Mid-County Fire Agencies

Santa Cruz, California

CONSOLIDATION FEASIBILITY STUDY AND SERVICE REVIEW

2018

Emergency Services Consulting International

Providing Expertise and Guidance that Enhances Community Safety

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ACKNOWLEDGEMENTS

Emergency Services Consulting International (ESCI) would like to acknowledge that without the assistance and support of the administrative staff and personnel of the Aptos/La Selva Fire Protection District (A/LSFPD), Central Fire Protection District (CFPD), and Santa Cruz Local Agency Formation Commission (LAFCO) this project could not have been successfully completed.

EXECUTIVE SUMMARY

ESCI has worked with hundreds of fire agencies and emergency services providers and is keenly aware of the struggles currently facing these organizations. With the many changes facing today's fire districts, a comprehensive long-range vision toward the future and co-operative arrangements are essential. Both Aptos/La Selva and Central Fire Protection Districts have made strides in their respective consolidations and co-operative efforts. It is now time to determine whether fully joining these two agencies is feasible and in the best interest of the citizens served by the Districts.

The Santa Cruz Local Agency Formation Commission (LAFCO) in cooperation with Aptos/La Selva Fire Protection District (A/LSFPD) and Central Fire Protection District (CFPD) engaged the professional services of ESCI to conduct this study. The purpose of the study is to analyze the feasibility of consolidating fire and emergency services of the Districts. Both A/LSFPD and CFPD have recently completed Standards of Coverage assessments. The ESCI team was directed to utilize these assessments as part of the process of developing the consolidation feasibility study.

One of the more challenging aspects of the study was the difference in salaries, benefits, and post-employment benefits of the two Districts. To address this challenge, ESCI included the expertise of a certified public accountant (CPA) and an actuarial firm.

In addition, the study includes service and sphere reviews of the Districts. LAFCOs are required by law to adopt service reviews and spheres of influence for local agencies, as well as, conduct periodic reviews.

Staff of both Districts and LAFCO provided background information for analysis. ESCI conducted stakeholder interviews and on-site visits. It should be noted this study represents a "snapshot in time" of the Districts. Fire districts must address changing conditions and challenges with internal changes. The ESCI team adjusted the data and analysis to address changes that occurred during the study process. However, it was beyond the scope of the study to reevaluate all changes that occurred. The team noted these changes where appropriate.

The first portion of the study provides a baseline of the Districts' current conditions. This baseline of information was used in the analysis to develop recommendations and projections to determine the feasibility of consolidation, as well as, the service and sphere reviews.

The following is a summary of challenges, opportunities, weaknesses, and strengths analyzed in the study:

CHALLENGES

- Address unfunded liabilities
- Address differences in Memorandums of Understanding
- Lack of sufficient administrative staff and redundancy of staff
- Retain community identity
- Loss of local control

- Blend cultural differences including standard operating procedures and standard operating guidelines
- Maintain level of service

OPPORTUNITIES

- Achieve full boundary drop response protocols
- Reduce duplication of staff, resources, and overhead
- Increase depth of Human Resources
- Enhance span of control and accountability
- Achieve economies of scale
- Contract fire prevention duties with Central Fire
- Reduce costs with combined purchasing
- Achieve cost savings through consolidation
- Enhance levels of service
- Improve mutual aid
- Improve training division
- Efficiency achieved with station relocation
- Lower response times with quick attack unit
- Enhance emergency response force with staffed quick attack unit

WEAKNESSES

- Recent political turmoil
- Differences in communities
- Unfunded liabilities

STRENGTHS

- Previously consolidated Districts
- Provision of progressive fire and medical services by both Districts
- Highly trained, innovative, and talented workforce at both Districts
- Working together now
- Standardized information technology services, programs, and hardware
- Shared resources
- Shared personnel
- Existing pilot program in place to share Battalion Chief and Division Chief coverage
- Moving forward and healing after political issues

Recommendations provided in the study are based on ESCI's analysis of data provided and professional experience. Implementation of any of these recommendations (in whole or part) requires the action of elected officials and the administration of the respective agencies. The following is a compilation of all recommendations in the study.

RECOMMENDATIONS

1. **Jointly Address Standards of Coverage and Master Plan Recommendations:**
   As several of the recommendations in both Citygate reports are similar in nature, the agencies should consider identifying those that, if addressed jointly, could result in economy of scale. Examples of some that might be considered include but are not limited to: Consolidation of management and administrative staff, relocation of facilities, and staffing peak hour "Fast Response Units."

2. **Standardize Policies:**
   In the event the Districts move forward to consolidate administration and/or a complete merger, steps should be taken to align and standardize the policies and related resolutions.

3. **Standardize Mobile Data Terminal Hardware:**
   Given the progress both Districts have made standardizing information technology services, programs, and hardware, ESCI recommends that they standardize their mobile data terminal hardware, related programs, and functions to include automatic vehicle location. This function will be beneficial in the event they implement a full boundary drop and closest resource first approach to service.

4. **Develop Plans for Facilities:**
   Develop Board-approved long-range capital remodel, relocation, and replacement plans for facilities.

5. **Establish Apparatus Replacement Plan:**
   Establish and fund a long-range Board-approved Apparatus Replacement Plan to move away from reliance upon General Fund Reserves.

6. **Address Administrative and Support Staff Needs:**
   Regardless of whether the two agencies move forward with a merger, CFPD should fill the vacant Assistant Fire Chief position.

7. **Address Critical Tasking Needs:**
   In the event the A/LSFPD wishes to be self-reliant for fire response and labor intense critical tasks, they will need to add personnel, apparatus, and facility accommodations to fully staff a dedicated truck company. In addition, consideration should be given to acquiring and staffing a peak-hour quick response/attack unit.

   - Both Districts should implement full boundary drop closest resource First Response Protocols.
   - Eliminate redundant resource assignments.
   - Initiate steps to fully consolidate operations.
   - Relocate and fully staff Central's truck company to a station that provides improved coverage to both Districts.

8. **Fully Staff Truck Company:**
   In the event CFPD wishes to be self-reliant for fire response-related critical tasking, they will need to add personnel and facility accommodations to fully staff the truck company. In addition, consideration should be given to acquiring and staffing a peak-hour quick response/attack unit.

9. **Financial Analysis Issues—A/LSFPD:**
   - A review of the budget process should be made to develop a less cumbersome system that will "roll-up" detailed information from detailed accounts to summary sheets. Should administrative staff time allow for actual numbers to be inserted after the close of the year that would reconcile to the financial presentation numbers, a process should be developed to do so. The revenue analysis should begin with the capture of the taxable valuation of the properties within the District and the applicable tax rate being assessed against those values. This will develop the historic information of the District regarding the growth of the valuation which can be an indicator of potential revenue increases.
   - It was noted that major capital expenditures for apparatus, significant improvements to stations and SCBA acquisition are typically made from operating reserves. A recommendation to "smooth" the impact of these purchases to the budget is to establish a replacement fund into which amounts would be deposited annually based on the estimated replacement cost, cost of the project, and the timing of the replacement of the asset.
   - It is critical that the unfunded actuarial liabilities for pension benefits and OPEB contributions be determined through a supportable calculation with a definite amortization period established for these liabilities to be retired. Aptos/La Selva utilizes the services of an actuary; however, the amounts in the budgets did not reference their work. These payments may have a significant impact on the operation of the District and the level of services it may provide for the community.

10. Financial Issues—CFPD:

- ESCI recommends accumulating historic valuation and tax rate information to be used in predicting future changes in revenue from property taxes.
- The use and regular transfer to reserve funds should be the result of the development of a replacement schedule or equipment expiration schedule. Once established, the required annual transfers necessary to adequately prepare the District for the day of the purchase must be made.
- Calculations have been prepared by independent actuaries that establish an amortization program over the 30-year period allowed by CalPERS to extinguish these liabilities. These amounts are significant, but the CFPD may have options in retiring the obligation. The Bickmore Report (Appendix E: Bickmore Report (Attached)) suggests that the District may consider borrowing funds at a much lower interest rate than the current CalPERS discount rate. The issue that potentially could cause a problem with that is that CalPERS could again modify their discount and could create another tranche of unfunded liabilities. This could place the District in a position of paying on the debt used to finance out of the first problem and then being forced to pay on the newly-created liability piece.

11. Financial Issues Consolidation

Salaries

- Eliminate one Fire Chief position, utilize the savings to fund and fill the vacant Assistant Chief position with an immaterial financial impact.
- Eliminate three administrative personnel positions performing duplicative duties.
- Restructure line position compensation to create parity within a set time-period.

A consolidation will result in the absorption into CFPD of all Aptos/La Selva employees. Presently, the A/LSFPD salary structure is between two and seven percent higher than that of CFPD, depending on rank and time in grade. ESCI recommends the Aptos/La Selva employees be held at their current pay amounts until the Central employees can, through the normal anticipated adjustments through COLA and the respective bargaining agreements, achieve salary increases sufficient to reach parity with the Aptos employees. This time-period is estimated at 12 to 18 months.

NOTE: It is beyond ESCI's Scope of Work to recommend specific employees who would be impacted by a reduction in force and or reassignment.

Pensions

- Continue to make payments required to extinguish Unfunded Actuarial Accrued Liability (UAAL) within the thirty-year amortization period required by CalPERS.
- Create a plan to utilize funding from each "former" District to extinguish the liability of each "former" District.
- Evaluate opportunities to prepay the UAAL.
- Evaluate amendments to the CalPERS contracts to minimize the financial impact to the budget.

The Bickmore Report offers additional alternatives to be considered based on other financial conditions. Some these include maintaining salary levels at their current rates for extended time frames and/or reducing or restricting the carryover of vacation or sick leave hours.

Health Insurance Benefits

- Evaluate the health insurance programs offered by CFPD versus those of A/LSFPD to determine any cost saving opportunities.

Other Post-Retirement Benefits (OPEB)

- Continue make payments necessary to extinguish OPEB liabilities.
- Evaluate the array of OPEB benefits to explore cost savings opportunities.
- Review and evaluate making changes to the age and service requirements for the PEMHCA/CalPERS medical program.

Based on the difference in CFPD OPEB benefits, this category should be a topic of conversation to modify and reduce costs. Bickmore and ESCI recommend the Districts meet with a qualified and experienced benefits advisor to explore a resolution to the OPEB program differences. An additional recommendation is to review and evaluate making changes to the age and service requirements for the PEMHCA/CalPERS medical program.

Other Benefits

- An evaluation of the root cause of work related injuries should be undertaken by a safety committee to reduce these incidents and related costs.

Supplies and Services

- Merging the Districts will eliminate the cost of a separate audit but not the entire fee on a merged basis due to an increase in workload.
- Merging the Districts should result in a cost savings of legal and other professional fees.
- The merged Districts will be able to combine technology reducing costs.
- Costs associated with a merged Board of Directors will be reduced.
- Cost of the combined liability and property insurance coverages may be less than the individual District's cost for the identical coverages.

Capital Reserves

- A merger of the Districts would create the opportunity fully evaluate the capital needs of the combined agency and make provision for improvements and replacements through the implementation and funding of a capital improvement reserve account.

12. Short Term and Long Term

- As a precursor to consolidation, ESCI recommends that consideration be given to Aptos/La Selva contracting all administrative functions and fire prevention duties to Central Fire Protection District. Note: During the development of this study, the Districts entered into a pilot program to share Battalion Chief and Division Chief Duty Officer coverage and have initiated negotiations of an agreement to share fire prevention services.
- ESCI recommends that the Aptos/La Selva and CFPD fully consolidate. This option would result in the savings identified in Figure 82. ESCI also recommends that consideration be given moving the CFPD truck company from CFPD Station 2 to A/LSFPD Station 1 and relocating the crew from CFPD Station 3 to A/LSFPD Station 1 for the purpose of staffing the truck company full-time.

13. Station Relocation:

ESCI recommends that regardless of consolidation, a new station be constructed at a key location such as indicated in the following figure provides enhanced Effective Response Force (ERF) coverage and allows for the closure of the two stations that are located in the floodplain.

14. Quick Attack Units:

ESCI recommends that consideration be given to establishing one to two peak-hour, quick attack units.

15. Staffing Quick Attack Unit:

ESCI recommends the quick attack be staffed with an operator and FF, one of which should be a paramedic. Establishment of this type of unit/s will lower response times during peak demand hours and enhance Emergency Response Force and initial attack among other benefits. Consideration should be given to initiating a pilot project possibly using an existing piece of apparatus staffed with overtime positions.

16. Preparation for LAFCO Process:

These recommendations apply to consolidation and the LAFCO process.

- The Districts should meet to negotiate all pertinent matters to be included in terms and conditions.
- Consolidation should take the form of a reorganization with one District annexing the other.

- Board of Director representation should be determined choosing one of the following options:
  - Five-member Board of Directors with two representatives from each existing District area and one "at large" representative from the newly combined area.
  - Five-member Board of Directors with one representative from each of the pre-consolidation areas (Aptos, La Selva, Live Oak, Soquel, and Capitola).
- Zone of benefit designation should be included in the terms and conditions to maintain fire suppression assessments in A/LSFPD rural areas.
- The Districts should pass substantially similar resolutions of application to LAFCO which include relevant terms and conditions.
- The Districts should develop informational material regarding the benefits of consolidation and to answer questions. This material should be distributed both internally and externally.
- The Districts should conduct informational public workshops.

17. Service Review Update:
That the Commission conduct a public hearing and accept this Service Review for A/LSFPD and CFPD.

18. Sphere of Influence (SOI) Update:
That the Commission update the SOIs for A/LSFPD and CFPD without amendment or changes to the existing SOI boundaries.

19. Sphere of Influence for Consolidated District:
ESCI recommends that, at the time of consolidation, the Commission adopt a SOI for the new agency which reflects a combination of the existing SOIs for A/LSFPD and CFPD.

EVALUATION OF CURRENT CONDITIONS

This section of the report provides an overview of the current conditions within the Aptos/La Selva Fire Protection District (A/LSFPD) and Central Fire Protection District (CFPD) of Santa Cruz County, California at the initiation of this study in November 2017. It includes a summary of each agency's organization; management infrastructure; capital assets; staffing; service delivery and performance; training; fire prevention; and finally, emergency medical services. This section focuses on the agencies as separate entities.

ORGANIZATIONAL OVERVIEW

This overview of the Districts focuses on the demographics of the two agencies, their histories, service delivery infrastructures, governance structures (and lines of authority), policies, and organizational designs. It is important to understand the context of the two agencies individually, in order to recognize what the issues might be as a more closely aligned or combined organization.

Aptos/La Selva Fire Protection District

The Aptos/La Selva Fire Protection District was established in 1930; the District was reaffirmed and documented by the Secretary of State in 1958 and operates under the authority of California Health and Safety Code Section 13800 et seq. (Fire Protection District Law of 1987).

The District consolidated with the La Selva Beach Fire Protection District in 1986, and later annexed the Day Valley area in 1988, the Spring Valley area in 2006, and the Eastern Boundary area in 2007.

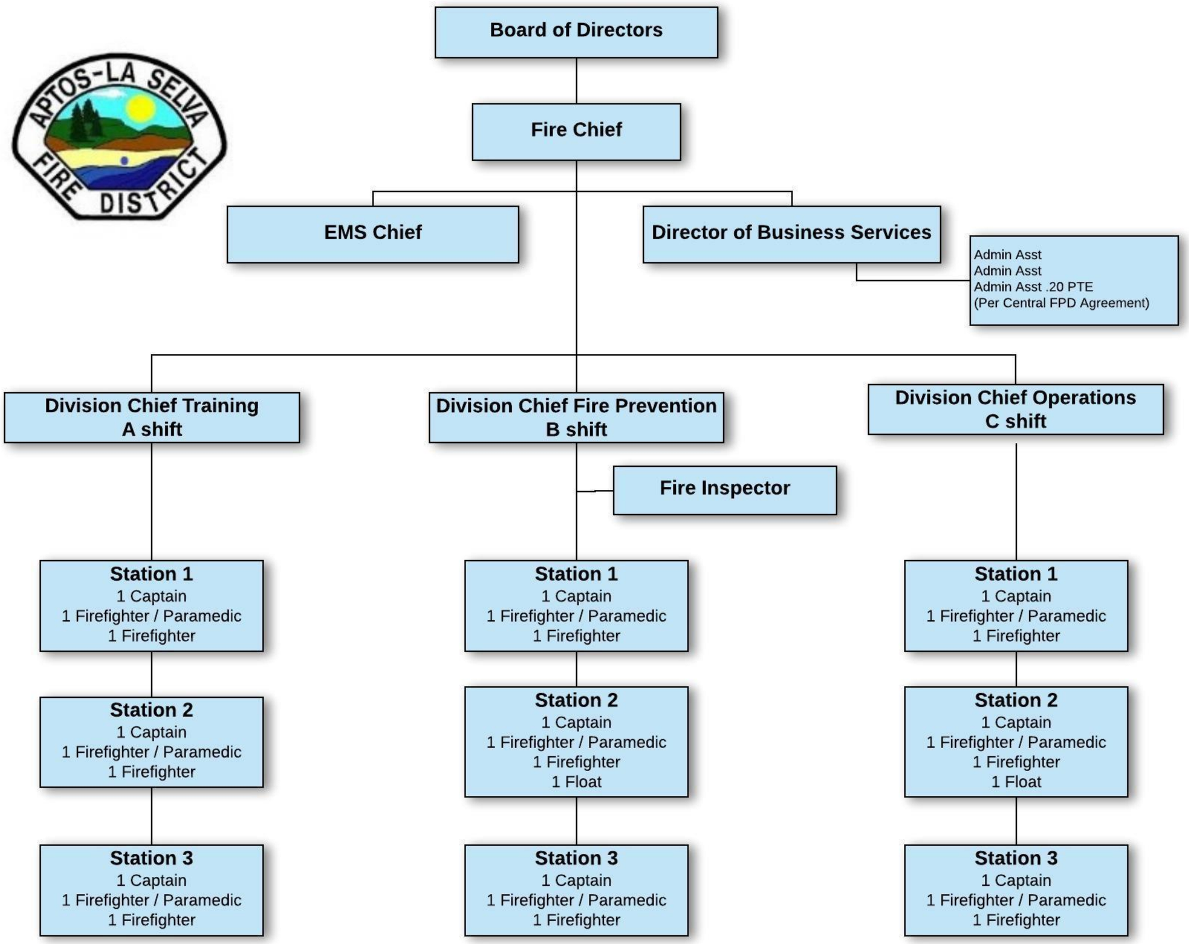
The Aptos/La Selva Fire Protection District provides fire suppression, advanced life support (ALS), pre-hospital emergency medical, rescue, initial hazardous material spill/release, fire prevention, and public education. The District employs 38 personnel that staff three fire stations. The District responds to approximately 2,500 calls for service annually.

The District encompasses 27 square miles with a resident population of approximately 29,931. The District is predominately residential in nature, with more than 12,000 residential occupancies. Nearly 600 commercial occupancies consisting primarily of retail and service-related businesses are within Aptos/La Selva Fire District's response area.

Currently, the District's assessed valuation is $6.8 billion with an approved budget for fiscal year 2017–2018 of $12,798,916.

The Fire Chief is hired by and answers to a five-member Board of Directors who are elected to staggered four-year terms.

Figure 1: Aptos/La Selva Fire Protection District Organizational Chart[1]



[1] Chart reflects the organization as of November 2017.

