



Office of the City Manager

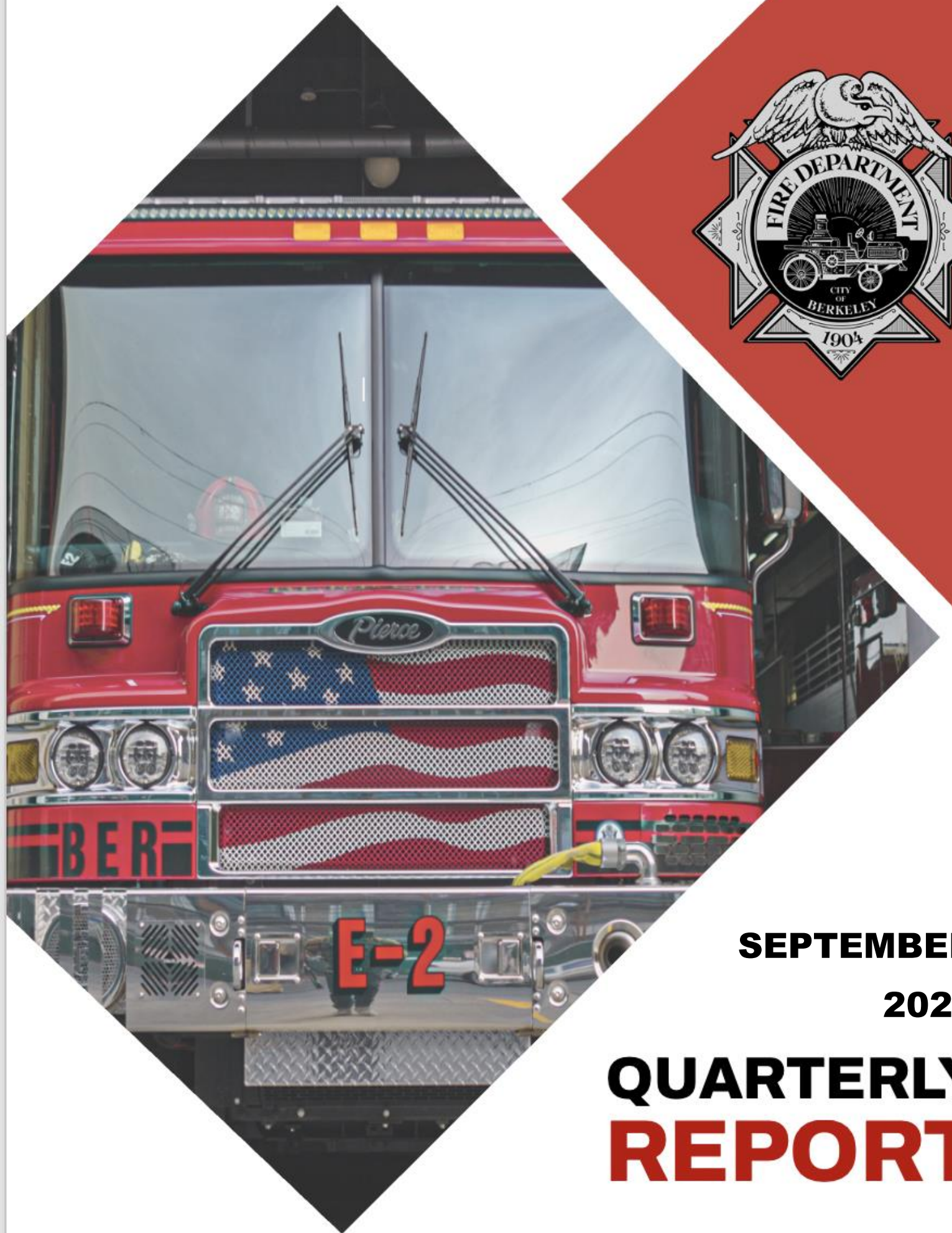
November 15, 2022

To: Honorable Mayor and Members of the City Council
From: *DWR* Dee Williams-Ridley, City Manager
Re: FY23, Berkeley Fire Department Quarterly Report (Q1)

Attached you will find the Berkeley Fire Department's report for the first quarter of FY23. The goal of producing this report is to increase the transparency of the Department and provide concise yet detailed updates on the programs and projects in which the Department is currently engaged in. We welcome any feedback on improvements that would make it more useful to you.

Attachments: Berkeley Fire Department Quarterly Report

cc: Disaster and Fire Safety Commission
Dee Williams-Ridley, City Manager
Paul Buddenhagen, Deputy City Manager
LaTanya Bellow, Deputy City Manager
David Sprague, Interim Fire Chief
Jenny Wong, City Auditor
Mark Numainville, City Clerk
Matthai Chakko, Assistant to the City Manager



SEPTEMBER

2022

**QUARTERLY
REPORT**



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The Division maintains a California State Fire Training Accredited Local Academy where new firefighters complete Firefighter I and II certifications. The Division also provides ongoing training and development to all positions in the Department. This is accomplished with the team: Assistant Fire Chief, three sworn members, and one non-sworn member who provides critical administrative support. _____ 22

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OFFICE OF THE FIRE CHIEF AND ADMINISTRATION

The Office of The Fire Chief directs the City's fire prevention, suppression, and emergency medical service programs. This office conducts planning and budgeting, maintains the labor-management relationship, supports city management, and fosters cooperative working relationships with community groups and other agencies.

Problem Statement: Due to significant and ongoing recruitment and hiring challenges resulting from the global pandemic, the Office of the Fire Chief (the Department) struggles to fulfill community needs through day-to-day operations, strategic planning efforts, and project and program management. The most significant challenges surround overseeing operational and programmatic priorities due to short staffing. The Department is working diligently to provide upgraded staffing facilities and reorganize its operations to support current and future staff and staffing needs.

PROJECT 1: Evaluate and Reorganize Emergency Communications Center Operations

Summary

The Berkeley Emergency Communications Center contracted Federal Engineering Inc. to conduct a comprehensive needs assessment, which will fulfill City Council's request to enhance operations, meeting the community's growing needs under the omnibus reimagining package. The project will examine existing dispatch capabilities and the City's goals to develop a gap analysis and path forward on how to triage calls, divert non-emergency calls—including mental health calls—to appropriate resources, and implement the delivery of emergency medical instructions to callers.

