY, FINANCE &
STRATEGIC SUPPORT COMMITTEE

FROM: Edgardo Garcia
Robert Sapien, Jr.
Rob Lloyd

**SUBJECT: 9-1-1 AND 3-1-1 AUDIT
RECOMMENDATIONS STATUS REPORT**

DATE: March 9, 2020

Approved ~~Andrew Maguire~~ Date 3-12-20

RECOMMENDATION

Accept the status report on the implementation of the 9-1-1 and 3-1-1 Audit recommendations.

BACKGROUND

In March 2019, City Council accepted the Office of the City Auditor Report titled, "Audit of 9-1-1 and 3-1-1: Changes to Call Handling and Increased Hiring Efforts Could Improve Call Answering Times".[1] The Civil Grand Jury (CGJ) of Santa Clara County issued a report that echoed the City Auditor's findings in June of the same year titled, "Improving San Jose Police Department's 9-1-1/3-1-1 Call Answering Time, When Seconds Count".[2] The City Council accepted the CGJ report in September 2019. Both reports were prompted, in part, by an October 2017 notification from the California Office of Emergency Services (CalOES) that the City of San José (City) was not meeting the minimum call answering times set by state statute. CalOES requires that 95 percent of 9-1-1 calls be answered within fifteen seconds.

The City Auditor issued four major findings with 19 recommendations. The findings were:
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.

---

[1] City Auditor's Report on 9-1-1 and 3-1-1: https://www.sanjoseca.gov/home/showdocument?id=38067
[2] Santa Clara County Civil Grand Jury Report on 9-1-1 and 3-1-1:
https://sanjose.legistar.com/View.ashx?M=F&ID=7697052&GUID=FB2DFBB3-2965-4D88-89EF-26ADF671820D

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

The Administration agreed or partially agreed with all 19 recommendations identified in the City Auditor's Report in its response. The Administration presented an overview of the work required to implement the recommendations and the associated timeframes for completion. The Administration also shared near-term activity to transfer about 10,000 calls for Department of Transportation and system operations requests from Fire Communication call handlers to the City Customer Contact Center.

With the background of the City Auditor's Report, the Santa Clara County Civil Grand Jury set out to determine whether the San Jose Police Department (SJPD) 9-1-1/3-1-1 emergency services communications are commensurate with the City's current needs. After additional analysis with the City, the CGJ made four major findings with seven recommendations. The findings were:

1. The City should remove non-emergency call-taking and Telephone Reporting Automation Center (TRAC) responsibilities from SJPD Communications, while maintaining the current authorized headcount by December 2020.
2. SJPD Communications is chronically understaffed due to: ineffective recruiting practices; lengthy hiring timelines; staffing vacancies; and salaries that are lower than other local Public Safety Answering Points (PSAPs).
3. SJPD Communications personnel are civilian employees and often perceive their positions as less valued than sworn positions within the Department, thus adversely affecting their morale.
4. Most other PSAPs in Santa Clara County use the South Bay Regional Public Safety Consortium for initial training. SJPD Communications conducts all its training in-house to the exclusion of other available training resources, adversely impacting its ability to timely fill positions.

The City Council gave direction at the March 19, 2019, meeting to move with haste in implementing changes that would improve emergency call handling times and the customer experience of the community members calling into 9-1-1 and 3-1-1.[3] The City Manager's Office prioritized the effort in the City's 2019-2020 Adopted Operating Budget, appropriating funding for additional staffing, hiring changes, specialized consulting, and process improvements across the Police, Fire, and Information Technology Departments.

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

---

[3] March 19, 2019, City Council Meeting, Item 3.4:
http://sanjose.granicus.com/MediaPlayer.php?view_id=&clip_id=10950&meta_id=906886

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

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

The City Customer Contact Center (CCCC) is responsible for answering the City's general 408-535-3500 number, addressing primarily general requests and questions, as well as water, wastewater, and sanitation service requests. The CCCC provides the City's customer relationship management (CRM) system and call management systems used by most departmental contact groups. The City's Omni channel engagement resources formerly branded *My San Jose* are also part of the CCCC, including the City's mobile app, direct chat services, and service requests data dashboard.

By way of volumes, Police Communications answers approximately 1.1 million calls per year, of which over 400,000 are non-emergency calls. Fire Communications answers approximately 250,000 calls per year, of which almost 100,000 are non-emergency calls. Emergency call volumes for both Police and Fire Communications are increasing over time. The City Customer Contact Center handles approximately 200,000 customer contacts per year.

