


Date: April 13, 2023

To: Thomas B. Modica, City Manager 

From: Dennis Buchanan, Fire Chief 

For: Mayor and Members of City Council

Subject: **Update on the Fire Department's Basic Life Support Ambulance Operations**

The Fire Department provides critical ambulance services for the safety, health and wellness of the Long Beach community. This memo will provide an overview of the department's Basic Life Support ambulance operations, which is a front-line community service fulfilled by the Ambulance Operator classification. This overview includes budget, staffing, workload data, and regional factors that impact ambulance operations.

Basic Life Support Ambulance Operations

The Fire Department (FD) provides two levels of ambulance services: Basic Life Support (BLS) and Advanced Life Support (ALS). In the City of Long Beach (City), ALS services are provided by Firefighter Paramedic personnel. Patients receiving ALS services require a higher level of medical monitoring and can include patients who need IV drips, chronic ventilator access, cardiac monitoring, and medication. With advanced medical training and certifications, ALS personnel help stabilize patients while transporting them to the appropriate medical center.

BLS ambulance operations include patient response and ambulance transport for patients to medical emergency departments (EDs), such as local hospital emergency rooms. BLS services include transportation of patients in stable condition or with basic traumatic injuries (e.g. a broken leg).

BLS ambulance operations are provided by Ambulance Operators, the classification used by the City describing personnel who hold Emergency Medical Technical (EMT) licenses, Health Care Provider CPR cards and an Ambulance Driver DMV Certification. Job duties for the Ambulance Operator classification include, but are not limited to, transporting to hospitals or other emergency care facilities, operating an emergency vehicle to and from the scene of an emergency, assisting paramedics and other emergency medical personnel in providing emergency medical and health care, and providing emergency medical care to the ill and injured within the scope of an EMT. Ambulance Operators are assigned to 24-hour shifts or 12-hours shifts and are expected to perform job duties over the entirety of a shift. In the City, part-time non-career Ambulance Operators are compensated \$17.095 per hour while full-time classified Ambulance Operators are compensated between \$16.926 and \$18.126 per hour in

Fiscal Year 2023 (FY 23). These hourly rates equal an annual salary of \$35,341 and \$37,847, respectively.

FD has been budgeted for 26 classified Ambulance Operator full-time equivalents (FTEs) since FY 07. The budgeted 26 Ambulance Operator FTE positions, when filled by employees, support three 24-hour BLS units and two 12-hour BLS units daily. This equates to 10 total positions filled by Ambulance Operator personnel daily. In FY 23, out of the Fire Department's \$154 million budget, \$1.7 million is budgeted for Ambulance Operator personnel.

When budgeted positions are vacant or when there is a lack of personnel to staff all shifts, the process to fill shift vacancies include requesting Ambulance Operators to voluntarily work extra shifts on overtime or they are called-in to work mandatory overtime shifts. If shifts cannot be filled, certain BLS units are placed out of service.

Over the past 10 years, there has been an overall increase in calls for BLS ambulance response. Over the past five years, BLS unit response decreased in 2020, during the beginning of the COVID-19 pandemic, but since then workload has steadily increased. Please see Table 1 for a 10-year summary of BLS unit response activity.

Table 1: Summary of BLS Unit Response Activity for the Past Five Years

Calendar Year	Total Unit Responses	Year over Year Increase
2013	20,941	N/A
2014*	13,124	-37%
2015*	10,138	-23%
2016	22,768	125%
2017	22,894	1%
2018	22,636	-1%
2019	22,972	1%
2020	20,427	-11%
2021	22,618	11%
2022	23,221	3%
2023 YTD	6,180	
*Note: In 2014 and 2015, the FD piloted the Rapid Medic Deployment (RMD) program, which paired Ambulance Operators with Paramedics. Due to this temporary program, BLS unit response numbers are lower when compared to other years due to RMD.		

911 calls for ambulance services are received by dispatchers assigned to the Department of Disaster Preparedness and Emergency Communications. Based on the circumstances for the call, dispatchers request a BLS or ALS unit to the calling party. BLS or ALS response is determined based on county standards for response, otherwise referred to the local Emergency Management Services agency (LEMSA) protocols.

