

2026 High Risk Re-Review: Performance Audit of the Fire-Rescue Department's Emergency Medical Response Process

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Topic 1: Emergency Response Process Evaluation

The Fire-Rescue Department should annually report on its emergency medical dispatch process to inform City leadership and the public about the trade-offs associated with its current process.

Topic 2: Data Collection and Reporting

The Fire-Rescue Department should track all phases of the emergency response process and evaluate and standardize turnout times to increase accountability.

Emerging Issue: Turnout Time

Fire-Rescue did not meet its arrival time standard from FY2023 through FY2025 in large part due to slow turnout times.

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The Office of the City Auditor would like to thank staff from the following departments and agencies for their assistance during this audit:

- Fire-Rescue Department
- San Diego Police Department
- Public Safety Committee Members



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Re-Review of the 2012 Performance Audit of the Fire-Rescue Department's Emergency Medical Response Process

Why OCA Did This Study

The City of San Diego's (City's) 911 emergency response system is a critical public safety service, ensuring that those experiencing a serious or life-threatening emergency receive an appropriate and timely response. The City's Fire-Rescue Department (Fire-Rescue) dispatches resources to all fire and medical emergencies in the City—from life-threatening incidents like heart attacks to minor injuries like falls. Quick response to critical medical calls is vital—the faster a first responder arrives on scene, the sooner life-saving care can begin.

Therefore, we conducted a re-review of our 2012 performance audit of Fire-Rescue's emergency response process with the objectives to determine whether Fire-Rescue:

1. Balances its limited resources with the need to quickly respond to high-priority calls for service; and
2. Uses dispatch data to evaluate emergency response performance, resource allocation, and the adequacy of performance reporting to the public and City leadership.

What OCA Found

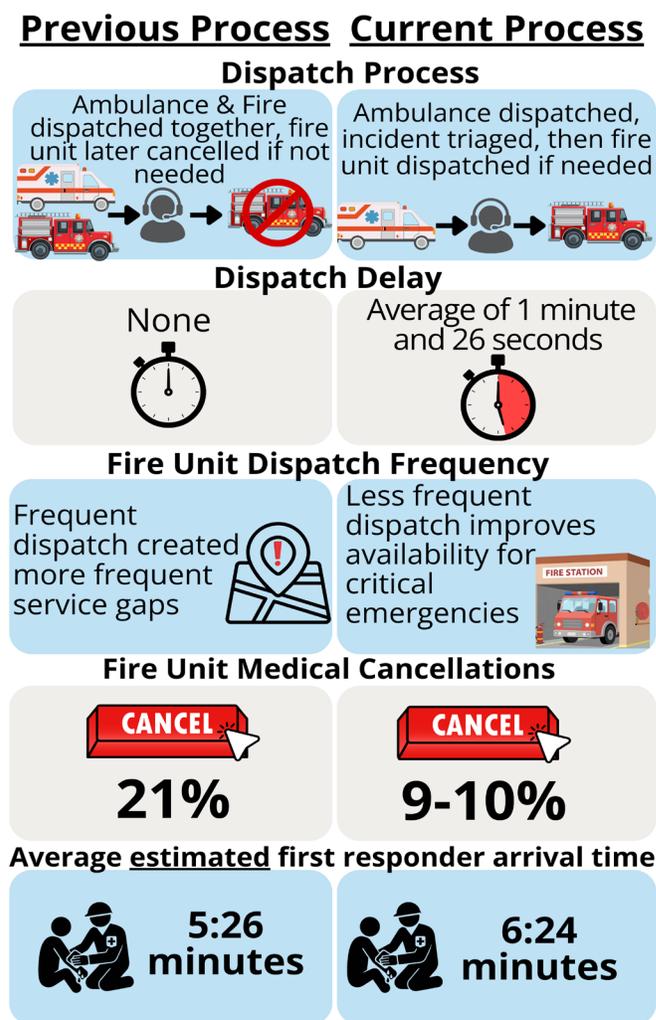
Topic 1: Process Evaluation

The Fire-Rescue Department should annually report on its emergency medical dispatch process to inform City leadership and the public about the trade-offs associated with its current process.

- Fire-Rescue adopted the prior audit's recommendation to simultaneously alert ambulances and fire units; however, in FY2019, it pivoted to a different protocol for medical emergencies, dispatching an ambulance first, then after triage, dispatching a fire unit if the incident warrants additional support.
- While **Fire-Rescue's current dispatch process has some advantages over the previous process**, such as reduced fire unit cancellations and improved resource preservation, it can **increase response times for the most severe medical emergencies by an estimated average of 58 seconds**.

- While both dispatch processes require a trade-off, **City leaders are not routinely informed on the costs, benefits, and rationale behind the City's emergency response process.**

Exhibit 8: Fire-Rescue's Current and Previous Dispatch Processes Have Various Pros and Cons



Note 1: While there are multiple variables that influence analysis of the emergency response process, our conclusions demonstrate that the current process takes longer than the previous, a conclusion which Fire-Rescue agrees with.

Note 2: This analysis was performed on incidents where both a fire unit and an ambulance were dispatched, and both arrived. Fire-Rescue conducted a parallel analysis, estimating a 56 second delay compared to our estimate of 58 seconds. Both analyses are limited by the many potential variables in the process, but it is clear the average arrival time delay and potential operational changes that would improve response times require further analysis.
 Source: OCA created based on data provided by Fire-Rescue, interviews with Fire-Rescue, and Fire-Rescue policy.

Topic 2: Data Collection and Reporting
The Fire-Rescue Department should track all phases of the emergency response process and evaluate and standardize turnout times to increase accountability.

- Fire-Rescue adopted the prior audit’s recommendation to collect data on all phases of its emergency dispatch process. However, it should also **report on all phases of the process to increase oversight and transparency** to City leadership and the public.
- There is **currently no requirement** for Fire-Rescue to **formally and routinely report on and present information on its emergency response process and performance.**
- Comprehensive reporting would help Fire-Rescue **inform City leadership’s decision-making and requests for additional resources.** Reporting can also give City leadership and the public insight on emergency response performance by phase and geographic area.

Exhibit 15: From FY2023 Through FY2025, Fire-Rescue Exceeded Its Arrival Time Standard of 6 Minutes and 30 Seconds for High Priority Medical Incidents Across All Council Districts By 1 Minute and 7 Seconds to Almost 3 Minutes

Council District	Arrival Time (90 th Percentile)	Percent of Fire Unit Arrivals Within 6 Minutes and 30 Seconds	Total Incidents Average
1	9 minutes 24 seconds	57%	7,025
2	8 minutes 57 seconds	66%	10,327
3	7 minutes 41 seconds	81%	19,827
4	8 minutes 14 seconds	69%	8,020
5	9 minutes 13 seconds	57%	6,111
6	9 minutes 11 seconds	60%	6,482
7	8 minutes 51 seconds	59%	7,355
8	9 minutes 0 seconds	69%	11,374
9	7 minutes 37 seconds	78%	9,825
Fire-Rescue’s Arrival Time Standard: 6 minutes and 30 seconds			

Note: The arrival time of 6 minutes and 30 seconds includes the time of dispatch to arrival time on scene. It does not include call dispatch time.

Source: OCA generated based on emergency response data provided by Fire-Rescue.

Emerging Issue: Turnout Time
Fire-Rescue did not meet its arrival time standard from FY2023 through FY2025 in large part due to slow turnout times.

- **Fire-Rescue has consistently fallen short of its arrival time standard, with underperformance in turnout time** likely contributing to longer total response times (also known as arrival time).

- **Turnout time across all stations was considerably longer than the standard** of 1 minute and 30 seconds or 2 minutes, depending on the time of day, with average turnout time across the scope period taking 2 minutes and 54 seconds.
- With the triage delay and slow turnout times across **all fire stations, crews do not leave the station to respond to an incident for over 4 minutes.**

Exhibit 12: Fire Units Do Not Leave the Station for an Average of 4 Minutes and 20 Seconds From Dispatch of an Ambulance for Some Medical Emergencies



Source: OCA generated based on incident and emergency response data provided by Fire-Rescue.

- Fire-Rescue typically attributes substandard arrival times to a lack of fire stations in its public reporting. While this is one factor, **our analysis indicates that slow turnout times are a more significant contributor.** Therefore, Fire-Rescue should establish a metric by which to measure, evaluate, and report turnout time performance.

What OCA Recommends

We made 3 recommendations to Fire-Rescue, which are intended to improve awareness of the trade-offs Fire-Rescue makes in its dispatch process, and to help monitor and improve turnout times. Specifically, Fire-Rescue should

- Create a policy requiring annual reporting on each phase of the emergency dispatch process, trade-offs associated with the current and alternative processes, and response times of fire units and present findings to City leadership; and
- Establish an internal policy that standardizes how turnout time is tracked and evaluated and report on performance by fire station and fire unit.

The Fire-Rescue Department agreed with all 3 recommendations.

For more information, contact Andy Hanau, City Auditor, at (619) 533-3165 or cityauditor@sandiego.gov.

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Background

The City of San Diego's (City's) 911 emergency response system is a critical public safety service, ensuring that those experiencing a serious or life-threatening emergency receive an appropriate and timely level of response. The City's Fire-Rescue Department (Fire-Rescue) dispatches resources to all fire and medical emergencies in the City—from life-threatening incidents like heart attacks to minor injuries like falls.

In the City, fire engines and trucks, also known as fire units, are dispatched to over two-thirds of reported medical incidents. In San Diego, like other cities, fire units are considered first responders and generally arrive to incidents before an ambulance, therefore making the role of fire crews critical in life-threatening emergencies.¹ Quick response to critical medical calls is vital—the faster a first responder arrives on scene, the sooner life-saving care can begin. According to medical literature, each minute of delay in cases like cardiac arrest can reduce survival chances by up to 10 percent.

This audit assesses the Fire-Rescue Department's emergency response process for medical incidents.

Medical emergencies make up over 85 percent of Fire-Rescue's incidents. This audit is a re-review of the 2012 Performance Audit of the Fire-Rescue Department's Emergency Medical Dispatch Process² and has two primary objectives:

1. To evaluate the efficiency and effectiveness of Fire-Rescue's emergency response process to determine whether it balances its limited resources with the need to respond quickly to high-priority calls for service; and
2. To determine whether Fire-Rescue uses its dispatch data to evaluate the efficiency, effectiveness, and equity of emergency response operations, performance, and resource allocation, and assess the adequacy and completeness of dispatch performance reporting to the public and City leadership.

1 Police officers, Emergency Medical Technicians (EMTs), and paramedics in ambulance units are all considered first responders in this report.

2 The Performance Audit of the Fire-Rescue Department's Emergency Medical Dispatch Process, issued in 2012, can be found here: <https://www.sandiego.gov/sites/default/files/120229dispatch.pdf>

We evaluated Fire-Rescue's emergency response process for medical emergencies within the City from fiscal year (FY) 2023 through FY2025. This audit focused on the emergency medical dispatch and response process for the most emergent medical incidents, classified as Level 1 medical and traffic accidents, which prompt the response of a fire unit. For these incidents, this audit focused on the emergency medical response process between the phases of initial dispatch of a first responder unit and its arrival time.

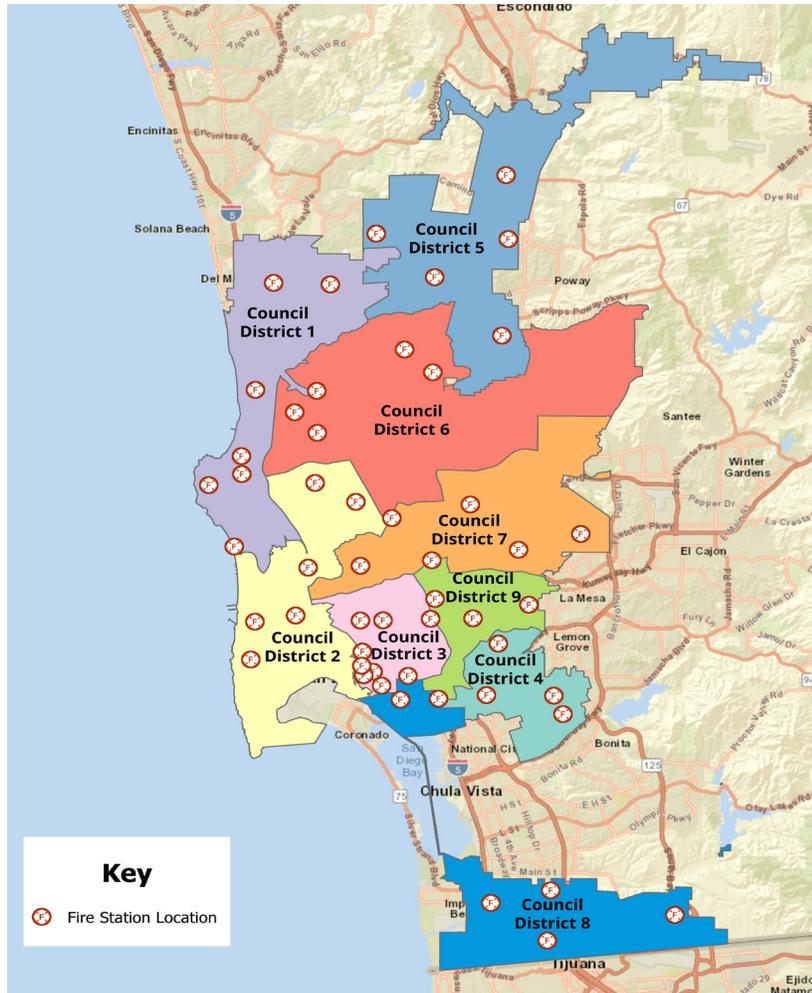
While the San Diego Police Department (SDPD) has a role in answering and responding to 911 calls, this audit did not analyze SDPD's role in the City's emergency response process. This audit also did not analyze ambulance response times, the City's contracts with Falck and American Medical Response (AMR), or staffing in the Emergency Command and Data Center and fire stations.

Fire-Rescue provides several services, including emergency responses to fire and medical calls.

Fire-Rescue serves the entire City, approximately 326 square miles, and the department has over 1,400 budgeted employees working every day to provide a variety of safety services. In addition to responding to medical emergencies to provide treatment and transport, Fire-Rescue provides many other services, including fire suppression and investigation, hazardous materials response, air operations, and beach safety and swimmer rescue. To provide these services, Fire-Rescue operates 50 fire stations and processes 911 emergency calls from the Emergency Command and Data Center. **Exhibit 1** shows the location of all the City's fire stations throughout the City's nine Council Districts.

Exhibit 1

The City of San Diego Maintains a Network of 50 Fire Stations



Source: OCA generated based on geographic data on the City's fire stations.

Fire-Rescue partners with other cities in San Diego County to send the nearest available fire unit to each incident, no matter the jurisdiction.³ This borderless tactic supplements the City's resources and aids in emergency response and coverage.

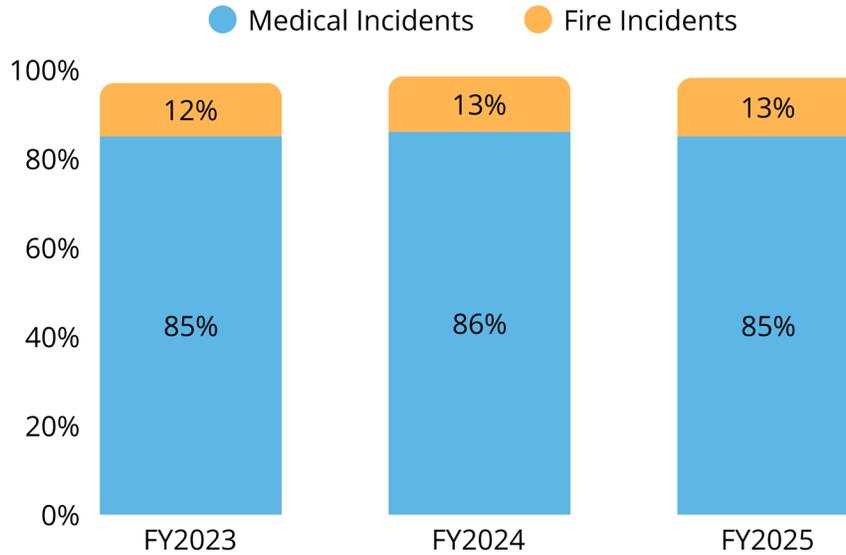
Most incidents Fire-Rescue responds to are medical, not fire related.

