

Funding Highlights: January 2020 – May 2021

The Los Angeles Fire Department (LAFD) Foundation exists to fulfill the essential equipment, technology, and programmatic needs of our Los Angeles firefighters. This document highlights the Foundation's funding accomplishments from January 2020 to May 2021.

Every donated dollar truly makes a difference. In this timeframe, we provided **\$7,037,843** in funding for vital tools, equipment, and programs. The Foundation's ability to adapt to the challenges and uncertainty of this chaotic period would not have been possible without the generous support and goodwill from individuals, businesses, and foundations across Los Angeles.

COMBATING COVID | \$1,325,316

Before the world knew of COVID-19, the LAFD was answering 9-1-1 calls related to the coronavirus and transporting symptomatic patients to local area hospitals. In March of 2020, the city appointed the LAFD to oversee and manage the city's testing sites.

Testing - The LAFD managed the day-to-day operations and collaborated with the non-profit organization, CORE Response, to test approximately four million Los Angeles residents. Managing the testing sites, along with an uptick in emergency medical calls, left the LAFD with a critical need for personal protective equipment (PPE). By the end of March, firefighters were rapidly depleting the Department's inventory of PPE and other resources to prevent the virus from spreading.



At the peak of the pandemic, the LAFD was burning through over 10,000 N95 respirator masks, 17,000 surgical masks, and over 140,000 pairs of surgical gloves a week. Working alongside LAFD leadership, the Foundation helped to fundraise and identify new PPE equipment suppliers who had access to international supplies that could keep up with the Department's growing demands.

Vaccination Sites and Mobile Program - In December 2020, the LAFD took on the responsibility of administering the city's vaccination sites. As the vaccines became more readily available, the LAFD began transitioning the testing sites to serve as vaccination sites.

In March of 2021, the LAFD rolled out its mobile vaccination program to expand vaccine access in underserved communities. To date, LAFD personnel have helped administer more than 1,300,000 life-saving vaccinations.



WILDFIRE SEASON | \$1,781,878

The 2020 fire season was the most destructive in California's history. More than 9,600 fires burned 4,397,809 acres – the equivalent of four percent of the state's approximately 100 million acres of land. Fire season arrives earlier and earlier each year. These extreme conditions are lasting longer, producing a higher rate of incidents,

and placing immeasurable pressure on firefighters. Wildfire-related needs are now a year-round funding priority for the LAFD Foundation.

Emergency Fire Shelters - These personal fire shelters are deployed when the unthinkable happens and firefighters become overrun by flames. The fire shelters are light, compact, and quickly deployed. They are designed to reflect radiant heat, protect against convective heat, and trap breathable air within. Over the past two years, the Foundation has secured enough fire shelters for every firefighter assigned to wildfire duty.



Wildland Brush Tools - Clearing fire roads and creating natural barriers in anticipation of fire season can save homes and lives. The process is labor-intensive and exhausting. These light and durable hand tools are specially designed to help ground crews cut through tree limbs, clear brush overgrowth, and remove potential fuel sources. Over the past two years, the Foundation has outfitted more than 80 stations and Crew 3 (the LAFD's volunteer brush clearance crew) with these tool kits.

Skid Steers - The Caterpillar Skid Steer D3 is a small operating vehicle that can use multiple attachments to address specific needs. The primary use for this vehicle is to assist in brush clearance, aid in debris removal, and provide access and help with large animal rescue.



Skid steers are also useful for commercial fires that require extensive amounts of labor to extinguish. The LAFD Wildland Fuel Management Unit received two new skid steers in time for the impending fire season.

Bulldozer - Bulldozers are often the most overlooked and the least known firefighting tools outside of the Department. Thanks to generous community support, the LAFD Foundation was able to secure a new Caterpillar D5-GR bulldozer just in time for the Palisades Fire of May 2021.

The D5 is a small, nimble bulldozer that can traverse rugged terrain and scale hillsides at a faster and safer speed than its larger counterparts. The D5 can cut a fire line at a rate of one to eight miles per hour depending on the terrain and vegetation. This is especially crucial considering L.A.'s unique environments where many hillside neighborhoods border wildland with heavy vegetation and limited access roads.



FIREFIGHTER HEALTH & SAFETY | \$761,459

Fire Chief Ralph Terrazas' key priorities include protecting the physical and psychological health of LAFD firefighters, and reducing their risks of near and long-term health concerns. Mental health and cancer prevention are two of the Foundation's top funding priorities in this category.

Structure Fire Gloves - Each firefighter was equipped with two sets of structure fire gloves. These gloves are used during residential fires, commercial fires, and high-rise fires. Structure fires present some of the most challenging and dangerous working conditions imaginable.

