ORANGE COUNTY FIRE AUTHORITY P. O. Box 57115, Irvine, CA 92619-7115 • 1 Fire Authority Road, Irvine, CA 92602-0125



Brian Fennessy Fire Chief

(714) 573-6000

www.ocfa.org

Attachment 3

August 12, 2022

The Honorable Erick L. Larsh Presiding Judge Orange County Superior Court 700 Civic Center Drive West Santa Ana, CA 92701

Honorable Erick L. Larsh,

The Orange County Fire Authority Board of Directors has reviewed the Grand Jury report titled "Where's the Fire? Stop Sending Fire Trucks to Medical Calls" during a Special Meeting held on August 11, 2022. The Board has reviewed and authorized this formal response from our agency.

As an emergency response system provider, and also as stewards of taxpayers' dollars, the Orange County Fire Authority (OCFA) continuously reviews the programs it provides to the communities served, and the methods for service delivery. We appreciate the time and effort the Grand Jury has dedicated to the citizens of Orange County in the pursuit of fair governance.

If I may be of service in the clarification of this response, please let me know.

Sincerely,

Brian Fennessy Fire Chief

cc Orange County Grand Jury

Serving the Cities of: Aliso Viejo • Buena Park • Cypress • Dana Point • Garden Grove • Irvine • Laguna Hills • Laguna Niguel • Laguna Woods • Lake Forest • La Palma • Los Alamitos • Mission Viejo • Rancho Santa Margarita •San Clemente • San Juan Capistrano • Santa Ana • Seal Beach • Stanton • Tustin • Villa Park • Westminster • Yorba Linda • and Unincorporated Areas of Orange County

Page Reserved for Board Minutes Reflecting Formal Action

Background and History of EMS and Paramedicine

The evolution of present-day Emergency Medical Services (EMS) began in the early 1960's. Experiments in Belfast, Ireland and Toronto, Canada highlighted the benefits of providing advanced medical care to cardiac patients in the field environment. To accomplish this, ambulance personnel and medical interns were utilized. The benefits of "medical care in the field" were further underscored in a published 1966 report entitled, *Accidental Death and Disability: The Neglected Disease of Modern Society*, which revealed a disturbing but illuminating paradox: Seriously injured American soldiers on the battlefields of Vietnam actually had a better survival rate than seriously injured motor vehicle accident victims on California highways.

These studies revealed a number of important factors leading to enhanced survival rates among the soldiers versus auto accident victims: comprehensive trauma care, rapid transport to designated trauma centers, and a new type of trained technicians — an Emergency Medical Technician (EMT) Paramedic. Medics for short, these personnel were trained in and adept at performing advanced life support (ALS) skills in the field such as fluid replacement, advanced airway control, medications, and other life-saving techniques.

With this groundbreaking information in hand, California became ground zero in the development of the Emergency Medical Services System in the 1970s. Medical experts recognized and embraced the delivery of EMS as a component of public safety, and the fire service was selected by medical experts to lead the EMS charge for a variety of reasons: The fire service had the most experience in delivering, planning, and managing public safety challenges; the fire service was uniquely positioned to provide the delivery of EMS services due to already-established and strategically-located personnel, facilities, and equipment needed to render those services quickly and efficiently.

At the dawn of the decade — July 14, 1970 — California Governor Ronald Reagan signed into law the Wedsworth-Townsend Act, creating legislative authority to establish the paramedic program in California. This led to similar programs across the nation, making California an innovator of, and authority in, best practices in the EMS arena. Many of these best practices began with the then-Orange County Fire Department (OCFD) and other local city fire departments that had both the required infrastructure and personnel in place to take the lead. Accordingly, on January 8, 1973, the County of Orange established its first paramedic training class through a cooperative agreement with the University of California, Irvine Medical Center. The OCFD had five personnel in that first class, which graduated on July 13, 1973¹.

On August 2, 1973, the first OCFD paramedic unit was placed into service at Fire Station #22 in Laguna Hills. Through 1975, twenty-two additional OCFD personnel were trained as paramedics. In 1975, three additional OCFD paramedic units were placed into service in Cypress, Tustin, and Placentia. As the OCFD implemented the paramedic program throughout the decade, the private ambulance industry was also evolving. As a critical component of the pre-hospital care delivery system, the emergency transportation network grew from a small cottage industry to the present-day integrated component of the EMS delivery system.

The fire-based paramedic program expanded through the decade, and by 1977, six additional paramedic units were put into service within OCFD jurisdiction, serving the cities of Irvine, Villa Park, San Juan

¹ For simplicity, we refer to the fire service provider throughout this historical background as the "Orange County Fire Department;" however, these fire services in Orange County were fulfilled by contract with the State Department of Forestry until 1980, when the provision of fire service was formally transferred to the County, establishing the Orange County Fire Department. As such, some of the contract city transition dates are noted as 1980, even though those cities began contracting for county-service prior to 1980 via the State Department of Forestry's contract with the County.