The City received nearly 670,000 911 calls in FY2025, approximately 28 percent of which were processed by Fire-Rescue. As shown in **Exhibit 2**, over 85 percent of incidents received by Fire-Rescue from FY2023 through FY2025, were medical in nature.

³ Fire Rescue's Emergency Command and Data Center dispatches resources for several other local agencies, including Chula Vista, Poway, Coronado, and Imperial Beach Fire Departments, in addition to San Diego.

Exhibit 2

The Majority of 911 Calls Fire-Rescue Received From FY2023 Through FY2025 Were for Medical Incidents



Note: “Other” incidents are not included in the exhibit (they make up 2 percent of all incidents on average from FY2023 through FY2025. “Other” incidents include aid sent to other municipalities, incidents where fire unit response is put on safety hold, and incidents with incomplete data).

Source: OCA generated based on incident data provided by Fire-Rescue.

Overview of Fire-Rescue’s Emergency Response Process

In San Diego, Fire-Rescue serves as the secondary Public Safety Answering Point for emergency calls, handling medical and fire incidents.

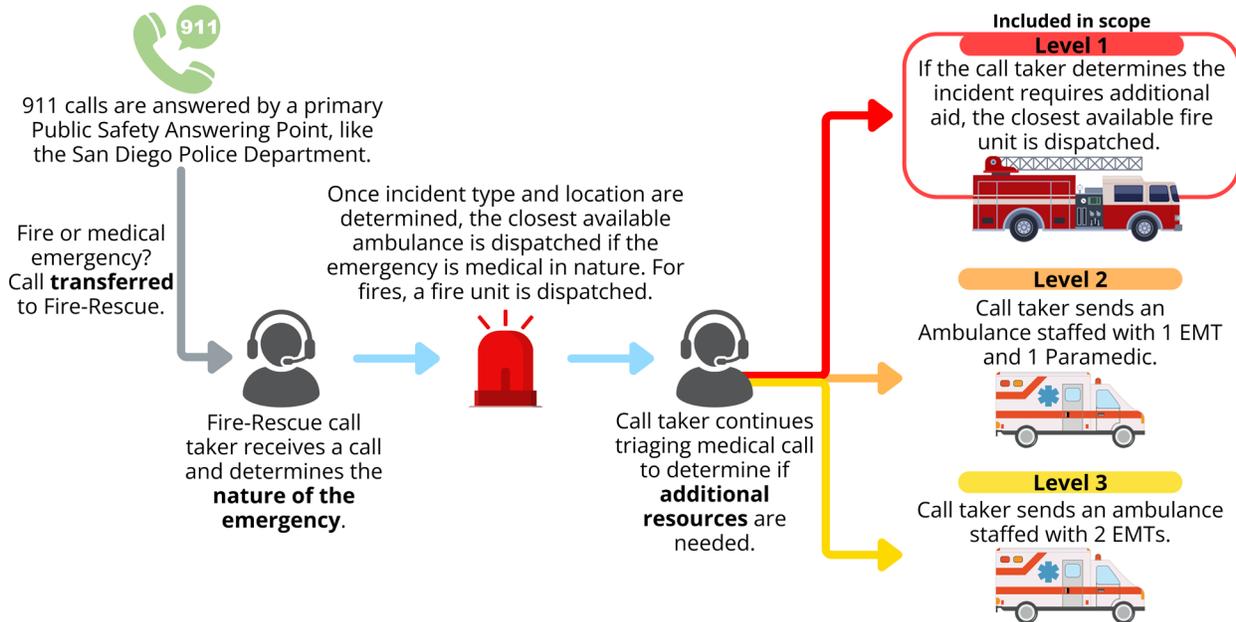
Most 911 calls in San Diego are answered by the San Diego Police Department (SDPD), the City’s primary Public Safety Answering Point (PSAP). Fire and medical calls are transferred to Fire-Rescue’s Emergency Command and Data Center, where call takers identify the location and nature of each emergency. After obtaining initial incident details, the dispatcher will send an ambulance to medical emergencies or fire units to fire incidents. Automatic Vehicle Location (AVL) technology identifies the nearest available unit for dispatch.

After an ambulance is dispatched, call takers triage medical incidents while on the phone with the caller to obtain more details on each emergency. The triage process helps categorize each incident into one of three priority levels, determining the level of response sent.

This audit focuses on the highest priority medical incidents, Level 1 and traffic accidents, that require a fire unit response, as shown in **Exhibit 3**.⁴

Exhibit 3

San Diego’s Emergency Response Differs Based on the Type of Emergency and Uses a Three-Tiered Triage System to Determine the Level of Aid Sent to an Incident Depending on Its Severity



Source: OCA generated based on interviews with Fire-Rescue staff and review of Fire-Rescue policy.

Once dispatched, fire units must quickly prepare to respond and travel to each emergency.

Once dispatched, the fire crew prepares to leave the station or “turn out.” Turnout time begins with the receipt of a dispatch alert and ends once the fire crew has loaded onto the fire rig and begins moving. The next phase, travel time, begins once the fire crew starts moving and ends when it arrives on scene. Once on scene, a vehicle’s GPS system timestamps the unit’s “arrival time.” If the scene is deemed unsafe, the dispatched fire unit will “stage” close by the incident at a secure distance and wait until SDPD has secured the area and it is safe to proceed.⁵

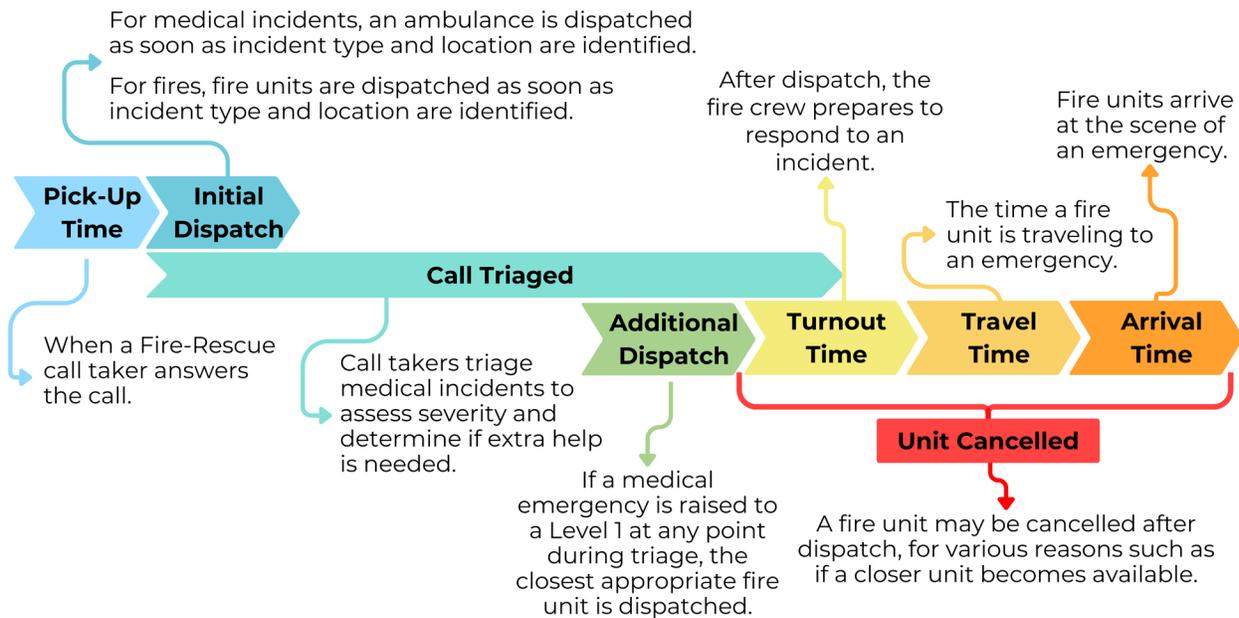
4 According to Fire-Rescue, Level 1 incidents break down into further sub-levels; however, due to data limitations, we averaged all Level 1 Medical and traffic accident incidents because all Level 1 incidents require a fire unit response. Level 2 and Level 3 medical calls generally do not require a fire unit response.

5 According to Fire-Rescue, “at scene” time is its own timestamp, the department considers the time a unit begins staging, if applicable, as its “arrival time” because the unit is ready to respond but cannot get closer to the incident for safety reasons.

Exhibit 4 shows the different phases of the emergency response process, from call pickup through arrival. Fire-Rescue now captures data on every phase of the process, collecting and analyzing timestamps for each phase, in addition to details on which unit was dispatched, and the classifications of each triaged medical incident. As stated earlier, this audit looks at the medical emergency response process from initial dispatch through arrival of a fire unit on scene.

Exhibit 4

Fire-Rescue’s Emergency Response Process Consists of Several Phases



Note 1: This graphic shows the general emergency response process, however according to Fire-Rescue, it does not account for all the response and cancellation variations that can occur.

Note 2: The closest appropriate fire unit may be dispatched at the initial dispatch phase if the call taker recognizes the emergency warrants a fire unit response.

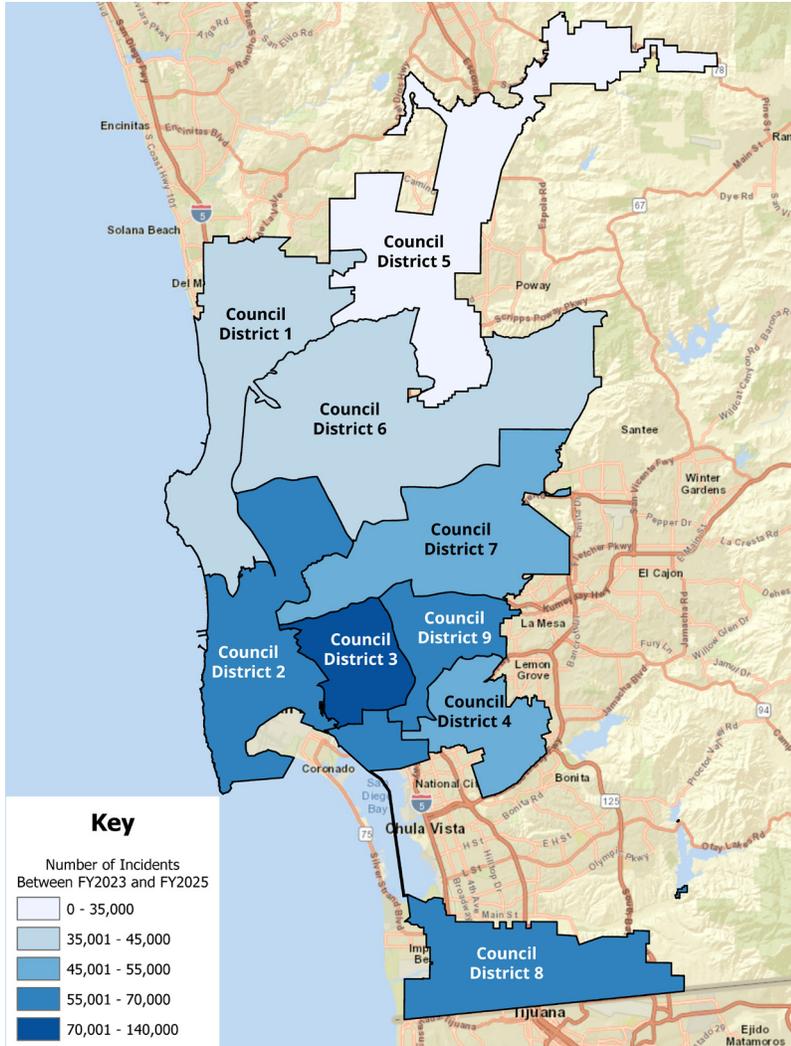
Source: OCA generated based on review of Fire-Rescue policy, data, and interviews with Fire-Rescue staff.

Fire-Rescue responds to medical incidents across the City.

As shown in **Exhibit 5**, from FY2023 through FY2025, some areas of the City recorded more medical incidents than others. Factors that affect incident volume include population density and the demographics of each area of the City, such as age or socioeconomic status. While incident volume varies across the City, Fire-Rescue’s response standards remain the same regardless of where an incident originates from. Emergency response standards are further discussed below.

Exhibit 5

From FY2023 Through FY2025, Emergency Medical Incident Volume Varied Across Each Council District



Source: OCA generated based on incident data provided by Fire-Rescue.

Fire-Rescue follows emergency response standards for each phase of the emergency response process.

Emergency response standards exist for each process phase, including those set by the California Office of Emergency Services (Cal OES) and organizations such as the National Emergency Number Association (NENA) and the National Fire Protection Association (NFPA). Though standards set by NENA and the NFPA are not mandates, they serve as critical emergency response guides, offering best practices and standards to improve emergency response efficiency. The City’s General Plan and Fire-Rescue’s internal policy sets its own standards

that differ from national standards in some instances. As shown in **Exhibit 6**, standards for each phase of the emergency response process exist at the department, City, State, and national level. Performance for each phase of the emergency response process, except for call pick up and call processing, are further discussed in **Topic 2**.⁶

Exhibit 6

Emergency Response Standards Exist at Each Phase of the Emergency Response Process

Emergency Response Process Stage	Emergency Response Standard
Call Answering	<p>CalOES, NENA, and NFPA: 90% of calls should be answered in 15 seconds, and 95% of calls should be answered in 20 seconds.</p>
	<p>City of San Diego Fire-Rescue Department: 95% of calls should be answered in 15 seconds or less.</p>
Call Processing	<p>City of San Diego General Plan and NFPA: Call processing should be completed within 60 seconds 90% of the time.</p>
Turnout Time	<p>City of San Diego General Plan: Fire units should turnout within 90 seconds 90% of the time.</p>
	<p>NFPA: Fire units should turnout in 60 seconds for medical incidents.</p>
	<p>City of San Diego Fire-Rescue Department: Fire units should turn out in 90 seconds or less between the hours of 7:00am to 10:00pm and 120 seconds outside of that time.</p>
Travel Time	<p>City of San Diego General Plan: Responding crews should have a 5-minute drive time in the most populated areas 90% of the time.</p>
	<p>NFPA: A first responder should arrive on scene in less than 4 minutes (240 seconds).</p>
Arrival Time	<p>City of San Diego Fire-Rescue Department: The first unit should arrive within 6:30 minutes from receipt of dispatch notification 90% of the time.</p>
	<p>City of San Diego General Plan: The first unit should arrive within 7:30 minutes, 90% of the time from when Fire Dispatch receives the 911 call.</p>

Source: OCA generated based on Fire-Rescue’s policy, City of San Diego’s General Plan, California Office of Emergency Services policy, National Emergency Number Association standards, and National Fire Protection Association standards.

⁶ We initially assessed Fire-Rescue’s call answering and processing performance and found that it met or exceeded standards; therefore, we determined no further review was needed.

This audit is a re-review of the Fire-Rescue Department's emergency medical response process.

In FY2012, the Office of the City Auditor published the Performance Audit of the Fire-Rescue Department's Emergency Medical Dispatch Process.⁷ The audit focused on Fire-Rescue's emergency response process and identified two findings, which were as follows:

1. Changes to Fire-Rescue's dispatch process could result in reduced response times by up to 1 minute.
2. Fire-Rescue was not collecting all components of its response times and could improve its data collection and reporting of its emergency response times.

The audit made two recommendations that Fire-Rescue implemented by the end of 2013. The first recommendation stated that Fire-Rescue should implement the pre-notification and deployment order option (option two) to reduce the overall response time for medical calls. This recommendation required Fire-Rescue to pre-notify the appropriate fire units of a possible medical deployment at the time that an ambulance was assigned. After completion of the medical triage process, call takers would confirm with fire units whether they are canceled or if they should deploy to an incident. The recommendation aimed to ensure fire units began preparing for deployment in advance, thereby enabling a faster response when necessary. The second recommendation stated that Fire-Rescue should strengthen its monthly measurement and reporting of dispatch data, analyze data to identify trends, and utilize the results of the analysis to identify opportunities to streamline and improve overall performance.

