STAFF REPORT

DATE: **May 28, 2024**

FROM: **Nathan Cooke, Director**

TO: **Administrative Committee**

SUBJECT: Adopting Dispatch Processing Time Standards

Recommendations:

1. Adopt 911 call pickup and call processing time goals for CONFIRE communication center as outlined in Attachment A.
2. Monitor the progress toward meeting the established goals through regular evaluation and reporting of call processing times to CONFIRE's administrative staff and dispatchers.

Background

As a secondary Public Safety Answering Point (PSAP), the services offered by CONFIRE communications represent the first step in providing emergency medical and fire services to 911 callers in San Bernardino County. Therefore, it is crucial that the processing of these 911 calls is efficient, accurate, and prompt. This includes call pickup time (interval between Primary PSAP call transfer and phone pickup at CONFIRE), and call processing time (911 call pickup by CONFIRE to first unit dispatched).

Because time is critical in the 911 response continuum, emphasis is often given to the promptness in which calls are processed. Organizations such as NFPA, National Emergency Number Association (NENA), and the International Academies of Emergency Dispatchers (IAED) address recommendations for secondary PSAP 911 call pickup and call processing times as follows:

NENA: NENA's document titled "Standard for 911 Call Processing" (Sec. 020.1-2020) outlines a maximum call pickup time of 15 seconds or less on 90% of calls. Their standard makes reference to call processing time guidelines but does not specify a time standard.

NFPA 1710: This standard mirrors NENA's call pickup time of 15 seconds or less on 90% of 911 calls. 1710 goes further with the general recommendation for call processing of 64 seconds on 90% of 911 calls. However, they make exceptions for certain conditions, such as the use of EMD, language translation, TTY, and other call situations. In these conditions, the standard is changed to 90 seconds on 90% of the calls.

IAED: IAED recognizes the need for expedient dispatch processing but stops short of providing a specific time standard. Their position has traditionally been to focus on quality as the efficiency metric, not a time standard.

It should be noted that the 2020 version of NENA's Standard for 911 Call Processing document states that their research found no evidence of a scientific basis for the selection of the metrics used by either NENA or NFPA. As such, their recommendation is that agencies use these metrics as a foundation for performance while engaging in evidence-based evaluations of their capabilities and desired outcomes to develop appropriate goals and policies.

It should also be noted that a 2022 analysis by NFPA's Fire Protection Research Foundation found that PSAPs are generally unable to process calls within the time prescribed by NFPA standards. Furthermore, very few PSAPs in their study adopted NFPA standards for call processing due to their inability to reasonably achieve the prescribed times.

Even so, both agencies recommend that some form of time standard is adopted and measured as part of best practices. Based on their research, agencies who follow a written standard experienced significantly lower call processing times than agencies who do not adopt and/or measure a standard[1].

Previous Action by CONFIRE

In 2020, CONFIRE adopted a call pickup time goal of ten seconds or less on 90% of 911 calls. This standard has been met or exceeded each month for over two years. Also in 2020, CONFIRE adopted a call processing goal of 90 seconds or less on 90% of "High Priority" calls for service. This was amended in 2022 to clarify "High Priority" using NFPA standard 1221's guidance of applying the time standard only to calls that CONFIRE deemed to be time sensitive (acute medical, working or suspected working fires, rescues, etc.). Calls that are excluded from the call processing time calculations are shown in Attachment B.

Meeting the 90-second call processing time goal has proved to be challenging. Overall call processing times for calendar year 2023 (using high priority calls only) was at 3 minutes, 3 seconds or less on 90% of the calls. This is 103% higher than CONFIRE's goal and NFPA 1710 recommendations of 90-seconds or less on 90% of emergency calls.

Based on staff's research, CONFIRE's difficulty in meeting these goals and recommendations is not uncommon for most fire communication centers. It is clear, however, that agencies that establish and abide by reasonable call processing time goals experience higher levels of efficiency and expediency in processing 911 calls. For these reasons, staff recommends that

[1] Fire Protection Research Foundation found that while PSAPs that adopted NFPA's processing time standard were still performing at twice the time of the recommended standard, those that did not took roughly 500% longer than the standard. One of the noted limitations of the study was that too few PSAPs were adequately tracking their times.

CONFIRE adopt call processing goals that are based on severity of the call and the center's capacity to process calls with accuracy and consistency.

An ad hoc committee of CONFIRE staff developed these goals using industry best practices, broader organizational goals, and historical data. As shown in Attachment A, the call processing time goals are aligned with the potential severity of each category of calls, the complexity of processing these calls, and the capacity of the communications center to handle call volumes and surges.

As Attachment A shows, the percentage of dispatchers currently meeting the proposed time goals is relatively low. Improving these times will require a focus on organizational processes and procedures, as well as individual performance. The committee felt that one of the key elements of continuous improvement will be to monitor the center's performance, make necessary adjustments to the process, and give regular feedback to individual dispatchers on their performance. As more attention is given to these areas it is expected the center will meet the established goals. It is also expected that any organizational elements that are impeding progress towards these goals will be identified and corrected through the monitoring process. As progress is made, there may be an opportunity to realign the goals more aggressively with higher individual performance and organizational efficiency.

Fiscal Impacts

There are no direct fiscal impacts associated with adopting the recommendations in this report.