ANALYSIS

The Police Department, Fire Department, and Information Technology (IT) Department approached the requirements of 9-1-1/3-1-1 call handling improvements through two groupings of work, centering on the City Auditor's findings and recommendations. **Effort A** consists of Finding 1, Opportunities to Improve Call Answering Times and Finding 4, Improving Customer Service for Non-Emergency Calls and Better Utilizing 3-1-1. **Effort B** consists of Findings 2, Hiring Qualified Communications Staff and Finding 3, Staffing Non-Emergency Phone Calls with Emergency Call Takers is Inefficient.

To support Effort A, the City assembled a cross-department team of Police, Fire, and IT personnel, along with a procured national vendor specializing in 9-1-1/3-1-1 management doing business as Mission Critical Partners (MCP). MCP's deliverables focus on analysis of call routing, redesigning call flows, and defining unifying metrics to gauge and manage the performance of the City's 9-1-1/3-1-1 operations. To facilitate the City's ability to analyze call data, customer experience with non-emergency contacts, and target high-impact technologies that improve call handling in support of the City Auditor's findings 1 and 4, the City was fortunate to also partner with Google.org, the non-profit arm of Google.

Google.org provided a dedicated team of Google Fellows for six months to awarded non-profit and civic partners to deliver advanced solutions that help solve a critical community issue proposed by the organization. The City received one of the first three civic partnerships in the

nation. In San Jose's case, the City proposed improvements in emergency call handling to save lives and decrease harm from delayed response. Google Fellows assigned to the City brought deep expertise in data science, customer experience research and design, project and program management, marketing and communications, and software engineering. Under an agreement signed between Google.org and the City of San José, the City owns all work products created for its continuing use and support purposes.

Team for Effort A

- **7 Google.org Fellows:** The Fellowship is Google.org's flagship employee engagement offering, enabling Googlers to complete up to six months of full-time pro bono work to accelerate the social impact of Google.org's top partners (civic and nonprofits). The City is among the first cities to be selected for this program with seven Fellows who are collaborating with the City to develop a modern approach to 9-1-1/3-1-1 call handling for San Jose residents in an effort to redirect non-emergency calls and increase the responsiveness to true emergencies.
- **3 Mission Critical Partners Consultants:** Expert vendor in public safety solutions, specifically in the area of 9-1-1. Subject-matter-expertise in recent 3-1-1 transitions, center management and practices, as well as industry-known leaders in California 9-1-1 operations and related applications. MCP is focusing on call routing, metrics, and planning/executing transitions.
- **9 City Staff:** Lead representatives from Police Communications, Fire Communications, CCCC and IT driving work progress. Also, ~6 supporting staff from those departments are contributing as specialists.

Methodology

The 9-1-1/3-1-1 Project Team, led by its Google Fellows, analyzed police and fire data from January 1, 2017, through October 31, 2019, estimating through the end of 2019 where possible. CCCC data is from January 1, 2019 through October 31, 2019. These data sets provided additional conclusions beyond those reached in the City Auditor's report as the time range was different. The conclusions were based on these data sets and 60+ cumulative hours of call shadowing, nine interviews with call center managers and call-takers, research discussions with national 9-1-1/3-1-1 experts, and more than five discussions with professional subject matter experts.

1. **Plan and coordinate the routing of non-emergency calls with Police, Fire, and CCCC.**
   a. Discover call load and type of calls (Public Safety versus Non-Public Safety). Meet and interview staff in Police, Fire, and CCCC to gather information about non-emergency calls that are received throughout the day. Provide a report outlining each area's call load and type, current metrics, and staffing levels.
   b. Identify non-emergency (3-1-1) call types that should never get routed to the 3-1-1 Center. Identify such call types and ensure that they continue to get routed to Public Safety Answering Points (PSAP) – for both Police and Fire departments.
   c. Identify non-emergency (3-1-1) general call types (outside of those that should get routed to PSAP) which can be shifted to the 3-1-1 Center.

d. Evaluate current structure and identify the overlap in services for non-emergency calls. Provide written analysis and feedback about what is working and what needs improvement based on best practices and standards. Provide comparison to other cities or agencies of similar size and structure for context.

e. Recommend new structure including operational resources. Staffing levels for non-emergency calls, training, equipment, retention schedule, cost allocations, and after-hours support capacities

f. Activate 3-1-1 calls from major carriers and plan the transition. Currently 3-1-1 calls are activated only for AT&T and Sprint.

g. Develop a transition plan, including training, community outreach, and resources needed – human and technical. Recommend a timeline for implementation and coordination with the County of Santa Clara using a phased approach.

2. **Recommend and design call metrics and performance standards to reach optimal service and efficiency.**

   a. Determine appropriate call metrics referencing state/national standards and industry benchmarks. Make recommendations about how to improve and measure a small set of Key Performance Indicators. Provide appropriate service metrics for at least the following:
      - Response times;
      - Call abandonment rates;
      - Wait times;
      - Customer service satisfaction; and
      - Recommend other metrics or benchmarks.