Federal Engineering (FE) Consultants' work will result in a wide-ranging plan to adjust daily operations in alignment with evolving emergency medical response needs. FEs work will include recommendations for:

- a more appropriate staffing model,
- additional hardware and software,
- how to implement pre-arrival and emergency medical dispatch systems,
- how to divert sub-acute calls to the most appropriate resource,
- improved training plan for dispatchers, and
- facility enhancements to the dispatch center over the next 36 months.

FY22: FE initiated Phase I on January 20, 2022. FE consultants conducted an onsite visit complete with staff interviews, focus groups, and an evaluation of the physical space. FE consultants also completed onsite visits, interviews, and observations in Piedmont Police and Fire Departments and Albany Fire Department. City staff collected relevant data, documentation, and information to assist FE with establishing a baseline analysis of communications operations and technology.



FY23 Quarter 1: FE conducted follow-up interviews with various City staff, reviewed and analyzed collected data and documentation, and delivered a draft report. BFD staff reviewed the draft Phase I report and expect a final draft before the end of CY 2022.

Expected Completion: Phase I, September 2022 – Phase II (Implementation) FY25-26

PROJECT 2: Contract for a Standards of Coverage Report

Summary

The Department is undergoing an in-depth analysis of fixed and mobile resources to determine if the City is meeting national standards for call processing and response times; as a result, the Department will be empowered to determine the best deployment model to achieve a more effective response force with a focus on efficiency.

FY22: The Department provided the City Gate with the necessary data to conduct the initial standards of cover analysis and presented mid-project results to City Council on April 19, 2022.

FY23 Quarter 1: City Gate consultants completed the risk assessment and since included an assessment of the Lawrence Berkeley National Laboratory and University of California, Berkeley's growth plans and the City's growth trends.

Expected Completion: FY 23 Quarter 1

PROJECT 3: Project Management & Subject Matter Expertise Support

Summary

The Department onboarded a project management team to assist with long-term project planning, provide subject matter experts (SMEs) with specialized knowledge the Department doesn't currently have access to, and help ensure project goals and objectives consistently meet deadlines. Project management support is ongoing; it has been and will continue to be critical to improving organization, efficiency, and transparency. The contracted project managers continued providing support to organize complex recurring processes like recruitment and personnel transactions (e.g. promotions, resignations, and retirements) to retain institutional knowledge and refine and improve these processes.

FY22: Since October 2021, Ganey Science consultants (Ganey) have provided consulting assistance to the Department with program management of multiple Departmental projects and initiatives. Overall, the Ganey project management team (PMT) and SMEs organized Department projects using the Smartsheet project management platform. Specific project assistance includes:

- Enhancement of Fire and Emergency Medical Service (EMS) Staffing and Deployment. The Ganey team assisted with staffing by developing a recruitment plan, marketing videos, a specialized website, and strategic social media posts. Ganey is also assisting with the development of a single-function paramedic academy curriculum.
- Risk Mitigation in the City's Wildland Urban Interface (WUI) Areas. Ganey assisted with WUI risk mitigation through developing a newsletter, postcards, and trifold brochure and has provided some assistance with grant application development for work in the WUI.



- Acquisition and Development of a Multi-Functional Property. Ganey performed a review of environmental studies performed on potential properties to be leased for a multi-functional training facility.
- Upgrade the Fire and EMS Dispatch Center. Ganey has conducted a third-party review of BFD's dispatch consultant's work and has been developing a quality improvement program for dispatch.
- In addition to project management and emergency services consulting support, Ganey has provided specialized technical support in various fields, including videography, marketing, information technology, grants management, and environmental planning. The PMT also added SMEs to our contract to assist with EMS quality improvement and developing a Regional Training Consortium.

FY23 Quarter 1: Consultants and SMEs with Ganey Science focused their efforts on a dispatch Quality Improvement model and presentation, current and future recruitment strategies to help the department target potential applicants, and the development of Paramedic entry-level Academy curriculum development. The project management team is focusing on new policy reviews and the wildland-urban interface programmatic support for vegetation management and evacuation.

Expected Completion: Ongoing

PROJECT 4: Fire Facilities Master Plan (FMP)

Summary

Six (of seven) Berkeley Fire stations are undersized, in poor condition, needing remodels or replacement, and do not meet modern workplace configurations for cancer prevention. The goal of the FMP is to develop a report that will provide leadership with actionable recommendations in preparation for future infrastructure bond measures. Read the scope of service [here](#) and the timeline [here](#).

FY22: The Department initiated a long-term replacement planning process to better understand infrastructure needs by collaborating with the Public Works (PW) Department staff and Siegel and Strain Architects, with expertise in interdisciplinary planning and engineering. Department staff and consultants collaborated to determine future facility needs and new building layouts and designs for all fire facilities. The team is also developing floor plans for the new proposed BFD administration building and will bring an update to City Council for a work session in the Fall of 2022.

FY23 Quarter 1: Conceptual high-level designs for each fire facility were presented to staff. Research of other public/private partnerships (residential over firehouse) was completed. Final designs for the new Fire Department Headquarters were completed. Staff is tracking grants and legislation to assist with the cost of the associated work that will be required on all fire facilities.

Expected Completion: Ongoing



PROJECT 5: Fire Station Solar & Lighting Transition

Summary

The Department is collaborating with the City's Office of Energy and Sustainable Development and the Energy Efficiency Coordinator to transition stations to use high-efficiency lighting and renewable energy sources.

FY22: East Bay Community Energy (EBCE) invited four cities (Berkeley, Fremont, Hayward, and San Leandro) to participate in an innovative pilot procurement partnership to install solar power and storage on critical municipal facilities. Vendors will bid on installing solar power/storage on the portfolio of critical facilities through a long-term (20-year) power purchase agreement (PPA), where the vendor pays the upfront cost of the equipment/installation and owns and operates/maintains the equipment. The City would pay the vendor back on the electricity bill to EBCE using funds from the energy savings.