Capistrano, Mission Viejo, and South Laguna. This brought the number of OCFD paramedic units to a total of 10.

The evolution of emergency medical services by the OCFD continued in the 1980s, including the establishment of both the countywide 9-1-1 system and Emergency Medical Technician (EMT-Basic) training for all OCFD first responders. Concurrently, an emergency medical dispatch program was created to train dispatchers to provide valuable lifesaving instructions over the phone as part of the chain-of-survival system focus. Acknowledging the importance of both EMS quality assurance and support of the EMS mission, the OCFD established the Emergency Medical Services Section in 1987.

As the need for emergency medical services grew in Orange County, so did the OCFD. The recognition of the many benefits of a regional-based provider of fire and emergency medical services led to many Orange County cities seeking out the system to reduce their costs and increase operational efficiencies. Soon, new OCFD partnerships within the cities of Placentia (1980), Tustin (1980), Seal Beach (1982), Stanton (1987), Buena Park (1994), San Clemente (1994), Westminster (1995), Santa Ana (2012), and Garden Grove (2019) were formed.

Today, the now-Orange County Fire Authority (OCFA) serves a population of 1.9 million residents in 23 cities and the unincorporated areas of Orange County, a service area that encompasses 587 square miles across 77 fire stations and staffing 57 paramedic units (with 2 paramedics and 2 basic life support [BLS] firefighters on each unit), 4 paramedic assessment units (1 paramedic), and 14 BLS units (with at least 3 emergency medical technicians per unit). Utilizing dual-function, cross-trained firefighter paramedics versus single-function paramedics maximizes efficiency and cost effectiveness while maintaining required fire protection service level standards. This is regarded by many experts throughout the state as one of the premier (and only) systems for delivering not one, but two paramedics (exceeding the county-wide requirement of 1) to the side of the patient in the shortest time possible.

The importance of two paramedics cannot be overstated, particularly on the many life-threatening ALS emergencies we tend to. To be clear, when four OCFA firefighters arrive on a paramedic unit for any medical call, all are incredibly busy performing various tasks – but none more important than the work of the two paramedics on an ALS call. With an already-ingrained synergy established from working the same unit, these two medical professionals perform in tandem, accomplishing life-saving tactics that cannot be performed simultaneously by one medic. For example, as one intubates the patient, the other administers medications, saving priceless minutes and countless lives.

Responses to Grand Jury Findings & Recommendations:

F1. Despite fire departments throughout Orange County having evolved into emergency medical departments, most have not updated their emergency response protocols accordingly, but have simply absorbed emergency medical responses into their existing fire response models.

OCFA respectfully disagrees with the finding. The delivery model of EMS within Orange County and throughout the State of California has continued to change and evolve to keep pace with an ever-growing population, advances in technology, and increasing community expectations. The deployment of EMS resources has specifically changed numerous times over the last decade, including a variety of technological advances such as LUCAS device Chest Compression System, EPCR-IPAD patient-charting system, and cardiac monitors that now take vital signs on demand.

Another powerful example of the evolution of OCFA's EMS response protocols is the configuration of our Paramedic service delivery model. Going back to 2000, OCFA had a total of 24 Paramedic Units out

of our fleet of 77 Units (Engines, Trucks, and Vans). Today, we have reconfigured that model with a total of 74 Paramedic Units out of our fleet of 82 total Units, which is a 171% increase in paramedic units. This dramatic evolution has created greater efficiency in our service delivery model, and today, OCFA is arguably one of the fastest agencies in the state to put two paramedics to the side of a patient.

F2. Despite use of a tiered dispatch system, OCFA's deployment of resources for medical response are the same for nearly all calls, resulting in unnecessary wear and tear on expensive firefighting equipment and public infrastructure.

OCFA partially disagrees with the finding. To provide the best possible patient care and outcome, the OCFA deploys best practice EMS service delivery by dispatching the "closest and most appropriate" emergency resource response services to all medical aids. During the 911 call triage process, dispatchers are continuously evaluating the accuracy and efficacy of the information being received. If patient acuity is not clear, best practice for pre-hospital caregivers is to dispatch an ALS response. Empirical data has over the course of many years demonstrated this to be in the best interest of patient care and resource management.

The OCFA has no documented experience or examples of unnecessary wear and tear on firefighting equipment or public infrastructure.

F3. ALS staffed ambulances or smaller squad vehicles are often the most appropriate response to medical calls and do not compromise the quality of medical care.