High heat, flames, and toxic smoke from furniture and building materials create a risk-filled environment requiring the ultimate in fire protection. These new gloves offer maximum grip and dexterity while protecting against exposure to chemicals, carcinogens, heat, and direct flame.



Extractors - Firefighters inherently risk exposure to carcinogens, making them 14% more likely to die of cancer-related illnesses. The Foundation purchased 12 commercial-grade washers (extractors) to remove carcinogens and other harmful particulates from dirty turnout gear. Extractors purge toxins and contaminants with the power and speed of 100-Gs (one hundred times the force of gravity).

STATE-OF-THE-ART TECHNOLOGY | \$356,248

Given the breadth and scope of what the Department handles, the LAFD must have the most up-to-date technology. The Foundation works closely with LAFD leadership and specialty units to secure equipment that helps minimize threats to firefighters' safety, and save lives and property.

Firefighting Robot RS3 - The LAFD is the first fire department in the country to count a robotic firefighting vehicle amongst its apparatus. The Thermite RS3 is designed for deployment in a wide variety of scenarios, helps to minimize risks to firefighters in dangerous situations like high-rise fires, warehouse fires, tanker fires, refineries, recycling plant fires, and hazardous materials spills. The RS3 can flow 2,500 gallons per minute, is remotely operated, and provides high-definition video feedback for ultimate maneuverability under challenging conditions.



Satellite Phones and Communications Equipment - The LAFD's Community Liaison Office (CLO) manages communication with external audiences to ensure that critical information and messaging is disseminated to the public. Geographic barriers and telecommunications dead zones can hinder the LAFD's ability to communicate the need for immediate evacuation, provide warnings and other emergency public information (EPI).

The LAFD Foundation equipped the CLO team with satellite phones, dual sim iPhones, a mobile P.A. system, and upgraded routers. These items are highly effective communications tools when cellular coverage is at a minimum or non-existent, especially during fire season. The additional equipment augments the Department's ability to broadcast evacuation orders, press conferences, and pertinent public information clearly and effectively.

Drones - Last year, the LAFD began using Unmanned Aerial Systems (UAS), or drones, to enhance its brush clearance inspection process, which annually inspects over 145,000 parcels. Drones are useful in conducting inspections in hard-to-reach areas that are either locked in by other properties or inaccessible due to rough terrain.

In June of 2021, the LAFD received City approval to expand its drone program to survey residential areas in high-fire severity zones. Drones can now be used to identify any governmental or residential parcels that are in violation of brush fire regulations or parcels that do not have an ideal defensible space for brush fires. The two Autel Robotic EVO II Dual 640 drones used for these inspections were supplied by the Foundation.

The LAFD's UAS team is also beta testing a new type of drone system that tethers to a command vehicle or mobile console. These drones can be equipped with high-definition cameras, thermal (heat) imaging, gas monitoring sensors, and other tools that give incident commanders real-time data for improved situational analysis and decision making. This system allows operators to live stream mission-critical aerial views without the need for flight authorization from the Federal Aviation Administration (as currently required for all standard UAS drone flights).

Geographic Information Systems (GIS) Mapping - The GIS Mapping team supports the LAFD by providing full-time resources for mapping systems and technology. With new equipment funded by the Foundation, the GIS team now has three mobile workstations, a state-of-the-art plotter, and a widescreen display which can be set up on-demand to develop real-time maps that support fire perimeter updates, evacuation updates, and more.

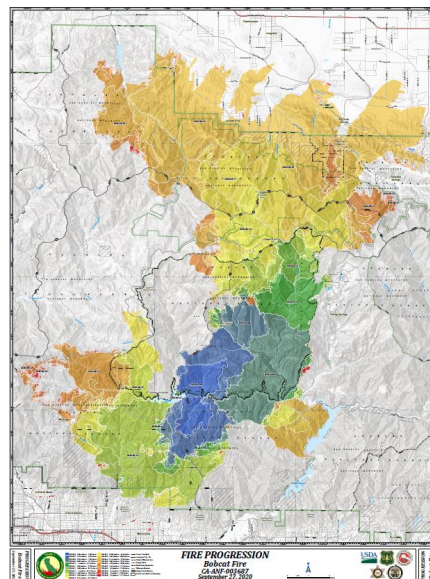
This mobility upgrade increases GIS operational efficiency while reducing downtime during the beginning stages of critical incidents. As an unforeseen bonus, the new GIS equipment has also been used in conjunction with the UAS Unit to create detailed site maps for COVID testing and vaccination sites.

ESSENTIAL TOOLS AND EQUIPMENT | \$247,400

The LAFD Foundation helps meet specific needs of the LAFD's specialty units, such as Air Operations, the Supply & Maintenance Division, the Fire Prevention Bureau, and widespread needs for the entire Department.

