



Fire and Emergency Services Committee
Tuesday, December 6, 2022
5:30 p.m.

Cameron Park Community Center – Social Room
2502 Country Club Drive
Cameron Park, CA 95682

HYBRID TELECONFERENCE TEAMS MEETING LINK

https://teams.microsoft.com/l/meetup-join/19%3ameeting_MzI2NzlkYmYtYTMwYy00M2YxLTg2Y2MtYzE2YmU4MmUzOWZl%40thread.v2/0?context=%7b%22id%22%3a%227546519e-2cd5-4e2c-bed5-ac3d46eec8ff%22%2c%22oid%22%3a%22b510e640-8ba3-421f-a075-694cad7ace01%22%7d

Agenda

Members: Chair, Director Eric Aiston (EA) & Vice Chair, Director Sidney Bazett (SB)
Alternate, Director Felicity Wood Carlson (FWC)
Staff: General Manager André Pichly, Chief Dusty Martin

CALL TO ORDER

ROLL CALL

Public testimony will be received on each agenda item as it is called. Principal party on each side of an issue is allocated 10 minutes to speak, individual comments are limited to 3 minutes except with the consent of the Committee; individuals shall be allowed to speak on an item only once. Members of the audience are asked to volunteer their name before addressing the Committee. The Committee reserves the right to waive said rules by a majority vote. All demonstrations, including cheering, yelling, whistling, handclapping, and foot stomping which disrupts, disturbs or otherwise impedes the orderly conduct of the Committee meeting are prohibited.

ADOPTION OF AGENDA

APPROVAL OF CONFORMED AGENDA

1. Conformed Agenda – Fire & Emergency Services Committee Meeting – November 1, 2022

OPEN FORUM

Members of the public may speak on any item not on the agenda that falls within the responsibilities of the Committee.

DEPARTMENT MATTERS: GENERAL BUSINESS

- 2. Review of Fire Department Master Plan and Capital Improvement Plan 2015-2020** (D. Martin)
– Staff report / Review and discuss / not an action item
- 3. Station 88 facility relocation** (D. Martin) – No staff report / Review and discuss / not an action item
- 4. Type III Engine Replacement** (D. Martin, C. Seibert) – Staff report / discussion only / not an action
- 5. Weed Abatement and Fuels Reduction update** (K. Richards) No staff report / information only / not an action item

STAFF UPDATES

- 6.**
 - a. Fire Department Report** – December 2022 (C. Siebert) – Staff report / Information only / Not an action item

ITEMS FOR FUTURE COMMITTEE AGENDAS

ITEMS TO TAKE TO THE BOARD OF DIRECTORS

MATTERS TO AND FROM COMMITTEE MEMBERS & STAFF

- 7.** Flyer for 3D Wildfire Simulations presentation series hosted by the Greater Cameron Park FireSafe Council

ADJOURNMENT



Fire and Emergency Services Committee
Tuesday, November 1, 2022
5:30 p.m.

Cameron Park Community Center – Social Room
2502 Country Club Drive
Cameron Park, CA 95682

HYBRID TELECONFERENCE TEAMS MEETING LINK

https://teams.microsoft.com/l/meetup-join/19%3ameeting_ZjQ2NGI5NWMtYWQ4NS00NDk3LWFkNGUtOTk4NTBmNTgxNjd%40thread.v2/0?context=%7b%22Tid%22%3a%227546519e-2cd5-4e2c-bed5-ac3d46eec8ff%22%2c%22Oid%22%3a%22b510e640-8ba3-421f-a075-694cad7ace01%22%7d

Conformed Agenda

Members: Chair, Director Eric Aiston (EA) & Vice Chair, Director Sidney Bazett (SB)
Alternate, Director Felicity Wood Carlson (FC)

Staff: General Manager André Pichly, Chief Dusty Martin

CALL TO ORDER – 5:31 pm

ROLL CALL - EA, FWC (alternate) – present, SB – absent

Public testimony will be received on each agenda item as it is called. Principal party on each side of an issue is allocated 10 minutes to speak, individual comments are limited to 3 minutes except with the consent of the Committee; individuals shall be allowed to speak on an item only once. Members of the audience are asked to volunteer their name before addressing the Committee. The Committee reserves the right to waive said rules by a majority vote.

ADOPTION OF AGENDA - Motion to adopt the agenda by FWC, 2nd by EA. Agenda approved.

APPROVAL OF CONFORMED AGENDA

1. Conformed Agenda – Fire & Emergency Services Committee Meeting – September 6, 2022 - Motion to approve the conformed agenda by FWC, 2nd by EA. Approved.

OPEN FORUM

Members of the public may speak on any item not on the agenda that falls within the responsibilities of the Committee.

DEPARTMENT MATTERS: GENERAL BUSINESS

2. **Station 88 facility relocation** (D. Martin) – Review and discuss / not an action item
 - DM talked about alternate locations for Station 88. The Rite Aid building is not available. Look at a parcel next to Grocery Outlet that is part of a second phase of a development property – the developer is open to having a discussion regarding the sale of 3.9 acres there. The District owns property on Starbuck which could be combined with an undeveloped lot adjacent that could have fire station potential (if that adjacent property is for sale).
 - EA – any other potential sites?
 - DM - KR identified some smaller lots, but it leaves us in the same situation we are in now.
 - DM – new fire station would cost approximately \$8-10 million
 - FWC – what do you mean by mixed use?
 - DM – that it couldn't be combined with a park or shop, but not all 4-acres would be needed for a fire station.
 - EA – we've talked about a park on the north side (Dunbar) – do you see any reasons why a park couldn't be located next to a fire station?
 - DM – no reason, could be beneficial
 - AP – agreed
 - EA – next steps
 - Explore property behind Dunbar (and on Green Valley including the property with the old apartment building)
 - Explore grant opportunities
 - How do we do the rest?
 - Closed session at November 16th Board meeting
 - What to do about the current Station 88 building?
3. **Equipment Replacement** (D. Martin) – discussion only / not an action
 - DM – Engine 389 is reaching the end of its lifespan. Things to consider:
 - How much for a new wildland engine?
 - Cost for maintaining E389
 - 2-year wait for taking delivery of a new engine
 - Believes we should plan now for its replacement
 - Chief Seibert will provide the committee a full report at the next meeting
 - Resale value for E389 (a Model M) is dropping. Current model is M34.
 - EA – look at lease vs. purchase options
4. **Weed Abatement and Fuels Reduction update** (K. Richards) information only / not an action item



- KR – CFPD working with El Dorado County Department of Transportation to abate weeds on Sudbury near Pinehill Reserve; some work along Cameron Park Drive between Hwy 50 and Oxford
- DM – will be updating weed abatement ordinance
- EA – are there any other areas in addition to Cameron Park Drive?
- DM – we try to link project areas together
- EA – Rasmussen Pond area needs weed abatement for 2023

STAFF UPDATES

5.

- a. **Fire Department Report** – October 2022 (C. Siebert) – Information only / Not an action item
- b. **Fire Department Report** – November 2022 (C. Siebert) – Information only / Not an action item

ITEMS FOR FUTURE COMMITTEE AGENDAS

ITEMS TO TAKE TO THE BOARD OF DIRECTORS

MATTERS TO AND FROM COMMITTEE MEMBERS & STAFF

- Santa Parade on December 9, 10 and 11.

ADJOURNMENT - Motion to adjourn by FWC, 2nd by EA. Adjournment at 6:26 pm.



Agenda Transmittal

DATE: December 6, 2022

FROM: André Pichly, General Manager
Dusty Martin, Fire Chief

AGENDA ITEM #2: **REVIEW OF FIRE MASTER PLAN AND CAPITAL IMPROVEMENT PLAN 2015-2020**

RECOMMENDED ACTION: Review and discuss Fire Master Plan and Capital Improvement Plan 2015-2020 document

Introduction

The General Manager and Fire Chief are requesting the Fire and Emergency Services Committee to review and discuss the Fire Master Plan and Capital Improvement Plan 2015-2020 document. A review will help Committee members and staff better understand decision making and actions that were implemented per the plan, as well as recommendations that have yet to be implemented. This perspective will aid the Committee and full Board with future strategic planning.

Attachment

2.a - Fire Master Plan and Capital Improvement Plan 2015-2020*

*Please note: some pages may appear to be missing as some blank pages were deleted from the attachment to reduce waste. A full version of the plan is available on the department web page at <https://www.cameronpark.org/about-us> at the bottom of the page under *Other district information*.

Cameron Park
Community Services District

Fire Department Master Plan and Capital Improvement Plan 2015-2020

Administrative Review Final

August 19, 2015



***Cameron Park
Community Services District***

**Fire Department Master Plan
and Capital Improvement Plan
*2015-2020***

Administrative Review Final

August 19, 2015

TABLE OF CONTENTS

Introduction	1
Policy and Program Context	3
Fire Stations and Training Facilities	5
Capital Improvement Plan	17
Long-Term Financial Strategy.....	27
References.....	31

FIGURES

Figure 1: Vacant Parcels within the Cameron Park Service Area	7
Figure 2: Cameron Park Fire Call Concentration.....	11



SECTION 1 INTRODUCTION

This Fire Protection Master Plan was prepared in mid-2015. It draws extensively on an internally prepared Final plan of January 1, 2011, the Cooperative Fire Programs Fire Protection Reimbursement Agreement (July 1, 2013-June 30, 2018), related documents and research, and key person interviews. It also draws heavily on the experience and knowledge of the consulting team from Mintier Harnish Planning Consultants of Sacramento.

Recommendations contained in this plan for personnel, facilities, and apparatus and equipment strike a balance between “ideal” requirements (i.e., national standards), and the needs of the community given the resources that are available.