Central Fire Protection District

Created in 1987, the Central Fire Protection District was formed as the result of the consolidation of the Capitola, Live Oak, and Soquel Fire Districts. The District currently serves 28 square miles and encompasses the communities of Live Oak, Soquel, and Capitola. The District is made up of residential, commercial, and light-industrial properties with an assessed valuation of $9.2 billion. The full-time resident population is more than 55,000, with an influx during the summer. The District responds to over 5,700 requests for service annually to fire, rescue, emergency medical services, hazardous materials calls, and assorted alarms.

Central Fire Protection District's staffing is comprised of 62 full-time and 18 Paid-Call Firefighters. These full-time and Paid-Call employees staff four fire stations, an Administrative Office, Fire Prevention Division, and a Fleet Services Facility. The District has several robust program areas including Fire Prevention, Community Education, Emergency Medical Services, Water Rescue, Fire Investigation, Hazardous Materials, Urban Search and Rescue, and Training.

The approved 2017–2018 fiscal year budget for the Central Fire Protection District was adopted on September 13, 2017, in the amount of $17,513,174.

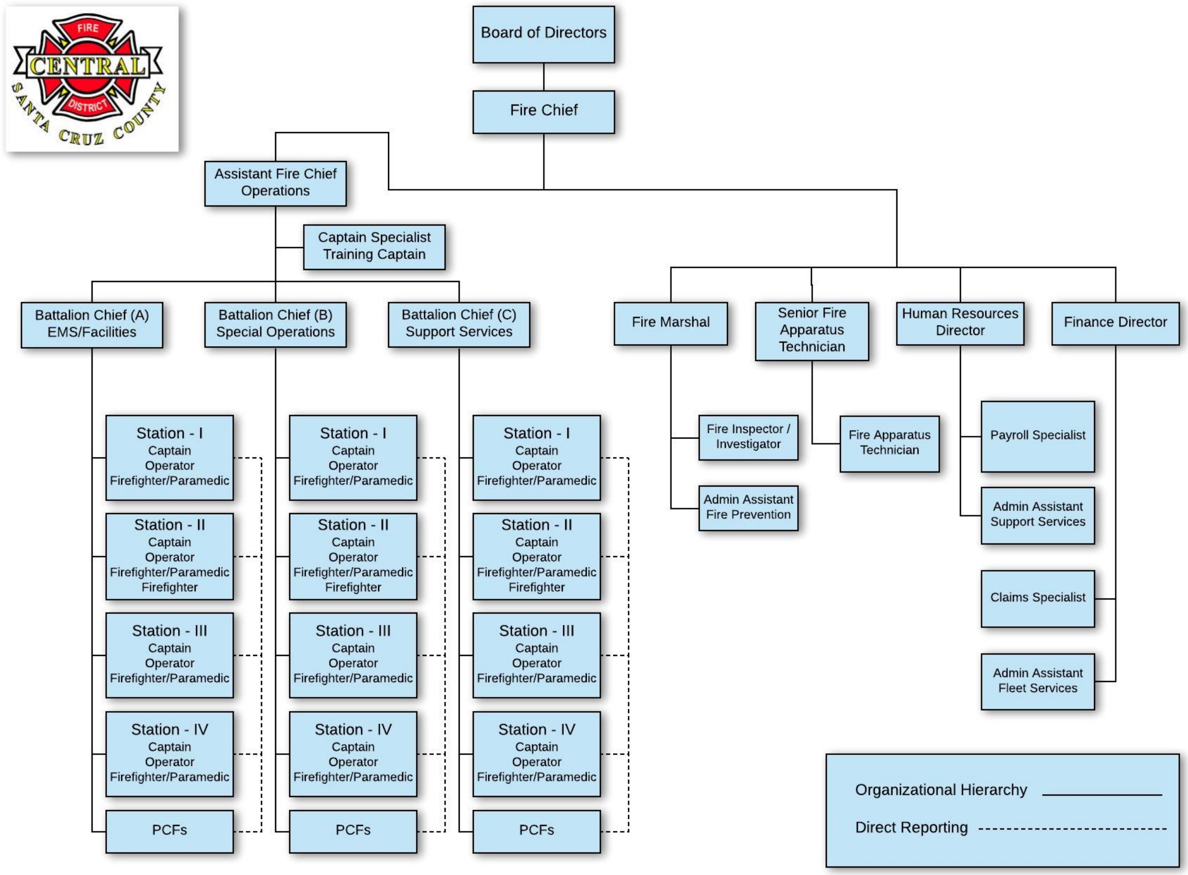
Unique to Santa Cruz County is a service provided by the Central Fire Protection District—an apparatus/vehicle maintenance facility located at 410 Kennedy Drive in Capitola. This facility is responsible for maintaining the operational readiness of the District's fleet apparatus and support vehicles. This Fleet Maintenance Division additionally provides contract services for fleet maintenance to other districts and County agencies located within Santa Cruz County. The Fleet Services Facility is certified as a "California Green Business" and is proud to provide and promote the health, safety, and quality of life of residents of the County.

The approved 2017–2018 fiscal year budget, inclusive of capital expenditures, for the Central Fire Protection District Fleet Services was adopted on September 13, 2017, in the amount of $1,826,720.

The Fire Chief is hired by and answers to a seven-member Board of Directors who are elected to four-year-staggered terms and represent more than 55,000 residents living within the Fire District. The District operates under the authority of California Health and Safety Code Section 13800 et. seq. (Fire Protection District Law of 1987) and is governed by the policies as approved and set forth by the Board of Directors.

Fire agencies are paramilitary in structure with an established chain of command. In an emergency, it is crucial that authority, information, and communication flow seamlessly. When less structure is warranted, the communication can be more relaxed.

Figure 2: Central Fire Protection District Organizational Chart[2]



[2] Chart reflects the organization as of November 2017.

MANAGEMENT COMPONENTS

Mission, Vision, and Values Statements

Mission, vision, and values statements are important to every organization and particularly public safety agencies. The statements help guide the Districts and personnel as they carry out the charge of public service. The following statements have been adopted and subscribed to as noted by each District.

Aptos/La Selva Fire Protection District

"Our Mission": To improve quality of life by protecting the community from the risks and consequences of fire, medical, rescue, hazardous material, and natural disaster incidents.

"Our Strategy": We will achieve our mission by aggressive and well-planned incident response, focused prevention programs and effective public education, all conducted by a well-trained and well-equipped team.

"Our Vision": We stay in touch with our community to identify their changing needs. Innovation is a key element of our leadership. We investigate new programs and techniques and implement them to maintain or improve our service levels. We aspire to be leaders in our profession and will actively participate when it is the most effective means to achieve our mission. We earn the respect of our peers as well as the community we serve by being effective, innovative, customer-friendly and reliable. We will consider changes to our district boundaries with neighboring communities when the result is an overall higher quality of service for all involved.

We are very supportive of regional approaches to training, fire prevention, incident response and administrative support.

"Our Values":

Safety: Safety is paramount. Our profession is dangerous by nature and requires that we provide service and train with minimal risk to our personnel and the public.

Readiness: We are prepared to serve at any moment by being trained, physically and mentally fit, and well equipped.

Service: Our services must be provided to the community with compassion, respect and sincerity. Good service results from our knowledge, ability and commitment.

Leadership: Leadership creates commitment, communication, desire, action and growth and is demonstrated through our actions.

Work Ethic: We plan, manage, accomplish and enjoy our work with dedication, respect teamwork and accountability.

Central Fire Protection District

Mission

Central Fire Protection District is committed to saving lives and minimizing loss through prevention efforts; community education; the hiring, retention, and ongoing training of highly qualified safety personnel; and ensuring availability of the tools and equipment necessary to provide emergency services.

Vision

The District is committed to taking a strategic, forward thinking approach to emergency services, and maximizing the limitations of the annual budget to provide the best possible service to the community.

Finding:

- Both Districts, via their mission, vision, and values statements, demonstrate commitment to serving their communities.

Goals and Objectives

Aptos/La Selva Fire Protection District

The District's organizational goals currently adopted are contained within the broadly-stated mission and vision statements. Per District staff, new specific goals will be developed and adopted due to the Board of Directors agreeing as to how and when the District will pursue implementation of the primary recommendations in the Citygate report *Emergency Services Master Plan*.

Central Fire Protection District

The District has developed, and the Board of Directors have approved, organizational goals along with objectives and timelines for fiscal year 2017/18.

Internal Assessment of Critical Issues and Future Challenges

Staff from both Districts referenced the recently-completed Citygate Associates LLC, *Emergency Services Master Plan Study* for the Aptos/La Selva Fire Protection District and the *Standards of Coverage and Management/Administrative Assessment* for the Central Fire Protection District and related findings and recommendations as the starting point for assessing critical issues and future challenges.

Finding:

- Both Citygate studies contain findings and recommendations that identify numerous issues and challenges. The majority of the recommendations will require a significant investment of funds.

Recommendation #1: Jointly Address SOC and Master Plan Recommendations
As several of the recommendations in both Citygate reports are similar in nature, the agencies should consider identifying those that, if addressed jointly, could result in economy of scale. Examples of some that might be considered include but are not limited to: Consolidation of management and administrative staff, relocation of facilities, and staffing peak hour "Fast Response Units."

Internal and External Communications

Aptos/La Selva Fire Protection District:

Internal:

- The Fire Chief conducts Monthly Officer's Meetings with the inclusion of agendas and minutes.
- Bi-weekly administrative staff meetings.
- The administrative staff utilizes multiple levels of internal email distribution lists, for daily updates on events/project deadlines, etc.
- Communications between Labor and Management are facilitated via an Ad Hoc Committee which includes representatives from each represented group which includes line personnel, the Chief Officers Association, two Board members, Director of Business Services, and the Fire Chief.
- Routine fire station visits

External:

- Monthly Board meetings, the District's website with links to Facebook, Twitter, NextDoor, and email blasts for citizens that have asked to receive meeting agendas, etc.
- The Fire Chief presents a report at the monthly Chamber of Commerce breakfast meetings.
- The District hosts a Community Relations Ad Hoc Committee. The Committee includes two citizens at large, two Board members, the Fire Chief, the Director of Business Services, and labor representatives as well as a representative from the Officers Association.
- The District also holds an Annual Open House event that typically draws between 200 and 300 attendees.
- Attendance at Chamber of Commerce Functions

Central Fire Protection District:

Internal:

- Chief Hall holds meetings on a weekly basis with the various divisions, i.e., Prevention, Training, Fleet, and Administration.
- Meetings are also held monthly with the all three Battalion Chiefs at a venue off-site from the Administrative Headquarters (breakfast or working lunch meeting).
- Every other month a hosted "coffee with the Chief" is conducted at one of the various coffee houses throughout the District with each crew/station on each shift.
- In addition to the above, monthly staff meetings are held with all divisions and command staff to discuss past, present, and future projects/endeavors.

External:

- The District hosts an informative and easy-to-navigate website and is in the process of developing a "Central News Blog." This blog will be distributed via the local printed newspaper (Santa Cruz Sentinel, Capitola Times, Aptos Times).
- The Chief also attends the local Chamber of Commerce meetings, as well as the Capitola City Council Meetings. Additionally, the District is preparing to host their first Open House in June 2018.

Document Control and Security

ESCI reviewed each District's policies related to the following:

- Public Records Guidelines
- Record Retention
- Release of Information
- Computer and Internet Access

Finding:

- Both Districts have policies and/or resolutions governing document control and security; however, Aptos/La Selva's are more robust.

Recommendation #2: Standardize Policies

In the event the Districts move forward to consolidate administration and/or a complete merger, steps should be taken to align and standardize the policies and related resolutions.

Reporting and Recordkeeping

As of 2016, A/LSFPD as well as Central FPD utilize the same fire records management program. Emergency Service Reporting is a cloud-based Records Management System (RMS) and per staff at both Districts, meets recordkeeping needs.

Finding:

- Sharing a common Fire Records Management System has allowed for standardized reporting and program familiarity across both Districts.

Information Technology Systems

CFPD hosts a server that is cost apportioned with A/LSFPD. In addition, both Districts contract with Pagoda Technologies Inc. for all their software, programming, and maintenance needs. The contract with Pagoda also includes group purchasing of hardware except for mobile data terminals. This approach has resulted in standardization of hardware and programs throughout both Districts.

Finding:

- CFPD and A/LFPD have made impressive progress sharing information technology services, standardizing programs, and moving towards the standardization of hardware.

Recommendation #3: Standardize Mobile Data Terminal Hardware

Given the progress both Districts have made standardizing information technology services, programs, and hardware, ESCI recommends that they standardize their mobile data terminal hardware, related programs, and functions to include automatic vehicle location. This function will be beneficial in the event they implement a full boundary drop and closest resource first approach to service.

CAPITAL ASSETS AND IMPROVEMENTS

Three basic resources are required to successfully carry out the mission of a fire department—trained personnel, firefighting equipment, and fire stations. No matter how competent or numerous the firefighters, if appropriate capital equipment is not available for use by responders, it is impossible for a fire department to deliver services effectively. The capital assets that are most essential to the provision of emergency response are facilities and apparatus (response vehicles). The following figures exhibit the number of fire stations, and fire and EMS apparatus operated by the agencies participating in the study.

Fixed Facilities

Fire stations play an integral role in the delivery of emergency services for several reasons. A station's location will dictate, to a large degree, response times to emergencies. A poorly located station can mean the difference between confining a fire to a single room and losing the structure. Fire stations also need to be designed to adequately house equipment and apparatus, as well as meet the needs of the organization, its firefighters, and/or its members.

Consideration should be given to a fire station's ability to support the jurisdiction's mission as it exists today and into the future. The activities that take place within the fire station should be closely examined to ensure the structure is adequate in both size and function.

ESCI Associates conducted walk-through inspections of Aptos/La Selva Fire Protection District's and Central Fire Protection District's Administrative Headquarters, fire stations, and fleet maintenance facility. ESCI utilized a standard check-off list each facility inspection.

Special attention was made to the building's location, future use viability in terms of serving the community, and capability of accommodating an increase in staffing levels and emergency response apparatuses in the future.

Figure 3: Fire Station Condition Definitions

EXCELLENT	Like new condition. No visible structural defects. The facility is clean and well maintained. Interior layout is conductive to function with no unnecessary impediments to the apparatus bays or offices. No significant defect history. Building design and construction matches building purpose
GOOD	The exterior has a good appearance with minor or no defects. Clean lines, good work flow design, and only minor wear of the building interior. Roof and apparatus apron are in good working order, absent any significant full thickness cracks or crumbling of apron surface or visible roof patches or leaks. Building design and construction matches building purpose.
FAIR	The building appears to be structurally sound with weathered appearance and minor to moderate non-structural defects. Interior condition shows normal wear and tear but flows effectively to the apparatus bay or offices. Mechanical systems are in working order. Building design and construction may not match building purpose well. Showing increasing age-related maintenance, but with no critical defects.
POOR	The building appears to be cosmetically weathered and worn with potentially structural defects, although not imminently dangerous or unsafe. Large, multiple full-thickness cracks and crumbling of concrete on apron may exist. Roof has evidence of leaking and/or multiple repairs. The interior is poorly maintained or showing signs of advanced deterioration with moderate to significant non-structural defects. Problematic age-related maintenance and/or major defects are evident. May not be well suited to its intended purpose.

The following figures depict the results of ESCI's inspections of the Aptos/La Selva Fire Protection District's Administration Headquarters and fire stations.

Figure 4: Aptos/La Selva Fire Protection District—Station #1 and Administrative Headquarters

Fire Station Name/Number:	**Aptos Fire Protection District—Station #1 and Administrative Offices**
Address/Physical Location:	6934 Soquel Drive, Aptos
	This fire station includes office space for a total of five Chief Officers: Fire Chief, EMS Chief, and three Division Chiefs. The Director of Business Services and three Administrative Assistants, one of which is part-time.

Survey Component	**Observations**
Structure	
Construction Type	Two-story, concrete block masonry, wood frame
Date of Construction	1968
Remodel	1992/2018 Firefighter side of building
Additions—Describe	Yes, 1992, administrative offices additional 4,428 SF
Energy Audits	Yes
Seismic Protection	Seismic alterations done front of station during roof work in 2008
Auxiliary Power	Yes
Condition	Good
Special Considerations	Yes, administrative-side of the building
Storage	Yes
Bays	3 bays of which 2 are drive-thru
Square Footage	9,444
Facilities Available	
Facility Use	Administration, Prevention and Fire Station
Exercise/Workout	Yes, in the engine bay
Kitchen/Dormitory	Yes
Lockers/Closets	Yes
Bathrooms/Showers	Yes, bathrooms are not gender sensitive
Training/Meeting Rooms	Yes
Washer/Dryer	Yes
Safety & Security	
Sprinklers	Yes, office, living quarters and engine bay
Smoke Detection	Yes
Security	Door locks and fencing
Apparatus Exhaust System	Yes
Washer Extractor	Yes
Fire Apparatus	Engine 3511, Engine 3536, Medic 3566, Utilities 3595 & 3596
Staffing Level (minimum)	3

Figure 5: Aptos/La Selva Fire Protection District—Station #2

Fire Station Name/Number:	**Aptos/La Selva Fire Protection—District Station #2, "Rio Del Mar"**
Address/Physical Location:	300 Bonita Drive, Aptos
	This station is poorly configured for an effective response time. The size of the lot limits its long-term viability.
Survey Component	**Observations**
Structure	
Construction Type	Two-story, wood frame
Date of Construction	1978
Remodel	1992–1993; Seismic retrofit in 2008
Additions—Describe	Addition of a 3rd Engine Bay and 2nd story
Energy Audits	Yes
Seismic Protection	Yes
Auxiliary Power	Yes
Condition	Good
Special Considerations	Yes, ADA; not fully compliant
Storage	Yes
Bays	3 back-in bays
Square Footage	4,930
Facilities Available	
Facility Use	Fire Station and Training facility
Exercise/Workout	Yes, in the Engine Bay
Kitchen/Dormitory	Yes
Lockers/Closets	Yes, lockers
Bathrooms/Showers	Yes, bathrooms are not gender sensitive
Training/Meeting Rooms	Yes, Station #2 is the District's training facility
Washer/Dryer	Yes
Safety & Security	
Sprinklers	Yes, office, living quarters, and engine bay
Smoke Detection	Yes
Security	Door locks only
Apparatus Exhaust System	Yes
Washer Extractor	Yes
Fire Apparatus	Engine 3512, Engine 3350 (water tender), Rescue 3560
Staffing Level (minimum)	3

Figure 6: Aptos/La Selva Fire Protection District—Station #3

Fire Station Name/Number:	Aptos Fire Protection District—Station #3, "La Selva Beach"
Address/Physical Location:	312 Estrella Drive, Aptos
	In 2003, this fire station reduced what was a three-bay engine bay to a two-bay engine bay. This was done to comply with seismic protection standards. This station has negative long-term viability and is poorly located. ESCI agrees with Citygate's recommendation: This station should be relocated closer to Highway 1.
Survey Component	**Observations**
Structure	
Construction Type	Two-story, Concrete masonry block, wood frame
Date of Construction	1969
Remodel	2003 (as referenced above)
Additions—Describe	No
Energy Audits	No
Seismic Protection	Yes
Auxiliary Power	Yes
Condition	Good
Special Considerations	No
Storage	Yes, some
Bays	Yes – 3 bays, 2 back-in bays 3rd bay used for storage
Square Footage	3,255
Facilities Available	
Facility Use	Fire Station with work station for 1 fire inspector
Exercise/Workout	Yes, in the Engine Bay
Kitchen/Dormitory	Yes, the Fire Prevention work station is also in this area.
Lockers/Closets	Yes, lockers
Bathrooms/Showers	Yes, bathrooms are not gender sensitive
Training/Meeting Rooms	Yes
Washer/Dryer	Yes
Safety & Security	
Sprinklers	Yes
Smoke Detection	Yes
Security	Security camera front of station
Apparatus Exhaust System	Yes
Washer Extractor	Yes
Fire Apparatus	Engine 3513, Engine 3310-Reserve engine
Staffing Level (minimum)	3

The following figures depict the results of ESCI's inspections of the Central Fire Protection District's Administration Headquarters and Fire Stations.