While BLS unit response has increased, Ambulance Operator retention is also a challenge. The Ambulance Operator classification is an entry-level position. Individuals who fill this role often transition out of this classification to pursue firefighter, medical or other professions that have enhanced professional and compensation growth opportunities.

FD is also experiencing a high rate of attrition of its classified Ambulance Operator personnel. Table 2 shows the six recent cohorts of classified Ambulance Operators. Ambulance Operator candidates respond to annual or bi-annual Civil Service application invitations, which results in certified Civil Service hiring lists. Candidates hired from the Civil Service list participate in a 2-week Ambulance Operator Academy process. All candidates from the same list begin employment at the same time and have the same hire date.

Table 2: Overview of Ambulance Operator Hiring and Attrition

Hire Date	Candidates Hired	Employees Attrition	Currently Employed
6/25/2022	31	13	18 BLS
10/02/2021	8	8	0 BLS
04/10/2021	8	7	1 BLS
11/14/2020	33	29	(2 FF) 4 BLS
04/04/2020	12	12	(1 FF) 0 BLS
01/08/2020	14	14	(1 FF) 0 BLS
Employees hired before 2020	Unavailable	Unavailable	2 BLS
Total	106	83	25 BLS

To augment full-time Ambulance Operator staff, FD also employs non-career Ambulance Operators who serve on a part-time basis and under limited hour thresholds. Currently, FD employs 14 full-time classified Ambulance Operators and 11 non-career Ambulance Operators.

National, State and Regional Trends Impacting BLS Ambulance Operations

Since the COVID-19 pandemic, research and studies released over the past few years have pointed to a noticeable and national shortage of medical professionals. This shortage also includes Emergency Medical Technicians (EMTs), which is the general national term for personnel who serve as Ambulance Operators. The American Ambulance Association conducted a study and noted a 36 percent turnover rate for full-time EMTs based on 2022 data from 119 EMS organizations. Additional 2022 data findings identified that in 2022, one-third of EMTs resign from their positions during their first year of employment which supports the trends observed by the FD.

As part of the State-wide effort to monitor patient care at medical EDs, the State of California Emergency Medical Services Authority (State EMSA) defines the time metrics, such as the Ambulance Patient Offload Time (APOT), which is the time interval between the arrival of an

ambulance patient at an emergency medical department and the time the patient is transferred to the emergency medical department's gurney, bed, chair or other acceptable location. Once this transfer has occurred, the medical emergency organization assumes the responsibility for care of the patient. The State EMSA also mandates the collection of APOT data from local emergency medical service agencies to compare APOT times and data throughout the State. Longer APOT wait times is a growing trend throughout the State. Per a statement released by the California Hospital Association in 2022, hospital ED volume over the last seven years has increased by 42 percent. Hospitals are facing severe staffing shortages as COVID-19 has depleted the nation's health care workforce. These larger labor and health factors are general reasons that hospitals and emergency medical organizations are citing for APOT increases.

At the State level, Assembly Bill 40 (AB 40) has been introduced in the current legislative session that would establish a statewide, 20-minute standard 90 percent of the time for APOT. New legislative amendments would require hospitals to develop, file, and annually update APOT reduction protocols with the State. If a hospital does not meet the 20-minute APOT standard, the State EMSA would be required to host weekly calls with individual hospitals to discuss implementation of APOT reduction protocols.

Over the past 6 months, City's FD BLS units have completed 5,138 patient transports, roughly averaging between 800 to 900 patient transports per month. Over the past 6 months, 1,771 of these patient transports have yielded an APOT of greater than 45 minutes. Accordingly, approximately 34 percent of BLS patient transports require Ambulance Operators to remain at a medical EDs for at least 45 minutes while waiting for the patient to transfer from LBFD care to the receiving medical ED.

The rate of pay for EMTs/Ambulance Operators have been cited at both the national and regional level as a reason for labor shortages. Table 3 below provides a snapshot of CLB Ambulance Operator/EMT pay, schedules, and workload minimums to provide a broader view of regional trends.