This plan has been prepared to serve several purposes, including:

1. Serving as a guide for the District’s Board of Directors and its Fire Committee and its General Manager,
2. Informing District residents, businesses, and other interested parties about the current and planned future configuration of the District’s fire protection services so they meet the community’s needs effectively and efficiently,
3. Meeting various administrative and regulatory requirements, such as El Dorado County’s letter of March 4, 2105 titled *Development Impact Mitigation Fee Reporting Requirements, Review Process, and Reporting Schedule*,
4. Serving as a Capital Improvement Program (CIP) to support future financing decisions and allocations, and
5. Providing the basis for periodic updates as the District’s fire protection services program adapts to meet current and anticipated demands.

The following sections present the policy and program context governing Cameron Park’s fire protection services, fire stations and training facilities, a suggested Capital Improvement Plan (CIP), and the need for a long-term financial strategy. Some key references also are listed.

SECTION 2 POLICY AND PROGRAM CONTEXT

As one of 2,948 special districts organized under California state law, the Cameron Park Community Services District (CPCSD) provides fire protection, important recreational services, and coordination of green waste management. The District was organized in 1961 under the provisions of Government Code Sections 61000 – 61850.

The latest approved version of the Fire Department Mission Statement states that “The mission of the Cameron Park Fire Department is to preserve and enhance the quality of life to the community of Cameron Park and to safeguard the health, safety and welfare through fire prevention, fire control, emergency medical, and public education programs.” (June 17, 2015)

Fire protection services generally include fire prevention inspections and code enforcement; fire response and suppression, fire investigation, emergency medical services (EMS); special operations, such as rescue, vehicle extrication, and hazardous materials response; fire department administration and staff training; and public safety education, including Community Emergency Response Training (CERT); and response to other public emergencies.

These particular activities are governed by the Safety Element of El Dorado County’s General Plan; state laws and regulations exercised through the District’s cooperative agreement with CAL FIRE; other County requirements and regulations; applicable District resolutions and ordinances; and Department standard operating procedures and protocols.

The *Fire Safety Section of the Public Health, Safety, and Noise Element of the El Dorado County General Plan* establishes a goal of minimizing “fire hazards and risks in both wildland and developed areas”. Supporting this goal are five objectives relating to defensible space and fire code building requirements; limitations on development in high and very high fire hazard areas; fire protection standards; fuel management activities; and fire prevention education. (pp. 108-110)

In sum, the cooperative agreement between CAL FIRE and the CPCSD states that CAL FIRE will provide emergency fire protection, emergency response, and basic life support medical services; paramedic level Advanced Life Support (ALS) services; and extended fire protection service availability. Dispatching is through a Joint Powers Agreement (JPA) with the multiagency Camino Emergency Command Center.

Of particular importance to this plan is work by the District being done related to impact fee mitigation requirements pursuant to a March 4, 2015 letter from the Chief Administrative Office of El Dorado County. It notes that under state law the “County is the local agency responsible for the development and imposition of any development impact fees..., including fees to mitigate for impacts to services including fire services...” The CPCSD is required to prepare and maintain a five year Capital Improvement Plan (CIP) and a “nexus study” that demonstrates the relationship between the facilities and/or equipment needed and the anticipated or new development.”

Fire protection services are currently governed also by three Board Resolutions and one Ordinance. Resolution No. 2005-04 (March 30, 2005) established development impact fees permitted by County Ordinance 3991; No. 2006-04 (March 15, 2006) amended the development impact fees; and No. 2011-22 (September 21, 2011) adopted the *Fire Department Fire Prevention Fee Schedule*. The CPCSD’s Ordinance No. 2010.11.17 adopted the 2010 edition of the *California Fire Code*.

Recommended standards for fire protection and emergency medical services issued by the National Fire Protection Association (NFPA) are important considerations. Sometimes these are incorporated into law and regulations, and often are used by courts to determine industry standards. Some of NFPA's recommended standards have been incorporated into the *California Code of Regulations*. For purposes of this plan is *NFPA 1710 – Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments.*" This covers response time objectives and staffing standards.

Also of importance to fire departments and property owners served by them are Public Protection Classification Surveys performed by the Insurance Services Office (ISO) for the insurance industry. The results have a direct bearing on the premiums charged by companies for fire insurance. ISO considers the distribution of engine companies, in-service engines and equipment, company personnel, and training. In its May 27, 2014 letter to the District, the ISO's Public Protection Classification rating for the CPCSD's services was 03/3X. Recent experience shows that the failure to meet minimum acceptable service standards causes immediate and expensive increases in fire insurance premiums for property owners in the rated area. This is discussed more fully below.

SECTION 3 FIRE STATIONS AND TRAINING FACILITIES

As part of a review of the Cameron Park Fire Department (CPFD), analysis has gone into fire station location and facility sufficiency. Existing fire stations are the Country Club (Station 89) and the Alhambra (Station 88). Station 88 particularly causes concern about the sustainability (e.g., response times and physical plant) related to the delivery of fire services by the CPFD, now and into the future, without improvements being made to the department's current facilities. The options under consideration have ranged from fire station remodeling and refurbishment, to station relocation, or adding fire stations.



Station 88 (Alhambra Drive; expansion would be on the left side)



Station 89 (Country Club Drive)

El Dorado County’s current automatic-aid response system (i.e., closest available unit response or essentially “boundary drops”), does provide a degree of improved ability to assemble the appropriate number of personnel for a first-alarm structure fire (14 personnel in an average of 8 minutes travel time, 90% of the time). This practice is much better than relying on “stand alone” response systems operated by each fire department. The boxed text below outlines the closest automatic-aid fire companies for a Cameron Park response. Two control points are used to estimate travel times under normal driving conditions. It is most likely that under “Code 3” emergency responses, the travel times will be less. See the following map that shows the locations of CFPD’s two fire stations and those closest to Cameron Park.

TABLE 1 FIRE STATION LOCATIONS FOR CAMERON PARK’S AUTOMATIC-AID RESPONSE PARTNERS AND ASSOCIATED (NON-EMERGENCY) TRAVEL TIMES		
Vehicle	Minutes to: Cameron Park Drive and Country Club Drive (southern control point)	Minutes to: Cameron Park Drive and Green Valley Road (northern control point)
Engine 28 ¹	4	9
Engine 83 ²	10	4
Engine 86 ³	5	11
Truck 85 ⁴	10	12

¹ Engine 28: El Dorado Co. FPD, 3860 Ponderosa Rd., Shingle Springs CA 95682

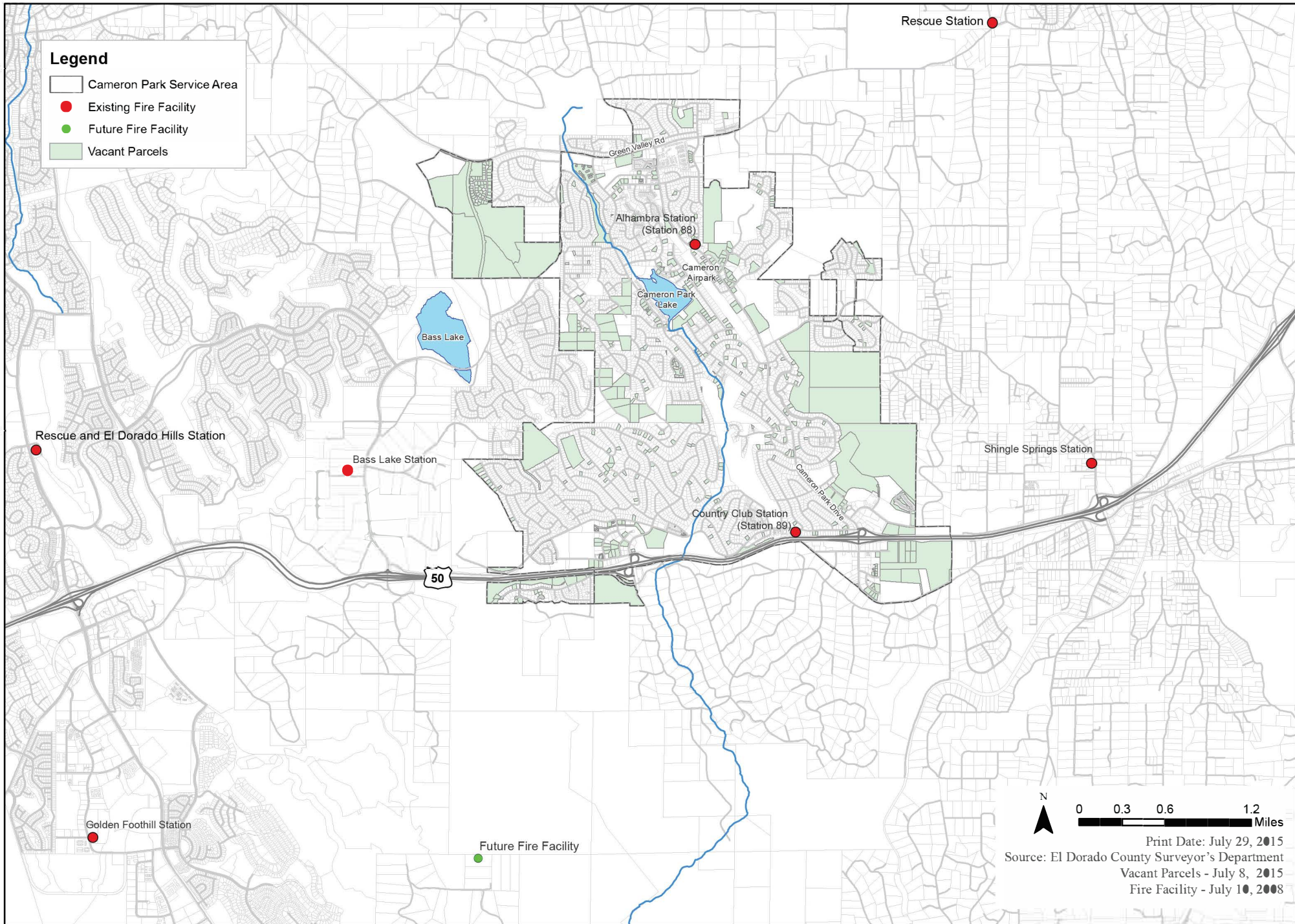
² Engine 83: Rescue FD, 5221 Deer Valley Road, Rescue CA 95672

³ Engine 86: El Dorado Hills FD, 3670 Bass Lake Rd., El Dorado Hills CA 95762

⁴ Truck 85: El Dorado Hills FD, 1050 Wilson Blvd., El Dorado Hills CA 95762

Source: Cameron Park Fire Department, Weisgerber Consulting, G-Maps Travel Time Calculator; July 2015.

