



RALPH M. TERRAZAS
FIRE CHIEF

July 24, 2018

BOARD OF FIRE COMMISSIONERS
FILE NO. 18-080

TO: Board of Fire Commissioners

FROM:  Ralph M. Terrazas, Fire Chief

SUBJECT: FAST RESPONSE VEHICLES/ADVANCED PROVIDER RESPONSE
UNIT UPDATE

FINAL ACTION:	<input type="checkbox"/> Approved	<input type="checkbox"/> Approved w/Corrections	<input type="checkbox"/> Withdrawn
	<input type="checkbox"/> Denied	<input type="checkbox"/> Received & Filed	<input type="checkbox"/> Other

SUMMARY

The Los Angeles Fire Department (LAFD) has implemented specialized Emergency Medical Services (EMS) resources, including the Fast Response Vehicles (FRVs) and the Advanced Provider Response Units (APRUs). These resources have been shown to improve the timeliness and quality of patient care, while simultaneously improving operational efficiency by increasing the availability of other LAFD resources.

On September 21, 2015, the LAFD's first FRV was placed into service. It was initially funded through the Mayor's Innovation Fund as a six month pilot project. The goals of the FRV were to decrease response times, provide more rapid treatment for patients with time-critical medical emergencies, and perform on-scene triage and thus cancel fire companies and paramedic ambulances when appropriate. The FRVs are modified brush patrol vehicles. These are multi-purpose rigs which carry a full complement of basic and advanced life support equipment and medications, and also carry water and hoses for fire suppression.

As part of our innovative efforts to more efficiently provide the highest quality EMS service in the face of unprecedented demands for service, we introduced our first Nurse Practitioner Response Unit (NPRU) in January 2016. This novel field resource was staffed with a Firefighter/Paramedic (FF/PM) and a Nurse Practitioner (NP). LAFD's first Nurse Practitioner Response Unit (NPRU) went into service on January 4, 2016. The NPRU was renamed as an APRU, which consists of a FF/PM with either an NP or physician assistant (PA).

Through collaborations with local healthcare systems, the LAFD was able to expand the APRU program. On July 23, 2018, the LAFD will deployed three additional APRUs: AP7, AP58, and AP82.

RECOMMENDATION

That the Board:
Receive and file.

FINDINGS

Fast Response Unit

The primary purpose of the FRV is to ensure a rapid response to incidents requiring immediate intervention and also to provide immediate triage of patients. The FRV accomplishes these goals by providing a rapid ALS response and by its ability to replace and release other resources, making them available for other EMS and fire incidents. The LAFD currently operates FR9 downtown and FR91 in Sylmar. Of the incidents to which these resources are dispatched, 94% are primarily EMS and the remaining 6% are fire related. Since its inception, the FRVs have frequently been the first EMS resource on scene and initiated life-saving interventions. The FRVs have also been first on scene at multiple fire incidents and minimized fire damage as a result.

During the first six months of 2018, FR9 responded to 769 incidents, which corresponded to seven (7) incidents/shift, or 0.78 incidents/hour. This workload is higher than our Engine 9, which is one of our busiest engine companies in the City. FR91 responded to 362 incidents during this time frame, which was 4.8 incidents/shift, or 0.53 responses/hour.

The primary goal of the FRVs is to decrease response times to the most time-critical incidents. The response time for FR9 to Immediate Dispatches was three (3) minutes one second, which was 51 seconds faster than Engine 9; 42 seconds faster than Engine 209; one (1) minute nine (9) seconds faster than RA 9; and one (1) minute 11 seconds faster than RA 209.

FR91's response time to Immediate Dispatches was five (5) minutes 25 seconds, which was 26 seconds faster than Engine 91 and 30 seconds faster than RA 91.

Advanced Provider Response Unit

The APRUs are staffed with a FF/PM and an Advanced Provider (AP) (either Nurse Practitioner or Physician Assistant) and offer a broad range of capabilities outside of the paramedic scope of practice. Utilizing advanced training and diagnostic tools, APRUs offer three primary services:

1. Mobile urgent care with on-scene treatment and release of low-acuity patients.
2. Comprehensive assessment of 911 super-users and vulnerable patients with linkage to follow-up care and needed services.
3. On-scene medical clearance of mental health and intoxicated patients with the option of direct transport to a mental health urgent care facility or sobering center.

From January 2016 through September 2017 the APRU has responded to 1038 incidents, of which the APRU evaluated patients in 876 incidents. Of these 876 incidents, 756 (86%) were for low acuity patients, 20 incidents involved scheduled visit

with an LAFD 911-high utilizer, and 99 incidents were for patients with primary mental health complaints requesting psychiatric evaluation.

Of the 756 low-acuity 911-patients, 365 (48.3%) were treated and released on-scene by the APRU Nurse Practitioner; 381 (50.4%) were treated but required transport by another LAFD ambulance to the emergency department (ED); and 10 (1.3%) were transported non-emergency to the ED by the APRU team. Involvement of the APRU resulted in an average of 1.35 resources being released on scene.

In October 2017, AP15 was temporarily closed and the FF/PM and AP were detailed to staff the Med Cart at Los Angeles World Airport (LAX) for a trial program. AP15 was placed back into service in July 2018. On July 23, 2018, three additional APRUs were placed into service. The Emergency Medical Services Bureau (EMS Bureau) will be collecting metrics on all of our APRUs with a quarterly report to follow in October.

CONCLUSION

The specialized EMS resources (FRVs and APRUs) have given the LAFD the ability to provide more appropriate care to patients based upon their needs, while simultaneously increasing the availability of other LAFD resources. FRVs have significantly reduced response times to our most critical patients, and APRUs have been able to safely treat and release approximately 50% of their patients. We look forward to the success of the additional specialized resources to provide a more service-oriented and efficient EMS delivery system.

Board Report prepared by Marc Eckstein, M.D., Medical Director, Commander, EMS Bureau.