Solar and Battery: EBCE hired EcoMotion, Inc. to provide technical evaluations of Berkeley's critical facilities. They identified eligibility for facilities that could be included in the PPA and the estimated costs for electrical and solar roof upgrades.

	<u>Fire Station 1</u>	<u>Fire Station 5</u>
Berkeley's Estimated Roof Cost	\$ 28,160	\$ 107,448
Berkeley's Estimated Electrical Costs	\$ 98,649	\$ 53,257
Berkeley's Estimated Total Costs for Upgrades	\$ 126,809	\$ 160,705

	<u>Fire Station 1</u>	<u>Fire Station 5</u>
Solar PV Size (kW-DC)	22.4	53.8
Battery Storage (kWh)	45	30
Estimated Internal Rate of Return (unlevered pre-tax)	2.12%	10.68%
Estimated % of energy produced, based on current demand	63%	98%

FY23 Quarter 1: Staff received the Scope of Work for the LED lighting upgrades for Fire Houses 3, 4, 5, 7, and the Fire Warehouse. The date of the work has not yet been scheduled.

Expected Completion: Ongoing



ADMINISTRATIVE AND FISCAL SERVICES UNIT

The Administrative and Fiscal Services Division supports budget and fiscal policy, payroll, purchasing, administrative systems, record retention compliance, employee training and development, and the labor-management relationship. The Division also oversees strategic planning, grant writing, responses to Public Records Act requests, and performance tracking and reporting.

Problem Statement: The amount and complexity of work have significantly increased over the course of several decades for the Administrative and Fiscal Services Unit, and the Division has not increased staffing. The current staffing model does not allow for necessary redundancy in knowledge and skill causing excessive staff overtime and producing a high-stress work environment; especially, for time-sensitive recurring tasks, such as payroll.

PROJECT 6: ERMA Implementation & Training

Summary

The Fire Department typically has the most complex payroll system in a city due to the shift schedule, the Fair Labor Standards Act, higher-class pay, shift trades, special team compensation, and multiple schedules that personnel move between. The implementation of ERMA has been challenging for the Department and its payroll staff, which is already challenged with day-to-day operations and has resulted in a significant number of payroll errors and time-consuming research and manual entry. The division is focused on processing payroll, correcting payroll errors, and responding to employee grievances related to ERMA.

FY 22 Completed Work: The Administrative and Fiscal Services Unit staff is diligently training on how to maximize the use of ERMA and mitigate payroll errors. The Department hired a temporary employee in March of 2022, who has focused their energy on addressing the several hundred reported payroll errors that have been logged by employees since the Fall of 2021.

FY23 Quarter 1: Staff participated in ERMA training that was focused on how to effectively organize and display ERMA data.

Expected Completion: Ongoing

PROJECT 7: Right-Sizing of Staffing in the Administrative & Fiscal Services Unit

Summary

The Division's urgent business need is to enhance staffing to ensure employees are paid correctly, to see that payroll errors are addressed in a timely manner, and to ensure the Division is balanced with institutional knowledge, skills, and abilities. The historical staffing for this Division is inadequate and has led to multiple single points of failure where one employee's absence causes unacceptable impacts on the Fire Department's payroll process.



FY 22 Completed Work: The Department's request for additional FTEs as part of the FY23-24 Budget request was approved and has identified internal funds to help increase staffing within the Division.

FY23 Quarter 1: The Division has recruited and hired one of two new additional staff to the Division. This person is providing significant relief to Division and is focused on budget and reporting for all funds. The temporary employee that was helping to resolve hundreds of payroll errors and submit adjustments has departed after completing the lion's share of that work.

Expected Completion: FY22

PROJECT 8: New Contracts & Requisitions Supporting Projects Funded by Measure FF

Summary

The Division is processing new contracts for service and requisitions for purchases to support the new and ongoing projects funded by Measure FF. There's a critical need for contractual management and support with current staffing levels to keep projects moving forward.

FY 22 Completed Work: Since July 2021, the Division has negotiated and processed eleven new contracts, and another six are in process.

FY23 Quarter 1: Staff has been working on processing contracts for the Departments Medical Director, a soft and hard inventory management solution, an amendment to software for defensible space inspection software to integrate chipping service appointment management, a new contract to provide support services for the Peer Counseling Unit, and a contract to provide upfitting (installation of lights and sirens) services for fire vehicles.

Expected Completion: Ongoing



PROJECT 9: Implementing Project Manager Budgeting

Summary

The Department is implementing a new process flow that delegates budget, purchase authority, and decision-making to the individuals within the organization that manages the program, project, or facility. The Department recognizes an opportunity to streamline processes, further improve the administrative workflow, and prepare staff to develop budget and purchase experience earlier in their career. Previously, all requests were directed to one person in the organization which centralized power and created a bottleneck impeding functional workflow and causing unnecessary busy work.

FY 22 Completed Work: Leadership solicited feedback from each program manager on how to improve purchasing process and communication. In FY23, staff will begin a trial using the Department's project management software to track budgets and purchases for two programs.

FY23 Quarter 1: The trial that will streamline the internal purchasing process and help managers track budgeting has been rolled out with two pilot programs and has so far been successful. Full implementation will begin in FY24.

Expected Completion: FY24



OPERATIONS DIVISION

The Operations Division's objective is the day-to-day delivery of emergency and non-emergency services to the City of Berkeley. This is accomplished through seven firehouses with seven Type I fire engines, two aerial ladder trucks, four advanced life support ambulances, one battalion chief, a Medical Specialist Team, a Hazardous Materials Response Team, two water rescue crafts, and 15 rescue swimmers.

Problem Statement: The Department has been substantially impacted by COVID-19 from FY21 through FY22. During that time, we continued to staff all BFD fire stations and deployed additional staff to assist with community testing, mass vaccination, wildfire season deployment, and in-City special events. The Department is working diligently to recover from the hiring freeze and extra work required to serve the Community throughout the pandemic.