Figure 1: Vacant Parcels within the Cameron Park Service Area



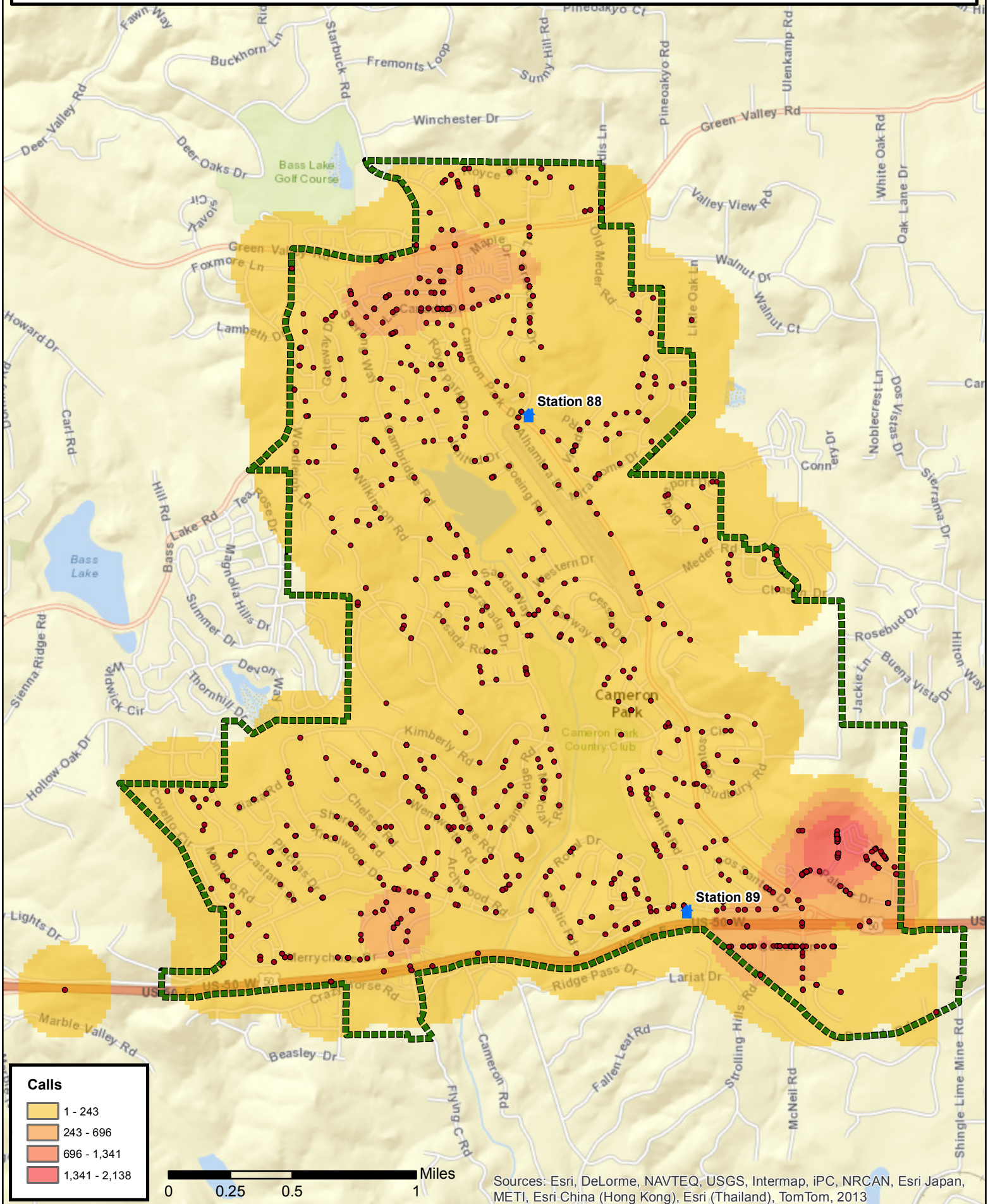
Given this stronger response model and the CPFDP's limited resources to remodel, relocate, or expand the number of fire stations in the District, the most practical, efficient, and cost-effective action the CPFDP can take is to renovate/remodel Fire Station 88.

It also is important to note that the boundary lines for the District and the Fire Department are not coterminous. For example, the planned new development in the northwest corner of the map is within the District's boundary, but it is not within the Fire Department's service area.

The call volume density and dispersal (see Figure 2 using 2014 data) indicates that possibly a third fire station may be warranted sometime in the future to reduce response times (due to proximity or simultaneous alarms) and to bolster on-duty staffing. Currently, the Cameron Park Fire Department has 2-person engine staffing, augmented by resident and volunteer firefighters, rendering 3-person staffing approximately 70% of the time. This practice leaves the community vulnerability to low frequency, high risk events, such as a working structure fire.



Figure 2: 2014 Cameron Park Fire Call Concentration



The highest concentration of call volume is at the nearby Ponte Palmero Senior Community; followed by the Green Valley Road area between La Crescenta Drive and Bass Lake Road; then the area surrounding the Cambridge Plaza Shops and Shopping Center; and, finally, the highway services and shopping areas surrounding the Highway 50 and the Cameron Park Drive interchange.

These call volumes show a triangle pattern of three response concentrations. This data suggests several improvement possibilities and raises a distinct issue regarding the frequency and volume of calls to the Ponte Palmero Senior Community. Ponte Palmero places a disproportionate demand on departmental resources. In holding a non-profit status, the facility pays no ad-valorem taxes and thus pays for no governmental services. This unfunded consumption of Fire Department resources is further discussed in the Financial Strategy section of this plan.

Refurbishing Station 88: Fire Station 88 was constructed in the 1980's when part-time volunteer staffing was in effect. Given the present fire protection need, the station is undersized and not conducive to full-time staffing due to limitations on space and amenities. Due to the age and construction of the current Station 88 the addition of a second story is not likely to be possible without significant foundation and building upgrades that may exceed the cost of other alternatives. However, preliminary discussions with a design consultant have suggested a realistic possibility of adding an "at-grade" addition of approximately 1,500 square feet to the existing building.

An initial cost of an engineering analysis is likely to be in the \$52,500 - \$60,000 (\$35-\$40/square foot) range; with construction costs estimated to be in the \$240,000-\$255,000 (\$160-\$170/square foot) range.

This building addition would modernize the on-duty staff's living quarters, and provide a vastly improved working environment. Preliminary investigation into typical, average fire station design and construction costs render this option a very realistic possibility for improving the department's existing facilities. Conclusion: ***Most viable alternative.***

Other Fire Station Alternatives Considered

Relocating Station 88: A new Station 88 would likely be located to the aforementioned area near Green Valley Rd. so as to provide for the most effective response to that area. However, that option simply shifts the response weakness from the new location to the former location. Thus, it is not judged to be a viable alternative. Moreover, there are few if any available land parcels on which to build a new Station 88 in that area.

Based on recent experience, it would likely be in the range of \$250-\$300 per square foot for new construction costs, which does not include the purchase of the land, architectural and engineering fees, furnishings and equipment, meeting LEED and essential facility certification standards, or adding apparatus, equipment, and personnel. Therefore, a 5,500 square-foot fire station would be in the construction cost range of \$1.4M-1.65M. Conclusion: ***Not a viable alternative.***

Establishing a third fire station: Based on call volume and frequency, a likely location for a third fire station is in the vicinity of Cambridge Plaza (Merrychase Drive/Cambridge Road area). This would serve the Cameron Park community in an area of concentrated alarm activity, which is not likely to diminish because of the proximity of the shopping center and the CSD's recreation center. This location is also is very likely for service to any development in the Marble Valley area that would

impact fire and emergency resources to or from Cameron Park. Moreover, the location provides access to Highway 50 from the Bass Lake Road interchange, allowing a dual response (or an alternative response) to freeway incidents that would complement responses from Station 89. However, given that CPFCD routinely responds on automatic-aid alarms twice as often as it receives automatic-aid, a third fire station should be carefully considered within the context of reviewing and adjusting the reciprocity formula of the automatic-aid agreement. In fact, it may only serve to exacerbate this dilemma. While not resulting in any substantial benefits to Cameron Park. Lastly, the same parcel availability and construction costs exist for this option as for the relocation of Station 88. Conclusion: ***Not a viable alternative.***

Recommendations:

- Conduct an architectural/engineering study for expanding the living quarters at Station 88 to accommodate full-time staffing.
- Maintain the automatic-aid agreement that calls for the closest available unit to respond to calls for service (regardless of ownership).
- Periodically evaluate fire station locations, response times, and strengths of the automatic-aid agreement regarding agency participation and reciprocity.
 - Adopt policy for response time effectiveness. It should be measured in terms of 90% efficiency for the following indicators:
 - Call processing time: 1 minute,
 - Turnout time: 1 minute,
 - Travel time: 5 minutes, and
 - 14 personnel on-scene of a structure fire in 8-minutes 90% of the time.

Priority:

- Immediate: complete facility modifications to Station 88.
- Intermediate-to-long range: Monitor and evaluate first-responders' efficiencies related to call concentrations, response times, and the effectiveness of closest available unit automatic-aid response.