3. **Analyze, review, and redesign auto-attendants.**

   a. Improve customer experience through call tree in:
      - Police non-emergency;
      - Fire non-emergency; and
      - CCCC.

   b. Implement a new 3-1-1 call tree.

   c. Implement the voice skills (aka "apps") for popular Voice Assistants – My San Jose, Alexa, Google Assistant, and Siri – if useful.

4. **Digitize Services to avoid voice calls.**

   a. Determine the frequent call types that can be rerouted or diverted to online resources that will provide the most positive impact to call load and customer experience. This would require engaging affected City departments in identifying which forms must be digitized. For those that cannot be digitized, recommend alternate procedures for handling the non-emergency calls.

   b. Design Forms and Data Flows for call types recommended for digitization (example: Accident Reports).

   c. Digital Form(s) launch.

5. **Communication Plan & Internal Training**

   a. Implement a robust communication plan to inform the community about the 3-1-1 call handling transition program. This could be in the form of emails, flyers, social media, and advertisements (TV and radio). The plan should include details on how to execute it effectively.

b. <u>Conduct internal training sessions</u> to the staff members of the Police Department, Fire Department, and the 3-1-1 Center. The training material (in the form of documents and videos) should be made available on the City's Intranet for future reference.

6. Hiring
   a. <u>Increase CCCC staff</u> with three new hires.
   b. <u>Train the new hires</u>, setup office space, install computers / monitors / desktop phones, and setup login accounts.

Team for Effort B

- **City Staff**: Lead representatives from Police Communications, Fire Communications, Police recruiting Unit, Public Works, CCCC and ITD are driving the work progress.

Methodology

For items focusing on recruiting and hiring, use of positions and classifications, work environment, and service delivery, several small teams assembled to identify and begin work on a series of near-term action items. For many of the associated recommendations, the Fire and Police Departments had previously worked on potential improvements. Based on specific needs detailed in the City Auditor's Report, existing concepts and plans were put forward for action.

Effort A Outcomes

Finding 1— Opportunities to Improve Call Answering Times
<u>Recommendation #1</u>: Fire Communications should implement technology to automatically connect calls to call takers' phones through off-hook answering.
Status: Implemented.
Fire Department Update: Hardware installation and staff training have occurred. The 9-1-1 phone system was upgraded in January 2020. AT&T, which supports the 9-1-1 phone system, implemented the feature after the upgrade and system performance has been monitored to ensure no unexpected complications arose. Complete as of February 24, 2020.

<u>Recommendation #2</u>: Fire Communications should pull regular performance reports and monitor average answering times.
Status: Partially Implemented and due for completion by June 2021.
Fire Department Update: Staff are actively working with Human Resources on the recruitment process for the newly authorized Analyst position in Fire Communications. The Analyst will be tasked with formalizing the Fire Communications performance measure reporting process and ensuring reports are generated and distributed at regular intervals. To allow sufficient time for hiring, training, then development of the reports and implementation, the target date has been adjusted to June 2021.

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

Status: Implemented.
All components of call measuring time were reviewed and the target was adjusted 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.
Status: Partially Implemented and due for completion June 2020.
Fire Department Update: The County of Santa Clara has made programming changes to prepare their Computer Aided Dispatch (CAD) system for this enhanced functionality. The vendor for the City's Computer Aided Dispatch system must make similar changes. A purchase order was issued in December 2019 and the vendor has scheduled personnel to work on this in March 2020.

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.
Status: Partially Implemented and due for completion June 2020. Adjusted target date: June 2020.
Police Communications Support Services Staff corrected some minor technical issues with the recording equipment (an identified electrical interference in the office caused a high pitch tone when recording). The phone tree script was rewritten for abandoned vehicles, CHP non-emergency transfers, and the initial greeting (to include information about My San Jose application). The revised scripts were recorded in English, Spanish, and Vietnamese and were placed into the IVR. The Communications Support Services Supervisor will review the IVR on a bi-annual basis and make any needed corrections to ensure the IVR consistently connects customers with the appropriate resource that can provide the needed service.

Recommendation #15: The Police Department should review the nonemergency call tree to resolve technical limitations and errors and provide a seamless transfer to residents.
Status: Implemented.
There were three voicemails from other Department Units which exceeded the maximum recording length and resulted in callers being disconnected. Operations Support and Services Division edited the recordings (Auto Desk 408-277-4263, Fingerprints 408-277-4149, and Warrants 408-277-4125) to fit within the allotted time frame.