PROJECT 10: Managing Overtime

Summary

The fire service is facing its greatest recruitment and retention challenges in over 100 years. For the first time, departments are unable to find qualified firefighters, and permanent staff are changing departments. Substantial investment is needed for firefighter recruitment and training. The average timeline to replace an employee is 12+ months. Berkeley Fire Department (BFD) is challenged with the ability to evaluate our recruitment, training, and retention strategies.

FY 22 Completed Work: The open recruitment for the 112th entry-level academy was completed on May 31st; however, the total number of applicants is the lowest the Department has seen. The goal is to hire 16 firefighters to keep up with attrition, and staff is expecting eight to pass background testing.

FY23 Quarter 1: The 112th Academy is scheduled to begin on October 31st with eight (8) firefighters.

Staff is focused on enhancing how overtime is tracked so it can be reported by special projects. This will enhance the organizations' ability to understand the staff costs associated with various programs and projects, leading to more effective budgeting.

Expected Completion: Ongoing

PROJECT 11: Cancer Prevention & Early Cancer Detection

Summary

Research shows a direct link between fire service work to cancer, and fire departments are experiencing substantially higher rates of illness among active and retired members. The City is committed to improving the work environment for staff. Leadership is exploring industry standards and best practices for personal protective equipment (PPE), workplace engineering, and policies and procedures that prevent or reduce exposure to carcinogens in the workplace.



FY22 Completed Work: The Department underwent two Requests for Proposals selecting Pinnacle LLC as its vendor for annual physicals, an effective program for early cancer detection, and preventative measures. BFD began planning for FY23 physicals.

FY23 Quarter 1: The Department purchased additional carcinogen-resistant PPE for all firefighters providing another layer of defense to mitigate exposure to carcinogens in the workplace. Research is underway to replace aging specialty equipment used to wash and decontaminate firefighter protective clothing.

Expected Completion: Ongoing

PROJECT 12: Improving Employee Health & Wellness

Summary

First responders have a higher rate of chronic medical and psychological injury and illness directly correlated to shift work, traumatic experiences, and stress. Post-traumatic stress disorder and depression rates among firefighters are as much as five times higher than the rates within the civilian population. Employee wellness programs have been proven to reduce healthcare and workers' compensation costs and improve employee health.

FY 22 Completed Work: The Department published a Request for Proposal and selected O2X as its vendor, and selected a Human Performance Coach to lead a health and wellness program to improve the overall health of staff.

FY23 Quarter 1: There have been some major O2X highlights. July kicked off with "Intro to O2X" workshops for the Berkeley Police department, where members were introduced to the *Eat, Sweat, Thrive* model of O2X and encouraged to participate in the O2X Readiness Assessment to get an overall picture of their physical, nutritional, sleep, and stress health. August saw the first fitness challenge through O2X staff working with members of the Police Departments in a movement challenge where they recorded physical activity in healthy competition. September saw the finalizing of the new Paramedic Physical Abilities Test that Gary researched and developed in conjunction with AC McPartland and the EMS division in support of the new single-function paramedic academy. The test has been validated and is being implemented with prospective hires currently.

By the numbers over the last three months there have been:

- ✓ 65 station/department visits
- ✓ 40 strength and conditioning consults
- ✓ 19 nutrition consults
- ✓ 11 individual nutrition programs written
- ✓ 27 individual strength and conditioning programs written
- ✓ 1,444 days of strength and conditioning programming created
- ✓ 205 Athletic Training Treatment sessions
- ✓ 67 Injury Evaluations
- ✓ 28 Athletic Trainer clinic days

Expected Completion: Ongoing



EMERGENCY MEDICAL SERVICES DIVISION

The Emergency Medical Services Division oversees the Department's pre-hospital care and treatment program for the Berkeley community. The Division oversees emergency medical services for large-scale events and provides standby services to contract EMS services to minimize the event's impact on the 9-1-1 system.

Problem Statement: The Department is facing challenges in keeping up with medical and other service call volumes due to increased call volumes over the last decade. Contributing factors are ongoing staffing and recruitment challenges since the pandemic, population growth, an aging population, and ongoing development within the city. The Department has an opportunity to evaluate, redesign, and implement updated operational models to work with our current staffing levels and ensure future operations are more efficient for future staff and the community.