Air Operations Section - The Foundation helped cover the costs of two significant upgrades to the LAFD's fleet of multi-mission AW139 medium-duty helicopters - the first line of defense in combating large-scale wildfires. The first upgrade was the purchase of two snag-free hover pump modifications at \$45,000.

This upgrade increases a pilot's ability to hover while replenishing their water supply from fill stations, reservoirs, lakes, and various bodies of water throughout Los Angeles. The snag-free feature prevents the hover pump from inadvertently snagging or becoming entangled during hover-filling operations, making refilling faster, safer, and more efficient.



Bobcat Fire Progression Map. The Bobcat Fire burned 115,796 acres in the San Gabriel Mountains from Sept. 9 – Dec. 18, 2020.



The second upgrade consisted of modifications to the actual water tanks. More specifically, the systems and mechanisms involved with opening the tank doors to release its contents in a more controlled and uniform water column. A helicopter drop tank typically carries close to 350 gallons of water, adding more than 2,900 pounds to the aircraft's payload.

Pilots conducting the test drops with these upgrades were able to increase their flight speed by an average of 15 knots (17 miles per hour), significantly reducing some of the safety concerns faced with the current tank hardware. The modifications are scheduled to take place before the start of the 2021 fire season.



Jet Skis - Two Kawasaki 15F Series watercraft (jet skis) and a custom trailer were provided to the Swift Water Rescue Unit. Since the jet skis can operate in as little as two feet of water, they will be deployed in washes, channels, and side tributaries where a boat or rope system may not be an option. Funding was provided for both jet skis, equipment, a tow trailer, and upgrades to retrofit a second transport trailer. The acquisition of these jet skis ensures that the LAFD has the ability to outfit and deploy two complete Swift Water Rescue teams at a moment's notice.

Heavy-Duty Rescue Flashlights - In 2012, the Foundation purchased a heavy-duty flashlight for every member of the Department. Each year since then, the Foundation has continued to purchase flashlights for all LAFD academy graduates as they enter the field. These rugged, over-engineered lights were designed specifically to meet the LAFD rigorous performance standards, continue to be a firefighter's go-to tool in a wide range of incident types.



ADOPT-A-FIRE-STATION PROGRAM | \$ 1,113,561

Firefighters work 24-hour shifts. This means everyday kitchen essentials, laundry appliances, and exercise equipment at fire stations withstand use around the clock. The buildings themselves and everything within sustains substantial wear and tear. When an appliance, ceiling fan, or coffee maker breaks down, the firefighters are out of luck. Budget constraints and limited resource availability result in firefighters frequently shouldering the costs for repairs or replacements of basic items.

This is why the Adopt-a-Fire Station program (AAFS) exists. The AAFS program enables communities to give back to their local station, and to say thank you for the selfless service LAFD members provide each day. Donations can be designated to specific stations to address immediate needs or help improve general living and working conditions.

The Foundation allocated funds towards AAFS needs in 2020, including:

- Washers and dryers
- Power tools and hand tools
- Commercial-grade ice machines and kitchen appliances
- Treadmills, stationary bikes, free weights, and exercise equipment



EDUCATION & TRAINING

The LAFD Foundation provided funding for four vital recruitment and outreach programs administered by the Department. These programs offer teens and young adults the opportunity to explore careers in the fire service while they develop skills in leadership, teamwork, and overall confidence. The LAFD's youth programs provide an invaluable service to underserved communities, and act as a recruiting pipeline for future generations of the LAFD family. The programs supported include:

- **Cadet Program** - Designed for 14-20-year-old individuals who are serious about pursuing a career with the fire service.
- **High School Magnet Program** – Prepares Los Angeles Unified School District students for entry-level careers and post-secondary education in the field of Public Service.
- **Girls Camp** - Two-day workshops for young women to provide hands-on exercises, CPR training, leadership building skills, and insight into pursuing fire service careers.
- **Youth Fire Academy** – Introductory seven-week program to educate, mentor, and teach life skills to high school students throughout underserved L.A. neighborhoods.



Canine Therapy Program - The LAFD Canine Therapy Program launched in December of 2020 as part of the Department's Behavioral Health Division. The purpose of the program is to help alleviate psychological and emotional trauma impacting our firefighters.

The program currently has one canine and handler duo to assist all 3,500 members of the Department. The LAFD Foundation is working closely with the Department's Behavioral Health Division to fast-track acquiring a second therapy dog.



Photo credits: Gary Apodaca, Chris Conkle, Austin Gebhardt, Garet Jatsek, Justin Johnson, Thomas Raymond, LAFD Air Operations, and the LAFD Wildland Fuel Management Unit.

For more information about the items or programs highlighted in this report, please contact:
Tara Gurlides, Development Director
(310) 552-4139 | Tara@supportLAFD.org