Recommendation #16: Police non-emergency services should provide information and translation services for customers who do not speak English.
Status: Partially Implemented.
Police Communications offers interpretation services for non-emergency callers and current policy directs staff to utilize the non-emergency translation service for language barriers. Police Communications does not offer interpretation services for Telephone Reports as that causes resources (both interpreter and a police call-taker) to be unavailable for an inordinate amount of time. To currently provide this service, it would cause additional delays for non-emergency calls

and potentially emergency calls. Once Telephone Reports are moved out of the 9-1-1 Center, interpretation services for these types of calls can be reviewed.

Recommendation #17: The City should work with cell phone carriers to make the City's 3-1-1 line available to wireless callers.
Status: Implemented.
AT&T and Sprint were already active. The 9-1-1/3-1-1 Project Team worked with Verizon and T-Mobile to activate 3-1-1 on their services in the San Jose area. T-Mobile was activated on February 28, 2020. Verizon activated 311 for the City of San José on March 9, 2020.

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.
Status: Implemented.
The CCCC serves as the City's 3-1-1 center for landlines and wireless lines as of February 27, 2020. Capacity and overflow/after-hours improvements will proceed into late-2020 as procurement for supplemental call handling services and a multi-lingual virtual agent continues development.

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.
Status: Partially Implemented. Target date: December 2020.
MCP is proposing unified performance metrics for non-emergency contact groups in the City as part of their contract. The CCCC will use these benchmarks as the basis of reviewing and assessing 3-1-1 service quality into the future. Additionally, the data science analysis performed by the Google Fellows identified a group of almost 20% of calls that are prime candidates for automated natural language call agent technology to relieve workload while achieving higher customer satisfaction and first-call resolution for residents calling the City with general questions and requests to pay utilities bills.

The 9-1-1/3-1-1 Project Team's data science analysis, coupled with the customer experience research and design results, thus surfaced additional efforts that can contribute large, positive impacts on call handling and call experience. These efforts address the City Audit findings and include:

1. Create capacity for 9-1-1 call taker availability for high priority emergency calls at the police and fire 9-1-1 centers.
2. Reduce queue and wait times for low priority-non-emergency or business-related calls at the 9-1-1 centers.
3. Improve resident experience & satisfaction with City government services.
4. Enhance staff experience with the call processing of quality of life reports for City services.
5. Streamline call processing flows to enhance the work experience for city staff and the request experience for residents.
6. Increase 3-1-1 mobile app subscriptions and increase traffic to the 3-1-1 web portal.
7. Standardize 3-1-1 with best practices from major cities in the U.S.

8. Provide inclusive access to City resources by ensuring that those who live, work and visit the City can call 3-1-1 and access its online offerings regardless of mobile carrier and/or language spoken.

Effort B Outcomes

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.

Status: Partially Implemented and due for completion by June 2021.

Police Department Update: The Police Department Recruiting Unit plans to work with the Communications Division to develop a written recruitment plan. In the meantime, Recruiting and Communications have been working together on various initiatives to promote Communications hiring opportunities. These include establishing relationships with local partners, such as colleges and universities; working to develop a workshop to provide applicants more guidance on the required CritiCall exam; recruiting at South Bay Regional Public Safety Consortium dispatch academies; working to implement a year-round application process and utilizing their external marketing firm to develop a social media marketing strategy. For 2018-2019, the Department reported a 55 percent increase in applicants compared to the prior fiscal year. Recruiting Unit staff have proposed the use of a larger training space in the event Communications academies exceed current capacity. The Fire Department received funding in 2019-2020 for staffing to work on a Communications recruitment plan, and the Police Recruiting Unit has connected with the Fire Department regarding successful recruiting strategies.

The Police Department's Recruiting Unit has worked with the Communications Division to increase Communications' recruiting reach. This has included Communications' personnel participating in creating new advertisement photographs to bolster social media/print media advertisements, the authorization of new gear for Communications to pass out at events and representation at all the 81 events attended by the Recruiting Unit.

The Police Department's Recruiting Unit created a CritiCall Workshop. The CritiCall test is one of the most complicated parts of the Communications' hiring process and the continued low numbers of successful passing scores led to the workshop. The first class was attended by 40 applicants and the survey conducted after showed the majority were thankful for the insight. Many of those applicants are in the background process right now.

The Police Department's Recruiting Unit has been attending the South Bay Regional Public Safety Dispatch Academies to increase recruiting opportunities. This continues to bring in some applicants.

Fire Department Update: Existing Fire Communications staff continue to conduct recruitment outreach as capacity and funding allow. Staff have coordinated with the Police Communications

Training Unit regarding recruitment opportunities. Additionally, staff are actively working with the Human Resources Department on the recruitment process for the newly authorized Analyst position in Fire Communications, which will add capacity to develop a formalized recruitment plan. To allow sufficient time for hiring, training, then development of the formalized recruitment plan, the target date has been adjusted to June 2021.