Attachment A

Proposed Dispatcher Call Pick up and Call Processing Time Goals

911 Call Pickup Time		
Call Type	Percentage of Calls Answered in 10 seconds or less*.	Proposed 90th Percentile Goal
All 911 Calls	92%	0:00:10

*Call pickup times are captured through the State 911 system using ECaTS. This platform reports by percentage compliance, not specific time intervals.

EMS Call Processing		
Determinant Code	**Current 90th Percentile Call Pickup to 1st unit Assigned**	**Proposed 90th Percentile Goal**
Echo	0:01:52	0:01:30
Delta	0:02:38	0:02:30
Charlie	0:03:11	0:02:30
Bravo	0:03:26	0:03:00
Alpha	0:03:37	0:03:00
Omega	0:03:10	0:03:00
EMS No Determinant Code	0:02:27	0:02:00

Fire/Rescue Call Processing		
Fire/Rescue Call Type	**Current 90th Percentile Call Pickup to 1st unit Assigned**	**Proposed 90th Percentile Goal**
Structure Fires (Priority 10 calls)	0:02:40	0:02:30
Non-Structure Fires (Priority 2 calls)	0:02:41	0:02:30
Alarms/Investigations (Priority 3 calls)	0:02:20	0:03:00

Attachment B

Calls Deemed Non-Emergent for Purposes of Call Processing Time Calculations Per CONFIRE Adoption of NFPA 1221

ABD-A1	CPR-O1x	MOVUP
ABD-A2	CPR-O1y	MU - Mutual Aid Requested
ABD-A3	CPR-O1z	OD-O1
ABD-O1	CVA-A1	OD-O1A
ABD-O2	CVA-A1c	OI - Outside Investigation
ALL-A1	CVA-A1j	PS - Public Service
ALL-A1i	CVA-A1l	Psy - Psychiatric/Abn Behavior
ALL-A1m	CVA-A1u	PSY-A1
ALL-A2	CVA-A1x	PSY-A2
ALL-A2m	DIA-A1	PSY-A3
ALL-O1	DIA-O1	PSY-B1
ALL-O2	DRWN-A1	PSY-B2
ANML-A2	ELEV-RQ - Elev Rescue w/o inj	PSY-B3
ANML-A3	EYE-A1	PSY-B4
ANML-A4	EYE-A2	PSY-B5
ANML-O1	EYE-A3	PSY-B6
ANML-O2	EYE-O1	PSY-O1
ANML-O3	EYE-O2	PSY-O2
AO -Aircraft Crash off Airport	FALL-A1	PSY-O3
AS - Aircraft Standby	FALL-A1e	PSY-O4
ASLT - Assault	FALL-A1g	RA - Residential Alarm
ASLT-A1	FALL-A1p	RQ - Rescue
ASLT-A2	FALL-A2	RR - Railcar Incident
ASLT-A2a	FALL-A2a	SICK-O1
ASLT-A2s	FALL-A2g	SICK-O10
ASLT-A3	FALL-A2p	SICK-O11
ASLT-A3a	FALL-A3	SICK-O12
ASLT-O1	FALL-A3g	SICK-O14
ASLT-O2	FALL-A3p	SICK-O15
AT - Ambulance Transport	FALL-A4	SICK-O17
BACK-A1	FALL-A4a	SICK-O18
BACK-A2	FALL-A4g	SICK-O19
BIRTH-A1	FALL-A4p	SICK-O2
BIRTH-A1m	FALL-O1	SICK-O20
BIRTH-O1	FALL-O2	SICK-O21

BIRTH-O2	FU - Unknown Type Fire	SICK-O22
BT - Bomb Threat	FWI - Fireworks Investigation	SICK-O23
BURN-A1	GAT -Alarm Testing	SICK-O24
BURN-A1e	GBP - Burn Permit	SICK-O25
BURN-A1w	GCC - County Comm Incident	SICK-O26
BURN-A3	GEM - Emergency Medical Inc	SICK-O27
BURN-A3e	GFM -Facilities Management Inc	SICK-O28
BURN-A5	GHZ - Hazardous Materials Inc	SICK-O3
BURN-A5e	GIT - IT Incident	SICK-O4
BURN-O1	GLAW - Law Enforcement Inc	SICK-O5
CA- Commercial Alarm	GLL - Loma Linda City Inc	SICK-O6
CARE TRANSPORT	GMI - Miscellaneous Gov Inc	SICK-O7
CHOKE-A1	GMU - Out-of-System Mutual Aid	SICK-O8
CHOKE-A1c	GPH - Public Health Incident	SICK-O9
CHOKE-A1f	GRD - Road Department Inc	SP - Fuel Spill
CHOKE-A1m	GRF - Referral Incident	STAB - Stabbing
CHOKE-A1o	GSW - Gunshot Wound	SWTR - Swift Water Rescue
CHOKE-A1u	GWX - Weather Incident	TRAUMA-O1
CHOKE-O1	HCE-O1	TRAUMA-O2
CI - Commercial Investigation	HEAD-O1	TRB - Training Burn
CO - Carbon Monoxide Alarm	HL-O1	WS - Water Salvage
CP-A1	HL-O2	ZAP - Outside Elec Incident
CP-O1	HL-O3	
CPR-O1	HZ - Hazardous Materials	
	IN - Inside Investigation	
	INH-O1	