⁷ The Performance Audit of the Fire-Rescue Department's Emergency Medical Dispatch Process, issued in 2012, can be found here: <https://www.sandiego.gov/sites/default/files/120229dispatch.pdf>

Since the previous audit, much of Fire-Rescue's emergency dispatch process has been automated.

Much of Fire-Rescue's call processing is now automated, thereby reducing the time it takes call takers to triage emergencies and dispatch the appropriate resources.

Much of Fire-Rescue's call processing is now automated, thereby reducing the time it takes call takers to triage emergencies and dispatch the appropriate resources. Examples of such improvements that have aided in streamlining the process include:

- **Increased dispatch technology:** To support emergency response operations and ensure timely and effective emergency response, Fire-Rescue relies on multiple integrated systems, including the Computer Aided Dispatch (CAD) and ProQA medical triage software, among others, to facilitate call handling, triage medical emergencies, location tracking, and dispatch coordination.
- **Borderless Emergency Response:** San Diego County operates with a borderless emergency response model and Fire-Rescue partners with other local agencies to send the nearest available fire unit to an emergency, no matter which City the emergency occurs in. For example, if a fire breaks out in Chula Vista and the nearest fire unit is a City of San Diego fire unit, that unit will be dispatched to respond to the incident. This has allowed the department to respond to incidents more efficiently.
- **Geolocation:** Fire-Rescue has adopted call tracking to allow dispatchers to quickly pinpoint the location of an emergency and automatic vehicle location technology finds the closest appropriate and available fire unit for dispatchers to deploy.
- **Holistic data collection:** Fire-Rescue collects and analyzes data on all phases of the dispatch process. According to Fire-Rescue, its data team has developed a centralized data warehouse to capture information across all aspects of the emergency response process. As discussed in **Topic 2**, this data is now being leveraged to evaluate dispatch operations, pinpoint areas for improvement, and develop solutions.

Overview

Fire-Rescue implemented both recommendations from the 2012 dispatch audit; however, we found additional opportunities for Fire-Rescue to enhance its emergency response reporting and update its tracking efforts of its turnout performance.

Due to the ongoing high risk public safety presents, OCA conducted a high-risk re-review of the two recommendations issued in the 2012 Fire-Rescue emergency medical dispatch audit. Based on our assessment of the status of those recommendations, we found that one is no longer operationalized by Fire-Rescue. Additionally, while the second recommendation has been implemented, we identified an emerging issue and have recommended further improvements.



Recommendation 1.1: No Longer Operationalized



Recommendation 2.1: Implemented with Further Improvements Recommended

This report also encompasses an emerging issue of underperformance in turnout times contributing to Fire-Rescue not meeting its total arrival response time standard that was previously not identified as a high-risk area during the 2012 audit.

Navigating the High-Risk Re-Review:

This re-review evaluates two recommendations originally assigned in the 2012 audit. First, we provide the text of the original recommendation, followed by its current status, as well as any emerging risks or new ideas not covered in the original recommendations. This report includes an emerging issue that was not assessed during the 2012 audit. Finally, we provide updated recommendation(s) as necessary.

Topic 1: Emergency Response Process Evaluation

The Fire-Rescue Department should annually report on its emergency medical dispatch process to inform City leadership and the public about the trade-offs associated with its current process.

In 2012, the Office of the City Auditor (OCA) found that changes to fire-rescue dispatch procedures can reduce response time by up to 1 minute.

The 2012 audit found that fire units were typically dispatched after call takers complete a series of questions for medical incidents and by dispatching fire units before questioning, responses to medical calls could be improved by up to 1 minute.

Current Status of Original Recommendation 1

Recommendation 1:

The Fire-Rescue Department should implement the prenotification and deployment order option (option two) to reduce the overall response time for medical calls. (Priority 1)

Original Implementation:	May 2012	Fire-Rescue adopted an internal directive that required an Advanced Life Support ambulance and the closest First Responder to be dispatched at the same time upon confirmation of a medical emergency.
 Current Status:	No Longer Operationalized	Fire-Rescue phased out the previous Recommendation 1 and modified its dispatch process in FY2019.

Fire-Rescue adopted the previous audit’s recommendation to alert ambulances and fire units simultaneously; however, in FY2019, it pivoted to a different dispatch protocol for medical emergencies.

Completing the triage process for medical incidents before dispatching fire units can delay emergency response times.

The 2012 OCA audit recommended simultaneous alerting of ambulances and fire units to reduce response times, which helped Fire-Rescue improve its arrival time performance. Prior to the implementation of the previous audit’s recommendation, Fire-Rescue met its arrival time standard 63 percent of the time. In the first year of implementing the previous audit’s recommendation, compliance rose to 69 percent and peaked at 78 percent in fiscal year (FY) 2017.⁸ Fire-Rescue implemented the recommendation from 2013 to 2018 but has since changed its emergency dispatch model. Fire-Rescue’s change to its current system in FY2019 involves immediately dispatching the ambulance while continuing to triage calls to determine if a fire unit also needs to be dispatched. This reduces the frequency of fire unit cancellations for medical incidents and according to Fire-Rescue, mitigates fire crew fatigue associated with cancellations and allows fire units to remain available to respond to other, potentially more severe emergencies. But in exchange, completing the triage process for medical incidents before dispatching fire units can delay emergency response times. Precisely calculating this delay is difficult due to the many variables involved. Based on our analysis, we estimate that the triage process delays emergency response times by an average of almost 1 minute.⁹ Fire-Rescue conducted a parallel analysis attempting to correct for additional variables, which also generated an estimated delay of almost 1 minute. While it is clear the triage process does result in a much longer delay than the 5 seconds Fire-Rescue estimated when making operational changes in FY2019, according to Fire-Rescue, the only way to precisely determine the effect of operational changes is to pilot potential changes in real world operations. Fire-Rescue indicates it is considering conducting a pilot to test certain operational changes in response to this report.

⁸ Fire-Rescue’s Key Performance Indicator (KPI), listed in the department’s annual budget, states that 90 percent of Fire-Rescue first responder arrivals to emergencies should be within 7 minutes and 30 seconds from the receipt of the 911 call in fire dispatch. Data collected on this KPI is available from FY2013 through FY2019 before Fire-Rescue changed the metric.

⁹ This analysis aims to compare incidents where an ambulance and a fire unit are both dispatched, and both arrived. We acknowledge that this excludes incidents where a fire unit arrives first and an ambulance is cancelled prior to arrival, which may affect response time delays in some instances. Fire-Rescue conducted a parallel analysis including incidents where an ambulance was dispatched but was cancelled prior to arrival and made adjustments to attempt to account for various other scenarios. Fire-Rescue’s analysis estimated a delay of 56 seconds compared to our estimate of 58 seconds. Both our analysis and Fire-Rescue’s are limited by the many potential variables and scenarios, but it is clear the average arrival time delay and potential operational changes that would improve response times requires further analysis.

Technological advancements have helped Fire-Rescue improve the emergency response process.

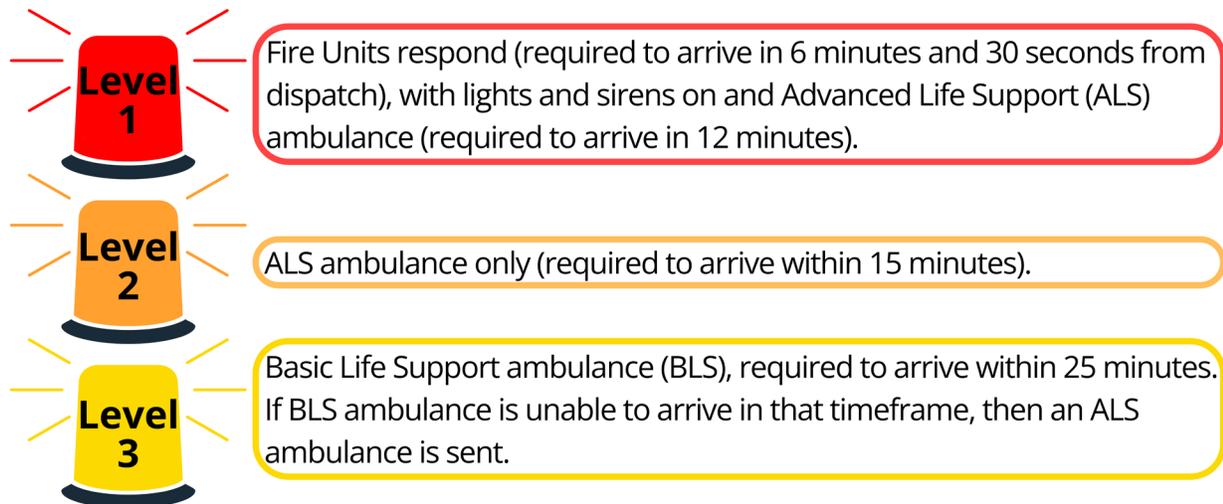
Since the previous audit, much of Fire-Rescue's call processing has been automated, thereby reducing the time required for call takers to process calls and dispatch resources. The previous audit found that Fire-Rescue met the City's 1 minute call processing standard 12 percent of the time, whereas today, Fire-Rescue's compliance is over 90 percent. With the help of new technology aiding dispatchers, as discussed in the **Background**, the current dispatch model seems to be more efficient than at the time of our previous audit.

Fire-Rescue now also collects data across all phases of the emergency response process, and its analyses guide operational changes. Fire-Rescue used its emergency response data to evaluate the dispatch process and, in part, inform its FY2019 transition to its current dispatch process. However, Fire-Rescue does not routinely report to City leadership on the emergency response process, its challenges, or any changes. As a result, City leadership may lack full visibility into the performance of the City's emergency response process.

The amount of aid dispatched to a medical emergency is dependent on its severity.

When a call comes to Fire-Rescue's Emergency Command and Data Center (ECDC), a Fire-Rescue call taker answers the call. Once a call taker identifies the nature and location of an emergency, an ambulance is automatically dispatched if the emergency is medical in nature. While still on the phone, call takers triage the call to determine the incident's severity level and the type of response required. The triage result classifies each medical incident into one of three levels, shown in **Exhibit 7**, and the resources associated with the incident level are then dispatched. For the most critical medical incidents (Level 1), call takers will dispatch a fire unit to respond.¹⁰ If the triage process determines the medical emergency is lower than Level 1, a fire unit is generally not sent.

¹⁰ According to Fire-Rescue, fire units are dispatched to other incidents if needed; however, the process typically reserves fire units for Level 1 medical incidents.

*Exhibit 7***Fire-Rescue Uses a Three-Tiered System to Match the Appropriate Level of Resource to Each Medical Emergency**

Note: If there are less than 10 ALS ambulances available, then the requirement to send an ALS is not applicable.

Source: OCA generated based on interviews with Fire-Rescue staff and review of department policy.

While Fire-Rescue’s current dispatch process has some advantages over the previous process, such as reduced fire unit cancellations and improved resource preservation, it results in longer response times.

In FY2018, Fire-Rescue evaluated its dispatch process via a pilot program study to automatically dispatch an ambulance to an emergency while continuing to triage the call to determine if a fire unit should also be dispatched. It found that cancellation rates—the percent of time a fire crew is dispatched for an emergency and then later cancelled—were reduced by about half. The study found that by fully triaging medical incidents before dispatching additional aid, fire units were assigned to 33 percent fewer medical incidents, allowing them to remain available to respond to other, possibly more severe emergencies. Furthermore, the pilot program study noted that the dispatch process did not negatively impact patient care. Additionally, the process only increased the fire unit’s total response time for acute emergencies by 5 seconds, a change that Fire-Rescue determined as not significant. As a result, Fire-Rescue implemented the current dispatch process in FY2019.

However, as shown in **Exhibit 8**, there are several trade-offs between the current and previous dispatch models that Fire-Rescue should report on. For example, while the current model reduced cancellations rates from 21 percent to 10 percent for fire units, it resulted in

longer response times by nearly 1 minute—significantly longer than determined during the pilot study.¹¹ The pros and cons of each system are discussed in the sections below.

The nature of and the nuances in the emergency response process make each incident and response unique. To evaluate Fire-Rescue's emergency response, we set certain parameters in our analyses to focus on incidents where both an ambulance and fire unit were dispatched. While there are additional variables that affect the emergency response process that we could not account for due to time constraints and data limitations, our analysis demonstrates evidence of an arrival time delay in the response process by up to nearly 1 minute—a key conclusion that Fire-Rescue also determined using a similar analysis.

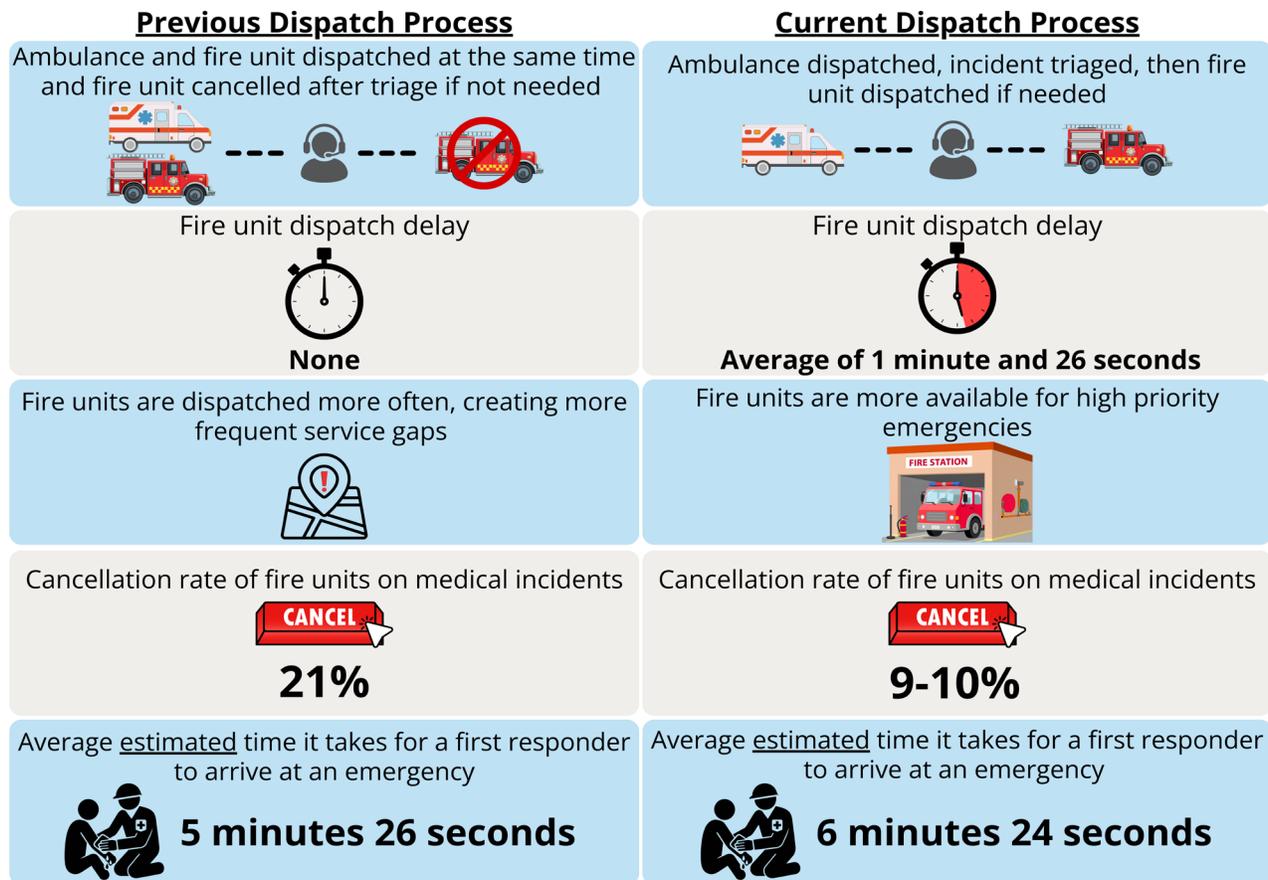
While our analysis and Fire-Rescue's analysis are both limited by available data and the many possible scenarios that can occur on an incident, they highlight that the dispatch delay from Fire-Rescue's current dispatch process is greater than what Fire-Rescue's pilot study determined over 7 years ago.¹² Both analyses point to the importance of re-evaluating the dispatch process to identify potential operational changes that would improve response times. With Fire-Rescue's enhanced technological capabilities and robust data collection, Fire-Rescue can conduct a more thorough assessment of its dispatch process, incorporate a wider range of influential factors, and potentially conduct a new pilot to provide City leadership with insights into its performance on a more detailed level.