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.
Status: Partially Implemented and due for completion by June 2021.
Police Department Update: The Police Department Recruiting Unit has been working with an external marketing firm to develop a social media strategy and promote Communications opportunities through online advertising. These efforts reportedly contributed to an increase in total Communications applicants for 2018-2019 compared to the prior fiscal year. Recruiting Unit staff expect to continue and potentially expand the use of the external marketing firm in the coming fiscal year as funding is available.

The Police Department's Recruiting Unit implemented a spending plan of approximately $40,000 to increase social media platforms with Facebook and Indeed.com. The number of applications significantly increases during those phases. The two most significant problems reported by applicants to the Recruiting Unit include the pay scale for incoming dispatchers and the significant delay between application and start date. A large wage increase was approved to address pay scale concerns and the Police Department's Recruiting Unit continues to work with SJPD Communications to expedite the hiring and training program. Staff continues to evaluate approaches and resource requirements to conduct multi-dimensional training program (radio vs. call taking academies).

Fire Department Update: Analysis and development of a formalized recruitment plan will guide the Fire Department's direction regarding use of an external marketing firm, subject to the budget request process. To allow sufficient time for development of the formalized recruitment plan, the target date has been adjusted to June 2021.

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.
Status: In-Progress.
Fire Department Update: The Police Department performs facility management for the Police campus, which includes the parking lots and Communication building. Public Works is currently working on this project with the Police and Fire Departments, aiming to start improvements in March 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.
Status: Partially Implemented and due for completion December 2020

Police Department Update: Police Communications has instituted part-time benefited, part-time non benefited, and retiree rehire positions. Staffing vacancies continue to prohibit adding additional part-time positions.

Fire Department Update: The Fire Department continues to use retiree rehires to backfill for vacancies, advance special projects, and maintain existing programs on an as-needed basis. Fire's portion of this recommendation is considered Implemented.

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.
Status: Partially Implemented and due for completion by June 2021.
Fire Department Update: Fire Department staff are working on procurement of the staffing study in coordination with the Human Resources Department. A request for proposals was posted in February 2020 and is scheduled to close in March 2020.

Finding 3—Staffing Police 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.
Status: Implemented.
Fire Department Update: Approximately 50% of these calls were transitioned to the CCCC between April and June 2019. Projections are this will relieve Fire Communications of about 6,000 calls per year. The MCP team has been tasked with identifying methods to transition the remaining calls away from Fire Communications. These calls mainly stem from two sources:
- Police Department field units reporting need for non-emergency city services. These reports are currently directed to Fire Communications for disposition. The desire is to identify an alternative reporting method which does not impact Fire Communications or Police Communications.
- Sanitary sewer and storm water pump station alarms monitored by Fire Communications.

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.
Status: Implemented.
A review of the Police non-emergency phone tree resulted in the issues cited in Recommendation #14 (Auto desk, CHP, and adding My San Jose Application) being corrected. No other areas of overlapping services were identified on the current 3-1-1 phone 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.
Status: In-Progress and due for completion December 2020.
Two former Police Communications retiree rehire employees continue to take TRAC reports. No further changes have occurred for the modified officers or 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.
Status: Not completed. Adjusted target date: December 2020.
The Police Department still needs to explore how to achieve this objective on-line. The solution appears to require more work than originally estimated and will need additional time to implement this objective. 9-1-1/3-1-1 Project Team for Effort A developed a full media plan and program to educate and train San Jose community members to use the right number between 9-1-1 and 3-1-1, handle accidental calls correctly, and to celebrate 3-1-1 operators by founding National 311 Day with the National Calendar of Days. Additionally, the media program developed is reusable for new City initiatives in the future.

CONCLUSIONS

1. Reducing the incidence and length of non-emergency calls answered by Police and Fire
   a. **What**: Of the calls that Police and Fire call-takers receive every year, **30% are for non-emergency** plus TRAC reports. This includes calls about updating a police report, noise disturbances, reporting an abandoned vehicle, etc. This is especially prevalent in the Police Department where 34% of the calls are about non-emergency issues in contrast to the Fire Department's 13%.
   b. **So what**: Both 9-1-1 centers invest a considerable amount of time in recruiting, hiring, selecting, and training their staff to manage emergencies of all types. Staff undergo **specialized and extensive training** from the time they are hired and annually to ensure the skills and knowledge are proficient to handle a myriad of calls. In contrast to utilizing these skills for emergencies, police 9-1-1 call-takers spend an average of 2,600+ minutes/day or 16,000+ hours/year handling low-priority calls, while Fire 9-1-1 call-takers spend an average 46 minutes/day or 280 hours/year handling similar non-emergency calls. The time spent on non-emergency call types is time away from answering calls that are of an unknown nature (and treated as an emergency) until they are answered.
   c. **Solution:** First, the Police 10-digit number and CCCC phone trees will be updated with shorter scripts, concise menu options, and more definitive routing to the responsible department. By providing callers with fewer and more concise menu options, they will not need to rely on pressing '0,' which sends a call to the police 9-1-1 center. This relieves the burden from 9-1-1 call-takers and frees up their time to answer 9-1-1 lines. In the cases of alarms and police reports, these calls will be routed to the appropriate non-emergency police division or unit via the phone tree. Additionally, alternative technology is being reviewed to automate the alarm process to make sure that alarms are verified before being