PROJECT 13: EMS Staffing & Deployment Redesign

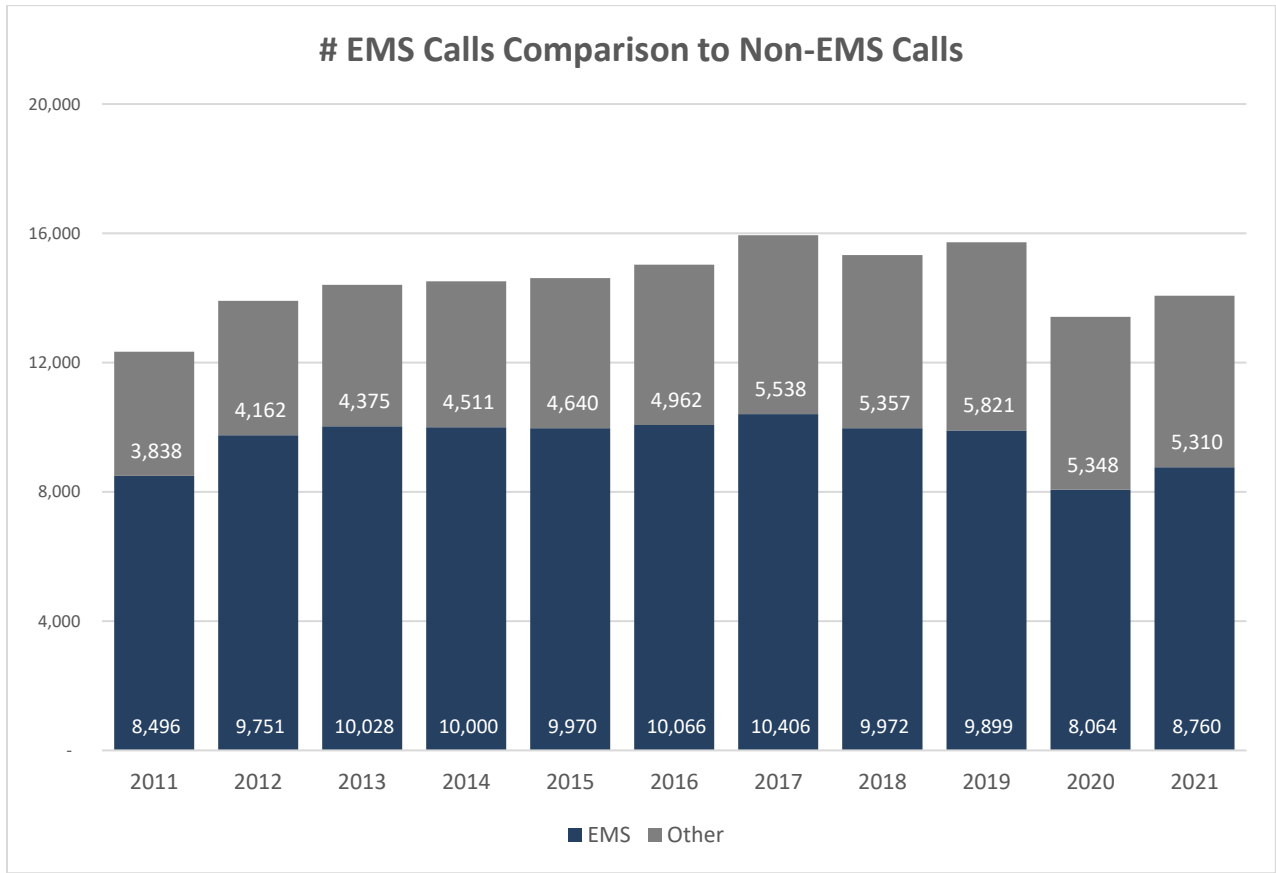
Summary

Background: Tracking & Predicting Changes to Call Volume

The chart below demonstrates the increase in call volume through 2019. The state of California estimates that the number of those over age 65 will nearly double by 2030 (according to the California State Department of Finance). When examining the population distribution of Berkeley, there is a significant segment of the population between the ages of 51-65 (about 20%) that will move into the center of the highest demand-for-service group by 2030.

Patients between the ages of 18-23, and those over 65, account for roughly half of all the documented patients in Berkeley. If patients over 50 are included, the total increases to approximately 70%. Older age groups are more likely to require transport.

The chart below illustrates a consistent upward trend for medical calls for service over the last decade (2020 & 2021 call volume was lower due to the pandemic).



Summary

A long-planned redesign of EMS staffing aims to mitigate calls for medical services by deploying more appropriate resources. This project is primarily focused on the planning efforts to adjust the ambulance staffing model by replacing traditional firefighter paramedic positions with EMTs and paramedics. Staff is looking at how this model will result in cost savings, allow for more flexibility in shift scheduling, create entry-level positions, and create a pipeline for local youth interested in EMS careers.

FY 22 Completed Work: Staff explored new ambulance deployment models by adding Basic Life Support (BLS) ambulances staffed with EMTs and alternate methods to triage and assign resources. The Department collaborated with labor groups to develop a new Division staffed with EMTs and Paramedics. The collaboration ensured these new positions align with the Berkeley High School B-STEP Community Technical Education program and improve the organization's ability to attract a diverse workforce. The Personnel Board and the City Council approved said classifications, and the project management consultant finalized the recruitment strategy for FY23 Q1.

FY23 Quarter 1: Staff is working with Human Resources, City Attorneys, and Labor to develop a new shift schedule, internal policies and procedures, recruitment process, and academy curriculum for the redesigned EMS deployment model. Two new/additional ambulances have arrived after a year+ of production (pandemic delays). Once additional ambulances are deployed, the Department can begin to optimize performance based on new operations.



Expected Completion: FY25

PROJECT 14: New Position Classifications & Recruitment Efforts

Summary

The Department is working with the City Manager's Office, Human Resources, City Attorney, and IAFF Local 1227 on the development and implementation of new job classifications, work schedules, staffing models, recruitment plans, and initial and ongoing curriculum for the academy. The transition to EMTs and Paramedics is expected to start in FY23.

FY 22 Completed Work: The Limited Term Emergency Medical Technician and Paramedic positions were developed, approved, and added to the CalPERS retirement system.

FY23 Quarter 1: The Department completed a recruitment campaign for paramedics and is moving candidates through the selection process in preparation for the Department's first academy in early 2023.

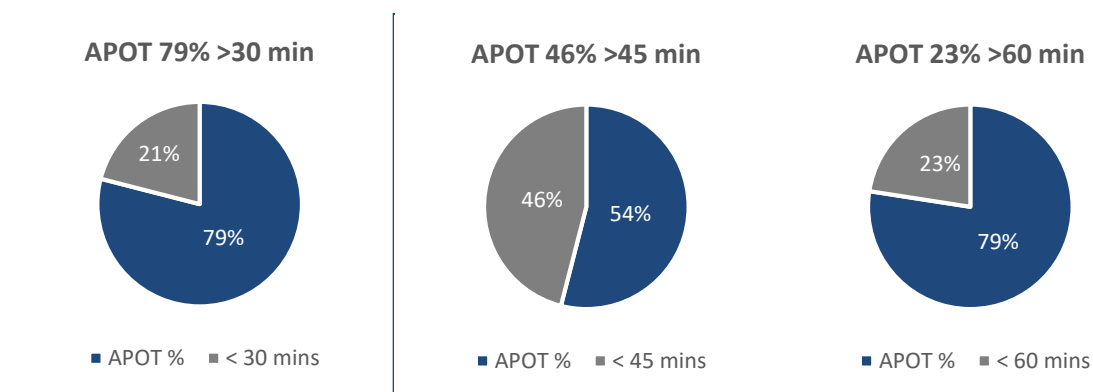
Expected Completion: Phase I completed; Phase II is ongoing

PROJECT 15: Managing Increasing Ambulance Patient Offload Time (APOT)

Summary

One of the major changes that directly affect ambulance Unit Hour Utilization is the increase in the physical offloading of patients from the ambulance to a hospital bed. This project is a more in-depth analysis of problem identification and exploration of ways in which BFD can improve APOT times.