11 According to Fire-Rescue, incident call volume has increased over time, and this increased service demand can strain the system and in turn may impact response times.

12 This report refers to "dispatch delay" as the time between when an ambulance and a fire unit are dispatched for medical emergencies. We define "arrival delay" as the estimated difference between the arrival times for medical emergencies with and without a dispatch delay.

Exhibit 8

Fire-Rescue’s Current and Previous Dispatch Processes Have Various Pros and Cons



Note 1: Cancellation rates of the previous system peaked at 21 percent (rounded) in FY2018 and FY2019 and from FY2023 through FY2025 the cancellation rates each year were 9–10 percent (rounded).

Note 2: This analysis was performed with incidents where both a fire unit and an ambulance were dispatched, and both arrived. Response time is calculated by taking the timestamp from the first unit dispatched to the time the first unit arrived on scene, no matter if it was an ambulance or fire unit. We acknowledge that this excludes incidents where a fire unit arrives first and an ambulance is cancelled prior to arrival, which may affect response time delays in some instances. Fire-Rescue conducted a parallel analysis including incidents where an ambulance was dispatched but was cancelled prior to arrival, and made adjustments to attempt to account for various other scenarios. Fire-Rescue’s analysis estimated a delay of 56 seconds compared to our estimate of 58 seconds. Both our analysis and Fire-Rescue’s are limited by the many potential variables and scenarios, but it is clear the average arrival and potential operational changes that would improve response times requires further analysis.

Note 3: We performed this analysis using data from FY2023 through FY2025 to estimate average arrival times for the current and previous processes.

Source: OCA created based on data provided by Fire-Rescue, interviews with Fire-Rescue, and Fire-Rescue policy.

Fire-Rescue's current emergency dispatch process demonstrates resource preservation and is consistent with most other agencies' approaches.

We found that the current dispatch model delays fire unit dispatches for some incidents but reduces unnecessary dispatches and subsequent cancellations for others. According to Fire-Rescue and other agencies, triaging medical calls ensures that the appropriate level of response is sent to each incident and that fire units remain available for high-priority emergencies.

We found that the current dispatch model delays fire unit dispatches for some incidents but reduces unnecessary dispatches and subsequent cancellations for others.

As shown in **Exhibit 9**, several large California agencies have similar processes, delaying the dispatch of additional or all resources until medical calls are fully triaged and sending the appropriate level of response based on the severity of the medical incident. The City of Fresno stated it recently revised its dispatch protocol for medical calls to improve resource efficiency and staff morale. Instead of automatically sending a fire unit to every incident and later canceling them when unnecessary, the city now triages calls first and dispatches fire units only when needed. According to the Orange County Fire Authority, it does not triage medical calls but recognizes that triaging medical calls is a best practice and is working to implement this model to match incident severity with the appropriate response level.

Exhibit 9

Other California Agencies Differ in Their Emergency Response Resource Capacity and Their Dispatch Process, But Most Triage Medical Calls Prior to Dispatching Resources

Agency	Triage Medical Calls Before Dispatching Units?	Experience with Cancellations
City of San Jose	A call taker dispatches a fire unit while the call is further triaged, then additional units are dispatched as necessary.	Unit cancellations are occasional, but very infrequent.
City of Los Angeles	Triages medical calls to determine the level of response required. Certain types of calls require an immediate dispatch, others are fully triaged prior to dispatching units.	Does not happen often and when it does, it is often driven by the resource in the field determining that a fire unit is not needed.
City of Fresno	Until FY2026, dispatched fire units to all medical calls and would then cancel units if not needed. Now, ambulances are dispatched, then calls are triaged to determine the severity of the emergency before dispatching a fire unit.	When dispatching fire units to all medical incidents and later cancelling if not needed, Fresno experienced a high cancellation rate and changed its process to mitigate cancellations.
City of Long Beach	Triages medical calls prior to dispatching resources. Fire units respond to all medical calls as there are more fire units than ambulances in the City.	Cancellations may occur, for example, if the caller changes their mind, the Police Department arrives first and determines medical response is not needed, or paramedics on scene downgrade a call.
City of Oakland	Triages medical calls and resources are dispatched based on triage results. Dispatchers or crews on site can add or request additional resources as needed.	Oakland does not downgrade calls once triaged, therefore resulting in fewer cancellations.
City of Sacramento	Triages medical calls and the type of resources sent are based on the triage determinant. Fire units are dispatched to every medical incident.	If a fire unit is cancelled after dispatch, it is up to the responding unit to decide if they want to follow through on the call.
Orange County Fire Authority	Does not currently have a triage process for medical calls but is looking into implementing one. Fire units are sent to all medical incidents.	Cancellations do not occur often. A first responder may be canceled so long as the issue requires basic life support only.

Source: OCA generated based on interviews with benchmark agencies listed in the exhibit.

According to Fire-Rescue, dispatching fire units before determining the severity of a medical incident can lead to gaps in coverage across the City. If a fire unit is dispatched before the triage process, that unit is essentially committed to an incident until cancelled once the triage process is completed, which takes an average of 1 minute and 26 seconds. Therefore, if Fire-Rescue receives another call about an incident, and the closest appropriate unit is not available, then the

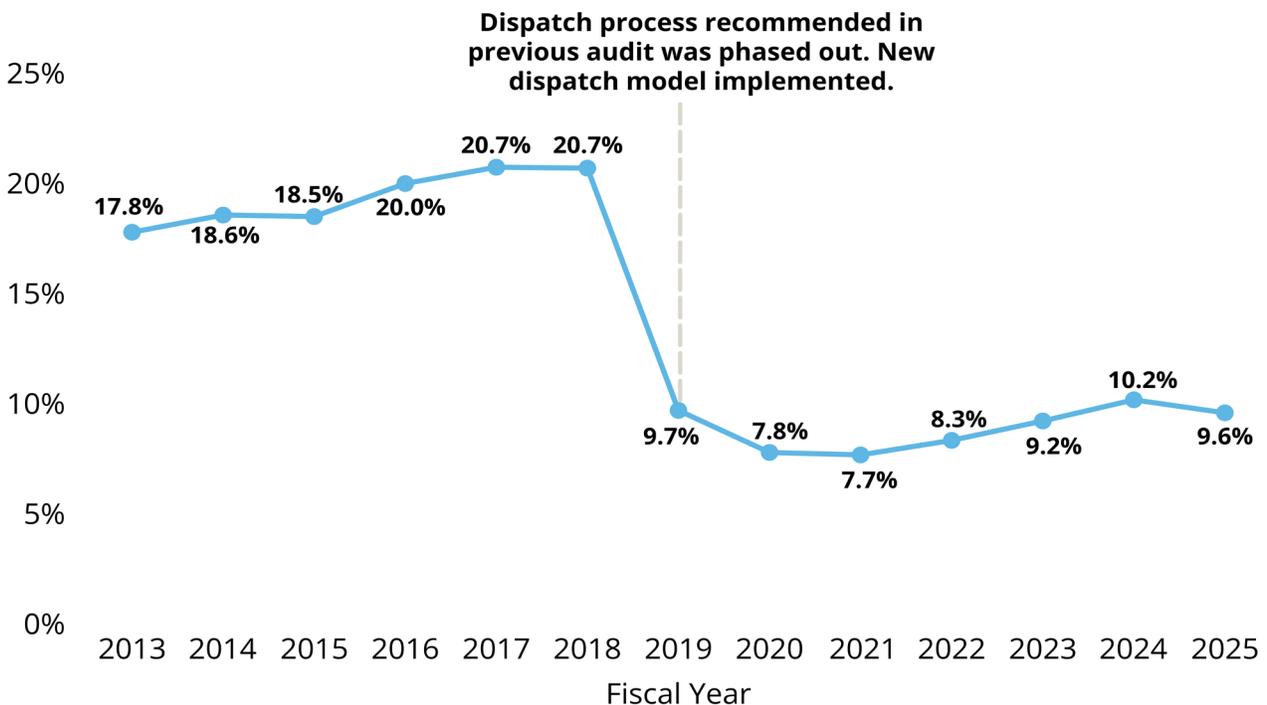
next closest appropriate unit is dispatched. Not only does this elevate response times, but this creates a domino effect that pulls resources from other areas of the City to cover when a fire unit is unavailable to respond. This occurs under Fire-Rescue’s current process as well; however, under the previous audit’s recommendation, fire units were dispatched (and cancelled) more often, which affected their availability and made them unavailable if a more emergent call came in.

Fire-Rescue’s current dispatch process reduces fire unit cancellation rates for medical incidents.

When operating under the previous audit’s recommendation, call takers dispatched fire units immediately upon identifying a medical incident, before completing triage. As a result, fire units were later canceled after call takers completed the triage process for incidents that were deemed non-critical (Levels 2 or 3 medical). When Fire-Rescue changed to its current medical dispatch process, shown in **Exhibit 10**, cancellation rates decreased from 20 percent to 10 percent, which also reduced crew fatigue, according to Fire-Rescue.

Exhibit 10

Cancellation Rates for Medical Calls Have Decreased by Nearly Half Since Fire-Rescue Changed Its Dispatch Process in FY2019



Source: OCA generated based on fire unit cancellation rate data provided by Fire-Rescue.

According to Fire-Rescue, frequent dispatch cancellations contribute to firefighter fatigue. Cancellations occurring during the night create a greater strain on fire crews than those that occur during the day. Additionally, while operating under the previous process, Fire-Rescue stated that some of the busier fire stations experienced around five to seven cancellations on some days. Due to frequent cancellations on medical incidents, fire crews began waiting to turn out after dispatch alerts, anticipating that many calls would be cancelled. This trend caused delays in emergency response times when fire units were needed. If fire crews receive more dispatches that are later canceled, they become less available to respond to incidents requiring their resources, thereby creating gaps in service, as discussed above.

While cancellations still occur under the current dispatch model, we found that stations experience an average of less than one cancellation per day on medical incidents. However, cancellation rates vary by station as busier stations may have higher cancellation rates than others. Cancellations under the current process may occur, for example, when a closer unit becomes available to respond.

Fire-Rescue's current process adds an estimated 58 seconds to response times compared to the previous dispatch process

We found that if fire and ambulance units were dispatched simultaneously, fire units would arrive first on scene an estimated 74 percent of the time, improving average response times.

Travel times for fire units are typically quicker than ambulances, therefore even when a fire unit is dispatched after an ambulance, it still arrives first on scene 59 percent of the time. We found that if fire and ambulance units were dispatched simultaneously, fire units would arrive first on scene an estimated 74 percent of the time. This would reduce the average response time by an estimated 58 seconds.¹³ According to Fire-Rescue, the closest appropriate fire unit can only be dispatched at the same time as an ambulance if it is available. Earlier dispatches with subsequent cancellations would affect fire unit availability by increasing the amount of time fire units are committed to emergencies, thereby reducing the likelihood that the nearest fire unit will be available to respond to other emergencies, if they arise. If the closest appropriate unit is not available, then the next closest appropriate available unit would be dispatched. In some situations, this could delay response but would likely improve Fire-Rescue's overall response times. **Exhibit 11** shows average incident response times

¹³ This analysis was performed on incidents that were triaged by call takers and a fire and ambulance unit were both dispatched and both arrived at an emergency.

from FY2023 through FY2025 under Fire-Rescue’s current process, and the calculated response times for medical incidents if ambulances and fire units were dispatched at the same time, and the closest appropriate unit was available to respond.

Exhibit 11

Triaging Calls Before Dispatching Fire Units Delays Emergency Response Times, on Average



Note 1: The 5 minute and 26 second arrival time is an estimate of the response time that would have been under the previous process (simultaneously dispatching fire units and ambulances) that was calculated using the data from FY2023 through FY2025, and the 6 minute and 24 second arrival time is an actual estimated average from the same data. We performed this analysis using data from FY2023 through FY2025 to estimate average arrival times for the current and previous processes.

Note 2: This analysis was performed with incidents where both a fire unit and an ambulance were dispatched, and both arrived. Response time is calculated by taking the timestamp from the first unit dispatched to the time the first unit arrived on scene, no matter if it was an ambulance or fire unit. We acknowledge that this excludes incidents where a fire unit arrives first and an ambulance is cancelled prior to arrival, which may affect response time delays in some instances. Fire-Rescue conducted a parallel analysis including incidents where an ambulance was dispatched but was cancelled prior to arrival, and made adjustments to attempt to account for various other scenarios. Fire-Rescue’s analysis estimated a delay of 56 seconds compared to our estimate of 58 seconds. Both our analysis and Fire-Rescue’s are limited by the many potential variables and scenarios, but it is clear the average arrival delay and potential operational changes that would improve response times requires further analysis.

Source: OCA generated based on incident data provided by Fire-Rescue from FY2023 through FY2025.

Additionally, while simultaneous alerting of first responders would potentially increase unit cancellation rates to 20 percent, we found that crews, in most cases, would not have left the station by the time they are cancelled.¹⁴ Fire-Rescue indicated that under the previous process, frequent cancellations led crews to delay turnout, as they would wait to see whether their dispatch would be canceled. However, as discussed further in **Topic 2**, even under the current process with half as many cancellations, for high priority medical incidents, Fire-Rescue’s average turnout time is nearly 2 minutes longer than the NFPA standard. Crews’ average turnout time of 2 minutes and 54 seconds, combined with Fire-Rescue’s average triage delay of 1 minute and 26 seconds,

¹⁴ According to Fire-Rescue, cancellations not only affect morale, but increase fatigue which can increase the likelihood of other risks, such as traffic collisions.

means that crews do not leave the station to respond to an incident for an average of 4 minutes and 20 seconds, as shown in **Exhibit 12**.¹⁵ Therefore, crews' concern over being canceled cannot alone explain high turnout times.

Exhibit 12

Fire Units Do Not Leave the Station for an Average of 4 Minutes and 20 Seconds from Dispatch of an Ambulance for Some Medical Emergencies



Source: OCA generated based on incident and emergency response data provided by Fire-Rescue.

Research shows that for every minute delay in primary response for certain life-threatening medical emergencies, there is a measurable effect on mortality.¹⁶ The American Heart Association states that cardiac arrest survival rates fall 7-10 percent for every untreated minute. For every untreated minute for a typical cardiac emergency, 1 minute of faster response translates into \$1,542 of savings in hospital costs per patient. Because in some instances patient outcomes are closely tied to how soon care is administered, it is important that the advantages and disadvantages of the City's emergency medical process are analyzed and shared with key stakeholders.

¹⁵ Cancellations can occur after a fire unit leaves the station, such as if a closer unit becomes available, but fire unit cancellations increased under the previous audit's recommendation to simultaneously alert fire units and ambulances, then subsequently cancel fire units if the incident did not require the aid of a fire unit. From this, we can infer that many cancellations were informed by the medical triage process.

¹⁶ Research on the impact of emergency response times can be found here: https://cdn2.hubspot.net/hubfs/549701/Documents/RapidSOS_Outcomes_White_Paper_-_2015_4.pdf

While both dispatch processes require a trade-off, City leaders are not routinely informed on the costs, benefits, and rationale behind the City's emergency dispatch process.

Notwithstanding Fire-Rescue's rationale for the current dispatch process, both the previous and current dispatch methods have associated costs and benefits. The current approach prioritizes fewer fire unit cancellations but introduces a dispatch delay that allows call takers to fully triage medical incidents. This triage delay enables more deliberate resource allocation, reduces cancellations, and helps minimize crew fatigue. If City leaders were informed of the trade-off between slower response times with fewer cancellations and faster responses with more cancellations, they would be able to review the process with more understanding of its effects and give input as to whether changes are needed.

Fire-Rescue should create an annual report and present findings to the Public Safety Committee to provide transparency to the Committee, City Council, and the public on its dispatch response process.