Figure 7: Central Fire Protection District Station Administrative Headquarters

Fire Station Name/Number:	**Central Fire Protection District—Administrative Headquarters**
Address/Physical Location:	930 17th Avenue, Santa Cruz
	The structure at 930 17th Avenue in Santa Cruz has been constructed as an administrative headquarters. This buildings future viability is positive; Fire Station #1 is adjacent—not connected to—the Administrative Headquarters.
Survey Component	**Observations**
Structure	
Construction Type	Wood Frame with stucco and masonry
Date of Construction	1999
Energy Audits	Yes
Seismic Protection	Yes
Auxiliary Power	Yes
Condition	Good
Special Considerations	ADA compliant
Storage	Yes
Bays	N/A
Square Footage	7,811
Facilities Available	
Facility Use	Administrative
Exercise/Workout	N/A—Administrative building
Kitchen/Dormitory	N/A—Administrative building
Lockers/Closets	N/A—Administrative building
Bathrooms/Showers	Bathrooms and 1 shower
Training/Meeting Rooms	Yes
Washer/Dryer	N/A—Administrative building
Safety & Security	
Sprinklers	Yes
Smoke Detection	Yes
Security	Yes
Apparatus Exhaust System	N/A—Administrative building
Washer Extractor	No
Fire Apparatus	N/A—Administrative building

Figure 8: Central Fire Protection District—Station #1

Fire Station Name/Number:	Central Fire Protection District—Station #1
Address/Physical Location:	930 17th Avenue, Santa Cruz
	This station was built in 1947 and was the original "Live Oak Station." In 1986, the station was renamed Central Fire Protection District #1. The design of this building does not lend itself to an efficient turnout time therefore future viability is negative.
Survey Component	**Observations**
Structure	
Construction Type	Metal with stucco and masonry
Date of Construction	1947
Remodel	Yes, 1997
Additions—Describe	Yes, 1997 addition of an additional apparatus bay, bedrooms
Energy Audits	Unknown
Seismic Protection	Yes
Auxiliary Power	Yes
Condition	Good
Special Considerations	ADA/Partial
Storage	Yes
Bays	4 bays; back-in
Square Footage	12,616
Facilities Available	
Facility Use	Fire Station
Exercise/Workout	Yes, separate from the engine bay
Kitchen/Dormitory	Yes, some dorms gender specific
Lockers/Closets	Yes, lockers
Bathrooms/Showers	Yes, some gender specific
Training/Meeting Rooms	Yes
Washer/Dryer	Yes
Safety & Security	
Sprinklers	Yes
Smoke Detection	Yes
Security	Yes, door locks only. Monitored security planned for the future.
Apparatus Exhaust System	Yes
Washer Extractor	Yes
Fire Apparatus	Engine 3411, Engine 3415, Rescue 3460
Staffing Level (minimum)	1 each FF, Engineer, Captain, 1 Battalion Chief

Figure 9: Central Fire Protection District—Station #2

Fire Station Name/Number:	**Central Fire Protection District—Station #2**
Address/Physical Location:	3445 Thurber Lane, Santa Cruz
	This station was built in 2000. It is located appropriately, and future viability is positive.
Survey Component	**Observations**
Structure	
Construction Type	Wood frame, partial stucco
Date of Construction	2000
Remodel	N/A
Additions—Describe	N/A
Energy Audits	N/A
Seismic Protection	Yes
Auxiliary Power	Yes
Condition	Good
Special Considerations	Bunker Rooms are separate; PPEs stored in Bunker Rooms
Storage	Yes
Bays	3 Bays; Drive-thru
Square Footage	7,181
Facilities Available	
Facility Use	Fire Station
Exercise/Workout	Yes, located in the Engine Bay
Kitchen/Dormitory	Yes
Lockers/Closets	Lockers
Bathrooms/Showers	Yes
Training/Meeting Rooms	Yes, and Captain's office
Washer/Dryer	Yes
Safety & Security	
Sprinklers	Yes
Smoke Detection	Yes
Security	Currently, only door locks
Apparatus Exhaust System	Yes
Washer Extractor	Yes
Fire Apparatus	Engine 3412, Truck 3472, Water Tender 3450
Staffing Level (minimum)	4

Figure 10: Central Fire Protection District—Station #3

Fire Station Name/Number:	**Central Fire Protection District—Station #3, Soquel**
Address/Physical Location:	4747 Soquel Drive, Soquel
	Station #3 was remodeled in 1962, adding two additional apparatus bays. In the early 1990s, seismic bracing occurred and in 2003, the District added separate shower and sleeping rooms for the safety personnel. This station is in a floodplain, experiences challenges with egress during emergency response, has gender segregation issues, and should be relocated and/or consolidated with another station.
Survey Component	**Observations**
Structure	
Construction Type	2-Joisted Masonry/Block
Date of Construction	1956
Remodel	No
Additions—Describe	Yes
Energy Audits	No
Seismic Protection	Yes
Auxiliary Power	Yes, Manual start
Condition	Fair
Special Considerations	ADA partial, gender appropriate yes
Storage	Yes
Bays	4 – Back-In
Square Footage	5,600
Facilities Available	
Facility Use	Fire Station
Exercise/Workout	Yes, in the Engine Bay
Kitchen/Dormitory	Combination Day Room, Kitchen & Training Room
Lockers/Closets	Lockers
Bathrooms/Showers	Bathrooms – Yes; Showers – 2
Training/Meeting Rooms	Yes, See Kitchen/Dormitory above
Washer/Dryer	Yes
Safety & Security	
Sprinklers	No
Smoke Detection	Yes
Security	Door locks only; no monitored security
Apparatus Exhaust System	Yes
Washer Extractor	No
Fire Apparatus	Engine 3413, Engine 3437, Engine 3417, Engine 3493
Staffing Level (minimum)	1 each FF, Engineer & Captain

Figure 11: Central Fire Protection District—Station #4, Capitola

Fire Station Name/Number:	**Central Fire Protection District—Station #4, Capitola**
Address/Physical Location:	405 Capitola Avenue, Capitola
	This station had a seismic upgrade in 1991, a fire sprinkler retrofit in 1995, and in 2011, the station experienced flood damage which was repaired. Along with Station #3 (Soquel), this station is located within a designated floodplain and experiences traffic congestion which can affect response time. The station should be relocated and/or consolidated with another station.
Survey Component	**Observations**
Structure	
Construction Type	Wood frame/Mason block
Date of Construction	1955
Remodel	1991
Additions—Describe	None
Energy Audits	No
Seismic Protection	Yes
Auxiliary Power	Yes, manual
Condition	Fair
Special Considerations	Partial ADA compliance. Gender separation is limited.
Storage	Yes
Bays	2 Back-in bays
Square Footage	3,862
Facilities Available	
Facility Use	Fire Station
Exercise/Workout	Yes, in the Engine Bay area
Kitchen/Dormitory	Kitchen – yes/Dorms – 3
Lockers/Closets	Yes
Bathrooms/Showers	Bathrooms with showers
Training/Meeting Rooms	Dayroom/Kitchen/Training
Washer/Dryer	Yes
Safety & Security	
Sprinklers	Yes
Smoke Detection	Yes
Security	Yes
Apparatus Exhaust System	Yes
Washer Extractor	No
Fire Apparatus	Engine 3414, Engine 3438
Staffing Level (minimum)	3

Figure 12: Central Fire Protection District Station—Fleet Services

Fire Station Name/Number:	Central Fire Protection District Station—Fleet Services
Address/Physical Location:	410 Kennedy Drive, Capitola
	The Fleet Services facility is responsible for maintaining the operational readiness of the District's fleet apparatus and support vehicles. The District also provides contract services for fleet maintenance to other Districts and agencies which are located within the County of Santa Cruz.
Survey Component	**Observations**
Structure	
Construction Type	Single-story with mezzanine, joisted masonry
Date of Construction	1972
Remodel	2011 – water damage from roof leak tenant improvements
Additions—Describe	None reported
Energy Audits	No
Seismic Protection	Yes
Auxiliary Power	Unknown
Condition	Fair
Special Considerations	Separate bathroom, partial ADA
Storage	Yes
Bays	Drive through capabilities
Square Footage	10,000
Facilities Available	
Facility Use	Vehicle Maintenance
Exercise/Workout	N/A
Kitchen/Dormitory	Kitchen
Lockers/Closets	N/A
Bathrooms/Showers	Bathroom
Training/Meeting Rooms	No
Washer/Dryer	No
Safety & Security	
Sprinklers	Yes, in the repair portion and the office portion of the building.
Smoke Detection	No
Security	Yes, Fire and Intrusion
Apparatus Exhaust System	Yes
Washer Extractor	N/A
Staffing Level (minimum)	2 Mechanics; 1 Part-time Administrative Assistant

Facilities Summary

Aptos/La Selva

The three stations are in generally good condition. They range in age from 40 to 50 years old. The Citygate and Associates 2017 study recommends relocation of Station #3 to enhance response times to the south end of the District.

When considering the opportunities that exist for cooperative efforts between fire districts, and particularly in the context of some form of legal unification, future facility costs are an important consideration. One organization does not want to inherit long range maintenance and replacement costs from another during a collaborative effort. The cost of fire stations, and varying degree of conditions and locations found in Central Fire Protection and Aptos/La Selva Fire Protection Districts, underscores the importance of long range replacement planning. As the organizations move forward, regardless of decisions made regarding cooperative efforts, a plan for replacement and possible relocation of fire stations will be important.

Central Fire Protection District

The five facilities range in age from 18 to 63 years old. Several have been updated and remodeled. Stations #1 and #2 will continue to serve the department well into the future. Stations #3 and #4 are aging, are in a designated floodplain, have access and egress that are impaired by congestion, and are marginally adequate for current use. These stations will need to be relocated and possibly consolidated in the future.

> ***Recommendation #4: Develop Plans for Facilities***
> Develop Board approved long-range capital remodel, relocation, and replacement plans for facilities.

Apparatus/Vehicles

Other than firefighters assigned to stations, response vehicles are undoubtedly the next most important resource of the emergency response system. The delivery of emergency services will be compromised if emergency personnel cannot arrive quickly due to unreliable transportation or if the equipment does not function properly.

Fire apparatus are unique and expensive pieces of equipment, customized to operate efficiently for a narrowly defined mission. An engine may be built in such a way that the compartments fit specific equipment and tools. Virtually every space on a fire vehicle is designed for function. This same vehicle, with its specialized design, does not lend itself well to operate in a completely different capacity, such as a hazardous materials unit or a rescue squad. For this reason, fire apparatus offers little flexibility in use or reassigned purpose. As a result, communities across the country have sought to achieve the longest life span possible for these vehicles. Unfortunately, no piece of mechanical equipment can be expected to last forever. As a vehicle ages, repairs tend to become more frequent and more complex.

Parts may become more difficult to obtain, and downtime for repairs increases. Given the emergency mission that is so critical to the community, downtime is one of the most frequently identified reasons for apparatus replacement. Because of the expense of fire apparatus, most communities develop replacement plans. To enable such planning, communities often turn to the accepted practice of establishing a life cycle for apparatus that results in an anticipated replacement date for each vehicle. The reality is that it may be best to establish a life cycle for planning purposes, such as the development of replacement funding for various types of apparatus; yet, apply a different method (such as a maintenance and performance review) for determining the actual replacement date, thereby achieving greater cost effectiveness when possible.

Fire administrators should be concerned about aging of the fleet and having a funded replacement schedule. As frontline apparatus age, fleet costs will naturally be higher and more down time will be associated with necessary repairs and routine maintenance.

It is beyond the scope of work and the expertise of ESCI to provide a mechanical assessment of the apparatus. For a mechanical evaluation of the apparatus, ESCI recommends seeking the services of a certified Emergency Vehicle Technician.

The following figure displays Aptos/La Selva and Central Fire Districts' Apparatus/Vehicle Inventory as submitted by District staff.

Figure 13: Aptos/La Selva Fire Protection District Apparatus and Vehicle Inventory

Apparatus Designation	Type	Year	Make and Model	Condition	Pump Capacity	Tank Capacity
351X	1	2001	Pierce Dash Pumper	Fair	1500	500
3510	1	2001	Pierce Dash Pumper	Fair	1500	500
3512	1	2007	Pierce Dash	Good	1500	500
3511	1	2015	Rosenbauer RAC40M611	Excellent	1500	750
3513	1	2012	Pierce PUC	Good	1500	500
3536	3	2007	International	Good	500	500
3550	HD	1986	Harvester Tanker	Fair	1500	2200
3566	LD	2012	Ambulance	Good		
3560	HD	2007	Kenworth/Pierce Rescue T300 series	Good		
3581	LD	2009	Ford Escape Hybrid SUV	Fair		
3595	LD	2011	Ford F450 Super Duty	Good		
3500	LD	2011	Chevy Tahoe	Good		
3501	LD	2011	Ford F150 (OPS)	Good		
3502	LD	2011	Ford F150 (Training)	Good		
3504	LD	2013	Ford F150 (Prevention)	Good		
3505	LD	2013	Ford F150 (EMS Chief)	Good		
3596	LD	3015	Ford Focus Sedan	Good		
	TR	2009	Carry On Trailer	Good		

LD = Light Duty HD = Heavy Duty TR = Trailer P = Parade

Figure 14: Central Fire Protection District Apparatus and Vehicle Inventory

Apparatus Designation	Type	Year	Make and Model	Pump Capacity	Tank Capacity
16-01	LD	2016	Chevy Tahoe	0	0
14-01	LT	2015	Chevy Tahoe	0	0
15-01	LT	2015	Ford 350 Crew Cab	0	0
3413	HD	2013	Pierce Pumper	1250	500
TBD	TBD	2009	Fire-Blast Burn Trailer	0	0
99	LD	2009	Ford Pickup	0	0
3480	LD	2008	Expedition	0	0
81	LD	2007	Ford PU	0	0
91	LD	2007	Ford PU w/equip	0	0
38	3	2007	Int'l Engine	500	500
37	3	2007	Int'l Engine	500	500
16	HD	2007	Pierce Pumper	1250	500
15	HD	2006	Pierce Pumper	1250	500
V03	LD	2005	Chevy Suburban	0	0
16-02-3491	LD	2004	Kenworth T300	0	0
11	HD	2004	Pierce Pumper	1250	500
V02	LD	2001	Ford Expedition	0	0
72	HD	2001	Pierce Dash Ladder	2000	500
82	LD	2000	Ford Explorer	0	0
60	HD	2000	Freightliner	0	0
F1	LD	1995	Daewoo Fork Lift	0	0
N/A	LD	1993	GMC Repair	0	0
65	LD	1993	GMC Yukon	0	0
12	HD	1992	Pierce Lance Pumper	1250	600
19	HD	1992	Pierce Lance Pumper	1250	600
62	TR	1992	Wells Cargo Trailer w/Search Rescue Contents	0	0
50	HD	1991	Freightliner Tender	500	2000
61	LD	1987	Chevy Stake Bed Flatbed	0	0
18	P	1949	Mack 750 Antique Pumper (parade)	0	0

LD = Light Duty HD = Heavy Duty TR = Trailer P = Parade

Apparatus Summary

Generally, fire agencies utilize a guideline as follows to establish capital equipment replacement programs:

- Engines: 10 years frontline and 5 years reserve.
- Truck Companies: 15 years frontline and 5 to 10 years in reserve.
- Ambulance: 5 years front line 5 years in reserve.

The level of activity, topography, and other factors may influence these guidelines.

Aptos/La Selva Fire Protection District

- The average age of the Aptos/La Selva is 10.33 years.
- The 2015 Rosenbauer is the newest and the 2001 Pierce Dash Pumper the oldest.

Central Fire Protection District[3]

- The average age of Central Fire Protection District's front-line engines is 11.88 years.
- The 2013 Pierce is the newest, and the 2001 Pierce Ladder Truck is the oldest at 17 years.
- Except for the 2013 Pierce, all front-line apparatus are over 10 years old.

Comment/Notes

Both agencies apparatus inventories need updating. An important consideration for fire districts contemplating any kind of integration, is that of their potential partners' commitment to apparatus maintenance and planning for the replacement of this expensive and sophisticated equipment as they near the end of their useful lives.

Capital Replacement Planning

Long range capital replacement planning is always a challenge for a fire district. Both study agencies have done a commendable job of purchasing and maintaining their fleet of fire apparatus. However, because nearly all front-line apparatuses exceed 10 years of age many are due for replacement, at about the same time. The practice in both organizations has been similar. Rather than purchasing fire and EMS vehicles incrementally over time, multiple pieces of equipment have been bought at the same time, using General Fund Reserves. This practice—while not uncommon—has resulted in a significant number of replacements being deferred. Fire vehicles have a readily predictable service life and an easily forecast future replacement cost, which should be preplanned. If future needs are identified and funding is set aside to accommodate the need, the agency will not be dependent on reserves in the future to meet its long-term financial demands. ESCI recommends to clients that, as soon as a new piece of fire apparatus is purchased, funding should start to be set aside for its replacement.

Findings—For Both Agencies:

- Neither fire District has established a Board-approved and fully-funded replacement schedule to address future needs.

Recommendation #5: Establish Apparatus Replacement Plan

Establish and fund a long-range Board-approved Apparatus Replacement Plan to move away from reliance upon General Fund Reserves.

[3] During the finalization of this study, ESCI was notified that CFPD placed an order for: One 105' platform type truck company, two Type I structure engines, and one Type 6 quick attack brush engine. These apparatuses should be completed/delivered by June 2019 (approximate).

STAFFING AND PERSONNEL MANAGEMENT

The most valuable asset of any organization is its people. The effective management of human resources requires a balance between the maximum utilization of the overall workforce and the experience of a high level of job satisfaction by individual workers. To achieve this goal consistently, management must combine reliability with a safe working environment, fair treatment, the opportunity to provide input, and recognition of the individual's commitment and sacrifice. Job satisfaction depends upon this combination of factors.

Administrative and Support Staffing

One of the primary responsibilities of a fire department's administration is to ensure that the fiscal, infrastructure, and support elements are in place and functioning smoothly and effectively so that the core mission—responding to and mitigating emergencies—can be accomplished in a safe and efficient manner.

This group includes both command officers (fire chiefs, deputy chiefs, battalion chiefs whose duties include administration, fire marshals); other uniformed members serving in support divisions, such as Training, Fire Prevention, or other roles; and civilian support staff. Within each District there are specific factors that cause job descriptions and job responsibilities to be customized for the organization. This can be the case for chief officers and for administrative assistants. The fire chief of a city (like Santa Cruz) has a slightly different job (and confronts some challenges unique to that environment) than does the fire chief of a district (who has his or her own unique challenges).