Schedule:

- Station 88 facility modifications: 18-24 months
- Response time monitoring and analysis: on-going

2015 Estimated Cost:

- Station 88 facility modifications:
 - Approximate footprint of addition: 1,500 square feet
 - Typical average design and engineering estimate:
 - \$35-\$40/square foot = \$52,500 -\$60,000
 - Typical average construction cost estimates
 - \$160 – \$170/square foot = \$240,000-\$255,000
 - Total rough estimate: \$292,500 -\$315,000

Fire Training Facility.

Firefighters (both career and volunteer) are mandated to train a minimum of 240 hours per year per person. The CSD property adjacent to Fire Station 89 has viable potential for a fire training facility. There are several manufacturers that construct custom training facilities from refurbished sea-cargo containers. These are legitimate facilities that can be client customized (West Sacramento has one that is only 3 years old). These training structures can be completed for approximately \$125,000 - \$300,000 depending on the design. This is a fraction of the cost for building a concrete cast-in-place training tower.



Proposed training facility space adjacent to Station 88

A local training building with a burn chamber would afford the CFPD the ability to train fire companies within the District's boundaries with some level of live fire, search and rescue, ventilation, and ladder work training; using on-duty personnel without involving extended travel time the CalFire location in Ione, and paying overtime for back-fill personnel or overtime for the personnel actually going to training during their off-duty time.

Beyond a full-scale training tower, there is an array of viable alternative training facility options to consider. Most of these are achievable through the Assistance to Firefighters Grants (AFG) funded through FEMA with the typical grant application filing dates taking place annually in December. Some options include:

- SCBA confidence course,
- Flashover simulator,
- Mobile multi-trainer (live fire, ventilation, and roof training aids),
- Stacked system of containers forming multiple configurations, and
- 2-story residential unit with a working gable roof, burn room chamber, balconies, stairs, above ground ladder-work, and hose stream training aids.

Another option to consider exploring is including a regular budget item for the rental use of any number of established regional live fire training trailers that may be available for annual or bi-annual live fire training for all personnel. This would require some research and negotiation for daily/weekly rates of equipment and training personnel. An economy of scale can be achieved by sharing the cost regionally amongst the automatic-aid partners. Conclusion: ***Research viability of alternative; plan/budget accordingly.***

- **Recommendation:** Research viability of each alternative and plan and budget accordingly.
- **Priority:** Intermediate
- **Schedule:** 3-5 years
- **2015 Estimated costs:** \$100,000 - \$300,000, depending on size and complexity of training facilities and aids, or budgeting for the annual rental and cost of instructors for 1-2 weeks use of an on-site "live fire" training trailer. Consider negotiating as a county or regionally shared resource with costs shared on pro-rata basis.

SECTION 4 CAPITAL IMPROVEMENT PLAN

A well-formulated Capital Improvement Plan (CIP) is rooted in consistent planning for major expenditures and in anticipation of the “just-in-time” replacement of apparatus, equipment, and facilities. CIPs are most effectively done in 5-year increments in which the current year drops into the annual operating budget and off of the 5-year plan. Then the CIP is replaced by a new 5th year so that it is a continuing process that is tied directly to normal annual budget preparations. Supported by an appropriate funding stream and thoughtful analysis and forecasting by staff, the CIP is a powerful instrument for managing a Fire Department’s level of service delivery.

Major capital improvements may include the following:

- **Apparatus:** Purchase and/or refurbishment/replacement of Type-I/Type-III pumper engines; squad and/or rescue vehicles; aerials; ladder trucks; water tenders; command vehicles; utility vehicles; and light vehicles or sedans.
- **Major equipment:** Purchase and/or replacement of: personal protective equipment (PPEs); self-contained breathing apparatus (SCBAs); rescue tools; advanced life support (ALS) cardiac monitoring/intervention equipment, and fire hose.
- **Facilities:** New construction and/or renovation of fire stations, vehicle maintenance facilities, training facilities (both didactic classrooms and manipulative drill ground buildings and props), emergency operations centers, and administrative and support offices.

The CIP allows policymakers and management to effectively plan, approve, and implement a sustained and continuous effort when operating a modern suburban fire protection service delivery system through a proactive budgeting strategy. If funding for a CIP has not yet been established, there is a requisite initial investment whenever inaugurating or restoring a CIP. This is necessary for creating a baseline of equipment and identifying the sources of funding to support an equipment and facilities replacement schedule based on a formally established policy specifying the useful service life of equipment and facilities. Certain safety equipment, such as structural and wildland firefighting gear and self-contained breathing apparatus, has OSHA-mandated service lives.

Some estimated expenditures could include the following:

- **Apparatus Replacement:** Currently, the Cameron Park Fire Department (CPFD) has no standard apparatus and equipment depreciation and replacement schedule, nor does it have an amortized equipment replacement fund. As a result, front line apparatus fall either into a deferred replacement mode or apparatus replacement is funded through a variety of creative methods ranging from one-time capital appropriations to seasonal apparatus “leasing” agreements with the State.

Apparatus replacement funding has most recently been accomplished through the aforementioned seasonal leasing of apparatus to the California Department of Forestry and Fire Protection (CalFire) for statewide deployment during wildland fire season (generally May through October). And, while this is a creative solution for leveraging fire department resources to fund new apparatus, it represents a short-term stop-gap solution for a long-term problem that must be addressed.

Some drawbacks to continuing the current approach include:

1. The funding stream is not sufficient to replace apparatus on a reasonable schedule of 10 years for front line service and 5 years for reserve service. Even with an extension of that replacement schedule to 15 years front line and 5 years reserve service for a total of 20 years, the leasing revenue is insufficient given the present number of front line apparatus, and the problem will only worsen over the course of time.
2. This strategy places CPGD into what amounts to being engaged in a vehicle “rental service” with no accounting for apparatus depreciation or the useful service life of the apparatus used to support the funding stream. Once these assets are depreciated and/or reach the end of their useful service lives, they will need to be funded for replacement. Regardless, there is currently no ongoing process for funding apparatus replacement.

A standard cycle of front line apparatus replacement (depreciation and replacement amortization) for a modern suburban fire department would likely be as previously stated: 10 years front line service followed by a minimum of 5 years reserve service before being decommissioned from the fleet. However, given the available resources of the CPGD, it may be more practical to extend the service life to 15 years front line service followed by a minimum of 5 years reserve status service before being evaluated for being decommissioned from the fleet (i.e., 15 to 20 years of service).

A recommendation for adjusting the service life of apparatus (up or down in the number of service years) is based on the continual analysis of on-going maintenance costs to determine trends in exceptional costs that are in excess of routine preventative and regular maintenance expenditures. The apparatus maintenance record system should be able to indicate how much is spent in time and materials for maintenance costs on any single apparatus. It should have the ability to flag those apparatus that have gone beyond their cost-effectiveness equilibrium, thus reaching a point of diminishing returns where the value of continuing repairs exceeds those of servicing a new apparatus.

Recommendations: Adopt and implement an apparatus replacement schedule policy of 15 years front line service for all firefighting apparatus, with a minimum of 5 years reserve service before consideration of decommissioning the apparatus.

Policy should also require the maintenance of accurate equipment and repair records. This data will support the evaluation of useful service life for each apparatus, and it will take into account any necessary adjustments to either extend or reduce front line or reserve service status.

Staff should regularly review and analyze maintenance records and cost-effectiveness to determine if capital outlay for refurbishing and repowering apparatus may be considered as a viable alternative to transitioning from front line to reserve status—or, from reserve status to de-commissioned from service altogether. This analysis should be done on a case by case basis. It is recommended that Engine 389 be replaced to maintain two reserve engines. After the new engine arrives (on/about September 2015), the Fire Department will then have two Type 1 reserve engines.

It is recommended that light vehicles should be considered for a replacement policy of 5 years for Battalion Chief Command Vehicles (due to intense, high mileage use), and 15 years

for Utility Vehicles. It is also recommended that Utility 289 not be replaced when it becomes no longer serviceable, and that CPFDP maintain only 2 utility vehicles, thereafter.

Several light vehicles in the CPFDP’s fleet could be due for replacement next year (2016), most notably the B/C Command Vehicles and Utility 89. One of the B/C vehicles could be relegated to replace Utility 89, leaving only the two B/C vehicles to be evaluated for replacement. The replacement cost for the two completely outfitted B/C vehicles could run between \$110,000 and \$140,000. Since this should happen soon, the cost for the replacement of both vehicles would be outside the recommended amortization funding. Alternatively, the replacement of one or both B/C vehicles could be deferred based on a cost-effective analysis of mileage and maintenance costs versus the costs of a newly purchased vehicle. Future replacement of these vehicles would be financed via the amortized replacement fund when it is established.

Regular analysis should determine the need for adjusting any of the recommended apparatus/vehicle replacement schedules with the corresponding funding level in the recommended amortization schedule being adjusted up or down accordingly.

Priority: Immediate

TABLE 2 APPARATUS AND LIGHT VEHICLE REPLACEMENT SCHEDULE				
Schedule	Purchased	Front Line	Refurb or Rsrv	De-comm
Engine 89	2006	9 years	2015	2020
Engine 88	2006	15 years	2021	2026
Engine 289	2001	5 years	2006	2021
Engine 288	2012	15 years	2027	2032
Engine 389	1990	15 years	2015	2020
Battalion 2715	2010	5 years	2016	2016
Battalion 2716	2010	5 years	2016	2016
Utility 89	2001	15 years	2016	2016
Utility 88	2010	15 years	2025	2025
Utility 289	1999			2019

Source: Weisgerber Consulting, July 2015.

2015 Estimated Costs:

- New Type-I engine completely equipped: \$650,000/each
- New B/C Command Vehicle completely equipped: \$70,000/each
- New F-150 utility vehicle w/shell, completely equipped: \$55,000/each

Based on the replacement costs in 2015, and if the CPFDP were starting from a baseline of all new apparatus and light vehicles, for FY 2015/16 it is recommended that an annual amortization fund be established for apparatus replacement in the amount of \$75,000-\$100,000.