sent to the 9-1-1 center to be handled/response. Second, non-police and non-emergency calls that were once handled by the police 9-1-1 staff will now be transitioned to the CCCC to align all city services under 3-1-1. This will reduce the number of calls handled by the 9-1-1 center. Third, as part of the marketing campaign launching on March 11th, informing the public of situations that are emergencies vs. non-emergencies and the appropriate numbers and resources to reach city services will be released.

2. Reducing the incidence and length of Police Department 9-1-1 accidental calls
   a. **What**: Accidental calls make up, on average, **7% of all Police Department 9-1-1 calls.** While this percentage is small, these calls have been increasing by 10-20% Year-Over-Year since 2017. Nationwide, 9-1-1 centers have been inundated by accidental calls with as many as 20% annually. Accidental calls include pocket dialing, children and adults mishandling smart phones and smart watches, and PBX business systems that require callers to dial '9' ahead of a phone number.
   b. **So what**: Police and Fire Department call-takers are required to call back each number that abruptly hangs up. These call-takers spend an average of almost 2 hours/day (103 minutes/day) or **625 hours/year** handling these calls, which is time away from higher priority calls and it is a cost to the city by the diversion.
   c. **Solution:** First, as part of the marketing campaign launching on March 11th, there will be information around accidental calls and what to do if a caller accidentally dials 9-1-1. Second, the 9-1-1 equipment, which was replaced at the end of January 2020, has a feature that would automatically call back the number that either abruptly hung up (accidental caller) or those that entered the network and disconnected prior to making to the 9-1-1 center (abandoned caller). This feature would reduce the time 9-1-1 staff take to call back these numbers. The 9-1-1 center managers are aware of this feature, where to date, performance issues have been identified at other large dispatch centers, specifically those who use technology for phone routing (Automatic Call Distributor) like San Jose does. While this software issue is being addressed, the callback feature will be implemented during a later phase of the project.

3. Reducing time spent on alarm calls
   a. **What**: On average, the Police and Fire Departments answer 38,000+ and 15,000+ alarm calls/year respectively, which **constitutes around 8% of all calls.** Police Department alarm calls have increased almost 20% in 2019. Police Department call-takers spend an average of 159 minutes/day or 965 hours/year handling these calls while Fire Department call-takers spend an average of 27 minutes/day or 164 hours/year handling similar calls.
   b. **So what:** By virtue of the types of alarms received by 9-1-1 centers, there is no other alternative agency to field them. Alarms that require a Police Department response include but are not limited to: burglary, intrusion, robbery, panic. Alarms that may require a Fire Department response include but are not limited to: fire, smoke, and water flow.
   c. **Solution:** The *ASAP to the PSAP Service.* This system delivers commercially monitored alarms notifications to 9-1-1 center CAD systems through telephone lines, automatically displaying that a call is pending for service. This process eliminates a phone call transaction between the PSAP and the monitoring company. A presentation by MCP was

conducted and public safety managers are considering its application and costs for the system.

4. Providing faster CCCC call resolution time for all residents
   a. **What**: The average length of an answered CCCC call in English is 2.5 minutes. On average, **call-takers spend 3x longer on the phone with Spanish and Vietnamese speaking residents than English speaking residents** because of the need to get a translator on the call.
   b. **So what**: Minimizing call duration will decrease wait times and improve resident satisfaction with the CCCC when calling 3-1-1. It will also decrease the likelihood of residents waiting in long queues and deciding to call 9-1-1 for faster response times. Improving the resident experience will also increase 3-1-1 staff morale by unburdening them of lengthy calls.
   c. **Solution:** First, the updated CCCC phone menu will provide the option to callers to select the department responsible instead of speaking to an agent first and then being transferred. Second, the CCCC phone menu will allow residents to receive a call-back if queues are long. This will not directly impact wait times, but will instead provide residents with an option to ensure they remain satisfied. Third, the telephony-based virtual agent prototype will enable future callers the options for self-service in four different service areas: scheduling a junk pickup, identifying, and being transferred directly to their garbage hauler, making a water service bill payment, and reporting an abandoned vehicle. If successful and moved into production, this will remove high volume and long duration call types from the human call-taker queue.
   d. **Best practices:** One best practice is to have the ability to reprioritize the categories of service requests based on the city's situational awareness. As an example, during the winter months, Washington D.C. would make sure that snow removal was placed at the top of the website for citizens to select and have the Interactive Voice Response (IVR) changed to 'snow removal' as the first selection. This allowed customer service to modify operations. These changes allowed better customer service. A similar approach is planned for the City of San José.