Table 3: BLS Ambulance Operations City Comparison

Jurisdiction	Hourly Pay	Schedule	Full-Time vs. Part-Time Staffing Model	Required Shifts/Month	Experience Required
Long Beach	\$16.93 to \$18.126	4/6 Platoon*	Full-Time and Part-Time	6 shifts + overtime	No
Huntington Beach	\$15.00 to \$17.00	48 hours and 96 hours	Full-Time and Part-Time	8 shifts	No
Glendale	\$16.43 to \$19.42	48 hours and 96 hours	Full-Time and Part-Time	2 shifts	No
Torrance	\$15.00	48 hours and 96 hours	FT and Peak Part-Time	No minimum	No

Culver City	\$16.00	One 24 Hour shift per week	Full-Time Only	1 shift per week	No
*Note: 4/6 Platoon Schedule consists of a set of 24-hour shifts every other day for 7 total days (4 x 24-hour shifts, with a day off in between each), followed by 4 days off and then 6 days off the next set.					

Summary of April 2, 2023 BLS 16 Incident

The BLS 16 vehicle collision occurred on April 2, 2023, at approximately 0500 hours in which BLS 16 struck a utility pole. BLS 16 is a 24-hour shift unit. The average calls per shift in CY 2022 for BLS 16 was 12.41 calls. On the day of the collision, BLS 16 responded to 19 calls, with four calls occurring between midnight and 0500 hours. Eleven calls during the shift resulted in APOT, which resulted in BLS 16 waiting over 20 minutes to transfer a patient from FD care to the medical ED. The average APOT time during this shift was approximately 30 minutes until BLS 16 could clear the medical ED location. In addition to these factors, both of FD's 12-hour BLS ambulances were out of service due to a shortage of staffing, thereby increasing call load on the entire City BLS system.

Opportunities and Solutions

The FD has been working over the past year to pursue many new approaches and opportunities to address challenges facing both ALS and BLS ambulance operations. The FD is currently working on the following initiatives:

- In partnership with the Human Resources Department, the City is conducting surge hiring for non-career Ambulance Operators. This has been a multi-month process and the FD is currently preparing to hire 43 new non-career BLS personnel. The expected Academy graduation for these candidates is planned for June 2023.
- Onboarding these new candidates will provide a larger pool of employees to work BLS shifts and reduce the amount of overtime shifts worked by the FD's current 14 full-time classified Ambulance Operators and 11 part-time non-career Ambulance Operators.
- With the additional 43 non-career employees, FD anticipates being able to place additional 12-hour and/or 24-hour BLS units into service as staffing is available. It is important to note that additional 12-hour BLS units are not budgeted in the department's FY 23 current appropriation.
- FD is working with labor group partners to explore cross-filling Ambulance Operator shifts with other classifications that hold the EMT certification. This is considered a short-term solution to support BLS ambulance operations while the onboarding of 43 non-career Ambulance Operator proceeds through June 2023.
- In partnership with Civil Service, a recruitment will be released in May to onboard classified Ambulance Operators to fill existing positions.

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- FD has submitted a request for a larger than normal Fire Recruit Academy in August 2023. Increasing staffing among the Firefighter sworn ranks will supplement Paramedic staffing challenges.
- Paramedic services through ALS ambulance units have been sustained. To sustain ALS services, FD has 20 Firefighters currently participating in a multi-month Paramedic education program, which is the State requirement for serving on an ALS ambulance unit. These 20 Firefighters are expected to activate as Paramedics within the 2023 calendar year.
- The department is evaluating new technology-based tools to assist the community with emergency health assessment. Specifically, the FD Medical Director is evaluating the feasibility of a Telehealth program and alternate destination medical receiving facilities to provide additional services to the community, enhance FD services and potentially reduce APOT.
- Stakeholder organizations that provide emergency medical response have partnered with the State legislature to educate the public on appropriate use of 911. AB 296 has been introduced in the current session to establish the 911 Public Education Campaign to educate the public on when it is appropriate to call 911. Some of the goals of the campaign would include reducing the number of unnecessary calls to 911 and reducing delays in the 911 system caused by nonemergency calls.
- In addition to the solutions listed above, FD is also exploring utilizing sworn department personnel to temporarily staff BLS units particularly during peak hours of service.

In spite of these challenges, the FD's emergency response continues to serve our community. If you have any questions, please contact me at (562) 570-2509.

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