It is also recommended that staff factor into any funding decisions the possibility that the two B/C vehicles could be due for replacement in the next year or two due to their high mileage (\$55,000-\$70,000/each).

- **Major Equipment Replacement:** This section discusses the replacement of major equipment in the on-going business of fire, rescue and EMS service delivery by the CFPD. It includes personal protective equipment (PPE) turnout gear, self-contained breathing apparatus (SCBA), rescue extrication tools, advanced life support (ALS) cardiac monitoring/intervention equipment, and fire hose.

1. **Personal Protective Equipment (PPE):** PPEs are eligible to be replaced every ten (10) years, or every two NFPA standards revision cycles, or whenever the equipment is damaged beyond repair or fails an inspection. The CFPD has approximately 65 sets of structural firefighting gear and an equal number of wildland firefighting PPE gear. The 2015 cost for each of these is as follows: 1 set of structural firefighting turnouts (pants and jacket) cost approximately \$6,000, and 1 set of wildland firefighting gear (pants and jacket) cost approximately \$1,200.

The CFPD typically buys some number of new PPE gear for the career-paid personnel on an annual basis; then it “hands down” the older PPE gear to “resident” firefighters and volunteers. Therefore, in order to amortize the cost of PPE replacement in a planned fashion over a 10 year period, the fire department should budget \$50,000 annually toward PPEs, in addition to maintenance and repairs. This would, in effect, replace the entire compliment of PPEs (structural and wildland) in manageable increments over each successive 10-year period.

Recommendation: Amortize the cost of PPE replacement over a 10 year period, should consider budgeting \$50,000 annually, in addition to maintenance and repairs. This would, in effect, replace the entire inventory of PPEs (structural and wildland), in manageable increments, over each successive 10-year period.

Priority: Immediate for initiating annual amortization funding for completing an on-going PPE replacement cycle.

Schedule: Annual amortization for PPE replacement every 10 years.

Cost: \$50,000 annually, to replace 7 sets of both structural and wildland PPEs.

Recommend including annual CPI index inflator and/or annual unit cost survey to use to adjust annual funding levels so they are commensurate with replacement costs.

2. **Self-Contained Breathing Apparatus (SCBA):** The CFPD has 25 SCBA units with a 2015 estimated replacement cost of \$7,000-\$8,000 each, equaling a potential \$200,000 capital outlay. Fortunately, the CFPD has just replaced the entire complement of SCBAs through grant funding, and replacement is not likely to be necessary prior to 2030 unless parts become unavailable or cylinders fail regular hydrostatic testing. However, an eventual replacement project must be anticipated and planned for as part of on-going financial planning.

All SCBA cylinders require periodic hydrostatic testing as required by 49 CFR 180.205. The frequency of the maintenance depends upon the cylinder material, as follows:

- Steel cylinders should be tested every five years and have an indefinite service life until they fail a hydro test.
- Aluminum cylinders (not including hoop-wrapped) should be tested every five years and have an indefinite service life until they fail a hydro test.
- Hoop-wrapped cylinders should be tested every three years and have a 15-year service life.
- Fully wrapped fiberglass cylinders should be tested every three years and have a 15-year service life.
- Fully wrapped Kevlar cylinders should be tested every three years and have a 15-year service life.
- Fully wrapped carbon fiber cylinders should be tested every five years and have a 15-year service life.

Recommendation: An annual amortization funding of approximately \$15,000 should be created for the replacement of SCBAs in addition to their annual maintenance budget.

Priority: Immediate for initiating annual amortization funding.

Schedule: Annually in order to prepare for the ultimate replacement of the SCBA inventory whether through obsolescence or non-serviceability.

Cost: \$15,000 annually, and recommend including an annual CPI index inflator and/or unit cost survey in order to adjust funding levels commensurate with replacement costs.

3. **Rescue Tools:** Hydraulic rescue tools are mission critical equipment to delivering services. Especially given the proximity and frequency of response by the CFPD to Highway 50 incidents, these units are of particular significance and value for disentangling and extricating trapped victims in vehicle accidents. These units should be replaced every 5-7 years depending on advances in technology and the cost of maintenance and repairs to each unit. The CFPD has four (4) Rescue Tool units at a 2015 cost of \$30,000 each. These are due for replacement in FY 2018-19. An annual capital amortization of approximately \$18,000 should be created for the replacement of Rescue Tools in addition to their annual maintenance budget.

Recommendation: The Rescue Tool units are due for replacement in FY 2018/19. An annual capital amortization of approximately \$20,000 should be considered for the replacement of Rescue Tools every 6 years (may be desired/required sooner, depending on advances in technology and annual cost of maintenance and repairs for each unit), in addition to the annual maintenance budget.

Priority: Immediate for initiating annual amortization funding.

Schedule: Annual amortization for Rescue Tool replacement every 6 years. This does require an accelerated 4-year schedule for replacing units in FY 2018-19.

Cost: \$30,000 annually for the first four years on the accelerated schedule then \$20,000 annually thereafter on 6-year replacement schedule, and use an annual CPI index inflator and/or unit cost survey to adjust funding levels commensurate with replacement costs.

4. **ALS Cardiac Monitors:** Cardiac monitors are mission critical equipment in the delivery of Advanced Life Support (ALS) service in the field, to the Cameron Park community and as part of the El Dorado County EMS JPA. The monitors should be replaced every 6-8 years depending on advances in technology and annual cost of maintenance and repairs. The CPFCD has four Cardiac Monitor (4) units at a 2015 cost of approximately \$30,000 each. These units are recommended for replacement in FY 2019-20. An annual capital amortization of approximately \$18,000 should be set aside for the replacement of Cardiac Monitors in addition to their annual maintenance budget.

Recommendation: The ALS Cardiac Monitoring units are due for replacement in FY 2019-20. An annual capital amortization of approximately \$18,000 should be established for the replacement of Cardiac Monitors every 7 years. This may be desired or required sooner depending on advances in technology and the annual budget for maintenance and repairs for each unit.

Priority: Immediate for initiating annual amortization funding for the replacement of ALS Cardiac Monitors.

Schedule: Annual amortization schedule for ALS Cardiac Monitor replacement. This does requires an accelerated 5-year schedule for replacing units in FY 2019-20.

Cost: \$24,000 annually for the first five years on the accelerated schedule then \$18,000 annually on a 7-year replacement schedule. Recommend including annual CPI index inflator and/or unit cost survey to adjust funding levels commensurate with replacement costs.

5. **Fire Hose:** The National Fire Protection Association's (NFPA) Standard-1962 calls for annual hose testing and allows for keeping hose as long as it passes the annual service test. However, a generally accepted practice is to remove hose from service after 10 years, as recommended by the NFPA in Standard-1962 (2008 Edition), Annex A.7.1., which states *"While all users should establish their own retirement schedule, fire departments should give careful consideration to a 10-year maximum service life under normal operating conditions."*

Therefore, an annual budget should be maintained for replacing a prescribed amount of hose inventory, so it will not need replacement all at once—while also providing for damaged hose repair and replacement. This allocation can be amortized over 10 year increments. The following are a representation of the average hose costs in 2015: 50-foot length of 1-3/4" double-jacketed fire hose approximately \$150; 50-foot length of 2-1/2" or 3" double-jacketed hose approximately \$250; and 100-foot length of 5" Large-Diameter Hose (LDH) approximately \$525.

Recommendation: Outfitting an entire engine with a complete hose change costs approximately \$9,000 in 2015 dollars. With 5 engines in the CPFCD fleet, this represents an in-service inventory of approximately 9,000 feet of fire hose (not including rack storage inventory). Therefore, an annual hose replacement budget of \$5,000-7,500 is considered reasonable.

Priority: Immediate for initiating annual amortization funding for completing an on-going fire hose replacement cycle.

Schedule: Annual amortization for fire hose replacement cycle.

Cost: Not less than \$5,000 annual allocation but likely not exceeding \$7,500 annually. Also recommend including an annual CPI index inflator and/or unit cost survey to adjust funding levels commensurate with replacement costs.

Facilities: Given the robust nature of El Dorado County’s automatic-aid, closest available unit for response model, the most efficient and cost-effective measure the CFPD can operationally take, regarding facilities, is to renovate Fire Station 88.

Fire Station 88 was constructed in the 1980’s with a part-time volunteer staff model in effect at the time. The station is under-sized and not conducive to full-time staffing space and amenities. Due to the age and construction of the current station 88, the addition of a second story is not likely to be possible, without significant foundation and building envelope upgrades that may exceed the cost of other alternatives. However, preliminary discussions with a design consultant have netted the realistic possibility of an “at-grade” addition of approximately 1,500 square feet, to the existing building.

This addition would modernize the on-duty staff living quarters, and provide a vastly improved working environment. Preliminary investigation into typical, average fire station design and construction costs, render this option a very real possibility for improving the operational facilities of the CFPD.

Recommendations:

- Engage in a modification study for expanding the living quarters at station 88 to accommodate full-time staffing.
- Maintain the current automatic-aid agreement that calls for participation of the closest available unit responding to calls for service.
- Regularly evaluate fire station locations, response times, and strength of the automatic-aid agreement’s participation and reciprocity.
- Response time effectiveness should be measured in terms of 90% efficiency for the following benchmarks: (1) call processing time: 1-minute; (2) turnout time: 1-minute; (3) Travel time: 5-minutes.

Priority:

- **Immediate:** complete facility modifications to station 88.
- **Intermediate to long range:** Monitor and evaluate first-responders’ efficiency related to call concentration, response time, and effectiveness of closest available automatic-aid unit.

Schedule:

- Station 88 facility modifications: 18 months
- Response time monitoring and analysis: on-going

Cost:

- Station 88 facility modifications:
 - Approximate footprint of addition: 1,500 square feet

- Typical average design and engineering estimate:
- \$35-\$40/square foot = \$52,500 -\$60,000
- Typical average construction cost estimates
- \$160 – \$170/square foot = \$240,000-\$255,000
- Total rough estimate: \$292,500 -\$315,000

- Staff time for analyzing response time efficiency and effectiveness.