5. Improving online 3-1-1 resources for residents to self-service more request types
   a. **What**: My San Jose, the mobile and web offering for 3-1-1 services, allows residents to submit requests across five categories: abandoned vehicle, graffiti, illegal dumping, pothole, and streetlight outage. When the category is available online, **residents are on average 96% more likely to submit it online than calling** the CCCC. However, one of the categories with the largest call volume (53% of all calls), utility (water and garbage) billing and support is not available online.
   b. **So what**: Service requests submitted online are routed automatically to the resolution department thereby removing CCCC call-takers from the process and decreasing resolution time for residents. Making the process seamless regardless of which entry point accessed is critical to increasing residents' satisfaction.
   c. **Solution:** First, there will be a new option within the app and website to access payment directions. It will not allow residents to pay directly through the app or website, but instead provide them with directions to do so. This is an interim solution while the Environmental

Services Department works with Wells Fargo to improve the online payment experience. Second, the water payment category will be offered as part of the virtual agent prototype (as referred to in 4.c.) thereby decreasing the call volume within this category in the future. Third, the mobile and web My San Jose architecture will undergo a revamp in 2020 to plan for additional service request types thereby continuing to unburden call-takers of voice calls. Fourth, as part of the marketing campaign launching on March 11th, there will be reminders of the types of services residents can access online. Where possible, awareness of the online resources will be emphasized and encouraged to redirect business from voice transactions to online resources.

In general, the solutions to the City Auditors report are recommended as follows:

	Phone Tree	IVR	Chat	Operational Enhancement	Marketing/ Rebranding 3-1-1
Reduce call load to 9-1-1 Centers	Yes	Yes	Yes	Yes	Yes
Revive 3-1-1 to accept all city service requests using all possible consumer access options	Yes	Yes	Yes	Yes	Yes
Automate CCCC service inquiry processes	Yes	Yes	No	Yes	Yes
Enhance customer and employee satisfaction	Yes	Yes	Yes	Yes	Yes

EVALUATION AND FOLLOW-UP

The City is working closely with MCP to identify and develop key performance metrics. The key metrics should be tied to the agency service level agreements. It is a common practice for many agencies to tie their metrics to the most common service request.

The metrics will allow the manager to handle business needs more effectively as they need to change.

Call Metrics

During the assessment phase and development of the plan, the team worked to identify key service requests. It is recommended that metrics compliance and reporting are directed to two factions: departments of which a Service Level Agreement (SLA) relationship exists, and

general reporting to the responsible department heads of whom the respective operational division report to. Reporting to SLA relationships allows those agencies to be held accountable to customers on the status of a service request. General reporting allows government officials a predictable way to measure effectiveness and measure workload and provide transparency through open government.

MCP recommends short and long-term reporting. The short-term reporting allows for more consistent measuring, compliance checking and implementation of adjustments to be made during the transitional period. The transitional period is recommended from April to September 2020, where continuous monitoring, reporting and adjustments can be made. This period also allows for the implementation of more comprehensive recommendations to be implemented or considered for ultimate optimization. Moving forward from September 2020, department heads should receive a minimum of quarterly reporting from both PSAP's and the 311 Center.

It is further recommended that two types of metrics be reported: Performance and Indicators. Performance measures are those metrics that are quantified with objective facts that accurately supports what performance has been or is. These metrics can be improved upon by adjusting business practices, policies, procedures, and/or technology modifications. Indicators are those data sets that are generally hard to influence. These quantitative data sets reflect workloads or frequencies 'that happen to you' and can be hard to change, i.e., the police 9-1-1 center received 1,000,000 calls in 2018-2019.