FY 22 Completed Work: BFD staff analyzed to better understand the scope of the problem. The average time an ambulance spent offloading a patient in 2011 was under 38 minutes and has since increased to 47 minutes in 2021. On twenty-three percent of calls, ambulance staff are waiting to offload patients greater than 60 minutes. BFD anticipates a significant increase in offloading times should Sutter close Alta Bates and consolidates to a single facility in Oakland.





FY23 Quarter 1: Staff engaged with local hospital administrators and found no measurable interest in reducing APOT times at local facilities. The Department and a coalition of other public transport agencies are engaging key stakeholders at the State level to address this issue.

Expected Completion: Ongoing

PROJECT 16: Addition of an Emergency Medical Services Coordinator Position

Summary

The Department developed and created a new job classification to manage the Department's Continuous Quality Improvement (CQI) program, providing a higher level of retrospective call audits, data analysis, and staff education. The position will be a critical component of the dispatch re-design and the Department's ambulance system re-design.

FY 22 Completed Work: The Department formed a labor-management committee to research effective CQI programs throughout the State to recruit the right person. The proposed modifications to this classification include renaming Fire Department EMS Coordinator position title and modifying the characteristics, duties, knowledge, abilities, minimum qualifications, and pay that align it with comparable classifications in other jurisdictions.

FY23 Quarter 1: Staff are currently working through the candidate selection and interview process. Onboarding of this new key position is anticipated before the end of December 2022.

Expected Completion: FY23 Quarter 1



FIRE PREVENTION DIVISION

The Fire Prevention Division decreases the number and severity of all fires in Berkeley through an active code-enforcement program, public education activities, engineering and plans review, and vegetation management. When fires occur, Fire Prevention staff investigate the fire's origin and cause and, if needed, prosecute those responsible.

Problem Statement: The complexity and volume of the Division's work have significantly increased over the past two decades with no adjustments to staffing, which impacts the level of service the Division can provide to internal stakeholders and the community for plan reviews and approvals. The Department has an opportunity to update and improve local fire codes and reorganize staffing to meet current community needs.

PROJECT 17: Adoption of the 2022 Fire Code

Summary

The State of California has adopted a new 2022 fire code which will go into effect on January 1, 2023. Berkeley has local conditions specific to our community that affect our local fire and life safety and has adopted multiple fire code amendments in the past that are designed to address these concerns.

FY23 Quarter 1: Staff has drafted amendments for this adoption cycle which echo the State's mandate with regard to vegetation management and provide local clarification that will help with implementation.

Expected Completion: FY23



WILDLAND URBAN INTERFACE DIVISION

The Wildland-Urban Interface (WUI) Division addresses local wildfire target hazards and performs community-based action planning to mitigate threats, promote preparedness activities, and ensure wildfire resilience. Action Planning provides the foundation and roadmap for the Department's work to prevent wildfires and limit the spread when they ignite.

Problem Statement: With 30 years of accumulated vegetation overgrowth and a lack of effective enforcement and mitigation, the City has faced significant challenges and opportunities to become more wildland fire safe. This new Division is solely staffed by retired firefighters due to the Department's staffing challenges, who have identified several wildfire mitigation and prevention projects critical to the community's safety. Permanent staff will supplement and eventually replace retired annuitants as the Department's staffing stabilizes through the end of FY22 and into FY23.

PROJECT 18: Development of a Wildland Urban Interface Task Force and Work Plan

Summary

The WUI problem is complex and challenging. To make substantial and meaningful reductions to the risk and potential of wildfire to the community, a multi-departmental coordinated effort is required. A WUI task force composed of representatives from the City Manager's Office (CMO), City Attorney's Office (CAO), Public Works (PW) Department, Parks Recreation and Waterfront (PRW) Department, and the Fire Department have been convened, and are meeting regularly to understand the new unfunded state mandates, policies, and lead the development of an implementation plan to complete all required activities in Berkeley.

The Task Force will develop a comprehensive plan that provides guidance at the strategic and tactical levels for the work that needs to occur to bring the community into alignment with best practices along five major lines of work, including (1) Minimizing Risks to Existing, and New Land Uses; (2) Fuel Modification and Land Management; (3) Protecting Public Health; (4) Increasing Equity; and (5) Disaster Response, Recovery, and Maintenance.

FY23 Quarter 1: Staff is researching best practices on new federal and state policies and building a draft plan that will be reviewed by various stakeholders, including the Mayor and City Council.

Expected Completion: Draft Plan Completed in FY23, Q2

PROJECT 19: Development of a Vegetation Reduction Program

Summary

The volume and spacing of vegetation in the community are not in compliance with best practices pertaining to fire risk reduction or state guidelines. Staff is working on a program to provide education, enhanced enforcement, and mitigation of hazardous vegetation, especially in Fire Zones 2 and 3.



FY23 Quarter 1: Staff is researching best practices that balance the reduction of hazardous vegetation with environmental concerns.

Expected Completion: Draft Plan Completed in FY23, Q2

PROJECT 20: Strategic Reduction of Hazardous Vegetation

Summary

Work with partner departments to treat hazardous vegetation in the community. This will reduce the risk associated with wildfire in the community and residential areas. There is a significant risk of a wildfire igniting on the ground level and tree canopy with down and dead brush and unkempt ladder fuels.

FY23 Quarter 1: Staff worked with Parks, Recreation and Waterfront Department staff to identify key projects on public land that required the removal of hazardous vegetation.

Expected Completion: On-going

PROJECT 21: Expansion of Chipping Services

Summary

Studying other jurisdictions that provide chipping services shows that they can substantially improve voluntary compliance with Defensible Space Inspections and increase the volume of hazardous vegetation removed with chipping programs.

FY23 Quarter 1: Staff began a high-level process to evaluate the existing chipping service levels and to envision how it can be streamlined and better aligned with inspections. This included a meeting with staff managing a similar program in Marin and multiple discussions with Public Works, Parks, Recreation and Waterfront, and Fire Department staff.

