



# **TO:** HONORABLE MAYOR AND CITY COUNCIL

FROM: Robert Sapien, Jr.

FIRE DEPARTMENT COUNTY SUBJECT: EMS RESPONSE TIME PERFORMANCE UPDATE

**DATE:** December 20, 2018

Approved Date 12.20-11 **INFORMATION** 

# SUMMARY

The Fire Department has realized significant response time improvements, despite increasing emergency call volume and traffic congestion which continue to challenge the Department's resources. Notably, the Department has exceeded the County Emergency Medical Services (EMS) 90 percent compliance standard for eight consecutive months from April to November 2018. Additionally, 2018 is the third consecutive year of improved County EMS response time compliance as indicated in Chart 1 below.

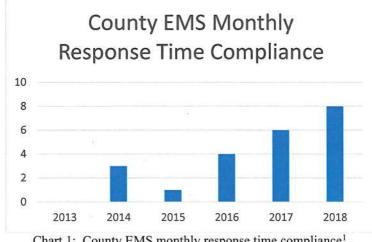


Chart 1: County EMS monthly response time compliance<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> Chart 1 indicates number of months in each calendar year where response time performance met or exceeded the 90% minimum requirement. 2018 data does not include the month of December.

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## BACKGROUND

In mid-2013, the Department initiated actions to address substandard response time performance and in early 2014 developed its comprehensive Response Time Work Plan. The work plan included strategies to improve response time performance under the City established response time standard and response time performance requirements specified in the County EMS first responder agreement. The work plan sought to achieve improvements in each of the measured components of response time including call processing time, turnout time, and travel time through improvement of data and reporting, refinement of 911 dispatch work flows, technology improvements, improved operational efficiency, workload management, and post-recession resource restoration.

The Fire Department provides semi-annual reporting on emergency response times performance metrics and progress on response time performance improvement strategies to the Public Safety, Finance, and Strategic Support Committee. The most recent semi-annual report including a Response Time Work Plan update was provided on October 18, 2018<sup>2</sup>.

Fire Department response time performance is measured against two standards. First, the City established standard is met when a responding resource arrives within 8 minutes for Priority 1 (red lights and sirens) emergencies and within 13 minutes for Priority 2 (no red lights and sirens) emergencies. The City established response time standard is measured from receipt of the 911 call at Fire Communications to arrival on scene by the first Fire Department resource. The Priority 1 and Priority 2 response time standards are met when the Department arrives within the required times 80% of the time.

The second response time standard is established under the 911 Emergency Medical Services Provider Agreement between the City of San José and the County of Santa Clara. Under this agreement, the Department must arrive on scene within 7 minutes, 59 seconds (7:59) for red lights and sirens responses<sup>3</sup> and within 12 minutes, 59 seconds (12:59) for non-red lights and sirens responses. The County EMS response time standard is measured from when the responding unit is alerted (point of dispatch) to arrival on scene. Monthly, the Department must meet the County EMS response time standard 95% of the time to receive full first responder funding and at least 90% of the time for minimal compliance.

### ANALYSIS

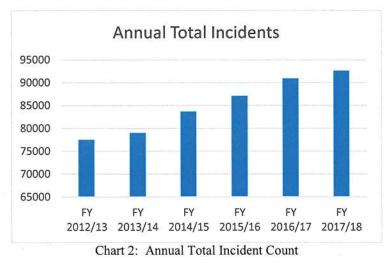
As the Department has advanced the Response Time Work Plan, system performance challenges have continued to mount. In FY 2012-2013 the Department responded to 77,481 incidents whereas in FY 2017-2018 incidents exceeded 92,587 as indicated in Chart 2 below.

<sup>&</sup>lt;sup>2</sup> Fire Department Emergency Response Times Performance Semi-Annual Report (PSFSS 10/18/2018)

<sup>&</sup>lt;sup>3</sup> 911 Emergency Medical Services Provider Agreement between the City of San José and the County of Santa Clara defines code of response as either red lights and sirens or non-red lights and sirens.

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Increased call volume can be equated to increased resource utilization or conversely decreased resource availability. Decreased resource availability results in an increase in the number of instances where resources must respond to incidents outside of their assigned response areas to cover for unavailable resources. The result is an increase in the number of late responses.

In addition to increasing call volume, field operations personnel have observed increased traffic congestion over time. Slower traffic movement and especially congested intersections increase travel times for responding resources.