Fire-Rescue does not routinely report to the Public Safety Committee on trends in its emergency response process. The Government Accountability Office (GAO) states that to align agency efforts with organizational objectives and to promote transparency, two-way communication is essential. Quality information should flow both upward and downward within an agency, enabling leadership to stay informed about departmental processes, priorities, trends, and needs, and to address related risks.

While Fire-Rescue does report some high-level statistics in its annual budget report, this information does not capture data on each phase of the emergency response process and is not presented to the Public Safety Committee. The Key Performance Indicator (KPI) goals included in the annual department budget are not supported with context as to how each goal was chosen and the data reported does not provide insight into the reasons behind good or poor outcomes and KPI's minimally elaborate on process changes, setbacks, or advancements that may have occurred. Thus, we recommend that Fire-Rescue report on emergency response process metrics in an annual report and share the findings with City leadership.

Several benchmark jurisdictions report publishing annual reports, and some also present to city leadership.

We found that while agencies differ in structure and procedure, many use data to inform process changes and create reports that summarize response statistics. The reports are then shared with city leadership to advocate for resources and inform decisionmakers of the workload of fire departments.

The City of San Jose provides some of the most comprehensive reporting with both the San Jose Fire Department and City Auditor regularly presenting emergency response summaries to City leadership. The San Jose Fire Department publishes and presents a Fire Communication Status Report to the Public Safety, Finance, and Strategic Support Committee on an annual basis. These reports provide a summary of protocol and standard updates, analyses on call volume and processing trends, and a synopsis on medical incident triage. According to the San Jose Fire Department, the emergency response data collected is used to support budget and resource requests. For example, the data shared with city leadership helped the department advance a bond to help fund the construction of new fire stations.

The Fresno Fire Department's annual report provides a summary for each department division and breaks down responses by fire unit and by incident type. Fresno's report also publishes an incident heat map of the city, providing a visual of emergency hotspots.¹⁷ Additionally, the department creates monthly maps that summarize call totals and incident types broken out by council district. The Fresno Fire Department reports these maps to Councilmembers, the City Manager, and the Mayor. According to the Fresno Fire Department, this type of data analysis is used to advocate for change, inform growth, and place fire units around the city.

The Los Angeles Fire Department publishes a fact sheet that summarizes and compares incident counts year-over-year, busiest fire units, call processing averages, and a breakdown of dispatches by incident type. Los Angeles also publishes an annual incidents summary, breaking down dispatched incidents and units per day and week across the year for emergencies and for all incidents. This report summary also compares differences from the previous year to track incident trends. According to the Los Angeles Fire Department, the

¹⁷ According to the Fresno Fire Department, it has in-house data and GIS analysts that assist with data analysis and mapping.

data collected is used to support budgetary requests, such as requests for personnel.

The Oakland Fire Department publishes an annual report that summarizes incident totals broken out by type, highlights the busiest fire units, features department updates that lend to emergency response such as operational enhancements, and lists department goals for the upcoming year.

2026 Recommendation:

To inform City leadership of the current emergency dispatch process and the associated trade-offs, we recommend:

Recommendation 1.1

(Priority 2)

The Fire-Rescue Department (Fire-Rescue) should create an internal policy that requires the production of an annual report on the emergency response process and performance. The policy should require Fire-Rescue to annually present the report to the Public Safety Committee. The report should, at minimum, include the items listed below and compare data year-over-year to identify performance trends:

- a. The first year's report should include a discussion of Fire-Rescue's current dispatch process in comparison with its process prior to 2018, delays in response times associated with the current process, and why the current process is selected;
- b. Cancellation rate of fire units on medical calls;
- c. Performance for each phase of the emergency medical response process from call pickup to time arrived (i.e., time from call answered to dispatch of an ambulance, time from call answered to dispatch of a fire unit, etc.);
- d. Percentage of medical incidents involving fire unit dispatch;
- e. Any future emergency response process changes and accompanying rationale;
- f. All the elements described in Recommendation 2.1; and
- g. Any other information Fire-Rescue believes is essential, such as the results of a pilot study that tests operational changes to its dispatch processes.

Management Response: Agree. [See full response beginning on page 56.]

Target Implementation Date: March 2027

Topic 2: Data Collection and Reporting

The Fire-Rescue Department should track all phases of the emergency response process and evaluate and standardize turnout times to increase accountability.

In 2012, the Office of the City Auditor (OCA) found that the Fire-Rescue Department was not collecting data on all components of emergency response time.

The 2012 audit found that the Fire-Rescue Department measured and reported on some but not all aspects of the emergency medical response process. Therefore, the department was unable to measure and analyze the process in detail and identify areas for improvement.

Current Status of Original Recommendation 2

Recommendation 2:

The Fire-Rescue Department should strengthen its monthly measurement and reporting of dispatch data, analyze data to identify trends, and utilize the results of the analysis to identify opportunities to streamline and improve overall performance. (Priority 2)

Original Implementation:	June 2012	Fire-Rescue collects data on all phases of its emergency response process and internally analyzes data to identify areas of improvement and inform internal process changes.
 Current Status:	Implemented with Further Improvements Recommended	Fire-Rescue should consistently and formally report its emergency dispatch information to City Council and the public to increase transparency and support its operational needs.
 New Issue:	Reporting of Emergency Process	Fire-Rescue should consistently track and report on turnout time to improve performance and establish baseline performance expectations.

Fire-Rescue adopted the previous audit’s recommendation to collect data on all phases of its emergency response process; however, it should track and report all phases of the process, including turnout time, to increase oversight and transparency to City leadership.

While the Fire-Rescue Department (Fire-Rescue) collects data on all phases of the emergency response process, it should formally report this information to City leadership and the public to increase transparency and inform on its operational needs. Additionally, Fire-Rescue’s turnout time performance falls short of its established standard, and historical reporting for this metric has relied on inconsistent data measures. By consistently reviewing and tracking turnout time performance, Fire-Rescue could ultimately help reduce its overall emergency response time.

At the time of the 2012 audit, Fire-Rescue was not collecting data and reporting on all components of its emergency response process. Therefore, the department was unable to measure and analyze the emergency response process in a comprehensive matter to uncover areas for improvement. Now, Fire-Rescue collects data points on all phases of its emergency response and uses its data to assess its process to inform operational changes and resource allocation. We found that improvements in Fire-Rescue’s reporting could further inform City leadership and the public about the City’s emergency response performance. Monitoring and reporting every phase of Fire-Rescue’s emergency response process, assessing outcomes, and informing City leadership of those outcomes can help identify areas of improvement and maximize efficient service delivery.

Fire-Rescue’s assessment of its emergency response data helps inform operational changes and resource allocation.

As discussed in the **Background**, since our audit in 2012, Fire-Rescue has made significant technological advancements to its emergency response process. Technological improvements helped Fire-Rescue assess the dispatch process and facilitate its move to its current dispatch model in FY2019. To date, Fire-Rescue continues to assess its emergency dispatch process using data to inform operational changes. For example, Fire-Rescue analyzed the dispatch process and found it was taking dispatchers nearly a minute to manually dispatch a fire unit to medical incidents. Fire-Rescue created a feature to automate this process, called RoboCAD, in FY2019 that reduced call processing times by 42 seconds.

While Fire-Rescue publishes high-level response data in its annual budget and on its website, it does not formally and consistently present information on its emergency response process and response times to City leadership and the public.

Fire-Rescue's reporting of its Key Performance Indicators (KPIs) in its budget and published annual incident summaries do not provide comprehensive information about the performance of its emergency response process. As stated in **Topic 1**, Fire-Rescue's reported emergency response data lacks sufficient detail for City leadership and the public to assess its emergency response performance. At the time of the 2012 audit, Fire-Rescue reported basic performance information through its annual budget KPIs and did not collect data on all phases of the emergency response process. However, now that Fire-Rescue collects data on all phases, it still does not report them all. Specifically, Fire-Rescue does not report its turnout time and travel time performance, as discussed more in the **Emerging Issue** section. The information reported provides statistical numbers without detailed analysis of actual performance for each phase of the process. **Exhibit 13** displays the emergency response process, including current reported KPIs and phases of the process with no performance measures with examples of KPIs that could be reported for these phases. Without these other elements and an overview of Fire-Rescue's emergency response process as pointed out in **Topic 1**, City leadership cannot determine areas for improvement and take appropriate steps to address performance. According to the International City/County Management Association (ICMA), response times should be broken down where possible to help determine where bottlenecks might be.

Exhibit 13

Fire-Rescue Does Not Report on All Phases of Its Emergency Response Process

Emergency Response Phase	Pick-Up Time	Turnout Time	Travel Time	Arrival Time
Emergency Response Standard	Percent of calls answered within 15 seconds.	Percent of turnouts that met Fire-Rescue’s standard of 1:30 to 2 minutes.	Percent of incidents that met Fire-Rescue’s 5 minute travel time standard.	Percentage of first responder arrivals within 6:30 minutes.
Currently Reported?	Reported as one of Fire-Rescue’s Key Performance Indicators.	No current reporting on this standard.	No current reporting on this standard.	Reported as one of Fire-Rescue’s Key Performance Indicators.

Note: The components in orange reflect the phases of the emergency response process with no current reporting provided by Fire-Rescue to City leadership and the public. According to Fire-Rescue, it reports on arrival times, which combines turnout and travel time intervals, because it does not have quality measures to determine turnout and travel times separately. Fire-Rescue’s current arrival time KPI measures fire units’ time from dispatch to arrive on scene. It does not include call processing time, which is from call pickup to dispatch.

Source: OCA generated based on KPI information reported in Fire-Rescue’s FY2026 Adopted Budget.

Fire-Rescue is not required to report on its emergency response process and since neither City leadership nor the public has expressed concern about emergency response performance, reporting has not been prioritized.

Without reporting on the response times of Fire-Rescue’s fire units, City leadership likely has an incomplete understanding of the City’s emergency response performance.

There is currently no requirement for Fire-Rescue to formally report on and present information on its emergency response process and its performance on a regular basis. Interviews with Public Safety Committee members confirmed that while the committee has previously received reports on ambulance performance, Fire-Rescue does not regularly present information on its emergency response times to any committee or the City Council.¹⁸ Without reporting on the response times of Fire-Rescue’s fire units, City leadership likely has an incomplete understanding of the City’s emergency response performance. We also found that Public Safety Committee and Councilmembers have not prioritized requesting emergency response information from Fire-Rescue in part because Fire-Rescue’s emergency response process has not been an area of concern. According to Public Safety Committee member staff, constituents have not recently reported concerns. However, in interviews, both the Independent

¹⁸ Reporting of ambulance response times is a mandatory requirement under the City’s contract with ambulance providers.

Budget Analyst (IBA) and Public Safety Committee members expressed interest in receiving more comprehensive reporting of Fire-Rescue's emergency response process and performance.

More extensive reporting on all phases of Fire-Rescue's dispatch process beyond what is reported in the annual budget can help inform City leadership with decision-making, inform budgetary requests, and help identify where Fire-Rescue may be underperforming to help address those areas. For example, the IBA stated that having response time performance compared with industry standards and information on existing coverage gaps could help City leadership prioritize capital projects for building new fire stations in areas of greatest need. Reporting can also inform City leaders that Fire-Rescue's turnout times are driving fire units' longer total response times as discussed in the **Emerging Issue** section.

Comprehensive, transparent reporting would help Fire-Rescue inform City leadership's decision-making and inform additional resource allocation.

Comprehensive emergency response reporting is essential to provide City leadership with the necessary information to inform decision-making to improve outcomes and inform departmental budget requests. We found that other benchmark jurisdictions use data in various capacities to support their operations and are more effective at sharing their emergency response dispatch data information with their city leadership.

For example, the cities of Fresno, Los Angeles, Oakland, and San Jose publish annual reports that include emergency response and incident summaries, with some also reporting emergency response information directly to their city leadership, as shown in **Exhibit 14**. Beyond annual reporting, Fresno Fire and Los Angeles Fire also have publicly accessible dashboards and websites that provide detailed information on their emergency response performance, including by geographic area.

Exhibit 14

Most Benchmark Jurisdictions Report Emergency Response Information to Their City Leadership

Jurisdiction	Emergency Response Reporting to City Leadership	Annual Report
San Diego†	Upon request	
Fresno*		
Long Beach**	Upon request	—
Los Angeles **	Upon request	
Oakland		
Orange County Fire Authority*		—
Sacramento*		—
San Jose***		

† San Diego Fire-Rescue does not report emergency response information to City leadership and has not received any requests from City leadership to present on this topic. While Fire-Rescue publishes a high-level summary on the number of incidents in a calendar year by each fire unit and publishes some of its KPIs in its annual budget, the information reported is not comprehensive.

* These jurisdictions reported sharing monthly reports to either their Councilmembers, City Manager or the Divisions Chiefs for the jurisdiction they serve.

** Upon request, Los Angeles Fire will report to the Public Safety Committee and share information with Councilmembers. Similarly, Long Beach will share information to city leadership only if requested to do so.

*** Annually, San Jose Fire presents emergency response performance data and improvements made to reduce response times to the Public Safety, Finance, and Strategic Support Committee.

— Unclear whether jurisdiction published an annual report.

Source: OCA generated based on information from benchmark jurisdiction interviews.

To inform and help support budgetary requests, six of the seven benchmark jurisdictions stated they use emergency dispatch data, with some cities successfully advocating for and receiving additional support from their city leadership, as was the case with San Jose Fire, as discussed in **Topic 1**. While jurisdictions may not always be successful at receiving support for all their budgetary requests due to competing priorities, presenting data to inform budgetary requests is key for city leadership to be fully informed of existing needs and understand potential impacts to the department’s operations.

Through comprehensive reporting, Fire-Rescue can help provide insight on emergency response performance by geographic area of the City.

Previous literature from medical journals on emergency response time disparities shows a correlation between slower response times and communities with lower socioeconomic status, resulting in worse health outcomes. According to a study by the University of Albany, New York, emergency response times are influenced by various factors including:

- Built environment (i.e., traffic conditions, infrastructure, and technology availability);
- Operational systems (i.e., call volume, dispatch system, policy, and agency goals); and
- Socio-demographics (i.e., socio-economic status, accessibility and utilization of services, education level, and language barrier).

Across our scope period from FY2023 through FY2025, we found the 90th percentile of arrival times in all Council Districts exceeded Fire-Rescue's arrival time standard of 6 minutes and 30 seconds, taking between 1 minute and 7 seconds to almost 3 minutes longer than the standard, as shown in **Exhibit 15**.

However, while arrival times are generally slower than the standard, our analysis of total emergency response performance by geographic area did not show a correlation between historically underserved Council Districts and slower response times. For example, we found that some historically underserved Council Districts, such as 4 and 9, performed better than most Council Districts in the City. Specifically, the 90th percentile of arrival times to respond to the most severe priority incidents¹⁹ between FY2023 through FY2025 took 8 minutes and 14 seconds for Council District 4 and 7 minutes and 37 seconds or less for Council District 9, as shown in **Exhibit 15**.²⁰ We also found that slower response times were correlated with Council Districts with fewer incidents and larger geographical spread. For example, Council District 5 had a longer arrival time of 9 minutes and 13 seconds compared to other districts, meeting Fire-Rescue's arrival time standard, only 57 percent of the time. According to the City of San Diego's General Plan, the topography and terrain throughout the City present considerable demands on fire rescue services and can affect response times.

¹⁹ When referring to the "most severe priority incidents" or "highest priority incidents," we are referring to Level 1 medical and traffic accidents incidents. Unless otherwise stated, our analysis focuses specifically on fire engines and trucks responding to Level 1 medical and traffic accident incidents.

²⁰ When evaluating emergency response times, it is an industry best practice to measure performance by the timeframe within which most calls were completed (commonly the 90th percentile). Averages may not be the best measure, as outliers can affect the average and skew results.