Like any other part of a fire department, administration and support need the appropriate resources to function properly. In this section of the staffing analysis, the ratio of administrative and support positions was reviewed inclusive of the recommendations contained within both Citygate and Associates reports. Too large an emphasis on administrative staffing can have as much of a detrimental influence on the efficient functioning of an organization as too little. It is important to achieve an appropriate balance between administration and support and the operational sides of a district; organizational success may depend upon it.

The following series of figures compare the Administrative and Support staffing composition of both agencies:

Figure 15: Aptos/La Selva Fire Protection District Administrative Support Staff Comparison

Position	Number
Fire Chief	1
Director of Business Services	1
Administrative Assistants	2+ 1PT .20 FTE*
Division Chief	3
EMS Chief (Shared) – Host Agency for EMSIA	1

*The .20 FTE Administrative Assistant is a shared position with CFPD.

Figure 16: Central Fire Protection District Administrative Support Staff Comparison

Position	Number
Fire Chief	1
Assistant Fire Chief	Vacant
Fire Marshal	1
Deputy Fire Marshal	0
Fleet Mechanic	2
Full-Time Administration:	
Administrative Services Manager	1
Business Services Manager	1
Administrative Assistant – Fire Prevention	1
Administrative Assistant – Support Services	1

Discussion

Levels of administrative and support staffing vary widely in fire districts for a host of reasons. A primary factor is that fire districts have very different administrative staffing needs from a city department. Fire districts typically will have to address services such as human resources, finance, payroll, purchasing, and many other functions that are available to a city department, but not to a district. The appropriate ratio is subject to many variables. ESCI recognizes organizational goals, regulatory environment, and workload are the actual drivers that determine the number of administrative personnel required to deliver support services. During the development of this study and review of administrative staffing, ESCI reviewed the Citygate LLC studies, their recommendations regarding staffing, as well as conducted interviews with the Chief of CFPD and the Interim Chief of A/LSFPD. Based on the information reviewed, interviews with the Fire Chiefs and our experience, ESCI believes a consolidation of administrations with the reduction in force of three redundant administrative positions, would result in efficiencies, economy of scale, and economic savings.

Finding:

Stand alone: Both Districts lack sufficient administrative staffing to fully carry out the many duties assigned. CFPD has a vacant Assistant Chief position which, for an organization of their size, is needed and should be filled. ESCI notes that some of the administrative positions are redundant. When viewing the administrative staffing of the two Districts as one operation, it is ESCI's opinion that consolidating the two administrations would result in cost savings. This would be derived from a reduction in force of three full-time administrative employees. The fire chief position could be transitioned to fill the vacant CFPD Assistant Chief position. Combining the administration of the two Districts would also result in streamlined administration, enhanced span of control and accountability and improved duty officer coverage for the Aptos/La Selva communities.

Recommendation #6: Address Administrative and Support Staff Needs
Regardless of whether the two agencies move forward with a merger, CFPD should fill the vacant Assistant Fire Chief position.

Emergency Response Staffing

An adequate number of properly trained staff of emergency responders is required for placing the appropriate emergency apparatus and equipment to its best use in mitigating incidents. Insufficient staffing at an operational scene decreases the effectiveness of the response.

The first 15 minutes is the most crucial period in the suppression of a fire. How effectively and efficiently firefighters perform during this period, has a significant impact on the overall outcome of the event. This general concept is applicable to fire, rescue, and medical situations. Critical tasks must be performed in a timely manner to control a fire or to treat a patient. The fire district is responsible for ensuring that responding companies are capable of performing all of the described tasks in a prompt, efficient, and safe manner.

Finding:
The two participating agencies staff for emergency operations in a very similar fashion. Central Fire Protection District is staffed with full-time, career firefighters augmented by Paid Call Firefighters. Stations are staffed 24 hours a day on a schedule in which personnel rotate through 48-hour shifts. The Aptos/La Selva Fire Protection District's approach differs in that the District does not have a Paid Call Firefighter program.

The following series of figures list each agencies' emergency response staffing as provided by District staff:

Aptos/La Selva Fire Protection District

The following figure details the Aptos/La Selva Fire Protection District's emergency response positions as submitted by District staff.

Figure 17: A/LSFPD Emergency Response Staffing by Position

Position/Qualified	Number	Actual Total
Fire Chief	1	1
Division Chief	3	3
Fire Captain – Includes 3 Acting Captains	11	9
Fire Apparatus Operator*	21	
Firefighter Paramedic	13	13
Firefighter EMT	20	8

*This is not a specified rank in this agency. All safety members are trained and licensed to work as Apparatus Operators.

As stated, Aptos La/Silva Fire Protection District is staffed with full-time, career personnel. The roster consists of 3 Division Chiefs, 9 Captains, and 21 Firefighter/Driver Operators. Thirteen personnel are certified as Paramedics. In total, there are 33 operational response personnel.

Each of the District's three fire stations houses an engine company and crew.

The following figure details Aptos/La Selva Fire Protection District's response staffing by station.

Figure 18: A/LSFPD Emergency Response Staffing by Station

Station	Apparatus	Minimum On-duty Staffing
Station One	Engine 3511	3
	Medic 3566	Cross-staffed
	Engine 3536	Cross-staffed
Station Two	Engine3512	3
	Rescue 3560	Cross-staffed
	Water Tender 3550	Cross-staffed
Station Three	Engine 3513	3
	Reserve Engine 3510	0
Duty Chief	Pickup Truck 3503	1
	Total	**10**

Critical Tasking—Aptos/La Selva Fire Protection District

Critical tasks are those activities that must be conducted in a timely manner by firefighters at emergency incidents to control the situation, stop the loss, and perform other necessary tasks required for an emergency. The Aptos/La Selva Fire Protection District has determined the level of staffing necessary for assuring that responding companies are capable of performing all of the described tasks in a prompt, efficient, and safe manner.

Fires—Critical tasking for fire operations is the minimum number of personnel to perform the tasks required to effectively control a fire in the listed risk category. Major fires (beyond first alarm) will require additional personnel and apparatus.

Emergency Medical—Critical tasking for emergency medical incidents is the minimum number of personnel to perform the tasks required and support the identified strategy based on the District's adopted medical protocol.

Alarm Assignments—Aptos/La Selva Fire Protection District

The following figure details Aptos/La Selva Fire Protection District's response staffing by fire type as identified by District staff.

Figure 19: A/LSFPD Emergency Response Staffing by Response Staffing by Type of Structure

First Alarm Structure Fires—All Types

Task	Number of Personnel
Command/Safety	1
Fire Attack—Pump Operator	3
Rapid Intervention Company (RIC)	3
Search and Rescue	3
Ventilation	3
Other (hydrant, backup line, utilities)	3
Total	**16**

Moderate Risk Commercial Structure Fire—1st Alarm

Task	Number of Personnel
Command/Safety	1
Fire Attack—Pump operator	3
Rapid Intervention Company (RIC)	3
Search and Rescue	3
Ventilation	3
Other (hydrant, backup line, utilities)	3
Total	**16**

High Risk Commercial Structure Fire—2nd Alarm

Task	Number of Personnel
Overhead	1
Support Personnel	9
Total	**10**

Wildland Fire—Local Response Area

Task	Number of Personnel
Command/Safety	1
Attack Line	2
Total	**3**

Wildland Fire—State Response Area

Task	Number of Personnel
Command/Safety	1
Fire Attack—Flank – Pumping Engine	3
Fire Attack—Flank	3
Structure Protection	2
Water Supply	1
Total	**10**

Aircraft Emergency

Task	Number of Personnel
Command/Safety	1
Fire Suppression/Pump Operations	3
Rescue/Emergency Medical Care	3
Total	**7**

Hazardous Materials—Low Risk

Task	Number of Personnel
Command/Safety	1
Investigation/Mitigation	3
Total	**4**

Hazardous Materials—High Risk

Task	Number of Personnel
Command	1
Safety	1
Decontamination	3
Research Support	2
Team Leader, Safety, Entry Team and Backup Team	6
Total	**13**

Emergency Medical Aid (Life-Threatening)

Task	Number of Personnel
Patient Management	1
Patient Care	1
Documentation	1
Total	**3**

Major Medical Response (10+ Patients) Level 2 MCI

Task	Number of Personnel
Incident Command/Safety	4
Triage	1
Treatment Group Supervisor	1
Transportation Group Supervisor	1
Patient Care and scene stabilization	18
Transportation—Ground	14
Transportation—Air	Unknown
Total	**39**

Motor Vehicle Accident (Non-Trapped)

Task	Number of Personnel
Command Safety	1
Patient Care/Extrication	3
Scene Safety/Traffic Blocks	3
Total	**7**

Motor Vehicle Accident (Trapped)

Task	Number of Personnel
Command Safety	1
Patient Care/Extrication	3
Scene Safety/Traffic Blocks	3
Total	**7**

Water Rescue

Task	Number of Personnel
Command/Safety	1
Rescue Swimmers—Spotter	3
Patient Care	2
Total	**6**

Technical Rescue—Rope

Task	Number of Personnel
Command/Safety	1
Rescue Team	2
Rigging	3
Patient Care	3
Edge control	1
Haul Team	3
Total	**13**

Technical Rescue—Confined Space

Task	Number of Personnel
Command/Safety	2
Rescue Team	2
Backup/Support Team	2
Patient Care	2
Attendant	1
Rigger	1
Air Monitoring	1
Support	3
Total	**14**

Technical Rescue—Shoring (No Rescue)

Task	Number of Personnel
Command/Safety	1
Shoring Team	3
Support	3
Total	**7**

Technical Rescue—With Rescue

Task	Number of Personnel
Command/Safety	2
Shoring Team	3
Cutting team	3
Rescue team	3
Support	3
Total	**14**

Alarm Assignment—Aptos/La Selva Fire Protection District Examples

To ensure sufficient personnel and apparatus are dispatched to an emergency event the following first alarm response assignments have been established by the District. "Total Staffing Needed" is the number identified in the Critical Tasking analysis above.

The number of personnel and apparatus required to mitigate an active and complex working incident will require additional resources above and beyond the numbers listed in the following figure. The figure details Aptos/La Selva Fire Protection District's response staffing by fire type.

Figure 20: A/LSFPD Emergency Response Staffing by Response Staffing by Type of Alarm

Low Rise Structure Fire—1st Alarm

Unit Type	Number of Units	Total Personnel
Engine	5	15
Truck	0	0
Division Chief	1	1
Total Staffing Provided		**16**
Total Staffing Needed		**16**

Moderate Risk Commercial Structure Fire—1st Alarm

Unit Type	Number of Units	Total Personnel
Engine	5	15
Truck	0	0
Air Supply	0	0
Division Chief	1	1
Total Staffing Provided		**16**
Total Staffing Needed		**16**

Moderate Risk Commercial Structure Fire—2nd Alarm

Unit Type	Number of Units	Total Personnel
Engine	3	9
Division Chief	1	1
Total Staffing Provided		**10**
Total Staffing Needed		**11**

All engines are staffed with three personnel at all time. The District's deployment of its emergency response resources is consistent with most of the District's calls for service. As is typically found in today's fire districts, most of fire service calls are for medically-related emergencies. All fire crews are able and qualified to provided medical care. The District is not able to field enough resources to manage a working structure fire as well as several of the labor intense alarms by itself. To fully staff any of the alarms noted, the District is dependent on automatic aid to meet recognized standards. Like other fire agencies in the area, there are incidents that require additional assistance from other departments to respond to and mitigate larger-sized or more complex emergencies.

Finding:

- Per A/LSFPD's identified alarm assignment matrix, the District is reliant on outside aid to accomplish fire response and other labor intense critical tasks.

Recommendation #7: Address Critical Tasking Needs

In the event the A/LSFPD wishes to be self-reliant for fire response and labor intense critical tasks, they will need to add personnel, apparatus, and facility accommodations to fully staff a dedicated truck company. In addition, consideration should be given to acquiring and staffing a peak-hour quick response/attack unit.

- Both Districts should implement full boundary drop closest resource First Response Protocols.
- Eliminate redundant resource assignments.
- Initiate steps to fully consolidate operations.
- Relocate and fully staff Central's truck company to a station that provides improved coverage to both Districts.

Central Fire Protection District

Figure 21: CFPD Emergency Response Positions

Position	Number
Assistant Chief	Vacant
Battalion Chief	3
Fire Captain	13
Fire Apparatus Operator	33
Firefighter—Career	*
Firefighter—Paid Call	15

*Combined with Fire Apparatus Operator, all firefighters off probation are also Driver/Operators.

As previously stated, Central Fire Protection District is staffed with full-time, career personnel augmented by Paid Call Firefighters. The roster consists of three Battalion Chiefs, 13 Captains, 33 Firefighters/Driver Operators. Twenty-four of the suppression personnel are also Paramedics.

In total, there are 50 operational response personnel. Paid Call firefighters (15) augment full-time staff. Each of Central Fire Protection District's four fire stations houses an engine company and crew. Station 2 also houses the District's truck company which is cross-staffed by the engine company crew.

The following figure details Central Fire Protection District's response staffing by station.

Figure 22: CFPD Emergency Response Staffing by Station

Station	Apparatus	Minimum On-duty Staffing
Station One	Engine 3411	3
	Rescue 3460	Cross Staffed w/ EC
	Battalion 3403	1
	*1 person on float status, at Station #1 if not assigned	
Station Two	Engine 3412	4
	Truck 3472	Cross Staffed with engine crew as needed
	Water Tender 3450	Cross staffed as needed
Station Three	Engine 3413	3
	Engine 3437 (Type-3)	Cross Staffed with Engine Crew
Station Four	Engine 3414	3
	Engine 3438 (Type-3)	Cross Staffed with engine Crew
	TOTAL	**15**

Critical Tasking—Central Fire Protection District

Critical tasks are those activities that must be conducted in a timely manner by firefighters at emergency incidents to control the situation, stop loss, and perform necessary tasks required for a medical emergency. The Central Fire Protection District has determined the level of staffing necessary to perform all the described tasks in a prompt, efficient, and safe manner.

Fires—Critical tasking for fire operations is the minimum number of personnel needed to perform the tasks required to effectively control a fire in the listed risk category. Major fires (beyond first alarm) will require additional personnel and apparatus.

Emergency Medical—Critical tasking for emergency medical incidents is the minimum number of personnel to perform the tasks required support the identified strategy based on the District's adopted medical protocol.

The following figure details Central Fire Protection District's response staffing by type of structure fire

Figure 23: CFPD Response Staffing by Type of Structure

Low Rise Structure Fire

Task	Number of Personnel
Command/Safety	2
Pump Operations	1
Attack Line	3
Search and Rescue	2
Ventilation	2
Rapid Intervention Crew (RIC)	2
Other (Hydrant, backup line)	3
Total	**15**

Moderate Risk Commercial Structure Fire

Task	Number of Personnel
Command/Safety	2
Pump Operations	2
Attack Line	4
Search and Rescue	4
Ventilation	4
Rapid Intervention Company (RIC)	2
Other (Hydrant, backup line)	4
Total	**22**

High Risk Commercial Structure Fire

Task	Number of Personnel
Command/Safety	3
Pump Operations	2
Attack Line	4
Search and Rescue	4
Ventilation	4
Rapid Intervention Company (RIC)	4
Other (Hydrant, backup line)	4
Total	**25**

The following figure details Central Fire Protection District's response staffing by risk and type of fire.

Figure 24: CFPD Response Staffing Based on Risk and Type of Fire

Wildland Fire—Low Risk

Task	Number of Personnel
Command/Safety	1
Attack Line	3
Total	**4**

Wildland Fire—High Risk

Task	Number of Personnel
Command/Safety	2
Pump Operations/Lookout	1
Attack Line	2
Structure Protection	3
Water Supply	2
Total	**10**

Aircraft Emergency

Task	Number of Personnel
Command/Safety	2
Aircraft Fire Suppression	2
Pump Operations	1
Attack Line	2
Back-up Line	2
Rescue	2
Emergency Medical Care	2
Water Supply	1
Total	**14**

Hazardous Materials—Low Risk

Task	Number of Personnel
Command	2
Liaison	1
Decontamination	4
Research/Support	2
Entry team, and Backup Team	6
Total	**15**

Hazardous Materials—High Risk

Task	Number of Personnel
Command	2
Liaison	1
Decontamination	4
Research Support	2
Team Leader, Safety, Entry Team, and Backup Team	6
Total	**15**

The following figure details Central Fire Protection District's response staffing for emergency medical aid.

Figure 25: CFPD Response Staffing by Type of Request for Medical Aid

Emergency Medical Aid (Life Threatening)

Task	Number of Personnel
Patient Management	1
Patient Care	1
Documentation	1
Total	**3**

Major Medical Response (10+ Patients)

Task	Number of Personnel
Incident Command/Safety	1
Triage	1
Treatment Manager	1
Patient Care	8
Transportation Manager	1
Total	**12**

Motor Vehicle Accident (Non-Trapped)

Task	Number of Personnel
Scene Mgmt./Documentation	1
Patient Care/Extrication	2
Total	**3**

Motor Vehicle Accident (Trapped)

Task	Number of Personnel
Command/Safety	1
Scene Management	1
Patient Care	2
Extrication	3
Pump Operator/Suppression Line	2
Extrication/Vehicle Stabilization	2
Total	**11**

The following figure details Central Fire Protection District's response staffing by type of: "Other Emergency Requests."

Figure 26: CFPD Response Staffing by Type of Water Rescue and Technical Rescue

Surf Rescue—Water

Task	Number of Personnel
Command/Safety	1
Rescue Team	2
Backup Team	2
Patient Care	2
Total	**7**

Technical Rescue—Rope

Task	Number of Personnel
Command/Safety	1
Rescue Team	2
Backup/Support Team	2
Patient Care	2
Rigger	1
Attendant	1
Ground Support	4
Edge Person	1
Total	**14**

Technical Rescue—Confined Space

Task	Number of Personnel
Command/Safety	2
Rescue Team	2
Backup/Support Team	2
Patient Care	2
Attendant	1
Rigger	1
Ground Support	4
Total	**14**

Technical Rescue—Trench

Task	Number of Personnel
Command/Safety	2
Rescue Team	2
Backup/Support Team	2
Patient Care	3
Shoring	5
Total	**14**

Alarm Assignments—Central Fire Protection District

To ensure sufficient personnel and apparatus are dispatched to an emergency event, the following first alarm response assignments have been established by the District. "Total Staffing Needed" is the number identified in the Critical Tasking Analysis above. The number of personnel and apparatus required to mitigate an active and complex working incident will require additional resources above and beyond the numbers listed in the following figure. The figure compares the type of fire and staffing provided. Based on the Critical Tasking Analysis above, it also provides the total personnel needed.