6. Supplemental Information:

There are also several other Capital items that were in need some consideration, although they hold more of an intermediate priority.

Replacement of the portable radios (35 count/ \$1,500/ea.) and thermal imaging cameras (TICs) (6 count/\$8,500 ea.). These are all of varying ages and should be replaced in the out years of the currently recommended CIP, or the first years of the next 5-year cycle. 32015 estimated costs for each of these categories is:

- Portable radios (35X \$1500) = \$57,000 (including tax)
- Thermal Imaging Cameras (6X\$8500) = \$55,500 (including tax)

There is also an additional cardiac monitor on the oldest engine (E-389) that needs replacement, but was not accounted for in the recommended CIP. This unit's replacement should be evaluated in the context of keeping a fifth engine in the fleet. If it is deemed desirable to continue maintaining a fifth engine, then a fifth cardiac monitor should be considered in year 4 or 5 of the current CIP.

CIP TABLE - 1A

This table represents an optimal 5-year CIP model, using the high end of estimates in each category discussed in the written plan. This model solves “behind schedule” funding for replacing the B/C Light Vehicles in the first year, and spreads the “catch up” amortization of Rescue Tools and Cardiac Monitors over the entire 5 years.

In the out years (FY-2020/21, and beyond) the amortized impact on annual totals will be reduced as the system stabilizes. All costs are in 2015 dollar estimates and should be adjusted for Consumer Price Index (CPI) and/or vendor cost surveys, on an annual basis.

CIP TABLE - 1A					
Item	2015/16	2016/17	2017/18	2018/19	2019/20
Apparatus	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Light Vehicles	\$140,000	0	0	0	0
PPEs	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
SCBAs	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
Rescue Tools	\$30,000	\$30,000	\$30,000	\$30,000	\$20,000 ¹
Cardiac Monitors	\$24,000	\$24,000	\$24,000	\$24,000	\$24,000 ²
Fire Hose	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500
Station 88	\$60,000 ³	\$255,000 ⁴	\$35,000 ⁵	0	0
TOTALS⁶	\$426,500	\$481,500	\$261,500	\$226,500	\$226,500

¹ \$20,000 (in 2015 dollars) from FY 2019/20 forward, should be adjusted annually for Consumer Price Index (CPI)

² \$18,000 (in 2015 dollars) from FY 2020/21 forward, should be adjusted annually for Consumer Price Index (CPI)

³ Allowance estimate for Design and Engineering

⁴ Allowance estimate for Construction

⁵ Allowance estimate for Furniture & Equipment

⁶ Should be adjusted annually for Consumer Price Index (CPI)

Source: Apparatus: Smeal Manufacturing and Pierce Manufacturing; Cameron Park Fire Department; West Sacramento Fire Department, Public Bids, July 2015; Light vehicles: State of California Public Bid and West Sacramento Fire Department Public Bid, July 2105; Personal protective equipment (PPE): L.N. Curtis & Sons, Inc.; 2015 Yolo County Regional AFG Grant Application, July 2015; Self-Contained Breathing Apparatus (SCBA): Scott Manufacturing, 2014-15; Yolo County Regional AFG Grant Application, July 2015.

CIP TABLE - 1B

This table represents an austere 5-year CIP model using the low end of cost estimates in each category discussed in the written plan. This model spreads the “behind schedule” expenditures of replacing the B/C Light Vehicles over two years (with a less expensive model), and does not account for a “catch up” amortization of Rescue Tools and Cardiac Monitors over the entire 5 years. All costs are in 2015 dollar estimates and should be adjusted for Consumer Price Index (CPI) and/or vendor cost surveys, on an annual basis.

While the annual totals in this model appear less daunting than in CIP Table-1A, this model results in significant risks of: having to defer critical equipment replacements due to insufficient amortized funds; continually shifting the shortfall predicament forward into the out years; and, there is an extremely high probability of not ever being able to reach a stable equilibrium in the replacement schedule.

CIP TABLE - 1B					
Item	2015/16	2016/17	2017/18	2018/19	2019/20
Apparatus	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000
Light Vehicles	\$55,000	\$55,000	0	0	0
PPEs	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
SCBAs	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
Rescue Tools	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000
Cardiac Monitors	\$24,000	\$24,000	\$24,000	\$24,000	\$24,000
Fire Hose	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Station 88	\$52,500	\$240,000	\$25,000	0	0
TOTALS	\$294,500	\$482,000	\$212,000	\$187,000	\$187,000

Source: Rescue tools and cardiac monitors: Cameron Park Fire Department, July 2015; Fire hose: L.N. Curtis & Sons, Inc., July 2015; Station 88 remodel/refurb: Design Cost Data (DCD.com); Regional Square Foot Cost Analysis (Western U.S.), June 2013 (adjusted for CPI to July 2015); Kastle & Boos Associates, Chatham, MA, MA Fire Station Design & Construction, October 2013 (adjusted for CPI to July 2015).

SECTION 5 LONG-TERM FINANCIAL STRATEGY

This financial strategy provides an analysis and recommendations for the on-going operations and staffing for the Cameron Park Fire Department represented in the most efficient and cost-effective manner and within the available resources of the District. This is designed to be a living document and not the final answer. Utilized along with thoughtful analysis and forecasting by staff, it allows management and policymakers to effectively plan and approve a sustainable maintenance of effort through a proactive budgeting strategy.

This financial strategy document provides a detailed description of several infrastructure and staffing issues by presenting alternatives with a recommendation, an implementation schedule, and an estimated cost to implement the recommendation.

This financial review also considered several courses of action for viable alternative options in funding mechanism strategies as well, ranging from:

- Financial planning possibly including bonds or certificates of participation;
- A benefit assessment election for partial funding of staffing shortfalls and major capital outlay expenses;
- Fees for service agreements for extraordinary circumstances; and
- Active pursuit of annual FEMA grant funding opportunities (SAFER and AFG).

However, since the nuances of each option varies as to implementation, it affects the cost and timeline. Therefore some general guidelines as to 2015 costs were included, along with recommendations for research and consideration of best practices, in terms of future financial strategy discussion. For planning purposes, the County Assessor's Office lists 6,897 parcels in the Cameron Park Community Services District. This data provides a good starting point for analyzing possible revenues available from benefit assessments, parcel fees, or other property based income sources.

Strategy: The level of ongoing staffing and infrastructure support necessary to sustain the Cameron Park Fire Department (CPFD) at even the current level of community fire and emergency services requires a financial maintenance of effort for capital facilities projects, apparatus and equipment replacement, and possibly staffing. Over time, costs are naturally going to increase for the delivery of fire and emergency services, while revenues in Cameron Park are forecast to remain relatively flat. These circumstances are exacerbated by the fact that Cameron Park is reaching "build-out" and developer impact fees will no longer be applicable. Moreover, there are several situations that require thoughtful attention now, and into the future, for mitigation.

Issue: Operational support is in need of a funding mechanism for capital outlay projects of large magnitude (facilities and large apparatus and equipment replacement), and/or staffing shortfalls that are on-going. The CSD's developer impact fee schedule has been a source of one-time revenue to compensate the fire department for initial impacts. However, with the CSD approaching build-out, this revenue source is rapidly coming to an end.

In recent history, the CPFD experienced a cyclical staffing model that has necessarily fluctuated with the annual revenue stream. This often results in sub-standard 2-person staffing on front

line engine companies, over the course of single and/or multiple fiscal year budgets, thus placing both first responders and the community at a higher than normal risk. The third person on each in-service engine is critical to effect firefighting with the first arriving company on a first alarm assignment of a structure fire. The engine companies of the CFPD are only staffed with three personnel approximately 70% of the time by utilizing resident firefighters as the third person. Resident firefighters work seasonally for CalFire, and they are gone on assignment in the summer months, but staffing improves in the winter when they return.

This 30% shortfall in engine staffing should be considered for funding. Adding permanent staff to achieve full time three person engine companies is needed. Possibly this can be accomplished via a benefit assessment measure. Not addressing this option for closing such a critical staffing gap could prove to be detrimental on many levels.

By way of example, the story (below) of a failed fire service assessment costing residents hundreds—if not thousands—of dollars per household, happened in a Bay Area rural interface fire district, just a few months ago:

On May 11, 2015, the East Contra Costa Fire Protection District residents voted down a benefit assessment that would have cost about \$100 per year per home. The rejected \$100 a year per parcel assessment will quickly be surpassed by much higher insurance rates. Fire service delivery was cut by 40% and homes there will be re-rated and charged accordingly for much greater risk (estimated at \$300-\$400 per year per home increase). George Stewart, manager of the East County Insurance Company, stated, "In some cases it could be to the point where the company itself, can't insure [homeowners]. And, [the homeowners insurance] would have to go to the FAIR Plan—which translates to thousands of dollars above a standard premium." A 40% reduction in stations and staffing (which is what occurred in East Contra Costa FPD) is equivalent to 2.4 personnel/per day in layoffs, with 3.6 personnel/per day in staffing, for CFPD. This would likely be represented in Cameron Park as 2 personnel on the ambulance and 1.6 on a single engine.

Moreover, an intelligently planned and scoped assessment holds a strong potential to fund proportionally large capital outlay expenses in addition to improved staffing.

Possible Remedy: It is recommended that the CFPD would greatly benefit from a well-crafted strategic financial plan as a companion to this strategic Fire Department Master Plan and CIP. Moreover, it is recommended that the CSD give strong consideration to engaging the services of a qualified governmental financial consultant to advise and inform the District on the viability of available options for long-term financing of infrastructure, and an analysis of the effects of smoothing the costs of large capital expenditures over a period of time via an predictable debt service scheduling model. (An initial analysis of this type would likely cost approximately \$25,000).