OCFA disagrees with the finding. No empirical data or studies exist that demonstrate ALS-staffed ambulances or smaller squad vehicles are the most appropriate response to medical calls. Industry best practice is to respond as rapidly as possible, delivering two trained and ALS certified paramedics to the side of a patient(s), with additional trained and BLS-certified EMT's and ALS/BLS equipment to appropriately manage patient acuity level. OCFA is arguably one of the fastest agencies in the state (among both private and fire-based ALS service providers) to put two paramedics to the side of a patient.

ALS-staffed vans and squads are smaller but must abide by the same driving laws governing emergency response as larger first responder units. No data or studies exist that demonstrate the smaller the size of a unit results in a "faster" response. ALS and BLS service delivery in Orange County is not being compromised because of fire apparatus response.

F4. There has been a breakdown of communication and trust between OCEMS and Orange County Fire Chiefs.

OCFA partially agrees with the finding. The OCFA Fire Chief, who is also a member of the Orange County Fire Chiefs Association (OCFCA), acknowledges and respects the regulatory authority of OCEMS. However, it is the moral obligation of the OCFA Fire Chief to communicate directly and candidly with OCEMS if the data indicates that their policy direction may adversely compromise patient care and outcome.

The OCFA Fire Chief has shared with the County of Orange and OCEMS leadership that OCEMS is not, nor has ever been, considered an "emergency response" organization. As a result, OCEMS management and staff lack the subject matter expertise and experience required to manage the day-to-day operation, in real-time, of a patient transportation system. Of course, OCEMS management and staff do possess the subject matter expertise to appropriately manage and address regulatory matters, an area in which we defer to their advice and authority.

Communication and trust between two individual OCEMS managers and the OCFCA members have degraded over the past 3-4 years. The OCFCA members have been open about their perspective on many issues and have offered these two OCEMS managers means in which communication and trust could be restored. While there is still trust-building work to be done, overall communications remain intact as evidenced by the many regulatory policies being discussed and agreed to by the County's fire-based ALS service providers. It is, however, the view of the OCFA Fire Chief that open dialogue and collaboration between the two agencies can be improved further, and OCFA remains committed to working collaboratively with OCEMS to manifest that progress.

The OCFA Fire Chief has forwarded a recommendation to the County CEO, the OC Health Care Agency (OCHCA) Director and OCEMS management to consider allowing the OCFA to partner with them by way of empowering the OCFA to manage the day-to-day patient transportation operational system in realtime. The OCEMS would continue to perform their statutory required regulatory responsibilities and obligations. As an emergency response system provider, the OCFA would provide the operational system level of expertise that does not currently exist within the four Exclusive Operational Areas (EOAs) that OCEMS is contractually responsible for. In concept, the OCEMS would continue to manage the contracts with the BLS private ambulance service providers while OCFA would manage the day-to-day operations of the EMS system within the four EOAs.

Such a partnership would not only improve upon the communication and collaboration between our agencies, but also empower us to leverage our respective subject matter expertise to better serve our communities.

F5. Over-deployment of firefighters for medical calls contributes to the current climate of forced hiring and firefighter fatigue.

OCFA disagrees with the finding. The OCFA does not "over-deploy" firefighters for medical calls. Further, the OCFA deployment model does not in any way contribute to force hiring practices. Force hiring is utilized to maintain minimum staffing due to vacant positions, special assignments, and employees on approved leave. The OCFA does not utilize force hiring to over-staff behind firefighters on medical calls.

F6. Code 3 response is over utilized by OCFA, unnecessarily putting the responders and public at risk.

OCFA partially agrees with the finding. In advance of the Grand Jury Report being released, OCFA EMS & Training had already developed a pilot program implementing "no-code" lights & siren response for medical aids that, in the view of the 911 dispatchers, leave no doubt that patient acuity level is low and that lack of a "code" lights & siren response will not compromise patient care or outcome.

The OCFA Fire Apparatus Engineer Academy includes a comprehensive driver training course and examination. Further, all OCFA personnel that may be required to drive OCFA apparatus are licensed by the State of California. As professionally trained and experienced fire apparatus driver/operators, the OCFA does not consider its first responders or the public at risk when responding apparatus "code" or "no-code" to emergency and non-emergency incidents.

F8. There are specific areas within Orange County, such as Laguna Woods and Seal Beach, that have an extremely high percentage of medical calls which, under the current model, results in the stations servicing those communities to require two engines.

OCFA agrees with the finding. There are specific areas within Orange County that OCFA serves, such as Laguna Woods and Seal Beach, that because of being located in or around high density retired and/or assisted living care communities, represent a higher-than-average percentage of medical calls within OCFA's jurisdiction.

F9. OCEMS has the authority and responsibility to inspect all for-profit ambulances operating in Orange County; however, publicly-owned ambulances are not automatically subject to OCEMS oversight.