Figure 27: CFPD Response Staffing Currently "Provided" versus "Needed"

Low Rise Structure Fire

Unit Type	Number of Units	Total Personnel
Engine	4	12
Truck	1	4
Air Supply	1	2
Battalion Chief	2	2
Total Staffing Provided		**20**
Total Staffing Needed		**15**

Moderate Risk Commercial Structure Fire

Unit Type	Number of Units	Total Personnel
Engine	4	12
Truck	1	4
Air Supply	1	2
Battalion Chief	2	2
Total Staffing Provided		**20**
Total Staffing Needed		**22**

High Risk Commercial Structure Fire

Unit Type	Number of Units	Total Personnel
Engine	4	12
Truck	1	4
Air Supply	1	2
Battalion Chief	2	2
Total Staffing Provided		**20**
Total Staffing Needed		**26**

Wildland Fire—Low Risk

Unit Type	Number of Units	Total Personnel
Engine	1	3
Battalion Chief	1	1
Total Staffing Provided		**4**
Total Staffing Needed		**4**

Wildland Fire—High Risk

Unit Type	Number of Units	Total Personnel
Engine	2	6
Brush Engine	2	6
Water Tender	2	4
Battalion Chief	2	2
Total Staffing Provided		**18**
Total Staffing Needed		**10**

Aircraft Emergency

Unit Type	Number of Units	Total Personnel
Engine	2	6
Truck	1	4
Battalion Chief	1	1
Total Staffing Provided		**11**
Total Staffing Needed		**14**

Hazardous Materials—High Risk

Unit Type	Number of Units	Total Personnel
Engine	1	3
Truck	1	4
Battalion Chief	1	1
Hazardous Materials Unit	1	3
Total Staffing Provided		**11**
Total Staffing Needed		**15**

Hazardous Materials—Low Risk

Unit Type	Number of Units	Total Personnel
Engine	1	3
Battalion Chief	1	1
Total Staffing Provided		**4**
Total Staffing Needed		**15**

Emergency Medical Service (Life Threatening)

Unit Type	Number of Units	Total Personnel
Engine or Truck	1	3–4
Total Staffing Provided		**3–4**
Total Staffing Needed		**3**

Major Medical Response (10+ Patients)

Unit Type	Number of Units	Total Personnel
Engine/Paramedic	2	6
Engine/Truck—ALS	1	4
Battalion Chief	1	1
Total Staffing Provided		**11**
Total Staffing Needed		**12**

Motor Vehicle Accident (Non-Trapped)

Unit Type	Number of Units	Total Personnel
Engine	1	3
Truck or Rescue	1	4
Battalion Chief	1	1
Total Staffing Provided		**8**
Total Staffing Needed		**3**

Motor Vehicle Accident (Trapped)

Unit Type	Number of Units	Total Personnel
Engine	1	3
Truck	1	4
Battalion Chief	1	1
Total Staffing Provided		**8**
Total Staffing Needed		**11**

Surf Rescue—Water

Unit Type	Number of Units	Total Personnel
Engine—at least 2 rescue swimmers	2	6
Battalion Chief	1	1
Total Staffing Provided		**7**
Total Staffing Needed		**7**

Technical Rescue—Rope

Unit Type	Number of Units	Total Personnel
Engine	1	3
Truck	1	4
Battalion Chief	1	1
Total Staffing Provided		**8**
Total Staffing Needed		**14**

Technical Rescue—Confined Space

Unit Type	Number of Units	Total Personnel
Engine	1	3
Truck	1	4
Battalion Chief	1	1
Total Staffing Provided		**8**
Total Staffing Needed		**14**

Technical Rescue—Trench

Unit Type	Number of Units	Total Personnel
Engine	1	3
Truck	1	4
Battalion Chief	1	1
Total Staffing Provided		**8**
Total Staffing Needed		**14**

All engines are staffed with three personnel at all times with the exception of Station 2. Station 2 is staffed with a crew of four and cross-staffs the truck company. Central Fire Protection District's deployment of its emergency response resources is consistent with most of its calls for service. As is typically found in today's fire districts, most of fire service calls are for medically-related emergencies. All fire crews are qualified and able to provide medical care.

Central Fire Protection District is not able to field enough resources to manage a working structure fire by itself and is dependent on automatic aid to meet recognized standards. Like other departments in the area, there are incidents that require additional assistance from other districts to respond to and mitigate larger-sized or more complex emergencies.

Finding:

- Per Central Fire Protection District's identified Critical Tasking Matrix, the District is reliant on outside aid to accomplish fire and other labor intense critical tasks.

Joint Findings:

- Neither District can field a full first alarm or effective response force absent automatic or mutual aid from each other. Aptos/La Selva does not have a truck company or staffing to operate one and is reliant on the cross staffed truck company being available from Central FPD.

Recommendation #8: Fully Staff Truck Company

In the event CFPD wishes to be self-reliant for fire response-related critical tasking, they will need to add personnel and facility accommodations to fully staff the truck company. In addition, consideration should be given to acquiring and staffing a peak-hour quick response/attack unit.

SERVICE DELIVERY AND PERFORMANCE

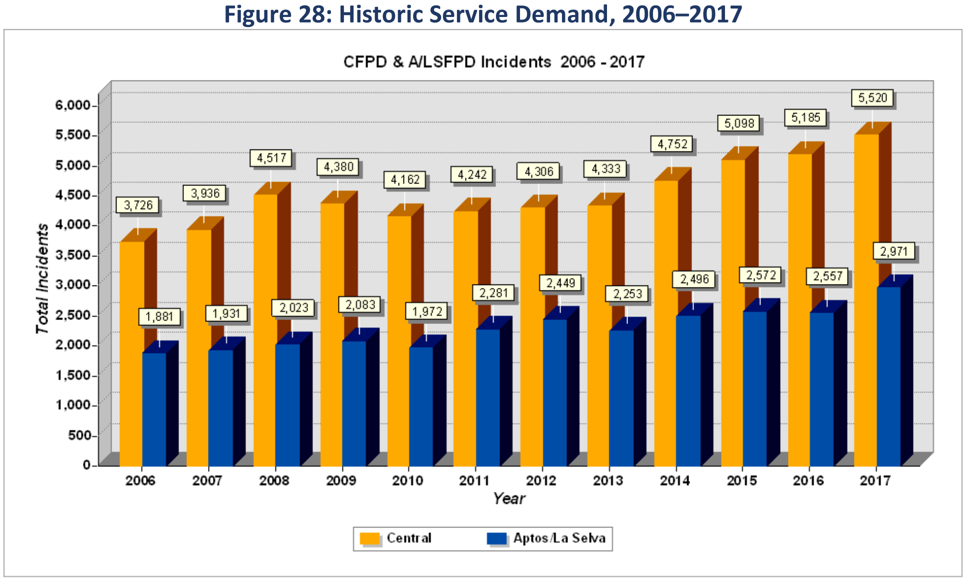
This section of the study reviews current service delivery, demand, and performance.

Service Demand

This section describes current and historical service demand by incident type and temporal variation for the study area and the participating jurisdictions. GIS software is used to provide a geographic display of demand within the overall study area. The data used in this analysis is derived from National Fire Incident Reporting System (NFIRS) data provided by the individual agencies. The following figures depict historical service demand from 2006 through 2017 for each agency.

Over the past decade, the total incidents for the Aptos/La Selva Fire Protection District increased by 5%. For the same period, the total incident for the Central Fire Protection District increased by 4%.

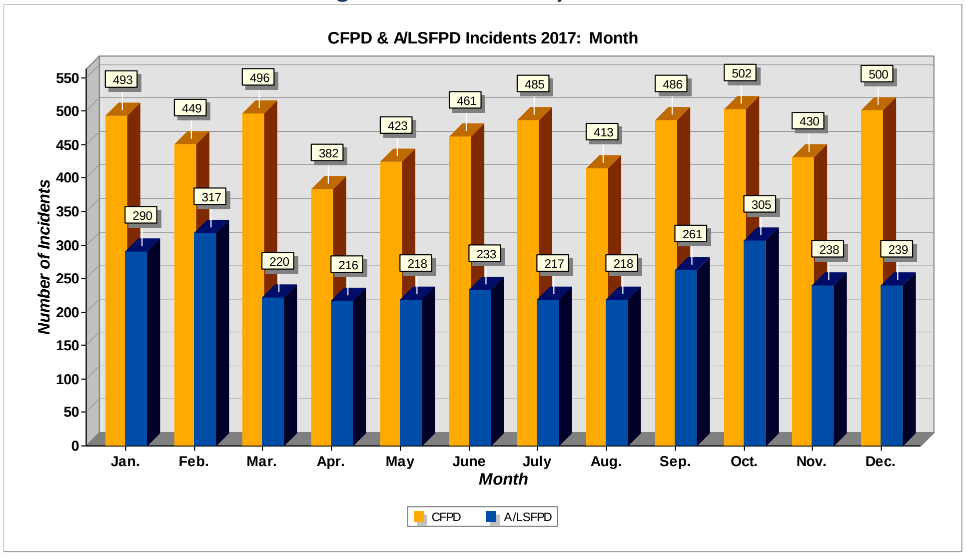
Figure 28: Historic Service Demand, 2006–2017



Temporal Variation

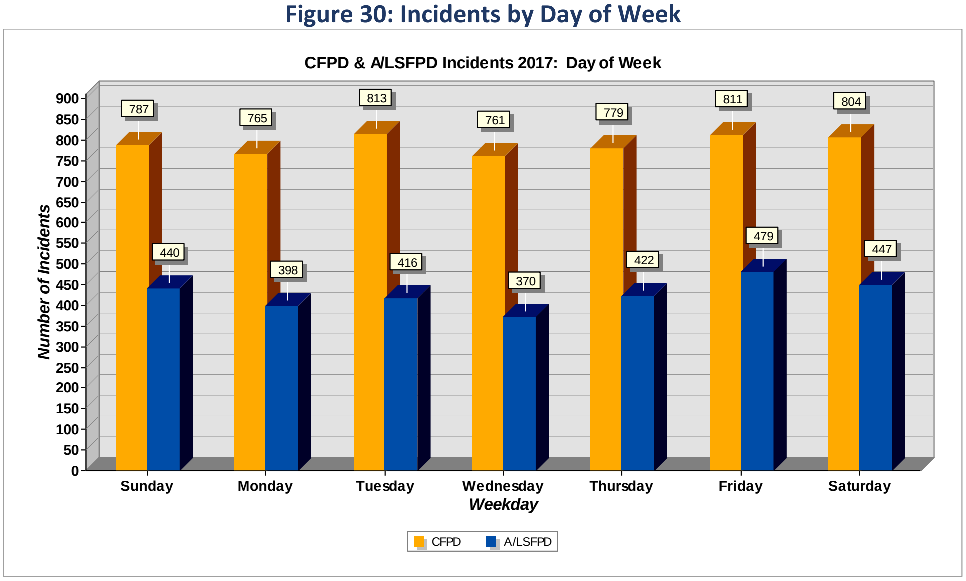
A temporal analysis of incidents reveals when the greatest response demand is occurring. The following figures show how activity and demand changes for the individual fire agencies based on various time measurements. The available incident data was from July 1, 2016 to December 31, 2017. In order to not skew the data, the following analysis was limited to the 2017 calendar year (January 1 through December 31, 2017). The busiest month for Aptos/La Selva Fire District was February and the busiest month for Central Fire District was October.

Figure 29: Incidents by Month



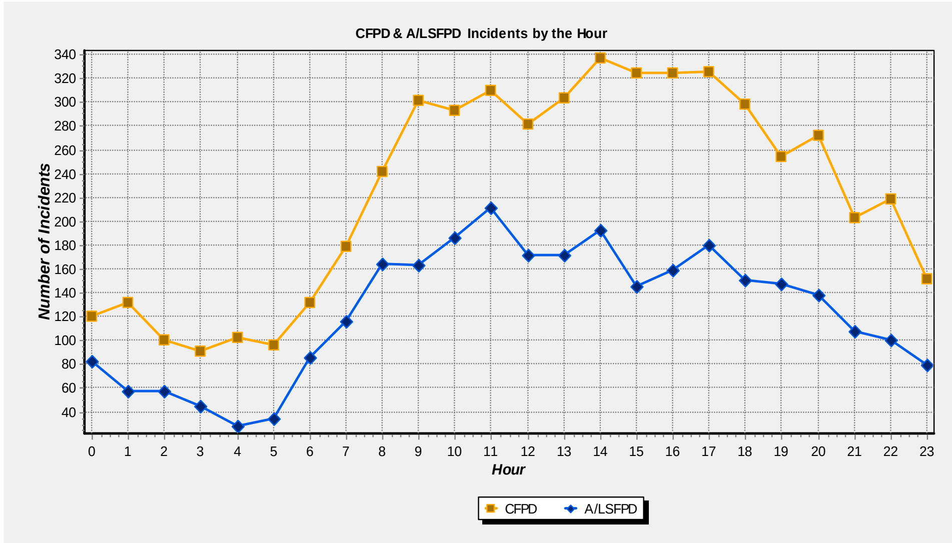
Again, although the available incident data ranged from July 1, 2016 to December 31, 2017, in order to not skew the data, the following analysis was limited to the 2017 calendar year (January 1 through December 31, 2017). The following figures show that the busiest day of the week for A/LSFPD was Friday and the busiest day for CFPD was Tuesday.

Figure 30: Incidents by Day of Week



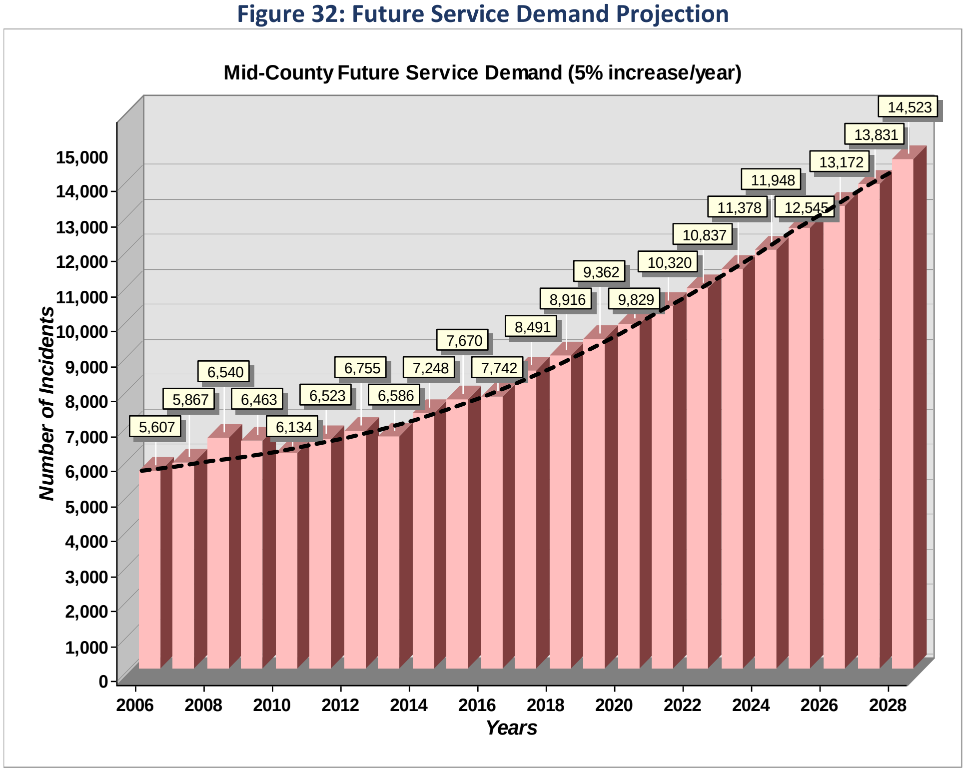
The last temporal analysis of service demand examines demand summarized by hour of the day. The following figure demonstrates a distinct curve that closely follows typical population activity patterns. Incident activity begins to increase in the morning and continues to increase throughout the workday. Demand gradually decreases throughout the evening and early morning hours. Seventy-six percent of service demand in the study area occurred between 8:00 AM and 9:00 PM.

Figure 31: Incidents by Hour



Based on the provided incident data, from both fire departments, a projection of 5% increase in calls through 2028 is shown in the next figure. Using the 2017 incident data as a base, by 2028, the number of incidents will have doubled to approximately 14,000/year.

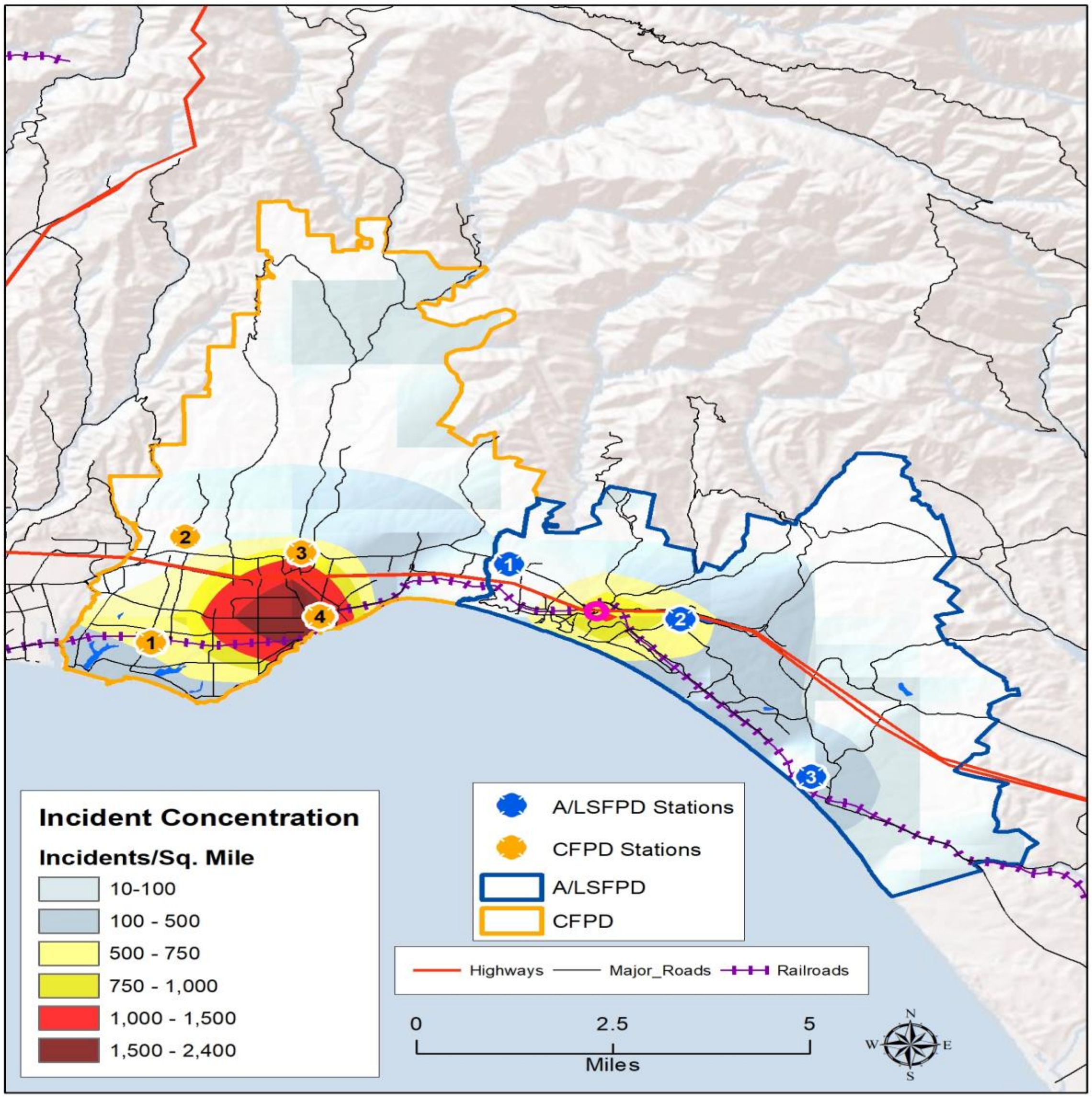
Figure 32: Future Service Demand Projection



Geographic Service Demand

In addition to the temporal analysis of service demand, it is useful to examine the geographic distribution of service demand. Utilizing agency data, the following figure illustrates incidents per square mile throughout the study area during the study period.