Exhibit 15

From FY2023 Through FY2025, Fire-Rescue Exceeded Its Arrival Time Standard of 6 Minutes and 30 Seconds for High Priority Medical Incidents Across All Council Districts By 1 Minute and 7 Seconds to Almost 3 Minutes

Council District	Arrival Time (90 th Percentile)	Percent of Fire Unit Arrivals Within 6 Minutes and 30 Seconds	Total Incidents Average
1	9 minutes 24 seconds	57%	7,025
2	8 minutes 57 seconds	66%	10,327
3	7 minutes 41 seconds	81%	19,827
4	8 minutes 14 seconds	69%	8,020
5	9 minutes 13 seconds	57%	6,111
6	9 minutes 11 seconds	60%	6,482
7	8 minutes 51 seconds	59%	7,355
8	9 minutes 0 seconds	69%	11,374
9	7 minutes 37 seconds	78%	9,825

Fire-Rescue’s Arrival Time Standard: 6 minutes and 30 seconds

Note: The arrival time of 6 minutes and 30 seconds includes the time of dispatch to arrival time on scene. It does not include call dispatch time.

Source: OCA generated based on emergency response dispatch data provided by Fire-Rescue.

Sharing emergency response performance information by geographic area is important for both City leadership and the public. Without access to this information, the public may have misconceptions of emergency response performance throughout the City.

City leaders make budgetary decisions each year based off an incomplete picture of Fire-Rescue's emergency response process.

Fire-Rescue can use its data to inform City leadership about its emergency response performance to help inform budgetary requests that enhance its operations. For example, if Fire-Rescue informed City leadership of its peak-hour engines' performance over time, they may be less likely to remove this item from Fire-Rescue's budget. We found that Fire-Rescue's peak-hour engines, a 2017 Citygate recommendation to address coverage gaps and reduce emergency response times, have been added and removed from Fire-Rescue's budget several times since FY2021 to achieve cost savings in tight budget years. The most recent removal of Engine 80 resulted in departmental savings of about \$615,000 for FY2026. In FY2025, Engine 80 responded to 8 percent of the most severe priority incidents and 8 percent of fires in Council District 3, the City's busiest district, with over 25,000 high priority incidents. As the City faces a structural budget deficit in FY2027 of nearly \$90 million and implements cost-saving measures, understanding the costs and benefits of adding or reducing peak-hour engines to the City's finances and the potential increased demand to employee workload in high call volume areas is imperative to making informed budget decisions.

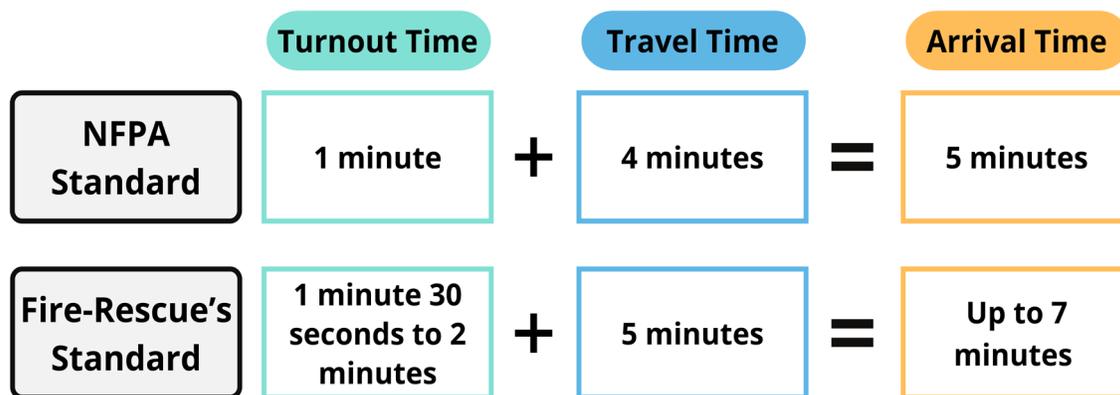
Emerging Issue: Turnout Time

Fire-Rescue did not meet its arrival time standard from FY2023 through FY2025 in large part due to slow turnout times.

We found that Fire-Rescue has consistently fallen short of its arrival time standard, with underperformance in turnout time likely contributing to longer total response times, referred to as arrival time. As mentioned in the **Background**, arrival time is measured from the time fire crews are assigned to when they arrive on scene, in other words, it combines turnout time and travel time, as shown in **Exhibit 16**. Over the last three fiscal years, from FY2023 through FY2025, Fire-Rescue’s arrival times have surpassed both the National Fire Protection Association’s (NFPA) and Fire-Rescue’s arrival response time standards, even though Fire-Rescue’s standard is longer.

Exhibit 16

Fire-Rescue’s Internal Arrival Time Standard is Up to 2 Minutes Longer Than the National Fire Protection Association’s (NFPA) Standard for Medical Incidents



Note: Per Fire-Rescue’s standard, depending on the time-of-day fire crews turnout is 1 minute 30 seconds to 2 minutes. That means that based on this turnout time requirement, total arrival time could be between 6 minutes and 30 seconds to 7 minutes. NFPA’s turnout time standard of 1 minute reflected in this exhibit, specifically applies to medical incidents; for fire incidents, NFPA has a separate turnout time standard.

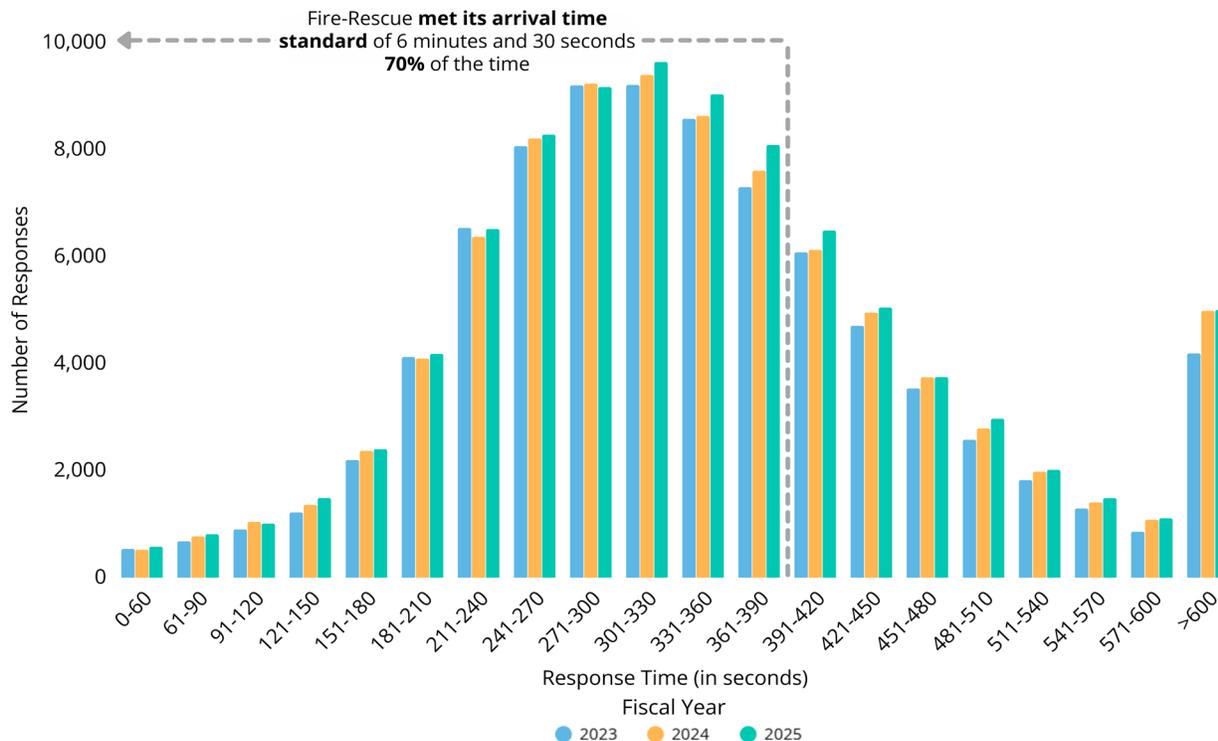
Source: OCA generated based on the National Fire Protection Association (NFPA) standards and Fire-Rescue’s policy.

From FY2023 through FY2025, fire unit response times for the highest priority incidents consistently fell short of the 90 percent target of arrival within 6 minutes and 30 seconds, with the standard met nearly 70 percent of the time, as shown in **Exhibit 17**.²¹

²¹ “Fire unit response times” specifically refers to arrival times for the first arrived San Diego Fire-Rescue fire engines and trucks, other fire apparatuses were excluded from the analysis.

Exhibit 17

Fire-Rescue Met Its Arrival Time Standard 70 Percent of the Time From FY2023 Through FY2025



Note: This analysis compares Fire Rescue’s arrival time (from dispatch to arrival) performance to its KPI and the City’s General Plan standard of 6 minutes 30 seconds from the moment the fire unit is dispatched. It does not factor in Fire Rescue’s reported internal standard that turnout time should be 1 minute and 30 seconds or less between 7 AM and 10 PM, and 2 minutes outside these hours.

Source: OCA generated based on emergency response data provided by Fire-Rescue.

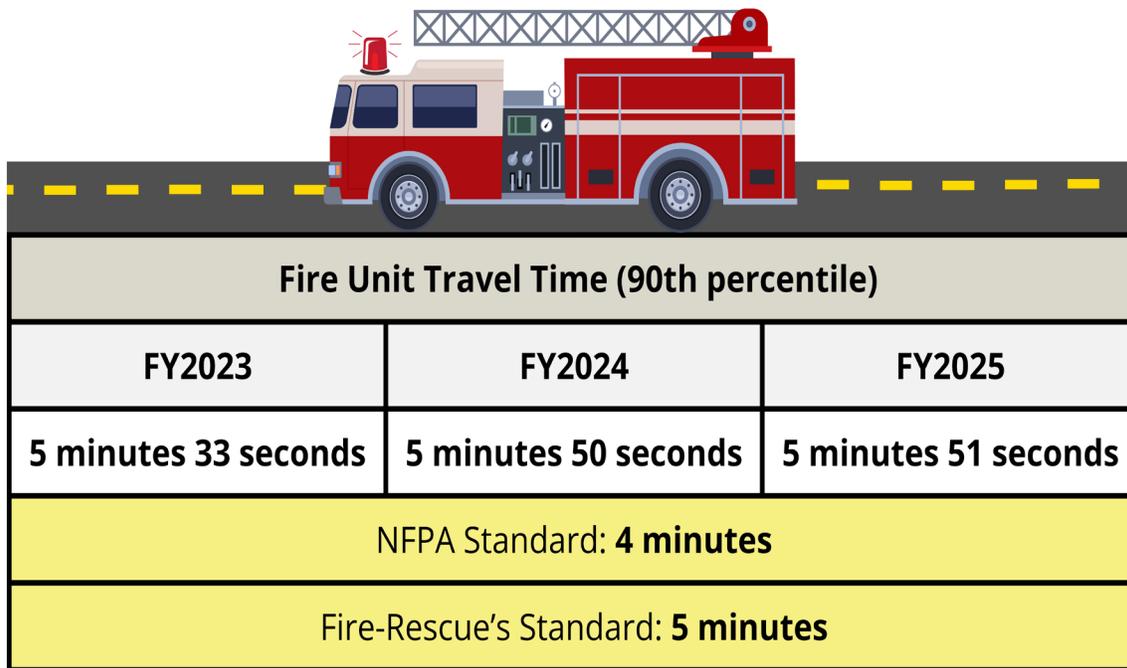
Specifically, we found that Fire-Rescue’s arrival response time is about 2 minutes longer than the standard, with the 90th percentile of arrival times to the highest priority incidents taking between 8 minutes and 27 seconds to 8 minutes and 41 seconds from FY2023 through FY2025. Per the City of San Diego’s General Plan, Fire-Rescue’s arrival time standard of 6 minutes and 30 seconds assumes 1 minute and 30 seconds for turnout time and 5 minutes for travel time. However, as explained later in this report, Fire-Rescue has consistently underperformed in turnout time, with fire units taking much longer to turnout than Fire-Rescue’s established standard.

Fire-Rescue falls slightly short of its travel time standard.

Overall, Fire-Rescue meets its travel time standard most of the time, although we found that travel time is increasing.²² The National Fire Protection Association’s (NFPA) travel time standard for fire units is 4 minutes. From FY2023 through FY2025, Fire-Rescue met this standard an average of 74 percent of the time. Fire-Rescue’s travel time standard is 5 minutes, which it met an average of 85 percent of the time across the same period. In FY2023, for high priority medical incidents, the 90th percentile of Fire-Rescue’s travel times were under 5 minutes and 33 seconds, and 5 minutes and 51 seconds in FY2025, nearly a minute longer than Fire-Rescue’s standard.²³ The increase in travel time is shown in **Exhibit 18**.

Exhibit 18

The 90th Percentile of Fire Unit Travel Times for High Priority Incidents Were Nearly a Minute Longer Than Fire-Rescue’s Standard.



Source: OCA generated based on emergency response data provided by Fire-Rescue, the National Fire Protection Association (NFPA) travel standard, and the City’s General Plan.

Limited resources and heavy traffic congestion can negatively impact emergency response times, delaying arrival time to an incident.

²² As stated in the **Background**, travel time is measured from the time the fire unit is enroute to when it arrives on scene.

²³ When evaluating emergency response performance, using the 90th percentile represents the time it takes to reach 90 percent of incidents. This provides a more accurate assessment of performance than the average, which can be skewed by outliers.

Every year, as part of Fire-Rescue's arrival time KPI reported in the annual budget, a footnote is included that states that the department's inability to meet desired response time goals is influenced by an insufficient number of geographically distributed resources, meaning fire stations.

Previous studies of Fire-Rescue's emergency response coverage have identified areas of concern in the City as well as opportunities for improving emergency response times. Specifically, the 2017 Citygate report identified communities in the City where additional resources are needed to achieve arrival time goal compliance. The report found that travel time was impacted by too few fire stations and an increasingly congested traffic road network. While limited resources may pose some challenges in meeting total response time standards, our review of emergency response data indicates that Fire-Rescue's average travel time is not the main driver of slower than target total response times.²⁴ In fact, as stated earlier, fire units have managed to perform well with travel time. Instead, we found that Fire-Rescue's underperformance in turnout time is a more significant factor in its substandard arrival times, as discussed further in the next section.

Fire-Rescue met its turnout time standard only 3–6 percent of the time between FY2023 through FY2025, likely contributing to Fire-Rescue's increased total response times.

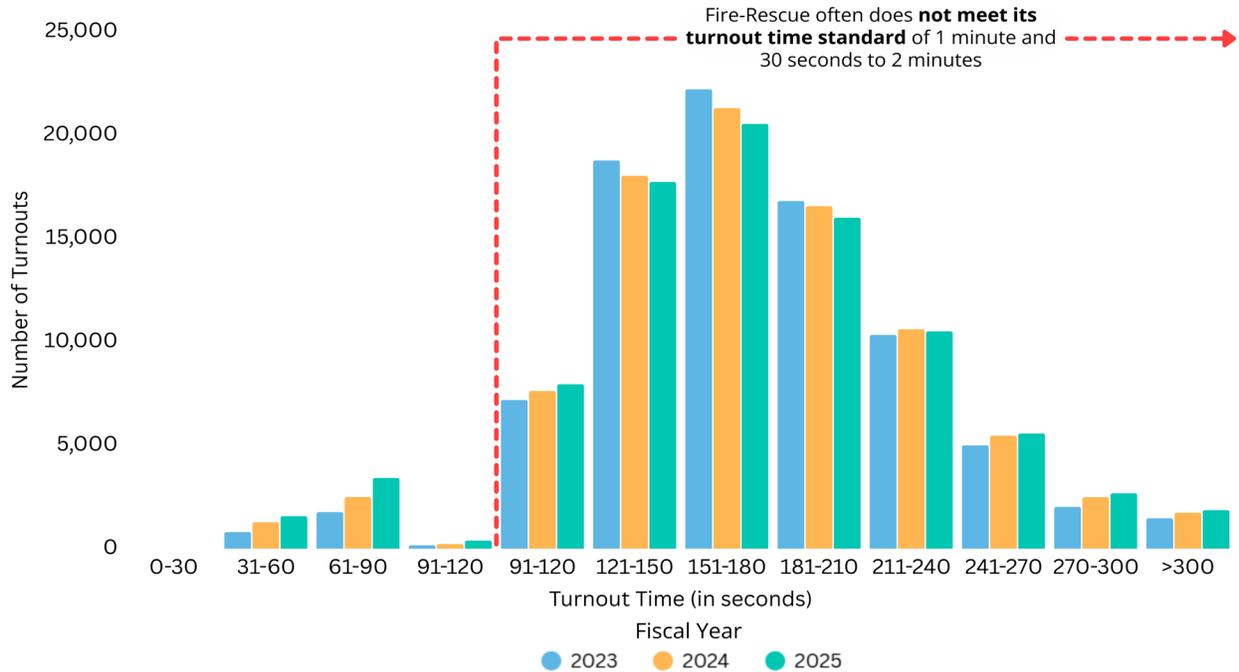
Our analysis found that Fire-Rescue only met its turnout time standard 3–6 percent of the time from FY2023 through FY2025, as shown in **Exhibit 19**. Turnout time consists of the time between when fire units are assigned to an incident to the time when they are enroute to the emergency. Specifically, we found that Fire-Rescue's turnout times for FY2023 through FY2025 averaged 2 minutes and 54 seconds, considerably longer than the standard of 1 minute and 30 seconds and 2 minutes depending on the time of day.²⁵ Per Fire-Rescue's internal policy, between the hours of 7 AM and 10 PM, turnout time for fire units should be 1 minute and 30 seconds, and 2 minutes after 10 PM.