Not applicable to OCFA. The OCFA does not provide patient transportation services in Orange County.

R1. As recommended in the 2012 and 2014 OCFA Standards of Coverage and Deployment Plans, as well as other studies, the Grand Jury recommends that by 2024, all fire agencies utilize criteria-base dispatch protocols and send a single unit response to those incidents triaged as non-life-threatening (BLS). F1, F2, F5

This recommendation will not be implemented because it is not warranted, reasonable, or applicable due to the fact that it is already consistent with current OCFA practice. Criteria-based dispatch has been in place in the OCFA for over 20 years. All calls that come in through 911 are screened and put through an Emergency Medical Dispatch protocol that has been approved by the Medical Director of OCFA and is in constant review by a team that includes the Medical Director, a nurse, a dispatch supervisor, and the dispatch manager. This also includes the review of numerous data points. OCFA continues to send the closest, most appropriate resources to emergency responses on every call. The majority of emergency medical responses within OCFA receive a single OCFA unit response and a private ambulance for transport of the patient. One example of an exception would be traffic collisions with injury(s) where extrication of a patient(s) could be required.

In the 2011-2012 Orange County Grand Jury Report (Emergency Medical Response) it was recommended that the "current emergency response models should be re-evaluated by independent outside consultants." Further, "this re-evaluation should consider the strengths, weaknesses, opportunities, and threats to the economics and operations of both the OCFA and city fire department's emergency response models." Based on experience then and now, the OCFA believes continued EMS system improvement is an obligation of both government and private EMS service providers. The residents and visitors of Orange County and all EMS service providers and stakeholders expect and deserve to be provided the highest level of EMS pre-hospital care.

R2. By 2024, OCFA should station a paramedic squad vehicle, which is more nimble and less costly to operate, in place of a second engine in stations with high volumes of medical calls. F8

<u>This recommendation will not be implemented because it is not warranted or reasonable.</u> This recommendation represents a firefighter safety concern. Specifically, it compromises National Fire Protection Agency (NFPA) 1710 response time and safe fire ground staffing standards. The recommended deployment model is not consistent with fire-based EMS best practices.

No data, studies, or experience exist that demonstrate a *"more nimble"* or *"less costly"* paramedic squad vehicle results in improved patient care and outcome.

R3. – OCFA should immediately stop the practice of requesting Code 3 responses on all non-life threatening (BLS) calls. F6.

This recommendation will not be implemented because it is not warranted or reasonable. The practice of OCFA requesting BLS ambulances to respond Code 3 to all non-life threatening BLS calls began shortly after identifying ambulance response time performance having significantly declined. 911 private ambulance service providers had been grossly under-performing in terms of not meeting their OCEMS contract emergency response time performance requirements. As a result, OCFA ALS units were spending significantly more time unavailable at scene of a BLS incident thus causing ALS delivery service delays within the OCFA service area.

The intent was for the practice to be short term and only until more 911 private contract ambulances were made available every day by one of the EOA contract private ambulance service providers. It was hoped that improved private contract BLS ambulance arrival at scene would allow OCFA ALS response units to return to service more rapidly. The longer an OCFA ALS unit remains unavailable at scene of a BLS medical aid waiting for a contract ambulance to arrive, the longer the ALS unit is unable to respond to genuine ALS emergencies where a delayed response could result in a delay in pain management care, further injury and/or death.

This practice was discontinued when 911 private contract ambulance response time performance improved to a point where other transportation modalities (transport by paramedics in patient vehicles, fire apparatus, etc.), were no longer being considered. When comparing before and after the short-term policy was implemented, it was determined that ambulance response time performance marginally improved. This represented another reason the practice of requesting BLS ambulances to respond Code 3 to all medical aids was discontinued.

While there has been improvement in 911 ambulance response time performance within three of the four County EOA's, OCEMS 911 contract ambulance response time performance compliance is still not being met.

R4. While OCEMS should recognize how certain policy changes may pose operational challenges to emergency response in the field, fire leadership should recognize and respect the independent oversight authority and expertise of OCEMS. F4

This recommendation has been implemented. The OCFA does recognize how certain policy changes may pose operational challenges to emergency response in the field and OCFA fire leadership further recognizes and respects the independent oversight authority and expertise of OCEMS. However, as one of Orange County's Advanced Life Support (ALS) service providers, the OCFA has a professional obligation to challenge changes in policy that represent a decreased level of ALS service delivery within its service areas.

R5. Departments with publicly-owned ambulances should allow OCEMS to inspect their ambulances for compliance with State EMS guidelines and adopt OCEMS recommendations. F9

<u>This recommendation will not be implemented because it is not applicable.</u> The OCFA does not provide patient transportation services in Orange County.