Figure 33: Study Area Geographic Service Demand



The previous figure demonstrates incident density for all incident types. EMS incidents constitute 59% (6,044) of the calls. Service Calls and Good Intent calls are 27% of the incident type, while Fires (100s) represent 2.2%.

Figure 34: Count of National Fire Incident Reporting System (NFIRS) Incident Types

NFIRS Type	Number of Incidents
No code recorded	3
100 Fire	231
200 Overpressure/Rupture	20
300 EMS	6,044
400 Haz. Condition	353
500 Service Call	1,048
600 Good Intent	1,753
700 False Alarm	758
800 Weather/Nat. Disaster	12
900 Special Incident	21

Figure 35: NFIRS Incident Types

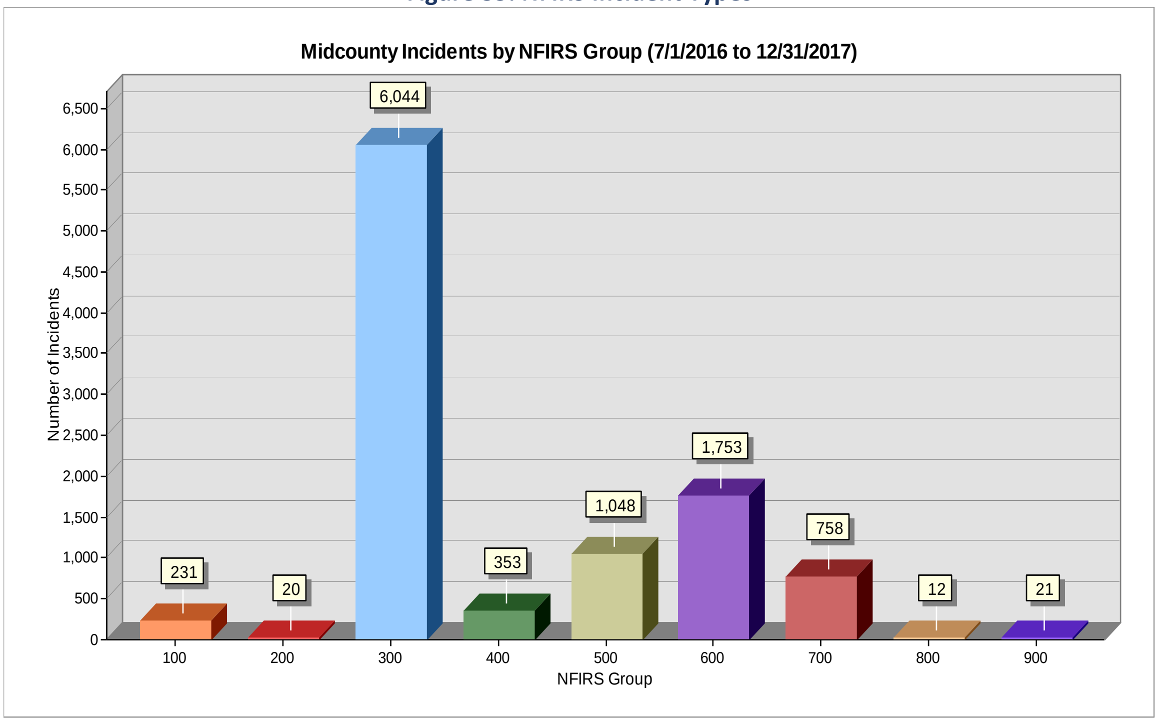
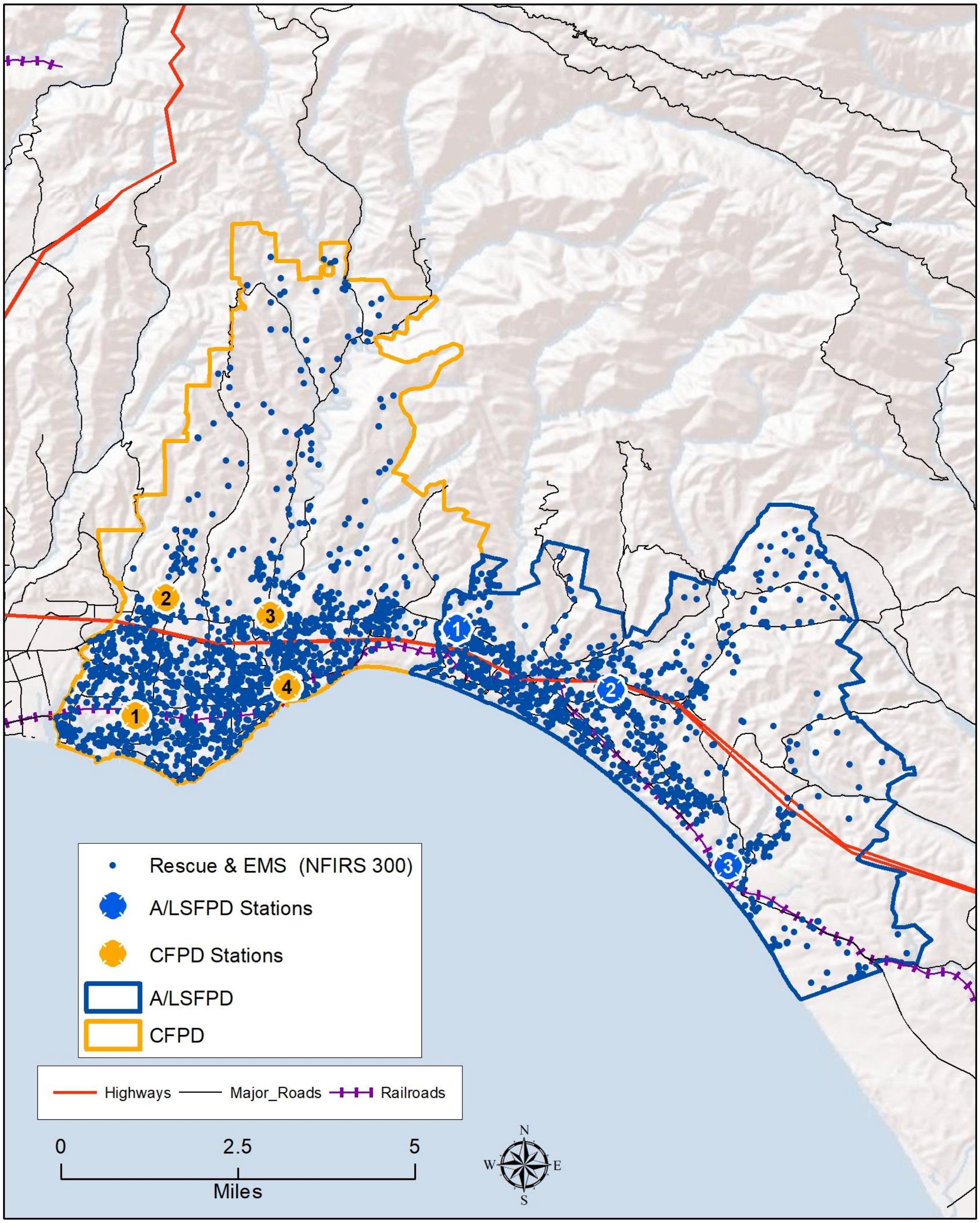
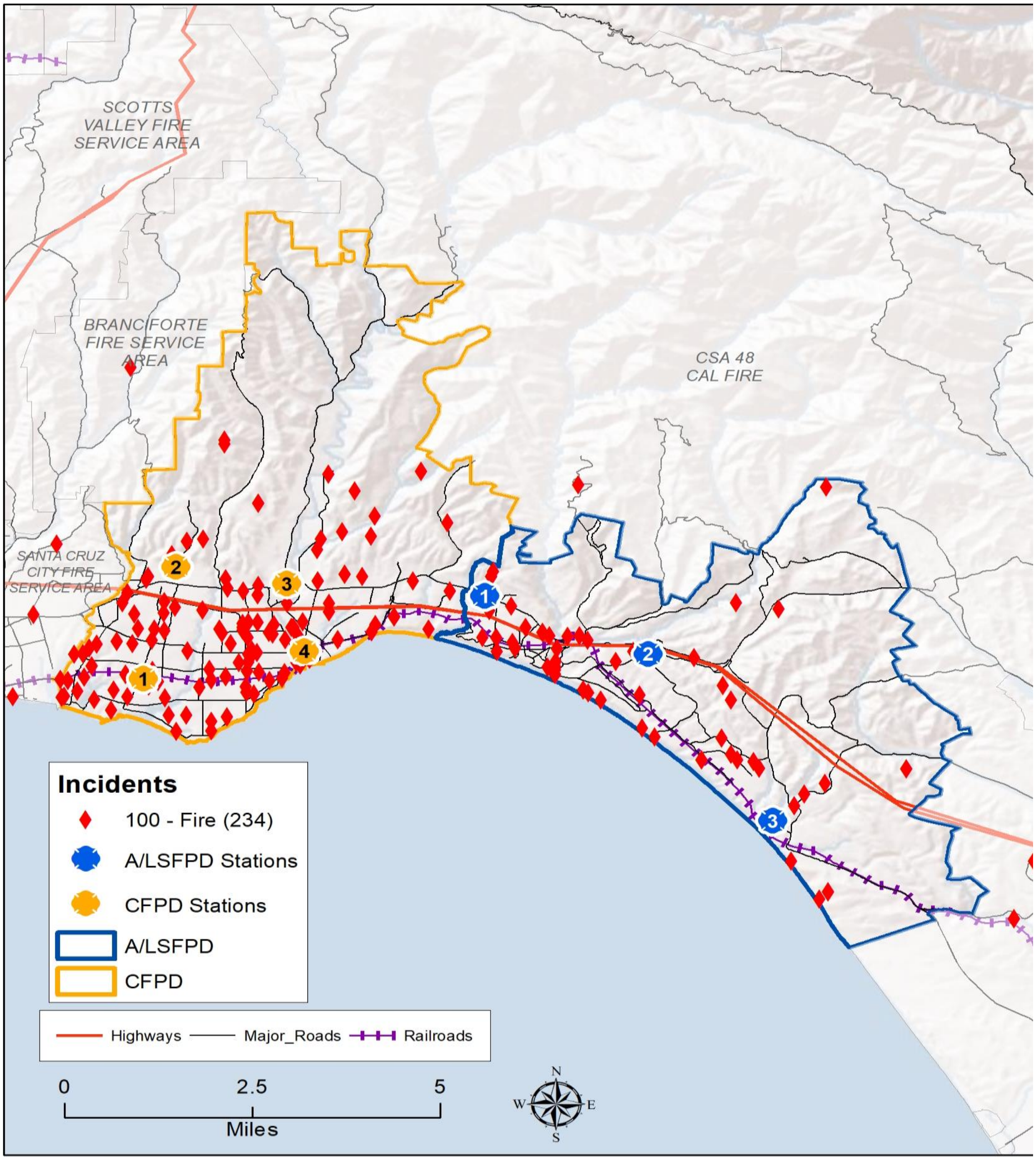


Figure 36: EMS Calls (7/1/2016–12/31/2017)



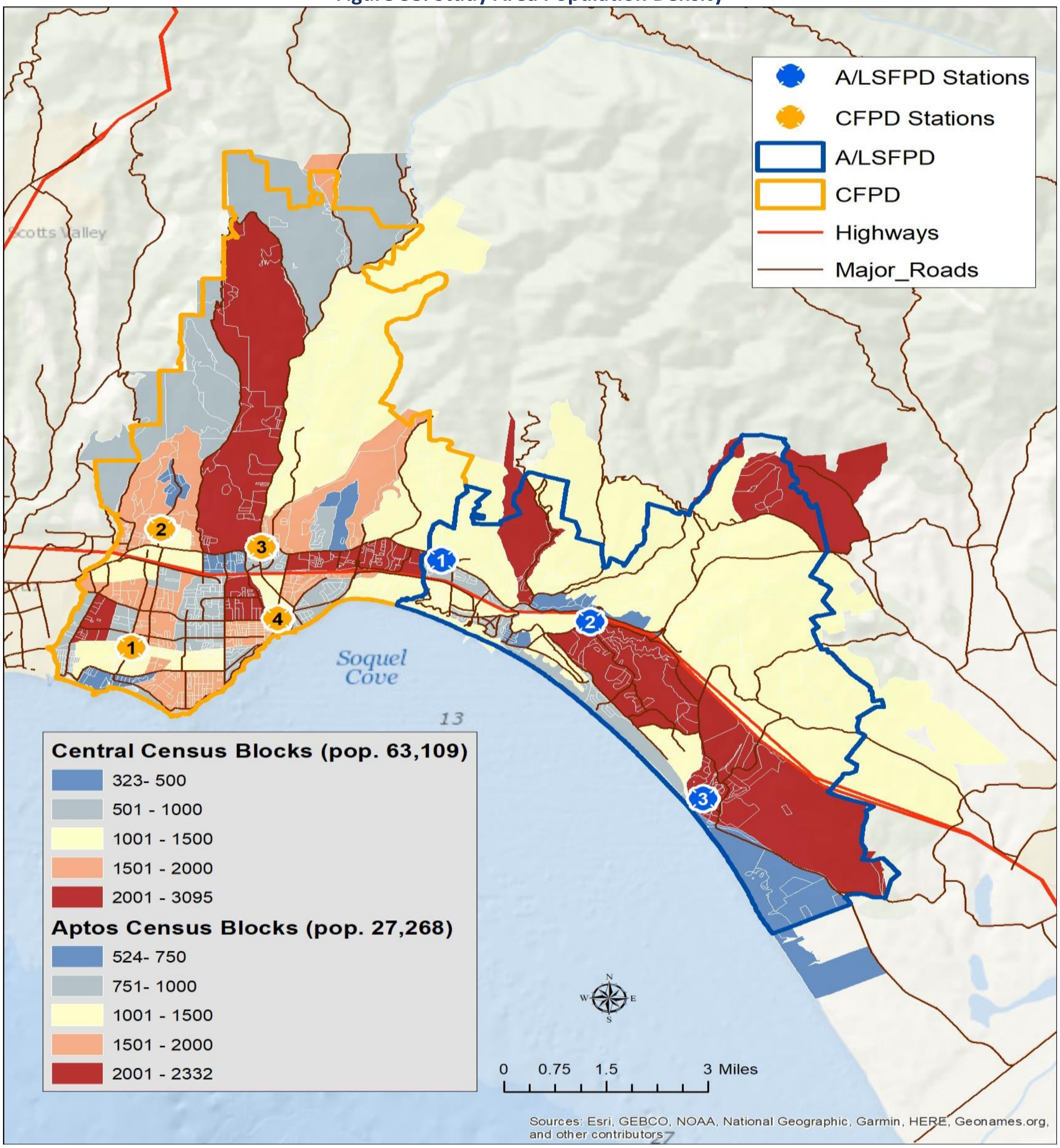
Fire incidents are the least frequent incident type in the data set. However, fires are distributed throughout the study area in a pattern that is similar to the overall incident density data. Fires are also one of the most resource intense incidents. Multiple response units are needed, and on-scene time are generally the longest of any incident type.

Figure 37: Mid County NFIRS 100 Type Incidents (7/1/2016–12/31/2017)



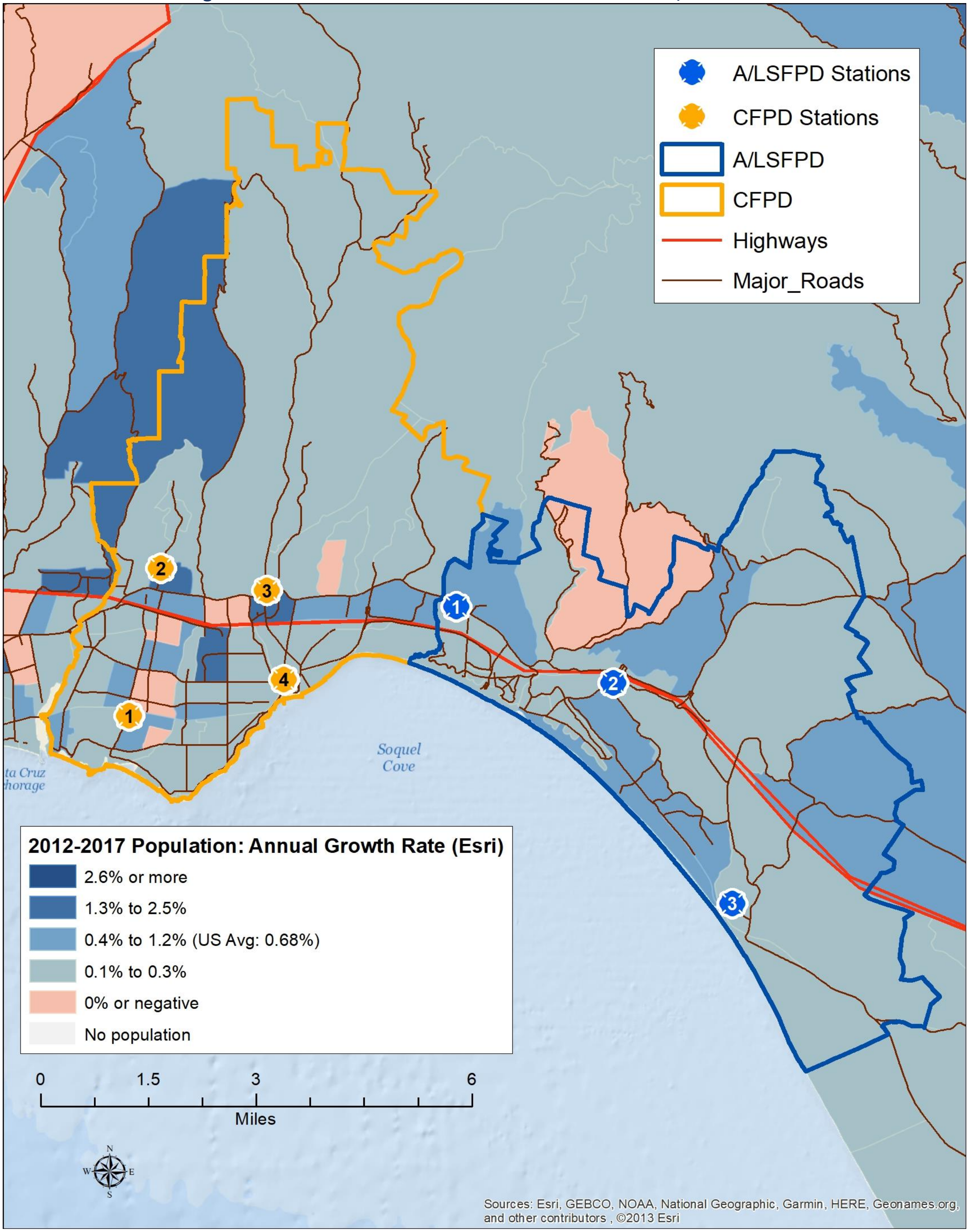
Population density is the most significant influence on incident workload. The following figure depicts the distribution of population throughout the study area. Currently, the densest population is along the coast line. However, the area to the northeast of the CFPD is seeing increased population growth outside of the Urban Response Zone.