²⁴ As discussed later in the report, Fire-Rescue stated that Citygate reports have historically used timestamp "Time Enroute by Status" rather than "Time Enroute by First Moving" to measure turnout time performance. According to Fire-Rescue, using that timestamp likely resulted in turnout time performance appearing faster, while in turn, resulting in a longer travel time performance.

²⁵ Emergency response data used to determine turnout time performance excluded turnout time outliers identified by Fire-Rescue. As a result, our analysis of turnout time used the average as a measure to evaluate turnout time performance for Fire-Rescue's fire engines and trucks across the scope period from FY2023 through FY2025.

Exhibit 19

Across the Scope Period, Fire-Rescue Consistently Did Not Meet Its Internal Turnout Time Standard



Source: OCA generated based on emergency response data provided by Fire-Rescue.

When compared to NFPA’s turnout time standard of 60 seconds for Emergency Medical Services (EMS) incidents, we found that Fire-Rescue’s performance was even lower, meeting the standard only 1–2 percent of the time, as reflected in **Exhibit 20**.

Exhibit 20

Fire-Rescue Only Met NFPA and Its Own Turnout Time Standards 6 Percent of the Time or Less From FY2023 Through FY2025

Fire Unit Turnout Time Performance for the Highest Priority Incidents

	FY2023	FY2024	FY2025
Turnout Time Standard	Standard Compliance Percentage		
National Fire Protection Association (NFPA) 1 minute	1%	1%	2%
City of San Diego Fire-Rescue 1 minute 30 seconds to 2 minutes*	3%	5%	6%

*From 7 AM to 10 PM, fire units have 1 minute 30 seconds to acknowledge the call and 2 minutes outside of those hours. The percentages above represent the percent of time that fire units’ turnout times for highest priority incidents, Level 1 medical and traffic accidents, fell within NFPA’s 1 minute turnout time standard for EMS incidents and Fire-Rescue’s internal standards for each fiscal year, FY2023 through FY2025.

Source: OCA generated based on emergency response data provided by Fire-Rescue, the National Fire Protection Association’s (NFPA) standard, and Fire-Rescue’s internal turnout time policy.

With the triage delay and slow turnout times across all fire stations, crews do not leave the station to respond to an incident for over 4 minutes.

Our review of turnout time performance by fire station found that all fire stations were exceeding Fire-Rescue's internal time standard, with average turnout time between FY2023 through FY2025 ranging between a low of 2 minutes and 13 seconds in FY2025 for Fire Station 4 to a high of 3 minutes and 36 seconds for Fire Station 47. This slower average turnout time, combined with the 1 minute and 26 seconds delay in triage for high priority incidents, as discussed in **Topic 1**, means that fire units are not leaving the fire station to respond to an incident for about 4 minutes and 20 seconds.²⁶ Thus, improving turnout time presents a clear opportunity for Fire-Rescue to further reduce its overall total response times.

While multiple factors can impact turnout time and lead to slower performance, among all phases of the emergency process, turnout time may be one of the more manageable areas for improvement.

According to Fire-Rescue and Local 145, turnout time performance may be impacted by fire station design and limitations with technology. Fire-Rescue also stated that the time of assignment and frequency of dispatch alarming can also impact turnout time. Fire stations with a higher incident call volume, for example, may turnout faster because of the frequency of needing to get ready. In contrast, fire units that are dispatched with less frequency and are stagnant, can experience system delays. In those instances, the system may take a few seconds to register that the fire unit is moving, adding additional seconds to the turnout time response. However, even with those limitations, there appears to be an opportunity for fire crews to further improve their turnout time performance.

Improving turnout time performance is the most cost-effective way to enhance overall response times in the short term.

As discussed earlier, Fire-Rescue has indicated in its annual budget that the reason it has fallen short of its response times is in part due to too few fire stations. Building or expanding new fire stations is unlikely in the near future due to the City's \$278 million funding gap over the next 5 years. Therefore, improving turnout time performance is the most cost-effective way to enhance overall response times in the short term.

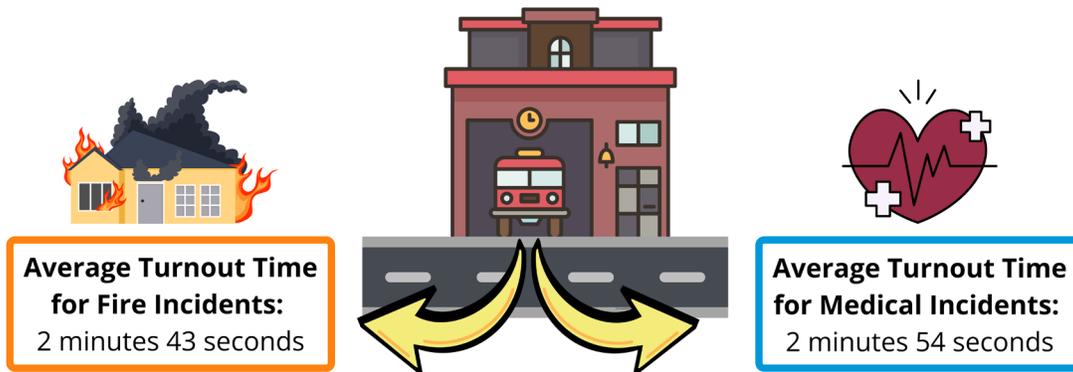
²⁶ This report refers to "dispatch delay" as the time between when an ambulance and a fire unit are dispatched for medical emergencies.

Turnout times appeared faster for fire incidents than for medical incidents, suggesting that fire personnel can improve turnout times overall.

Our analysis found that average turnout time performance for fire incidents was about 11 seconds faster than turnout times responding to the highest priority medical incidents. NFPA standards recommend a faster turnout time for medical incidents at 60 seconds compared to 80 seconds for fire incidents because fire incidents take longer to get ready for. The additional 20 seconds for fire incidents allow fire crews to properly put on personal protective equipment and ensure equipment preparation. However, from FY2023 through FY2025, we found that fire units turned out faster for fire incidents, with average turnout time at 2 minutes and 43 seconds for fire incidents compared to 2 minutes and 54 seconds for the highest priority medical incidents, as shown in **Exhibit 21**.

Exhibit 21

On Average, Turnout Time for Fire Incidents Was About 11 Seconds Faster Than for Medical Incidents



Source: OCA generated based on response data provided by Fire-Rescue.

Turnout time performance by fire station also showed that in some cases, the difference in turnout time for fire incidents compared to the highest priority medical incidents was greater than 11 seconds. For example, in FY2023, Fire Station 7's average turnout time performance for fire incidents was 2 minutes and 26 seconds compared to 2 minutes and 54 seconds for medical incidents—28 seconds faster for fire incidents.

Like Fire-Rescue, other agencies, including the Oakland Fire Department and the Orange County Fire Authority, stated that turnout times for fire incidents tend to be faster than those for medical

incidents. According to Oakland Fire, the difference in performance among incident types stems from the internal culture within the department, where fire personnel view responding to fire calls differently from medical incidents.

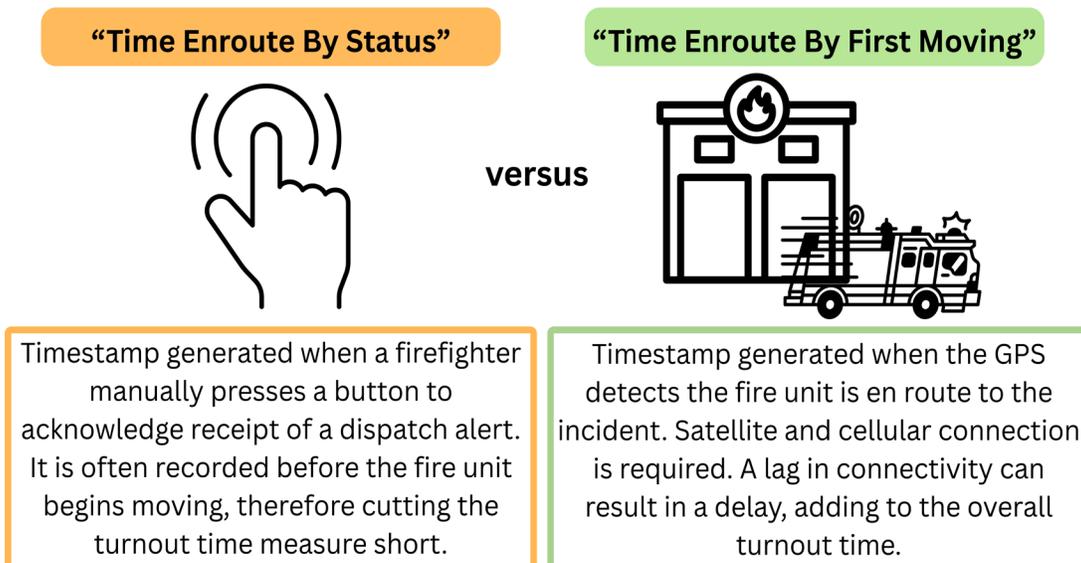
Because every second counts during an emergency, faster turnout time performance for both fire and medical incidents will help reduce overall emergency response times. Fire-Rescue has stated that turnout time is an area that has room for improvement and is one of the only phases of the emergency response process that is within its control. Other aspects of the emergency process, travel time for example, present further challenges to control as they may be impacted by outside factors, such as traffic congestion. With average turnout time performance at close to 3 minutes—well above internal and external standards—and an observed difference between turnouts for fire versus medical incidents, there appears to be an opportunity for Fire-Rescue to further improve its turnout performance.

While Fire-Rescue has the mechanism to calculate turnout time with the current data it collects, it has not settled on a tracking metric to regularly analyze its performance.

Fire-Rescue captures two timestamps that are associated with turnout time, which are “Time Enroute by Status” and “Time Enroute By First Moving,” described in **Exhibit 22**.

Exhibit 22

Fire-Rescue Collects Two Timestamps Associated With Measuring Turnout Time



Source: OCA generated based on interviews with Fire-Rescue personnel.

However, Fire-Rescue stated it does not regularly use its data to measure turnout time performance. According to Fire-Rescue, both timestamps have challenges, but “Time Enroute by First Moving” is the more reliable option of the two. Fire-Rescue stated the “Time Enroute by First Moving” timestamp also has its limitations. For the GPS timestamp to record, the GPS in each vehicle must be connected to a satellite and have a cellular connection. Sometimes it takes a few seconds for the vehicle to connect, which according to Fire-Rescue, can cause a delay of about 10–20 seconds in some cases. However, based on our analysis of Fire-Rescue’s current turnout time performance, even if the 10–20 seconds were removed from the overall turnout time to account for the delay, fire units would still exceed the established standard by at least 1 minute.

Best practices recommend governments establish and monitor performance measures to assess outcomes.

The Government Finance Officers Association (GFOA) recommends governments identify, track, and communicate performance measures to monitor service delivery, program outcomes, and community conditions. To identify performance measurements, the GFOA recommends measures meet certain conditions, including:

- **Useful:** The measure should provide information that is helpful to decision-making and accountability efforts.
- **Reliable:** Collection methods and performance measure definitions should be understood by stakeholders.
- **Consistent:** Performance measures should be regularly tracked to assess outcomes over time and avoid the need to identify new performance measures.

When communicating performance measures, the GFOA emphasizes the importance of communicating the information both internally and externally. For internal communication, the GFOA recommends governments to communicate:

- The performance measures’ purpose and expectations of how the information will be used for decision-making;
- The data integrity, meaning defining the source of the data; and
- Information on how the data is interpreted or used to draw conclusions.

As already mentioned, our review of overall emergency response data revealed that of all the phases of the emergency response process, turnout time performance presents opportunities for Fire-Rescue to enhance its performance. To do so however, as a first step, Fire-Rescue should determine how to best calculate and track turnout time performance for its fire units.

Without a consistent metric by which to measure turnout time performance, Fire-Rescue is unable to hold fire crews accountable.

According to Fire-Rescue, it does not perform turnout time analysis by fire station or fire unit because firefighter personnel have previously questioned and pushed back on turnout time accuracy. We found that inconsistent evaluations of Fire-Rescue's turnout time performance have been observed in previous reports, including the 2017 Citygate report, which provided inaccurate turnout times due to the authors' use of a less accurate method.²⁷

Fire-Rescue does not consistently hold crews accountable for turnout times above internal standards and instead relies on dispatch staff to flag prolonged turnout times above 4 minutes for supervisory review. These instances may be shared with the battalion chief of the corresponding stations and addressed on a case-by-case basis. However, Fire-Rescue does not appear to analyze the outcomes for these cases. Given that the majority of turnout times are considerably longer than Fire-Rescue's standard, Fire-Rescue should consistently monitor turnout times across stations and reduce reliance on dispatch staff to flag high turnout times.

According to Fire-Rescue, the key to holding fire crews accountable is to set a baseline for each fire station by which the department can set expectations, and performance can be continuously measured.

According to Fire-Rescue, the key to holding fire crews accountable is to set a baseline for each fire station by which the department can set expectations, and performance can be continuously measured. Fire-Rescue stated that it is fair to assess fire crews on an individual basis to see if they deviate from their baseline as a fire station. Because each fire station is built differently and operates under slightly different conditions, establishing a baseline by which to be evaluated by is important. As mentioned earlier, our review of turnout time found that

²⁷ The 2017 Citygate report determined that Fire-Rescue's turnout time performance was 1 minute and 28 seconds and concluded that Fire-Rescue's turnout time goal of 1 minute and 30 seconds was a realistic goal. Fire-Rescue stated that authors of the 2017 Citygate report used the "Time Enroute by Status" timestamp rather than "Time Enroute by First Moving," which is considered a slightly better measure. According to Fire-Rescue, external contractors typically rely on the "Time Enroute by Status" timestamp, even when informed that Fire-Rescue captures a more precise GPS-based timestamp known as "Time Enroute by First Moving."

turnout time performance by fire station varies, therefore establishing a baseline would help Fire-Rescue understand realistic performance and set expectations to hold its firefighter personnel accountable.

Like Fire-Rescue, other benchmark jurisdictions are also underperforming with turnout time but have improved outcomes by monitoring the situation.

We found that benchmark jurisdictions are also not meeting their turnout time goals. To address this issue, some jurisdictions monitor performance more regularly to better understand the underlying issues and take appropriate action. Examples of actions taken by other jurisdictions include:

- Orange County Fire Authority (OCFA), which has an internal turnout time goal of 2 minutes or less, stated it looks at turnout time performance by fire crew and aims to improve performance by raising awareness, educating fire crews about the importance of staying under the acceptable turnout time standard, and holding its personnel accountable, which at times involves a call from the battalion chief. OCFA emphasizes to fire personnel the importance of staying under the acceptable turnout time and taking personal accountability.
- Oakland Fire previously monitored performance by fire unit across different shifts and incident type and compared turnout times for medical and fire calls. The results were reported internally to raise awareness on slow performance.
- San Jose Fire analyzes turnout time by fire company and provides the data to the staff leading each fire company to improve performance.²⁸ San Jose Fire stated that sharing this information has been an impactful practice.