It is further recommended that the CSD give strong consideration to exploring the advantages and viability of a successful benefit assessment election (under provisions contained in Proposition 218) to provide reliable on-going revenue to adequately staff its emergency first responder apparatus with a third person for the remaining 30% of the time. A successfully passed effort of this nature will provide a consistent and reliable revenue stream to provide the community with a level of staffing that it should be receiving from a modern suburban interface fire department. (An initial analysis would also be approximately \$25,000).

Issue: The frequency and volume of emergency calls for service generated by the Ponte Palmero Senior Community create a disproportionate demand on CPFDD resources, yet the facility holds a non-profit status and pays no ad valorem secured property tax increment, and as such Ponte Palmero pays for no governmental services. This unfunded consumption of CPFDD resources should necessarily be accounted for.

Possible Remedy: Explore the possibility of a fee for service agreement with Ponte Palmero Senior Community. An initial benchmark of a \$100/year per unit (less than 27 cents/day) pass-through service fee might be considered a reasonable service fee; for the facility that is responsible for the greatest number of emergency calls per capita, without any contribution to the on-going ad valorem tax base in support of government services provided the CSD. If this approach is rendered impossible with the existing Ponte Palmero Senior Community (even as a phased-in approach), then it should certainly be considered for negotiation in future development agreements, and similarly situated non-profit facilities.

Grant Opportunity Remedies: The CPFDD should consider aggressively pursuing the annual funding opportunities through FEMA's Assistance to Firefighters Grant (AFG), typically available in January of each year. If chosen, the CPFDD could receive funding for apparatus and/or equipment on a one-time basis. Typically, there is a 10% matching fund requirement.

If the CPFDD lacks expertise in grant writing, there is a regional grant approach available (particularly with the AFG), whereby the CPFDD could partner with another agency or group of agencies in seeking similar resources using an economy of scales, which often is given a higher funding priority than proposals from individual agencies. Moreover, there are a number of consultants available to either train CPFDD personnel or to write the grant proposal itself. Both of these have had very high success rates. Also, many vendors (PPEs, SCBA, Modular Training Towers/Props, and Exhaust Extraction Systems) offer assistance with grant writing and grant writing templates.

Equally valuable and attendant to the AFG are grants available through FEMA's "Staffing for Adequate Fire and Emergency Response" (SAFER) program—typically open for application in November of each year. These grants are highly competitive but not unattainable, particularly given the level of urban interface risk that Cameron Park faces and the limited resources that are available to address that risk. SAFER grants are currently funding positions for a full two years with no matching funds required from the grant receiving agency. And, there is no obligation to retain employees after the grant performance period. This is a method by which to consider staffing-up, following a downturn cycle, and gaining the ability to replenishing FTEs in anticipation of revenue (e.g., the aforementioned 30% staffing gap).

Recommendations:

- Commission services of qualified governmental financial strategist to analyze viability of various funding strategies.
- Commission services of qualified consultant for feasibility effort on viability of a Prop 218, Benefit Assessment Election to fund staffing and/or infrastructure.
- Allocate staff time and training to pursue FEMA grants annually available in the SAFER and AFG programs, in coordination with the El Dorado County Operational Area (County OES).

Priority: Immediate

Schedule: 18-24 months

2015 Estimated Cost:

- \$25,000 for an initial 50-hours financial strategic analysis;
- \$25,000 for a Prop 218 engineering study.
- Staff time for grant writing

SECTION 6 REFERENCES

Cameron Park Community Services District, January 1, 2011, *Fire Department Master Plan and Capital Improvement Plan* (incomplete).

Cameron Park Fire Department, April 2015, *Monthly Vehicle/ Apparatus Inventory Report*.

California Department of Forestry and Fire Protection (CAL FIRE), November 12, 2013, *Cooperative Fire Programs Fire Protection Reimbursement Agreement*.

Foothill Associates, June 2014, *Summary of Anticipated Impacts from Developments at Marble Valley and Lime Rock Valley on Cameron Park Community Services District Park Facilities and Preliminary Fee Calculations*.

Browning Reserve Group, May 9, 2014, *Reserve Study, Cameron Park Community Services District*.

Insurance Services Office, May 27, 2014, *letter RE: Cameron Park CSD, El Dorado County, California North, Public Protection Classification: 03/3X*.

County of El Dorado, Chief Administrative Office, March 4, 2015, *letter RE: Development Impact Mitigation Fee Reporting Requirements, Review Process and Reporting Schedule*.

County of El Dorado, December 2014, *General Plan Public Health, Safety, and Noise Element*.

Camino Emergency Command Center, 2014 *Annual Report*.

Agenda Transmittal

DATE: December 6, 2022

FROM: Dusty Martin, Fire Chief
Clint Seibert, Battalion Chief

AGENDA ITEM #4: TYPE III ENGINE REPLACEMENT

RECOMMENDED ACTION: Review and discuss replacement of Type II Fire Engine

Need For a Type III Engine:

A goal of the Cameron Park Fire Department is to have 2 type III Engines. These engines are available for response in our community and provide regional wildland fire protection throughout the state. Fire apparatus must exceed the standards of commercial and private vehicles due to the need to ensure public safety in the district. Cameron Park has two type III engines; one is currently in need of replacement. In addition to increasing the efficiency of the fire department the type III engines contribute to the department's budget with local rental agreements.

Our current type III Engines include Engine 389 and Engine 388. Engine 389 is 21 years old and has 81,006 miles; Engine 388 is 11 years old and has 53,177. National Fire protection Agency (NFPA) standards recommend the replacement of frontline engines at 10-15 years. Following (NFPA) standards reduces maintenance costs, safer work environment, and greater operational effectiveness. Engine 389 is currently past the recommended replacement standard. Engine 389s age possess some challenges. One of the challenges are parts are hard to find; Engine 389 is often out of service due to part delays. Another challenge is the cost of frequent repairs. Safety is of high value, and Engine 389 is not equipped with modern safety features such as airbags.

The proposed replacement schedule PER NFPA:

Engine	Purchased	De-Commissioned
Engine 389	2001	2016
Engine 388	2011	2026

Useful life Definition:

The applicable standards used by the fire service relating to fire apparatus are the National Fire Protection Association (NFPA) 1901. According to the NFPA 1901 Standard (2016 Ed.) Annex D Guidelines for First Line and Reserve Fire Apparatus:

According to the National Fire Protection Agency (NFPA), the expected useful life of front line engines is generally 10 to 15 years and the expected useful life of frontline trucks is at least 15 years. The NFPA adds that once equipment has reached the end of its frontline service, it can be maintained in the reserve fleet until it is no more than 25 years old.

“To maximize firefighter capabilities and minimize risk of injuries, it is important that fire apparatus be equipped with the latest safety feature and operating capabilities. In the last 10 to 15 years, much progress has been made in upgrading functional capabilities and improving the safety features of fire apparatus. Apparatus more than 15 years old might include only a few of the safety upgrades required by the recent editions of the NFPA fire department apparatus standards. Because the changes, upgrades, and fine tuning of NFPA 1901 have been truly significant, especially in the area of safety, fire departments should seriously consider the value (or risk) to firefighters of keeping fire apparatus more than 15 years in first-line service.”

“It is a generally accepted fact that fire apparatus, like all types of mechanical devices, have a finite life. The length of that life depends on many factors, including vehicle mileage and engine hours, quality of preventative maintenance program, quality of driver training program and rules enforcement, whether the vehicle was used within the design parameters, whether the fire apparatus was manufactured on a custom or commercial chassis, quality of workmanship by the original manufacturer, quality of the components used, and availability of replacement parts, to name a few.”

Purchasing:

We recommend an immediate replacement for Engine 389. It will take a minimum of 24 months to receive the engine once purchased. We will use the same specifications and vendor as the current CAL FIRE type III Engines. Utilizing

the CAL FIRE contract allows the district discounted cost and continuity between fire fighter personnel.

Attached are:

- Last four fiscal year rental income
- Repair costs per year
- Equipment needed for new engine
- Price quotes of buying a new engine

Engine 389



Last 3 years income from rentals

E388			
FY 22-23	\$	82,400.65	
FY 21-22	\$	150,142.85	
FY 20-21	\$	141,085.45	
FY 19-20	\$	898.15	\$ 374,527.10
E389			Total
FY 22-23	\$	65,327.91	\$ 604,330.31
FY 21-22	\$	26,716.80	
FY 20-21	\$	137,758.50	
FY 19-20	\$	-	\$ 229,803.21

Cost of maintenance per Engine

New tires for E388 2,200.00 per year

New tires for E389 1,400.00 per year

F/Y 20/21 E388 had a

Fiscal Year	Engine 388	Engine 389	Year Total
2016/2017	\$4,275.29	\$2,510.84	\$6,786.13
2017/2018	\$1,615.73	\$339.93	\$1955.66
2018/2019	\$0	\$4,304.85	\$4,304.85
2019/2020	\$0	\$2772.68	\$2772.68
2020/2021	\$10,835.73	\$1,823.68	\$12,659.41
2021/2022	\$4,159.13	\$4,615.28	\$8,774.41
2022/2023	\$2,347.21	\$1,854.84	\$4,202.05
Grand total	\$23,233.09	\$15,449.42	\$38,682.51
Average Per Year	\$3,319.01	\$2,207.06	\$5,526.07

Equipment needed:

This is the cost of total equipment to outfit a new engine. Most of the equipment from engine being replace will work on the new engine. The cost will be lower for equipment but there will be some associated costs for new equipment.