Figure 38: Study Area Population Density



Note: Population estimates have not changed significantly since the 2017 Citygate Report (see Central FPD, Vol. 1 – Technical Report, Page 106, Table 35 & Volume 2 SOC HQ Map Atlas, Map 2d, Population Density; also, Aptos-Las Selva FPD Master Plan Tech Report page 122, Table 41 & Master Plan Part 2b, Map 2c Population Density.)

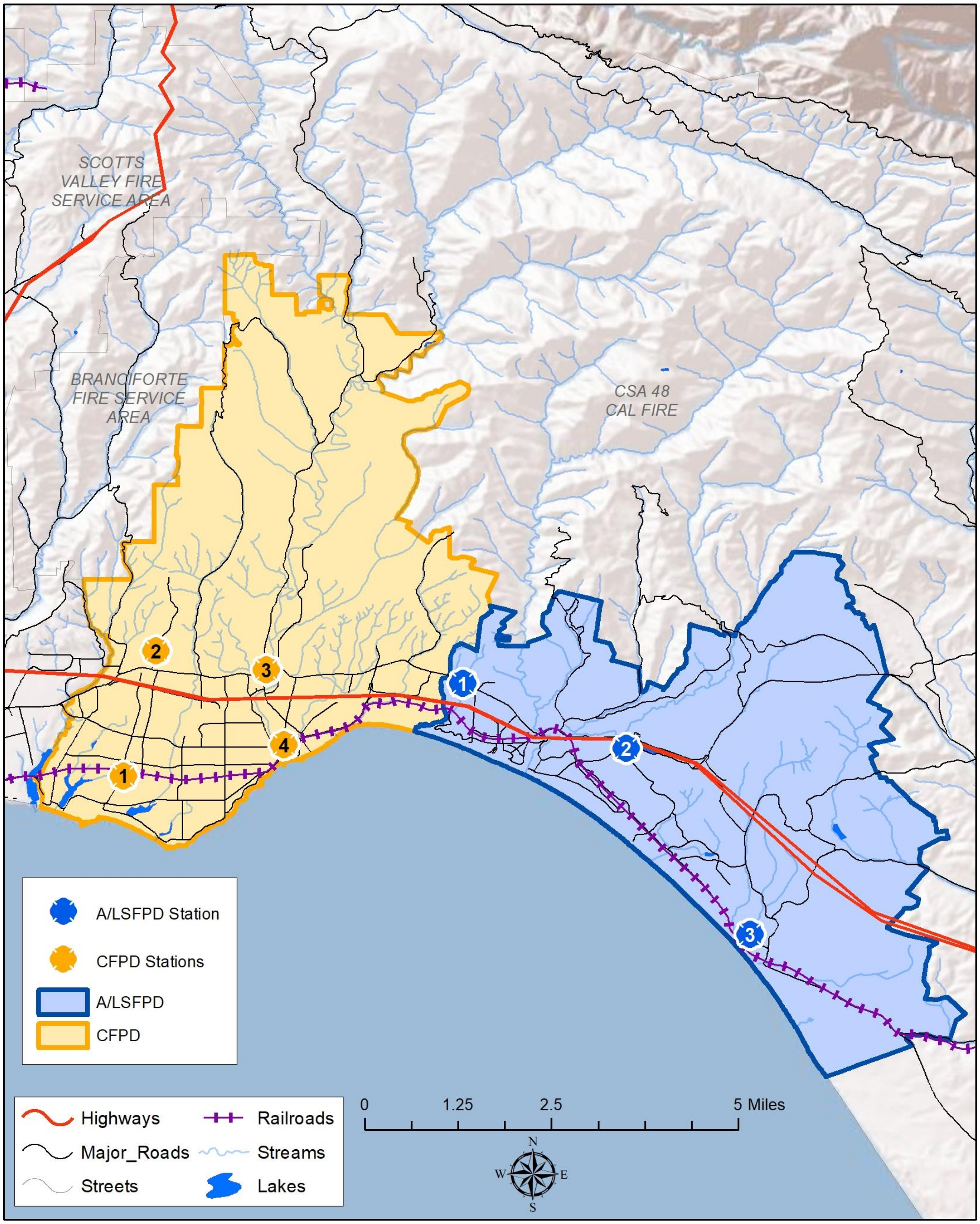
Figure 39: Annual Growth Rate for the U.S. Census Blocks, 2012–2017



Resource Distribution

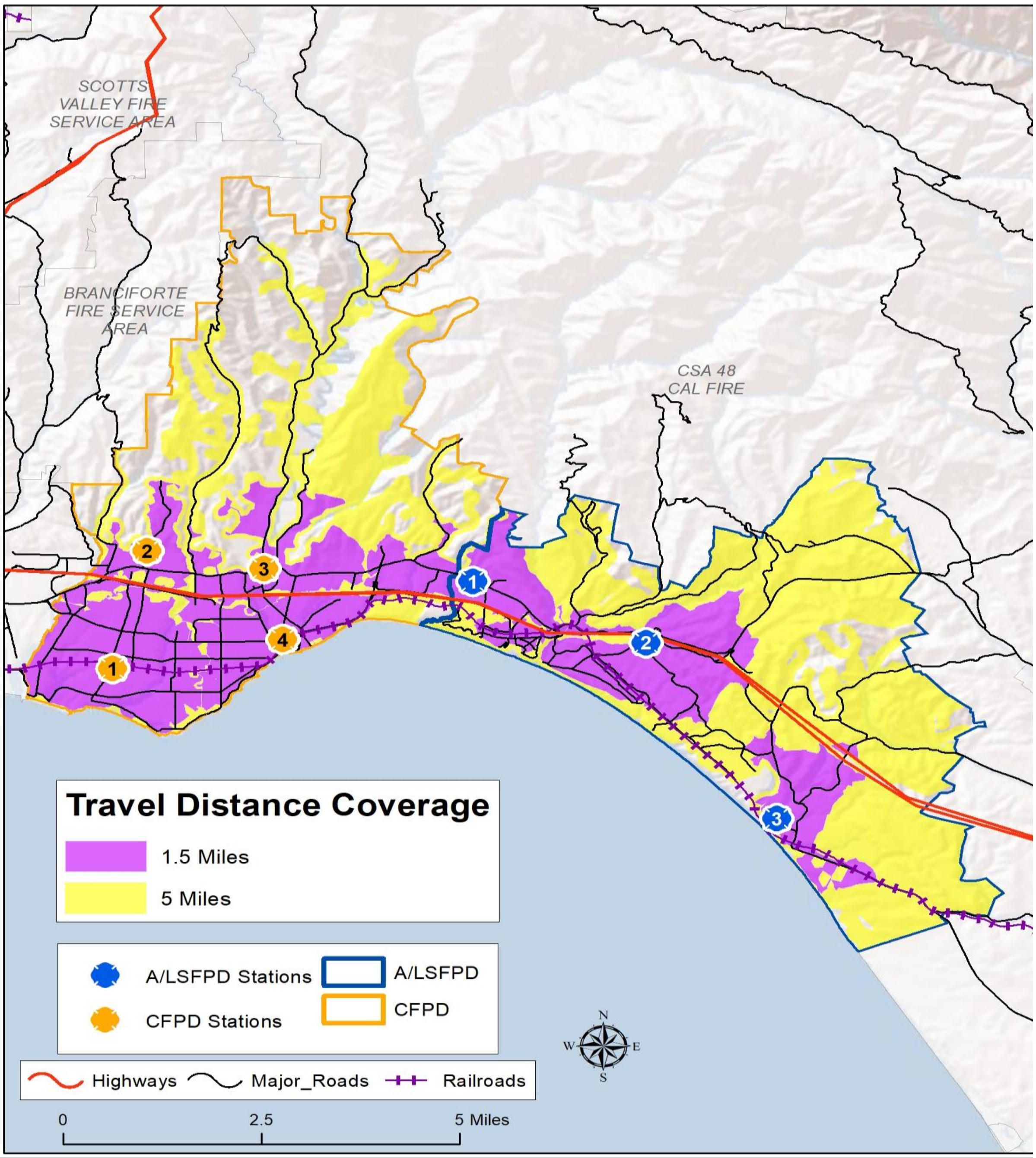
The following figure illustrates the current distribution of fire stations within the two study agencies.

Figure 40: Study Agencies and Fire Station Locations



The Insurance Services Organization (ISO) is a national insurance industry organization that evaluates fire protection for communities across the country. A jurisdiction's ISO rating is an important factor when considering fire station and apparatus distribution as it can affect the cost of fire insurance for individuals and businesses. To receive maximum credit for station and apparatus distribution, ISO recommends that all "built upon" areas in a community be within 1.5 road miles of an engine company. Additionally, a built upon area should be within five miles of a fire station to receive any credit for fire protection. The following figure illustrates fire station distribution by distance over the existing road network.

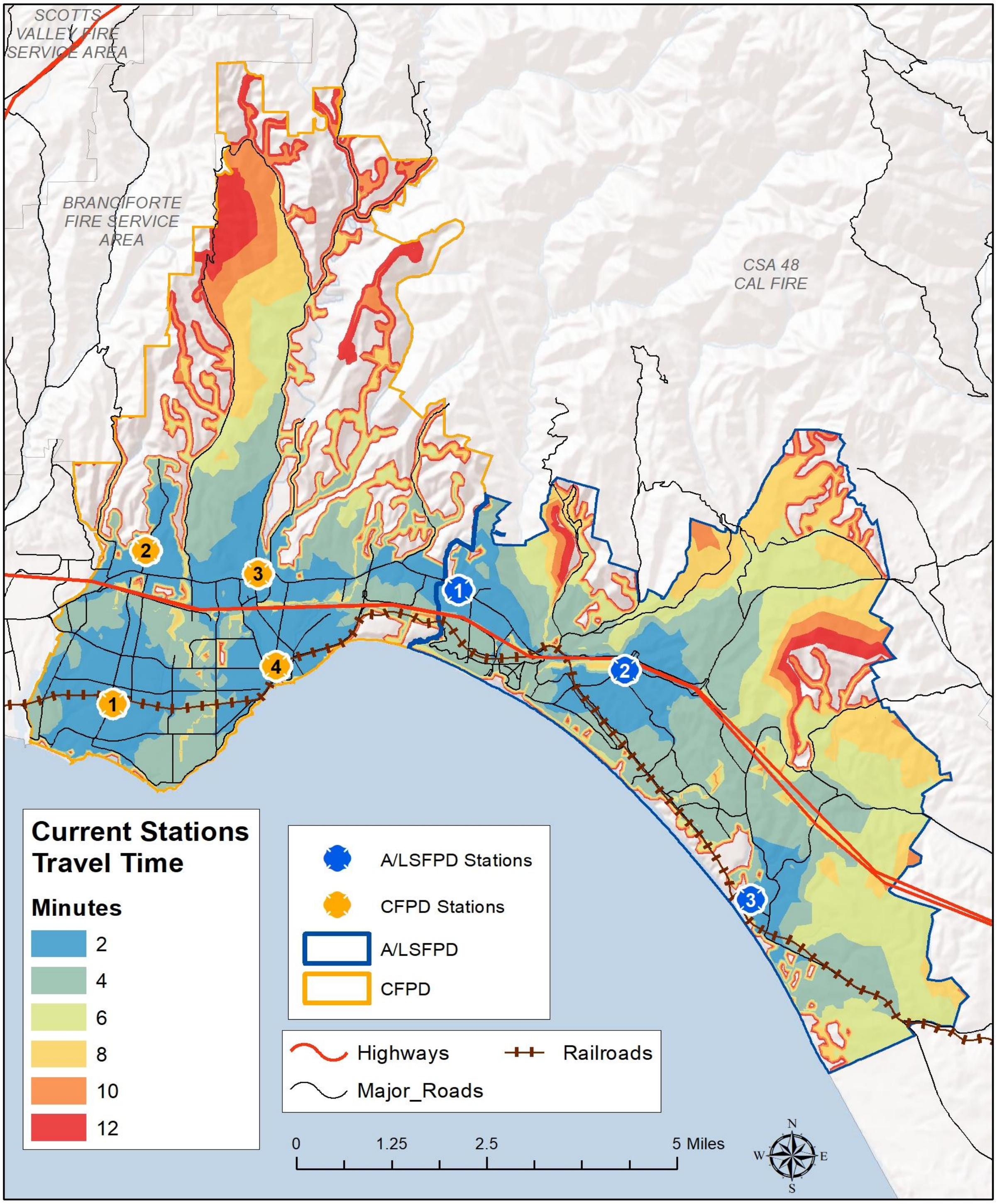
Figure 41: Study Area Station Distribution, ISO Criteria, 1.5 & 5 Mile Travel Coverage



Travel Time

The following figure shows the current stations' travel time model in two-minute increments. Most of the urban response zone is within 6 minutes' travel time.

Figure 42: Current Stations Travel Time



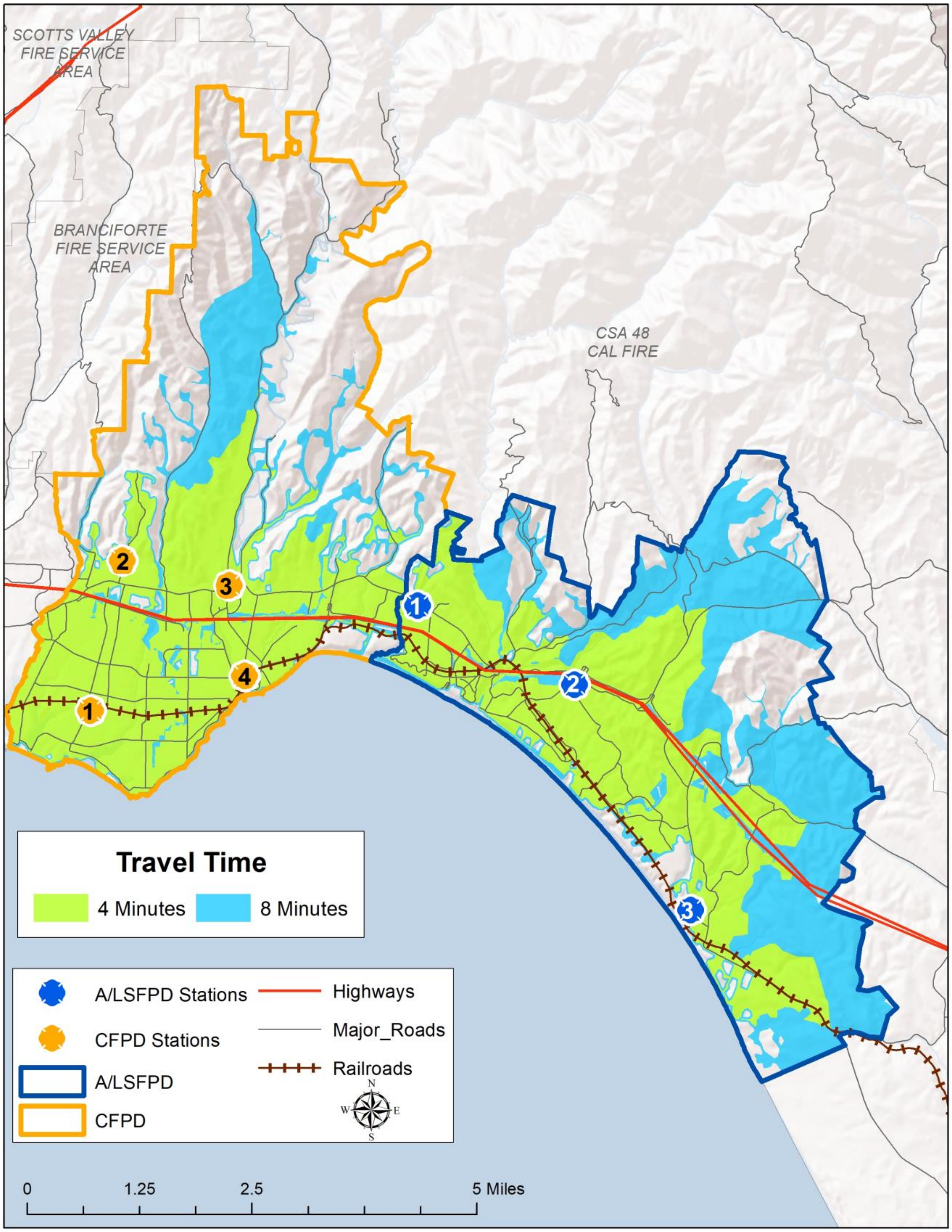
Resource Concentration/Effective Response Force

Standard firefighting procedures call for the arrival of the entire initial assignment (sufficient apparatus and personnel to effectively deal with an emergency based on its level of risk, referred to as "effective response force") within a specified amount of time. This is to ensure that enough people and equipment arrive soon enough to safely control a fire or mitigate any emergency before there is substantial damage or injury. In this analysis, ESCI examines the participating agencies' ability to assemble multiple resources across the study area.

The 2017 Citygate studies for both CFPD & A/LSFPD analyzed in great detail the challenges both Districts have meeting performance measures for Initial Unit (First Due) and Effective Response Force due to substantial traffic congestion issues.[4] The following figure uses a four- and eight-minute travel time models to illustrate the ability of each agency to assemble an effective response force. Eight minutes' travel time to assemble the effective response force is recommended by national standards for urban areas.

[4] This analysis can be found in the Central FPD Standards of Cover & Management/Administrative Assessment, Vol. 1, pp. 35–38, Table 16 & Vol 2, Maps 3–7: Travel times with & without traffic congestion.; Aptos/La Selva FPD Master Plan Tech Report, pp. 46–47, Maps 3–7, Travel times with & without traffic congestion.

Figure 43: Resource Concentration/Effective Response Force



Response Reliability

The workload of emergency response units can be a factor in response time performance. Concurrent incidents and the amount of time individual units are committed to an incident can affect a jurisdiction's ability to muster sufficient resources to respond to additional emergencies.

The following figure lists the number of concurrent incidents for each agency. This is important because the more calls occurring at the same time, the more stretched available resources become leading to extended response times from more distant responding apparatus. Within both agencies, concurrent incidents are common.

Figure 44: A/LSFPD & CFPD Concurrent Incidents (2017)

Concurrent Calls	A/LSFPD	CFPD
2	755	1,344
3	260	577
4	87	226
5	28	99
6	7	36
7	0	11
8	0	3
9	**1**	**1**

The following figures display the amount of time primary response apparatus were committed to an incident during the study period.