Expected Completion: FY23, Q4

PROJECT 22: Community Wildfire Protection Plan (CWPP)

Summary

The CWPP is a comprehensive risk analysis that addresses local target hazards and includes a community-based action plan to mitigate threats, promote preparedness activities, and ensure resilience. It will serve as the foundation and roadmap for the Department's work to prevent wildfires and limit the spread when they ignite. The Department contracted Wildland Resource Management to complete an internal plan and a preliminary schedule to address the six task segments in the CWPP, identify available city resources, and establish a steering committee.

FY22 Completed Work: The CWPP process kicked off in May, confirming a steering committee with stakeholders representing the Disaster and Fire Safety Commission, City of Berkeley Parks and Recreation Department, Hills Emergency Forum, Diablo Firesafe Council, Berkeley Office of Emergency Services, and the BFD. The CWPP Steering Committee identified processes for public participation via an online hub site with survey tools slated to launch at the end of July and through September.



Committee members have communicated the CWPP process to neighboring agencies at the Hills Emergency Forum (HEF) monthly meetings. They will continue to keep our neighboring agencies informed and involved throughout the process.

The Community-Based Map is a key component of the CWPP that will create a shared vision of the existing City of Berkeley wildfire environments. The Community Based Map was initiated and used to display the wildfire layers as the data was gathered and finalized.

FY23 Quarter 1: The CWPP Core Team released Survey 2, and the Berkeley Fire Hazard Mapping at the September 28, 2022, Disaster and Fire Safety Commission Meeting. For Plan consistency, Fire Zones 1, 2, and 3 will be used as the formal risk map. The CWPP Hazard Map also acknowledges adjacent regional hazards, risks and of collaborative mitigation actions. New data is coming in the next year from both regional mapping and detailed data from Berkeley inspectors as they complete defensible space inspections and home hardening recommendations for the homes in Zone 2 and 3. CWPP Survey 2 focuses on strategies and projects as we develop our CWPP Action Plan.

Expected Completion: FY23 Quarter 3

PROJECT 23: Increasing Wildfire Safety Inspections

Summary

Per California State regulatory body, the Department had to expand the traditional hazardous fire area vegetation inspection program to include all properties in fire Zones 2 and 3. This increased the number of inspections by 83% (+7,184). The Department could not promote the permanent full-time Inspectors necessary to complete the increased inspection requirements.

FY22 Completed Work: Increased number of inspections in Zones 2 and 3. The Department is recruiting additional personnel to fill positions for Fire Inspectors (see project 17) and, in the interim, hired retired annuitants (RA) to perform inspections and begin transitioning administrative tasks from paper to mobile technology. This upgrade aims to improve the re-inspection, citation, and violation processes. The Chief promoted a permanent full-time Chief to lead the division. Our team of Retired Annuitants aims to complete the first inspection cycle with 8,500 inspections by July 2022.

FY23 Quarter 1: The first full-time Inspector was onboarded to the Division; two additional inspectors will be recruited. Staff is working to complete the transition and implementation of a new Defensible Space Inspection (DSI) software and mobile tablets.

Expected Completion: On-going

PROJECT 24: Expanding Firewise Programs

Summary

The WUI Division staff are delivering presentations to the community about Berkeley's identified WUI, the importance of defensible space, vegetation management, home hardening, and what FireWise status means. FireWise criteria were developed by National Fire Protection Association (NFPA) and are intended



to build community, learn, and implement vegetation management and home hardening practices. The more FireWise groups Berkeley has, the more eligible the City is for grant funding.

FY22 Completed Work: Staff worked with Acacia, an 11-home neighborhood, through the application and approval of FireWise status. Acacia has officially been recognized as the City's first official NFPA FireWise group. Recognizing a Firewise neighborhood or Zone requires collaborative organizing to create a board and develop a 3-year wildfire reduction plan.

Division staff is assisting several other neighborhoods in navigating the application and approval of their FireWise status. There are conflicting guidelines from the NFPA and Cal FIRE that have caused delays in the approval process.

FY23 Quarter 1: The Community Outreach Program continues to engage with the residents located in High Fire Hazard Zones 2 and 3. They facilitated community meetings focusing on two wildfire mitigation strategies:

- Home Hardening - actions taken to reduce home ignition from wildfire/embers
- Creating a Defensible Space - Vegetation management to reduce the spread of a fire

Berkeley's first FireWise community was recognized; command staff attended an event with neighbors the day the official signs were installed.

Expected Completion: Ongoing



TRAINING DIVISION

The Division maintains a California State Fire Training Accredited Local Academy where new firefighters complete Firefighter I and II certifications. The Division also provides ongoing training and development to all positions in the Department. This is accomplished with the team: Assistant Fire Chief, three sworn members, and one non-sworn member who provides critical administrative support.

Problem Statement: The scope and complexity of the Training Division's operations have substantially changed over time. Most incoming technical calls occur less frequently but pose a higher risk to civilians and fire personnel. To adequately meet Federal, State, and Local mandates for training and ensure that fire personnel is ready to respond to all calls for service, BFD must implement considerable changes to the Training Division. This includes adequate staffing, funding for external SMEs, utilizing collaborative partnerships, acquiring an adequately sized training facility, and providing the physical resources necessary to conduct hyper-realistic training that simulates the work environment.

PROJECT 25: Enhanced Staffing

Summary

The Department's Division of Training has been critically understaffed for decades. The Division has been led by a manager that splits their time and efforts with the Emergency Medical Services Division. To properly function, the Division needs a dedicated full-time Manager, a minimum of three full-time staff, and an additional full-time supporting role.

FY22 Completed Work: Training was removed from the EMS Division in August of 2022 and was provided with a dedicated assigned Assistant Fire Chief and an additional Captain through a budget-neutral reorganization. These staffing changes have increased the Divisions' capacity for work.

FY23 Quarter 1: The Department is evaluating the additional staffing needs of this Division following the expansion of permanently assigned staff.

Expected Completion: FY24

PROJECT 26: Berkeley - Albany Fire Departments Partnership

Summary

The Berkeley and Albany Fire Departments respond to calls in collaboration on a daily basis. In FY22, the Departments initiated a formal training relationship that focused on training staff to better align response protocols.