Despite conditions challenging Department response time performance, the recent sustained performance above the County EMS 90 percent standard suggests that Response Time Work Plan strategies are resulting in improved system performance. This current trend is highlighted in Chart 3 below.

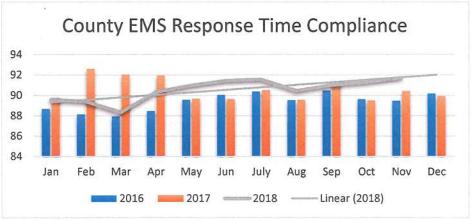


Chart 3: 2016-2018 County EMS Code 3 Compliance (per month)

Tables 1 and 2 below provide monthly performance data for 2018 and 2017. Calendar year 2018 data reflects sustained response time performance improvement under both the City Priority 1

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and County EMS standards, including eight consecutive months above the County EMS Code 3 compliance standard (90% standard) from April through November 2018. While the City Priority 1 compliance standard (80% standard) has not yet been met, the Department continues to advance response time improvement strategies. The Emergency Vehicle Preemption solution was fully deployed in November 2018 and the Department is initiating steps toward implementing the closest unit dispatch strategy, which is anticipated to be completed in early 2020. Measure T, an infrastructure bond measure passed by voters in November 2018, will enable construction of three additional fire stations in the coming years.

				Janu	ary to De	ecember	2018				
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1923		2 222 250	City	Priority	1 Comp	liance (80	0% Stand	lard)	24-54.00	a prise	
71.08	72.34	70.88	72.16	73.86	73.62	72.29	72.79	74.06	75.17	72.94	N/A
			County	EMS Co	de 3 Cor	npliance	(90% Sta	andard)*		1	
89.60	89.39	88.32	90.31	90.95	91.43	91.55	90.49	91.00	91.27	91.69	N/A

\*Compliance standard reflects performance reported to County EMS adjusted for allowable exemptions. Table 1: Calendar year 2018 City Priority 1 and County Code 3 Compliance

January to December 2017											
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
City Priority 1 Compliance (80% Standard)											
68.96	75.64	75.80	75.26	70.70	69.46	69.80	70.64	71.43	68.47	72.05	70.23
County EMS Code 3 Compliance (90% Standard)*											
89.76	92.57	92.04	91.95	89.86	89.64	90.50	89.57	91.15	89.51	90.43	89.91

\*Compliance standard reflects performance reported to County EMS adjusted for allowable exemptions. Table 2: Calendar year 2017 City Priority 1 and County Code 3 Compliance

The most recent response time performance improvements in both the City Priority 1 and County EMS Code 3 performance measures were realized in the turnout and travel time segments. Turnout time improvement is attributable to installation of countdown clocks in fire stations providing real-time feedback to responders as they don appropriate personal protective equipment prior to responding, and due to availability of performance data made available by analytical support onboarded in early 2018. As was mentioned above, Emergency Vehicle Preemption has been activated at 896 intersections across the City as of mid-November 2018, in cooperation with the Police and Transportation Departments. Preemption "green lights" traffic signals for responding police and fire vehicles. With the preemption solution now deployed, the Department has received positive feedback from field personnel and expects that data will reflect improvement in the travel time segment.

From July 1, 2016 to June 30, 2017 the City was ineligible for first responder funding under the 911 Emergency Medical Services Provider Agreement for failure to meet response time requirements. In 2017, the agreement was amended to provide funding on a monthly basis under the EMS Resource Management category (Annex B, Category A), and under the Response Time Performance category (Annex B, Category B) for each month that the City achieved the 90% standard. For the 2017-2018 performance period the City received 100% of funds available

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under Annex B, Category A, or \$1,257,083; and approximately 40% of available funds under Annex B, Category B, or \$737,638. In 2018-2019 the City will again be eligible for 100% of Annex B, Category A funds, and has already qualified for funding for each of the first five months under Annex B, Category B.

# CONCLUSION

The Department will continue to advance its Response Time Work Plan toward maximizing efficiency and effectiveness in the mitigation of emergencies across the City. To build on the safety benefits gained through the EVP solution, the Department will also launch a "Pull to the Right for Sirens and Lights" campaign in January 2019, which will seek to educate the public about the importance of pulling over when emergency vehicles are approaching.

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

For questions, please contact Robert Sapien, Jr., Fire Chief at (408) 794-6952.