Required Measures

Common measures reveal how outcomes relate to individual departments. In this case, staff tied department outcome measures to Service Level Agreements to ensure resolution to a service request is rendered:

1. Non-Emergency Calls
   a. Decreased percentage of non-emergency, non-police related calls answered by PD Call takers
   b. Decreased percentage of non-emergency, non-fire related calls answered by FD Call takers
   c. Increased percentage of non-emergency, non-police/non-fire related calls answered by 311 agents.
2. Phone Tree
   a. Decreased number of non-police related calls re-directed to 311 via phone tree
   b. Increased number of non-police related calls answered by 311 via phone tree
   c. Increased number of non-police related calls made by non-English speakers (Spanish or Vietnamese) answered by 311 agents
   d. Decreased number of 911 Call takers transferring calls of non-English speakers to phone tree menu
3. Hang-ups/Automation
   a. Decreased number of hang-ups after reaching the phone tree menu that did not re-enter the queue on the non-police non-emergency line

    b. Decreased number of hang-ups after reaching the phone tree menu that did not re-enter the queue on the non-police non-emergency line

Emerging Performance Measures

New measures are emerging that focus increasingly on effective call resolution and achieving higher customer satisfaction. The data research underscored the importance of a small number of variables on the outcomes residents report they experience. These outcome and effectiveness measures should be applied to customer-centric call handling operations across the City:

1. 311 Activity Measures
   a. Number and percentage of monthly service requests presented during operating hours
   b. Number and percentage of monthly service requests presented after-hours
   c. Number and percentage of calls transferred to another source
   d. Number and percentage of requests closed within the Service Level Agreement (SLA) where applicable
   e. Monthly average wait time in seconds for calls answered
   f. Average time to acknowledge and close (excluding weekends and holidays) service requests
2. 311 Outcome and Efficiency Measures
   a. Customer ratings of call experience via survey
   b. Staff ratings of satisfaction with multi-media approach to service request processing by survey
   c. Number and percentage of monthly voice calls answered within 45 seconds
   d. Number and percentage of calls resolved on first contact
   e. Number and percentage of monthly decreases of abandon calls
   f. Number and percentage of calls in queue at risk of exceeding time threshold
   g. Number and percentage of increased on-line service requests, showing a relative decrease in voice transactions
   h. Number and percentage of calls accessing contact services by language across all platforms
   i. Month-to-month decrease in call wait times
3. Police 911 Center
   a. Number and percentage of increase, per shift (hours) of call taker availability
   b. Number and percentage of decreasing non-emergency call types (in CAD) for 311 services fielded by 911 staff Number and percentage of decreasing non-emergency voice calls that reach the 911 center for processing Number and percentage of decrease in calling back accidental misdials and/or abandon calls to the 911 Center
   c. Number and percentage of decrease in non-emergency city service requests entered by police call takers and assigned to fire dispatch staff
   d. Number and percentage of increase of staff surveyed expressing satisfaction with efforts in call diversion and reassignments
   e. Number and percentage of increase of call taker availability in answering 911 calls

Solutions to off-load non-emergency calls from the Fire/EMS 911 Center are indicated in long-term metrics below.

PUBLIC OUTREACH

Extensive discussions have been conducted with various City departments to understand their public outreach programs, marketing efforts, budget, and promotional events. Given the limited budget for the 3-1-1 awareness campaign, the team worked to identify City assets that could be leveraged for marketing 3-1-1 and in events planned for the 1st half of 2020. Partnering with each City Councilmember and their respective Chiefs of Staff has been conducted as well, to communicate the new 3-1-1 service to their constituents via newsletters and social media. Aside from the City Manager's Office of Communications, the project team met with each of the Public Information Officers from the following departments:

- Airport
- Animal Care & Services
- Civic Innovation
- Community Energy
- Employee Relations
- Environmental Services
- Fire
- Library
- Parks, Recreation, and Neighborhood Services
- Police
- Public Works (including Fleet)
- Transportation

In addition, the Project Team recruited several residents from the community for research in the IVR sequencing, rebranding of My San Jose mobile application, web portal, and telephony-based virtual agents.

This memorandum will be posted on the City's website for the March 19, 2020, Public Safety, Finance, and Strategic Support Committee Agenda.

COORDINATION

This memorandum has been coordinated with the City Manager's Office of Employee Relations and the City Auditor's Office. The cross-departmental team also worked with the Mayor's Office, City Council District Offices, the City Manager's Office of Communications.

CONCLUSION

The Administration greatly appreciates the comprehensive audit of 9-1-1/3-1-1 call handling prepared by the City Auditor's Office. Communications teams Citywide and the people they serve will benefit from the collaborative resolution of the audit findings and recommendations detailed in this report.

/s/
EDGARDO GARCIA
Chief of Police
Police Department

/s/
ROBERT SAPIEN, JR.
Fire Chief
Fire Department

/s/
ROB LLOYD
Chief Information Officer
Information Technology Department

For questions, please contact Laura Biersdorff, Acting Communications Manager, at (408) 535-1753, Michael Wodnick, Acting Communications Division Manager, Fire Department at (408) 794-1285, or Sudheer Vangati, IT Products-Projects Manager, at (408) 793-6801.