FY22 Completed Work: The pilot project was initiated and has shown to be mutually beneficial for the Departments and both communities. The two Departments are formalizing the partnership through a Memorandum of Understanding.



FY23 Quarter 1: A final draft of the MOU was completed.

Expected Completion: FY23

PROJECT 27: Improving Entry-Level Firefighter Recruitment

Summary

Department Staff is reducing the recruitment process timeline from nine to six months and is targeting specific qualified employees. BFD, like all fire departments, is struggling to find qualified employees in the applicant pool. See Project 3 for recruitment details.

FY22 Completed Work: Nine firefighter-paramedics from the 110th Academy graduated on October 1st, 2021, and will complete their probation by May 2023.

FY23 Quarter 1: The Department's 111th Academy graduated with seven firefighter/paramedics on June 24th and will begin two-year probation.

Recruitment for the 112th entry-level firefighter/paramedic academy was completed, and eight (8) offers were accepted.

The two additional staff assigned to the Training Division on October 2nd are planning for the upcoming academy in October.

Expected Completion: Ongoing

PROJECT 28: Regional Leadership Academy

Summary

The Department was awarded FEMA's Assistance to Firefighters Grant to design and facilitate a regional leadership series for current and prospective leaders. Classes are running monthly through August of 2023.

FY22 Completed Work: The Department hosted sessions through June but paused during the CY22 fire season.

FY23 Quarter 1: The Department is planning to resume leadership courses from October through FY24, Q1.

Expected Completion: FY24 Quarter 1

PROJECT 29: Develop a Regional Training Consortium

Summary

The Department is working with Contra Costa and Alameda Counties to pursue a regional training consortium. Training is a critical Division within each fire agency but is chronically understaffed and under-



resourced. The intent to consolidate and share resources will allow multiple agencies to complete more drills and education and reduce the overall operational cost associated with training.

FY22 Completed Work: The Department hosted retired Chief Eric Tomlinson from the South King County Regional Fire Training Consortium in Washington State. Chief Tomlinson worked with Department staff to present the history and benefits of the consortium in King County to Chief Officers of nearly every department in Alameda and Contra Costa Counties. This was an Initial presentation that helped to launch this long-term, multi-jurisdictional project.

FY23 Quarter 1: Coordination and planning meetings have occurred between several core Departments that have expressed interest in this project. Draft agreements and budgets are being developed that will eventually be presented to each City's legislative leaders for consideration.

Expected Completion: Ongoing

PROJECT 30: Training Facility Land Acquisition

Summary

The Department needs a training facility and is actively engaged in identifying a property that will meet the City's needs for the training and development of its emergency responders and support staff. Due to zoning, the cost of the property, and the proximity of residential neighborhoods, this facility will have to be located outside City boundaries. This presents exciting opportunities for regional collaboration with other fire departments and a community college district.

FY22 Completed Work: The Department sought suitable land to purchase or lease within 20 minutes of the City. Two properties were identified in the City of Richmond, and the Department sought permission to negotiate a lease and develop high-level site plans.

FY23 Quarter 1: The City is working with Legal Department to discuss training grounds with the City of Richmond. This conceptual plan would allow for funding to be invested in an existing piece of public property that could provide a shared training space for multiple regional agencies.

Expected Completion: Property Acquisition FY22, Development FY26



OFFICE OF EMERGENCY SERVICES

The Fire Department's Office of Emergency Services (OES) coordinates a suite of programs to build disaster resilience for the Berkeley community. These programs support personal preparedness, community connections, and government efforts that will help Berkeley respond to and recover from our next earthquake, fire, or other disasters.

Problem Statement: The Disaster Commission and Fire Safety Commission identified improving Berkeley's emergency notifications as a priority. *AC Alerts* historically have a low opt-in rate. To ensure communication is adequate when needed and accommodates those without access to electronic notifications, the Department is utilizing this opportunity to conduct an evacuation route study, improve evacuation and warning systems, and improve and increase our preparedness activities.

PROJECT 31: Evacuation Route Study

Summary

This study will better inform the Department on what engineering controls (traffic controls at intersections, contraflow traffic, reducing mobilization times, and building new roads or using fire roads as additional evacuation routes) are most useful during a complex evacuation in the City of Berkeley.

FY23 Quarter 1: Staff is working through the procurement process to hire a consultant to perform this work.

Expected Completion: FY24

PROJECT 32: Evacuation & Warning Systems

Summary

One of several priority projects for the Disaster Fire Safety Commission and City Council is the purchase and installation of a city-wide outdoor warning system to assist with emergency notifications.

FY22 Completed Work: Staff worked to research and piggyback on a contract with Genasys to provide the City with an Outdoor Warning System (OWS). Staff engaged in a laborious process of identifying the 15 locations for the speakers and working to negotiate leases to use the sites for this long-term project. The first five speakers have been delivered and should be installed by the end of CY22.

FY23 Quarter 1: The Department took delivery of the physical outdoor warning equipment. Five sites around the City will have the systems installed by the end of CY22. The remaining sites have more complex planning and permitting that is required which required an amendment to the Genasys contract, which will be going to Council in FY23, Q2.



Staff is working on an RFP to hire a consultant to perform an evacuation route study. This will better inform us on what engineering controls (traffic controls at intersections, contraflow traffic, reducing mobilization times, and building new roads or using fire roads as additional evacuation routes) are most useful during a complex evacuation in the City of Berkeley.

Expected Completion: FY24

PROJECT 33: Improved and Increased Preparedness Activities

Summary

Office of Emergency Services and Wildland Urban Interface Division are collaborating to level up the preparedness activities.

FY22 Completed Work: Continued to strategize information sharing on preparedness activities, including building out the Department's [webpage](#).

FY23 Quarter 1: Hosted community workshops to help prepare the community to make decisions on evacuation. The Department hosted a wildfire evacuation exercise and the Lawrence Berkeley National Lab; several other departments participated: Wildland-Urban Interface Division, Suppression, and the Planning and Public Works Departments.

Expected Completion: FY24