²⁸ Per the National Fire Protection Association (NFPA), a fire company refers to a group of fire personnel under direct supervision, trained and equipped to perform assigned tasks and organized and identified as engine, ladder, and rescue.

Monitoring and comprehensive reporting on its emergency response performance can help Fire-Rescue inform its budgetary requests to City leadership.

As discussed in **Topic 2**, more comprehensive reporting of emergency response data presents opportunities for Fire-Rescue to provide a narrative to City leadership on its current performance and inform additional resource requests. Specifically, as it relates to measuring turnout time, Fire-Rescue stated that there are vehicle telematics packages that can be installed to fire apparatus to provide a more accurate measure. However, with all phases of the emergency process, including turnout time, not currently reported by Fire-Rescue, City leadership may be unaware of the underperforming areas and the opportunities that exist to improve the City's emergency response times.

2026 Recommendations:

To ensure Fire-Rescue better tracks its performance for turnout time and ensure staff accountability, we recommend:

Recommendation 2.1

(Priority 2)

The Fire-Rescue Department (Fire-Rescue) should add the following reporting elements, and any others that Fire-Rescue deems essential, to the annual report specified in Recommendation 1.1:

- a. An overview of the emergency response process;
- b. High-level summary statistics, including total call volume, incidents by type, turnout and travel times by fire stations;
- c. Emergency response times by area, such as Council Districts and Community Planning Areas, to identify areas with slower response times and high call volumes; and
- d. Performance of peak hour engines, including total number of calls responded to, areas responded to, types of calls responded to, and the impact of the peak hour engines on permanent fire units.

Management Response: Agree. [See full response beginning on page 56.]

Target Implementation Date: March 2027

Recommendation 2.2

(Priority 2)

The Fire-Rescue Department (Fire-Rescue) should establish an internal policy that standardizes a tracking and evaluation method for turnout time and disseminate it to Fire-Rescue personnel. Fire-Rescue should also consistently track turnout time for each fire station and fire unit and report on these times in its annual report as noted in Recommendations 1.1 and 2.1.

Management Response: Agree. [See full response beginning on page 56.]

Target Implementation Date: March 2027

Appendix A

Definition of Audit Recommendation Priorities

The Office of the City Auditor maintains a priority classification scheme for audit recommendations based on the importance of each recommendation to the City, as described in the table below.

While the City Auditor is responsible for providing a priority classification for recommendations, it is the City Administration’s responsibility to establish a target date to implement each recommendation, taking into consideration its priority.

The City Auditor requests that target dates be included in the Administration’s official response to the audit findings and recommendations.

PRIORITY CLASS*	DESCRIPTION
1	Fraud or serious violations are being committed. Significant fiscal and/or equivalent non-fiscal losses are occurring. Costly and/or detrimental operational inefficiencies are taking place. A significant internal control weakness has been identified.
2	The potential for incurring significant fiscal and/or equivalent nonfiscal losses exists. The potential for costly and/or detrimental operational inefficiencies exists. The potential for strengthening or improving internal controls exists.
3	Operation or administrative process will be improved.

* The City Auditor is responsible for assigning audit recommendation priority class numbers. A recommendation that clearly fits the description for more than one priority class shall be assigned the higher priority.

Appendix B

Audit Objectives, Scope, and Methodology

Objectives

In accordance with the Office of the City Auditor's Fiscal Year (FY) 2025 Audit Work Plan, we conducted a re-review performance audit of the Fire-Rescue Department (Fire-Rescue) Emergency Medical Dispatch Process. Our audit included the following objectives:

1. Evaluate the efficiency and effectiveness of Fire-Rescue's emergency response process to determine whether it balances its limited resources with the need to respond quickly to high-priority calls for service; and
2. Determine whether Fire-Rescue uses its dispatch data to evaluate the efficiency, effectiveness, and equity of emergency response operations, performance, and resource allocation, and assess the adequacy and completeness of dispatch performance reporting to the public and City leadership.

Scope

Our analysis focused on Fire-Rescue's emergency response process for medical emergencies within the City from FY2023 through FY2025, specifically from the initial dispatch to arrival time. This audit focused on the emergency medical dispatch and response times for the most emergent medical incidents, classified as Level 1 medical and traffic accidents, responded to by San Diego fire units, classified as fire engines and trucks. While there are additional variables that affect the emergency response process that we could not account for due to time constraints and data limitations, we only evaluated emergency medical incident and response data within our scope period (FY2023 through FY2025) and used this data to make assumptions about the previous process which was operationalized in FY2019 prior to our scope period. For analysis comparing the current and previous dispatch process, we set data parameters to evaluate incidents where an ambulance and fire unit were both dispatched and both arrived.

This scope did not include an analysis of the San Diego Police Department's role in the City's emergency response process, ambulance response times, the City's contract with Falck and American Medical Response (AMR), or staffing within the Emergency Command and Data Center and fire stations.

Methodology

To evaluate the efficiency and effectiveness of Fire-Rescue's emergency response process and determine whether it balances its limited resources with the need to respond quickly to high-priority calls for service, we:

- Reviewed applicable emergency response process laws and policies, such as:
 - Fire-Rescue emergency response policies, procedures, and Drill Manual
 - Operational Area Emergency Operation Plan
- Reviewed previous relevant OCA performance audit on Fire-Rescue's Emergency Dispatch Process (2012), confidential IT audit of Fire-Rescue's Emergency Response Management, and relevant documentation from the 2012 audit, such as recommendation follow up.
- Reviewed studies and audits of other fire departments' emergency dispatch and emergency response conducted in the following jurisdictions:
 - Austin, TX
 - Berkeley, CA
 - Long Beach, CA
 - Sacramento, CA
 - San Jose, CA
 - Santa Clara County, CA
 - Seattle, WA
- Interviewed key staff and stakeholders:
 - City of San Diego Fire Chief
 - Former Assistant Fire Chief of Emergency and Business Operations
 - Deputy Chief of Employee Services
 - Deputy Fire Chief of the Emergency Command and Data Center (ECDC)
 - Fire Dispatch Administrator
 - Fire-Rescue's CAD Program Manager
 - Staff of four City of San Diego Councilmember Offices on the Public Safety Committee
 - Local 145 representatives
 - Fiscal and Policy Analyst with the Office of the Independent Budget Analyst
 - City's Medical Director
- Reviewed the City's 2011 and 2017 Citygate Reports on the Standard of Coverage and the 2017 Metro Zone Emergency Command and Data Center (ECDC) report.
- Analyzed FY2023 through FY2025 incident data to determine the percent of medical incidents in which a fire unit was assigned and calculated fire unit cancellations under the current emergency dispatch process.

- Evaluated FY2023 through FY2025 incident data to determine annual incident count and percentage by incident type.
- Evaluated incident data to evaluate call processing performance for FY2023 through FY2025.
- Analyzed FY2023 through FY2025 data to determine the average dispatch delay to assign a fire unit to incidents starting as Level 0 medical and triaged as Level 1 medical and traffic accidents. The analysis also evaluated ambulance and fire unit response times to determine percentage of time in which a fire unit arrived to an incident before the ambulance and calculated average response times for ambulance or fire unit with and without the estimated dispatch delay time.
- Reviewed information provided by the San Diego Police Department on the number of 911 emergency calls receive each year and number of incidents transferred to Fire-Rescue.
- Reviewed data on Fire-Rescue's call pickup response rates by fiscal year from FY2023 through FY2025.
- Reviewed documentation on Fire-Rescue's pilot dispatch process and outcomes resulting from the adoption of the current dispatch process.
- Reviewed documentation on Fire-Rescue's adoption of RoboCAD, an automated capability to reduce call processing time.
- Conducted a site visit of the Emergency Command and Data Center to observe the dispatch process and interviewed dispatch staff on site.
- Reviewed San Diego Police Department's Computer Aided Dispatch (CAD) contract.
- Reviewed research studies on emergency dispatch processes.

To determine whether Fire-Rescue uses its dispatch data to evaluate the efficiency, effectiveness, and equity of emergency response operations, performance, and resource allocation, and assesses the adequacy and completeness of dispatch performance reporting to the public and City leadership, we:

- Reviewed national, State, and local standards on emergency response times from:
 - National Fire Protection Association (NFPA)
 - National Emergency Number Association (NENA)
 - California Office of Emergency Services (Cal OES)
 - City of San Diego's General Plan Public Facilities, Services and Safety Element
 - Fire-Rescue's Standard Operating Guidelines
- Benchmarked Fire-Rescue's emergency response process and performance with comparable jurisdictions in California:
 - Fresno, CA
 - Long Beach, CA

- Los Angeles, CA
- Oakland, CA
- Orange County Fire Authority (OCFA)
- Sacramento, CA
- San Jose, CA
- Reviewed documentation provided by benchmark jurisdictions including annual reports, internal policies, and previous studies.
- Analyzed FY2023 through FY2025 response data to evaluate turnout time performance for Level 1 medical and traffic accident incidents for San Diego fire engines and trucks only, excluding outliers, by incident type (medical versus fire incidents), by fire station, and determined turnout time compliance percentage compared to internal and external standard.
- Analyzed FY2023 through FY2025 response data to evaluate travel time performance for Level 1 medical and traffic accident incidents for San Diego fire engines and trucks only, excluding outliers, by calculating travel time and determining compliance percentage with internal and external standard.
- Evaluated FY2023 through FY2025 total response time performance for Level 1 medical and traffic accident incidents for the first arrived San Diego fire engines or trucks, by Council District and determined compliance rate for arrival time standard as a whole and by Council District.
- Evaluated performance for Engine 80 in FY2025 to gain understanding of the volume of incidents it responded to and coverage areas while in service.
- Reviewed Fire-Rescue's annual incident summaries from calendar years 2021 to 2024.
- Reviewed Fire-Rescue's annual budget Key Performance Indicators (KPIs) from FY2009 through FY2011 and FY2020 through FY2025 to identify changes since the 2012 audit.
- Reviewed Fire-Rescue's budget from FY2020 through FY2025 to determine instances when peak-hour engines were added or removed from the budget.
- Reviewed medical journals and studies on community socioeconomic characteristics and emergency response performance and impacts of timely emergency response times.
- Reviewed best practices on establishing and reporting of performance measures from the Government Finance Officers Association.
- Interviewed staff from the Race and Equity Office regarding equity in the emergency response process and response times.

Data Reliability

We primarily worked with incident and emergency response data provided by Fire-Rescue from Computer Aided Dispatch (CAD) and ProQA systems. We assessed the reliability of these datasets by reviewing existing information about the data and systems that produced them and by interviewing Fire-Rescue staff knowledgeable about the data. We determined that the data were sufficiently reliable for the purpose of responding to our objectives.

Internal Controls Statement

We limited our review of internal controls to specific controls relevant to our audit objectives, described above. We tested the following controls:

- General controls related to the data systems used for the dispatch process and data tracking;
- Oversight, monitoring and reporting of emergency response data; and
- Policies and procedures on the emergency response process and standards and best practices on emergency response times.

Compliance Statement

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.



THE CITY OF SAN DIEGO

M E M O R A N D U M

DATE: March 3rd, 2026

TO: Andy Hanau, City Auditor, Office of the City Auditor

FROM: Robert Logan, Chief, Fire-Rescue Department

SUBJECT: Management Response to the Office of the City Auditor's Performance Audit of the Fire-Rescue Department's Emergency Dispatch Process

This memorandum serves as the management response to the Performance Audit of the Fire-Rescue Department's Emergency Dispatch Process (Performance Audit). At the time this response was written, the draft Performance Audit provided to management contained two findings and three recommendations. Department staff and management appreciate the Performance Audit prepared by the Office of the City Auditor and thank the staff involved.

The department agrees with the Performance Audit's findings and addresses each recommendation in this response. It is important for the reader to understand and carefully consider our (Auditors and Department) mutual agreement that the process of emergency services call-taking, dispatching, unit assignment, medical call triage, resource positioning and allocation, emergency unit performance, and arrival processes is a complex system. Analysis of performance improvement can be challenging to predict accurately in this complex system, and the department agrees that continued review and stakeholder communication of performance metrics, which can be followed up with system improvement proposals, are vital obligations.

It is also important that the reader recognize that the timeline from a 911 emergency call to the arrival of an emergency unit involves many variables, processes, and levels of urgency in a highly resource-constrained environment. Any proposed future system changes should be carefully considered, with specific measures identified and regularly reviewed to validate actual improvements, ensure patient safety, and monitor for potential adverse effects.

Performance measures reviewed with all stakeholders in mind should always be carried out in the *context of the factors that affect those measures*, whether those factors be the ever-increasing volume of 911 calls or the ability to maintain or improve the necessary equipment and personnel levels to serve them. The department addresses this renewed approach in answer to the auditor's recommendations.

RECOMMENDATION 1.1: The Fire-Rescue Department (Fire-Rescue) should create an internal policy that requires the production of an annual report on the emergency response process and performance. The policy should require Fire-Rescue to annually present the report to the Public Safety Committee. The report should, at minimum, include the items listed below and compare data year-over-year to identify performance trends:

- a. The first year’s report should include a discussion of Fire-Rescue’s current dispatch process in comparison with its process prior to 2018, delays in response times associated with the current process, and why the current process is selected;
- b. Cancellation rate of fire units on medical calls;
- c. Performance for each phase of the emergency medical response process from call pickup to time arrived (i.e., time from call answered to dispatch of an ambulance, time from call answered to dispatch of a fire unit);
- d. Percentage of medical incidents involving fire unit dispatch;
- e. Any future emergency response process changes and accompanying rationale;
- f. All the elements described in Recommendation 2.1; and
- g. Any other information Fire-Rescue believes is essential, such as the results of a pilot study that tests operational changes to its dispatch processes.

Management Response: Agree with the recommendation.

Target Implementation Date: 1 Year, to be performed by March 31, 2027. The department proposes addressing each of the identified metrics, PLUS to provide additional metrics and statistics that give readers an opportunity to evaluate relevant context for any proposed changes in service delivery strategies. Because this response proposes additional factors, we believe one year to develop this product is a reasonable timeframe for the required staff work.

RECOMMENDATION 2.1: The Fire-Rescue Department (Fire-Rescue) should add the following reporting elements, and any others that Fire-Rescue deems essential, to the annual report specified in Recommendation 1.1:

- a. An overview of the emergency response process;
- b. High-level summary statistics, including total call volume, incidents by type, turnout and travel times by fire stations;
- c. Emergency response times by area, such as Council Districts and Community Planning Areas, to identify areas with slower response times and high call volumes; and
- d. Performance of the peak hour engines, including total number of calls responded to, areas responded to, types of calls responded to, and the impact of the peak hour engines on permanent fire units. (Priority 2)

Management Response: Agree with the recommendation.

Target Implementation Date: 1 Year, to be performed by March 31, 2027, as stated in the previous recommendation, the annual report shall provide context and additional measures/statistics for reviewers and will require development time.

RECOMMENDATION 2.2: The Fire-Rescue Department (Fire-Rescue) should establish an internal policy that standardizes an evaluation method for turnout time and disseminate it to

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March 3rd, 2026

Fire-Rescue personnel. Fire-Rescue should also consistently track turnout time for each fire station and fire unit and report on these times in its annual report, as noted in Recommendations 1.1 and 2.1. (Priority 2)

Management Response: Agree with the recommendation.

Target Implementation Date: 1 Year, to be performed by March 31, 2027, as stated above, this product is closely tied to the previous recommendations.

Thank you for the opportunity to provide responses to these recommendations. Management appreciates your team's professionalism throughout this review.

Thank you,

Robert Logan

Robert Logan
Chief, Fire-Rescue Department

cc: Honorable City Attorney Heather Ferbert
Paola Avila, Chief of Staff, Office of the Mayor
Charles Modica, Independent Budget Analyst
Rolando Charvel, Chief Financial Officer, Office of the Mayor
Scott Wahl, Chief, Police Department
Rania Amen, Chief Community Services Officer & City Engineer, Office of the Mayor
Kris McFadden, Chief Infrastructure Officer, Office of the Mayor
Bethany Bezak, Chief Performance & Logistics Officer, Office of the Mayor
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