CATERGORY	TOTAL PRICE
Appliances	\$8,345.30
MEDICAL	\$6,863.04
RESCUE	\$16,709.78
HOSE	10,764.25
HANDTOOLS	\$2,807.33
POWERTOOLS	\$1,670.93
MISCELLANIOUS	\$5,491.60
Grand Estimated Cost	\$52,652.23

Items need to purchase after moving over old equipment

ITEM	# Of	Price per item	Vendor	Total Price
Camelbak Squadbak 25L	2	\$320.58	amazon	\$641.16
Metal clip board	2	18.99	Amazon	\$38.00
Gas Clip multi gas monitor	1	\$709.99	amazon	\$709.99
vehicle lock out kit	1	\$87.72	Amazon	\$87.72
Lock out tag out kit	1	\$139.99	Amazon	\$139.99
Elevator kit	1			
Rtic back pack cooler	1	\$183.99	Amazon	\$183.99
Rtic cooler 45 quart	1	\$239.99	Amazon	\$239.99
streamlight stinger w/ charger	2	\$155.64	Amazon	\$311.28
streamlight vulcan w/ charger	2	\$179.20	amazon	\$358.40
Garmin 64 hard case	1	\$16.99	Amazon	\$16.99
Garmin screen protector	1	\$7.85	amazon	\$7.85
Garmin 64 xs w/ maps	1	\$355.24	amazon	\$355.24
Kestrel 3000	1	\$159.00	Amazon	\$159.00
20 lb extinguisher	1	\$196.80	All Star	\$196.80
2.5 gal water extinguisher	1	\$166.80	All Star	\$166.80
Honda pump acc. Kit	1	\$238.00	All Star	\$238.00
Stop/slow signs	2	\$49.20	All Star	\$98.40
Gosport salvage cover 12x18	3	\$222.00	All Star	\$666.00
Gosport hall runner 3x18	2	\$56.40	All Star	\$112.80
gosport carry all	1	\$76.80	All Star	\$76.80
Jim-gem belt weather kit	1	\$177.60	All Star	\$177.60
Flare alert strobe beacon	1	\$139.20	All Star	\$139.20
drip torch (RED)	2	\$184.80	All Star	\$369.60
GRAND TOTAL FOR THIS PAGE				\$5,491.60



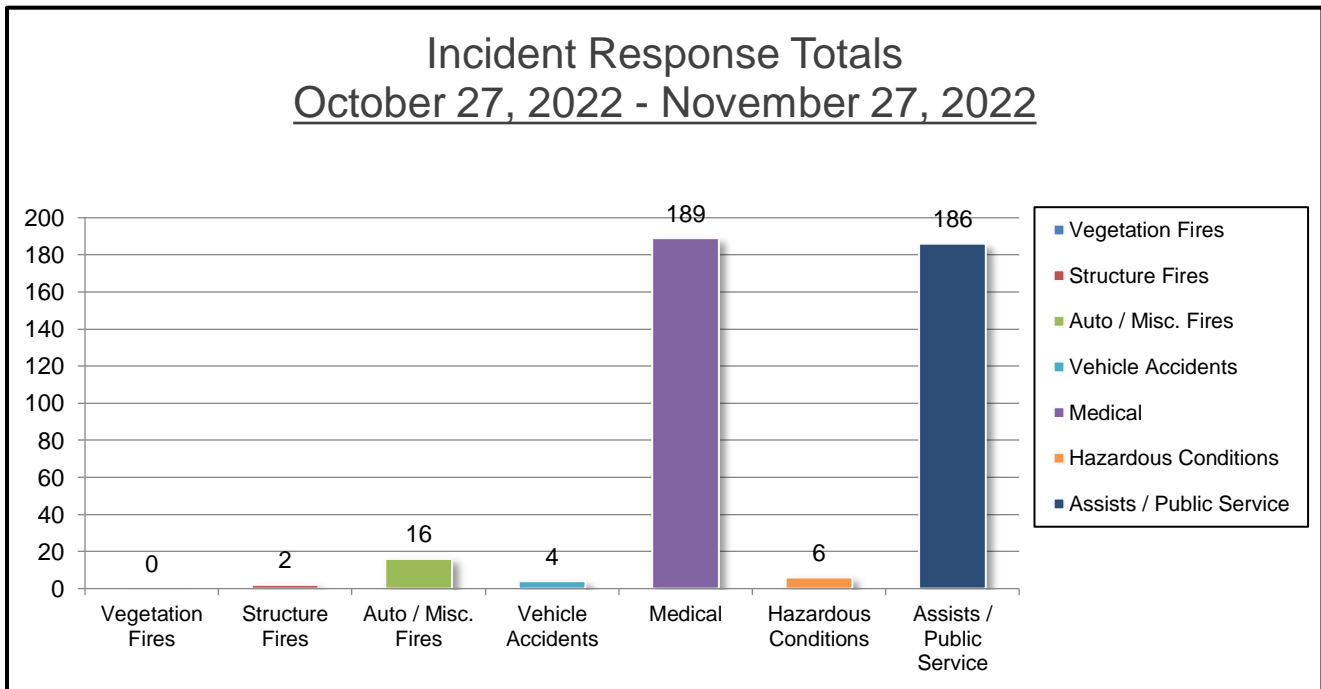
Cameron Park
Community Services District



Agenda Transmittal

Date: December 6, 2022
From: Clinton Siebert, Battalion Chief
Agenda Item #2A: Fire Department Report
Recommended Action: Receive and File

Cameron Park Fire Department Incident Totals



Monthly	October 2022	November 2022	Decrease
	358	352	1.7%
Yearly	November 2021	November 2022	Increase
	229	352	42.3%
YTD	YTD 2021	YTD 2022	Increase
	3,052	3,381	10.2%

Response Statistics-7 Medic Units

October 28-November 3, 2022

Total Response by Medic Unit (includes Move-Ups)							
M17	M19	M25	M28	M49	M61	M85	M89
65	67	91	84	0	52	64	72
Total Incident Response by Medic Unit							
27	30	80	69	0	27	56	66
Total Medical Response by Medic Unit							
26	30	80	67	0	22	54	64
Total Transport Response by Medic Unit							
13	17	49	50	0	9	38	40

November 4-10, 2022

Total Response by Medic Unit (includes Move-Ups)							
M17	M19	M25	M28	M49	M61	M85	M89
88	76	82	93	0	68	69	77
Total Incident Response by Medic Unit							
44	38	75	64	0	32	55	67
Total Medical Response by Medic Unit							
44	35	74	61	0	29	55	66
Total Transport Response by Medic Unit							
27	22	52	45	0	16	35	46

November 18-24, 2022

Total Response by Medic Unit (includes Move-Ups)							
M17	M19	M25	M28	M49	M61	M85	M89
85	81	93	93	0	58	70	70
Total Incident Response by Medic Unit							
45	33	79	65	0	30	65	56
Total Medical Response by Medic Unit							
44	33	75	64	0	28	63	55
Total Transport Response by Medic Unit							
27	21	44	51	0	19	35	37

Cameron Park Fire Department Operations and Administration Report

- **11/19/22** B2705 B2711 E89 E88 ECF EDH and RES responded to a working apartment fire at 2600 Knollwood Ct. One upstairs unit was well involved. Crews made a quick knockdown and prevented the spread into other units. No injuries were reported.
- **11/22/22** B2705 B2715 E89 E88 ECF EDH and RES responded to a working commercial fire at that Cameron Park Country Club. Fire was found in a void space and was traveling into the attic. Crews made quick access and knockdown while preventing any further fire spread. No injuries were reported.
- **12/2/22** B2711 B2705 E89 E88 E2771 M89 Attended the CPCSD Tree Lighting ceremony
- Santa Parade is scheduled for 12/9, 12/10, and 12/11. We would like to extend an invite to CSD staff, board members, and their family



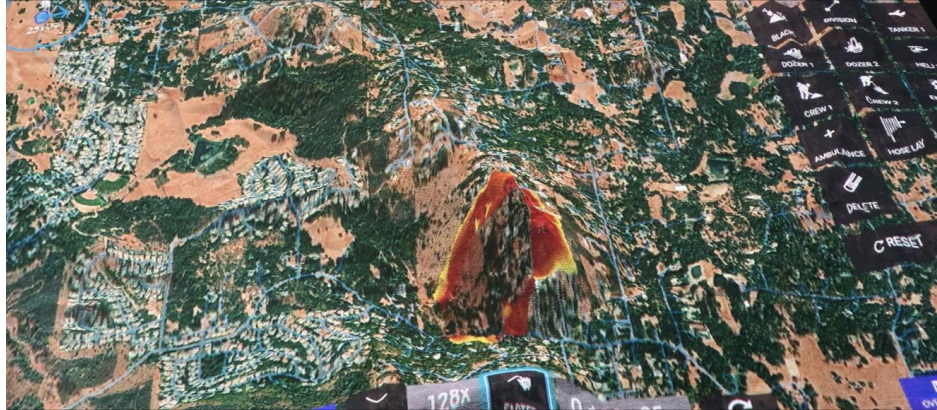


Cameron Park Fire Department Weed Abatement and Prevention Report

- Fire Prevention Specialist Edlund has completed her initial training and is busy performing business and state regulated inspections
- 7 acres of open space was cleared, limbed and mowed off of Cambridge and Sandhurst
- Sudbury road vegetation reduction completed. Cameron Park Dr phase 2 is in the planning process
- On 12/14/22 Chief Richards will be presenting a fire simulation for the Greater CP Fire Safe Council. The presentation will be located at the CPCSD at 6pm



3D Wildfire Simulations Greater Cameron Park Area



14-Dec-2022 6:30PM

Cameron Park CSD Assembly Hall

2502 Country Club Drive, Cameron Park CA 95682

This will be the 1st of 5 forums and each subsequent event will build on the previous. The goal is to educate the public on reducing risk associated with catastrophic wildfire. The 1st forum will focus on the unique land areas in the Shingle Springs / Cameron Park area. Topography, winds, temperature and fuel moisture levels will be taken into consideration. The simulations will provide real time feedback in demonstrating wildfire behavior.

[Click here to RSVP](#)

In coordination with



CalFire



Cameron Park Fire



El Dorado County Fire



El Dorado Hills Fire



Rescue Fire



Tribal Fire