Figure 45: A/LSFPD Apparatus Response Workload (2017)

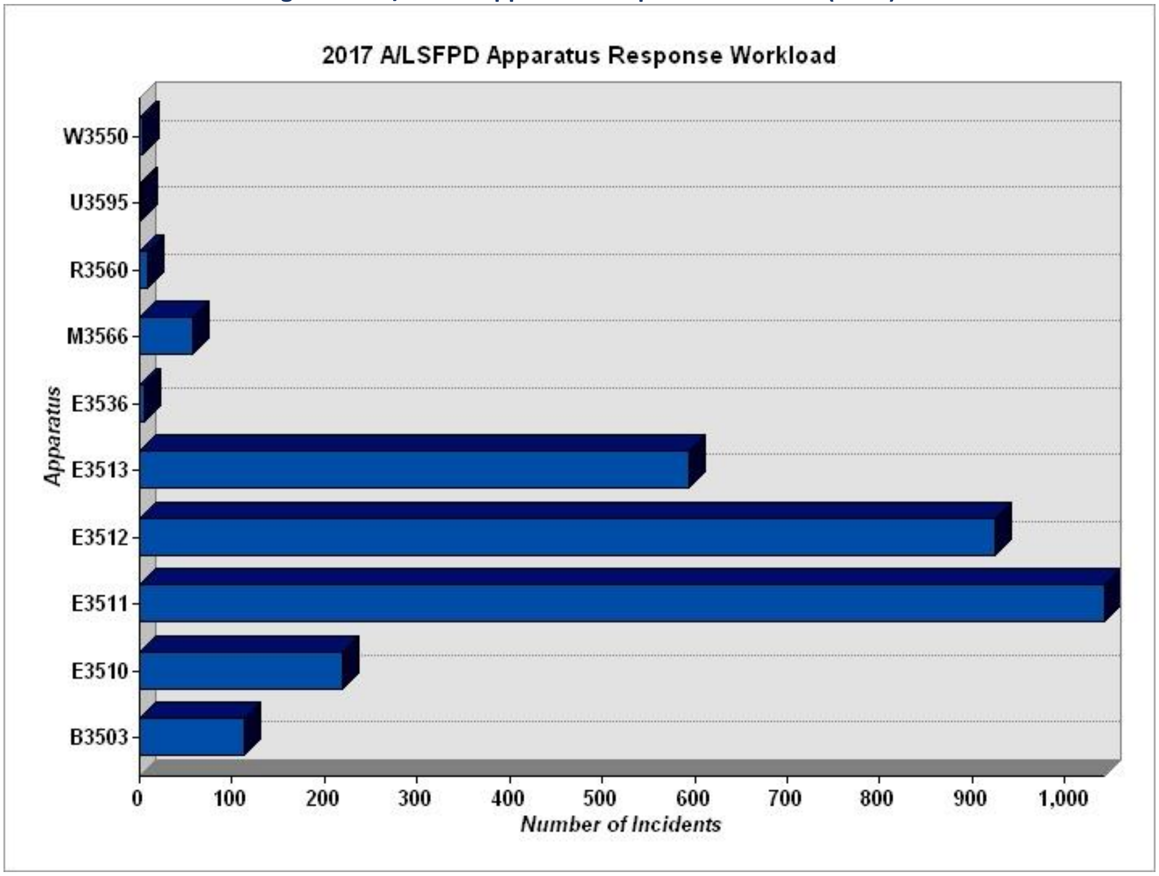


Figure 46: CFPD Apparatus Response Workload (2017)

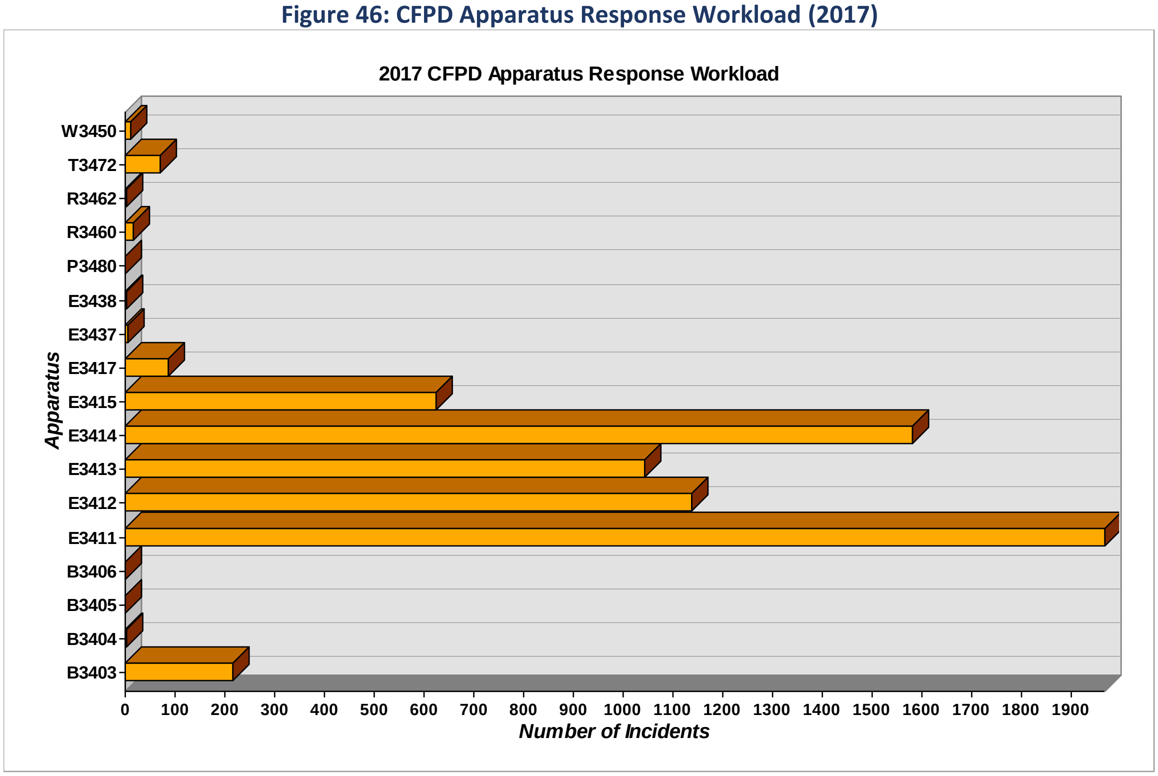


Figure 47: Percentage Overall Workload A/LSFPD (2017)

A/LSFPD Unit	Number of Incidents	Percentage
B3503	114	4%
E3510	220	7%
E3511	1,043	35%
E3512	924	31%
E3513	594	20%
E3536	5	<1%
M3566	57	2%
R3560	9	<1%
U3595	1	<1%
W3550	3	<1%
Total	2,970	

Figure 48: Percentage Overall Workload CFPD (2017)

CFPD Unit	Number of Incidents	Percentage
B3403	217	3%
B3404	2	<1%
B3405	1	<1%
B3406	1	<1%
E3411	1,968	29%
E3412	1,138	17%
E3413	1,043	15%
E3414	1,581	23%
E3415	625	9%
E3417	87	1%
E3437	5	<1%
E3438	4	<1%
P3480	1	<1%
R3460	16	<1%
R3462	2	<1%
T3472	71	1%
W3450	11	<1%
Total	6,773	

Unit hour utilization is an important workload indicator. It is calculated by dividing the total time a unit is committed to all incidents during a year divided by the total time in a year. Expressed as a percentage, it describes the amount of time a unit is not available for response since it is already committed to an incident. The larger the percentage, the greater a unit's utilization and the less available it is for assignment to an incident.

Unit hour utilization is an important statistic to monitor for those fire agencies using percentile-based performance standards. Unit hour utilization greater than 10 percent means that the response unit will not be able to provide on-time response to its 90 percent target even if response is its only activity.

A/LSFPD's most utilized unit is E3511 at nearly 7%. CFPD's most utilized units are E3411 and E3414, both exceeding 12%.

Figure 49: Unit Hour Utilization (2017)

A/LSFPD Unit	UHU	CFPD Unit	UHU
B3503	0.918%	**B3403**	3.229%
E3510	1.084%	**B3404**	0.016%
E3511	6.703%	**B3405**	3.607%
E3512	5.317%	**B3406**	0.002%
E3513	4.325%	**E3411**	12.207%
E3536	3.815%	**E3412**	6.241%
M3566	0.402%	**E3413**	7.343%
R3560	0.264%	**E3414**	12.717%
W3550	0.223%	**E3415**	4.125%
		E3417	0.517%
		E3437	0.257%
		E3438	10.384%
		P3480	0.246%
		R3460	0.825%
		R3462	0.003%
		S3493	0.156%
		T3472	1.632%
		W3450	1.641%

Financial Analysis

Critical to the success and operation of any business, private or public, is a consistent and reliable funding stream. In the instance of public agencies, this funding is usually provided by the assessment and collection of various forms of taxation such as ad valorem (real estate) taxes, sales taxes, or special assessments. Recognizing the limits of public funding, public safety agencies, including fire districts, are limited in the level of service they may provide to their communities by the amount of property tax revenue, or special assessments that the authority having jurisdiction is willing to or limited by the legislative process to, assess. Public agencies also may charge fees for services and or under contractual arrangements to areas outside of their political boundaries.

A discussion of Aptos/La Selva's financial operations will be made here and a similar discussion of the Central Fire Protection District's financial operations will follow.

APTOS LA SELVA FIRE PROTECTION DISTRICT

The following figure provides a summary of the Aptos/La Selva Fire Protection District's revenues, operating budget, and debt. The representations presented here illustrate the total for the agencies budgets including personnel, supplies/materials, and capital expenditures, information that will be used in future analyses in this report and the percentage of the General Fund revenue stream required to fund each of the District's operations.

Figure 50: A/LSFPD Operating Budget and Financial Resources

Survey Components	Aptos/La Selva Fire District Observations
Finance Overview	
Designated fiscal year	June 30
Assessed property value, FY 2017–18	FY 2018 $6.8b
Revised current year general operating fund budget	FY 2018 $12,798,916
General fund property tax, city levy – current budget year	$11,233,413
levy rate per $100 valuation	2013 – $.1545430 2014 – $.1519402 2015 – $.15526733 2016 – $.15839411 2017 – $.16087355
general fund levy collection rate	2013 – 96.56% 2014 – 96.89% 2015 – 97.10% 2016 – 97.13% 2017 – 99.02%
Bonds, fire district	N/A
levy rate	N/A
Other tax levy, public safety	N/A
levy rate	N/A
Percent of General Fund	N/A

Historical Revenue and Expense

ESCI has analyzed the historical revenues and expenses from FY 2013 through FY 2017, displayed in the following figure, for the Aptos/La Selva FPD to develop relevant financial trends, strengths, and weaknesses which, in conjunction with the annual budget information for FY 2018, will assist in the completion of the financial forecasts presented later in this report. The Aptos/La Selva FPD is funded from revenues consisting primarily of property taxes and fees for services provided to the communities. The La Selva FPD, prior to is consolidation with the Aptos FPD, was authorized to assess a "Fire Assessment" under Ordinance No. 1 81/82, adopted by the Board of Directors of the La Selva FPD on January 19, 1982. Resolution No. 9-87 dated December 8, 1987 by the Board of Directors of the Aptos/La Selva FPD created the levy applicable to the Day Valley annexation. The District operates on a fiscal year beginning July 1 and ending June 30 of the following year.

Aptos/La Selva FPD is authorized at 38 full-time personnel. This staffing model includes the operations and support personnel in the District. The Aptos/La Selva FPD operates from three stations and provides fire suppression, advanced life support (ALS), pre-hospital emergency medical, rescue, initial hazardous material spill/release, fire prevention, public education, and other services. A/LSFPD receives fees from AMR, the EMS contractor with Santa Cruz County, for any transports performed by A/LSFPD.

For budget and financial reporting purposes, all operational divisions of the District are included in the budget analysis. The District receives fees for providing a hazardous materials technician for the County's hazardous materials response team, reimbursement of the costs associated with being the host department for the EMS Chief and plan review services. These fees are included in the revenue section of the District's budget analysis.

The District's annual budget includes expenses for all operations. It also includes minimal transfers in and out for various allocations of expenses between the capital reserve accounts. Also included in the annual budget is an amount for anticipated fleet replacement costs.

Of financial significance in the District is the amount of unfunded actuarial liability for pension costs as well as OPEB liabilities. The magnitude and potential impact of these issues will be discussed in the projections provided later in this report.

Figure 51: A/LSFPD Summary of Operations FY 2013–2017 and Budget for FY 2018

	Actual					Budgeted
	2013	2014	2015	2016	2017	2018
REVENUES						
Property taxes	8,415,679	8,898,954	9,643,827	10,335,120	11,049,952	11,598,564
Fire Protection Tax	131,367	131,097	131,706	131,372	131,104	131,104
Other	559,153	436,584	613,668	745,582	722,909	364,753
Total Revenues	9,106,199	9,466,635	10,389,201	11,212,074	11,903,965	12,094,421
EXPENSES						
Salaries & benefits	7,804,350	8,544,327	8,574,785	9,174,778	9,516,677	9,178,794
Supplies	176,125	181,802	160,737	236,364	201,551	281,267
Services	430,600	439,985	490,934	437,594	643,841	867,676
Energy	65,496	63,601	59,102	53,651	61,801	61,568
Maintenance	111,079	122,489	105,170	120,355	138,674	120,106
Capital	104,797	52,398	-	125,169	76,967	1,176,695
Contingency	-	-	-	-	-	-
Total Expenses	8,692,447	9,404,601	9,390,729	10,147,910	10,639,512	11,686,106
Net cash flow	413,752	62,034	998,472	1,064,164	1,264,454	408,316

Revenues

A significant source of funding government services, including the Aptos/La Selva Fire Protection District, is the assessment of property taxes on real property. These funds are collected by the County and deposited into the District's General Fund account.

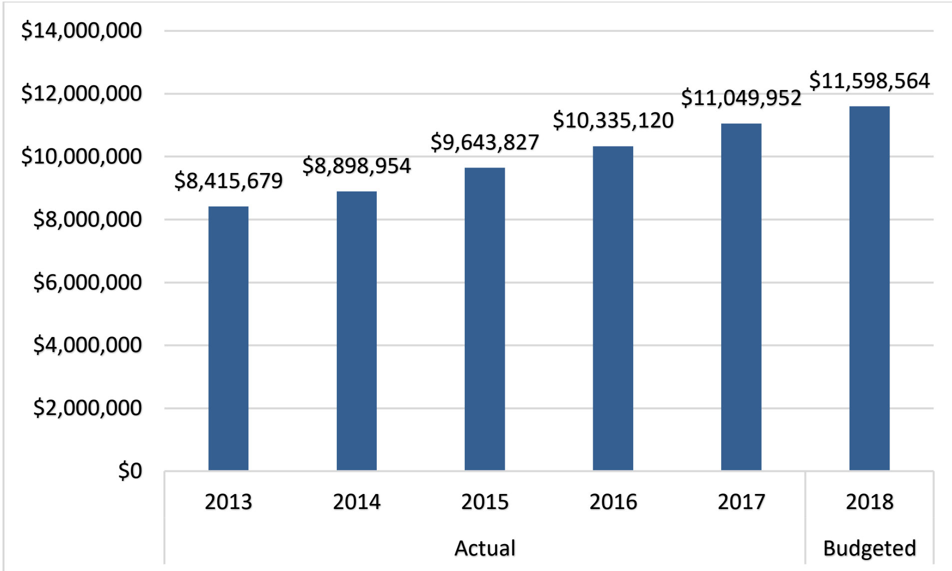
Revenues generated from this source are affected by two primary components, the assessed value of the real and personal properties being taxed, and the tax rate being charged against that value. The value of a property is affected by the market conditions in the community and subject to state legislation limiting the growth of real estate tax assessments. This growth rate is a calculation combining the change in the assessment role and the change in the population of the county and was calculated at 4.72% in the fiscal year ending June 30, 2016.

Figure 52: Growth in Taxable Value of the A/LSFPD (2013–2018)

	Actual					Budgeted
	2013	2014	2015	2016	2017	2018
Property Valuation (000)	5,445,526.07	5,858,266.54	6,211,111.36	6,524,939.46	6,868,719.05	7,212,155.00

This growth in taxable values has resulted in the growth of annual real estate tax revenues. The following provides a visible representation of the dramatic impact on the District's revenues brought on by the stabilization and growth of the real estate property values experienced across the Country beginning in 2013. The figure provides a graphic picture of the growth in the property tax revenues within the Aptos/La Selva FPD from FY 2012 to FY2017.

Figure 53: Growth of A/LSFPD Property Tax Revenues (FY 2013–2018)



The tax rate is controlled through the Board of Equalization providing the county tax assessor with Consumer Price Index (CPI) for adjusting the tax base. In Santa Cruz County, the taxes are assessed and collected by the County and then apportioned to the various cities and districts. The effective tax rate to fund the operations of Aptos/La Selva Fire Protection District has increased from $.155934 in FY 2013 to its current rate of $.156880 in 2018. The following figure reflects the changes in property tax rates, the change in the assessed value of property in the District and the effect on property tax revenue from FY 2013 through the budget projections in FY 2018.

Figure 54: Analysis of A/LSFPD Assessed Valuation and Tax Rates (FYE 2013–2018)

	Actual					Budgeted
	2013	2014	2015	2016	2017	2018
Property Valuation (000)	5,445,526.07	5,858,266.54	6,211,111.36	6,524,939.46	6,868,719.05	7,212,155.00
Property Tax rate/$100	0.155933768	0.15241116	0.154699754	0.156386156	0.156515777	0.156880433
Property tax assessment	8,491,414	8,928,652	9,608,574	10,204,102	10,750,629	11,314,460
Current property taxes received	8,199,270	8,650,567	9,329,524	9,910,900	10,645,316	11,198,872
Percentage current collected	96.56%	96.89%	97.10%	97.13%	99.02%	98.98%

Property tax revenue is derived from several categories including: current secured and unsecured taxes, prior secured and unsecured tax assessments, supplemental assessments, and penalties and interest collections on delinquent payments. The following figure provides details on this revenue stream.

Figure 55: Components of A/LSFPD Property Tax Collections (FYE 2013–2018)

	Actual					Budgeted
	2013	2014	2015	2016	2017	2018
Property tax - current secured -gen	8,199,270	8,650,567	9,329,524	9,910,900	10,645,316	11,198,872
Property tax - current unsecured -gen	180,702	177,431	192,234	198,931	215,439	219,748
Property tax - prior secured -gen	4,087	4,033	20,584	31,359	21,087	21,508
Penalties for delinquent taxes	473	540	2,507	4,315	935	-
Redemption penalties for del taxes	2,372	616	3,560	7,405	1,410	-
Supp prop tax - current secured	26,393	63,233	88,752	156,855	149,133	152,115
Supp prop tax - current unsecured	(2,458)	275	2,105	10,983	5,663	-
Supp prop tax - prior secured	4,287	2,185	4,015	9,262	6,320	6,320
Supp prop tax - prior unsecured	555	75	546	5,091	4,650	-
Total property tax collections	8,415,681	8,898,955	9,643,827	10,335,100	11,049,952	11,598,564

The following figure shows the detail of the total historic revenues the past five years and the budgeted amounts for FY 2018.

Figure 56: Detail of A/LSFPD General Fund Revenues (FY 2013–FY 2017 and Budgeted FY 2018)

	FYE June 30					
	Actual					Budget
	2013	2014	2015	2016	2017	2018
Property taxes	$ 8,415,679	$ 8,898,954	$ 9,643,827	$ 10,335,120	$ 11,049,952	$ 11,598,564
Fire Protection Tax	131,367	131,097	131,706	131,372	131,104	131,104
Interest income	5,107	5,891	8,844	18,231	26,962	10,524
Other Governmental aid	367,885	192,375	229,254	306,324	400,955	71,780
Charges for services	116,224	161,439	286,350	291,800	280,640	282,450
Other revenue	44,433	55,625	89,221	129,228	8,891	-
Asset sales	25,504	21,254	-	-	5,461	-
Total	$ 9,106,199	$ 9,466,635	$ 10,389,201	$ 11,212,074	$ 11,903,965	$ 12,094,421

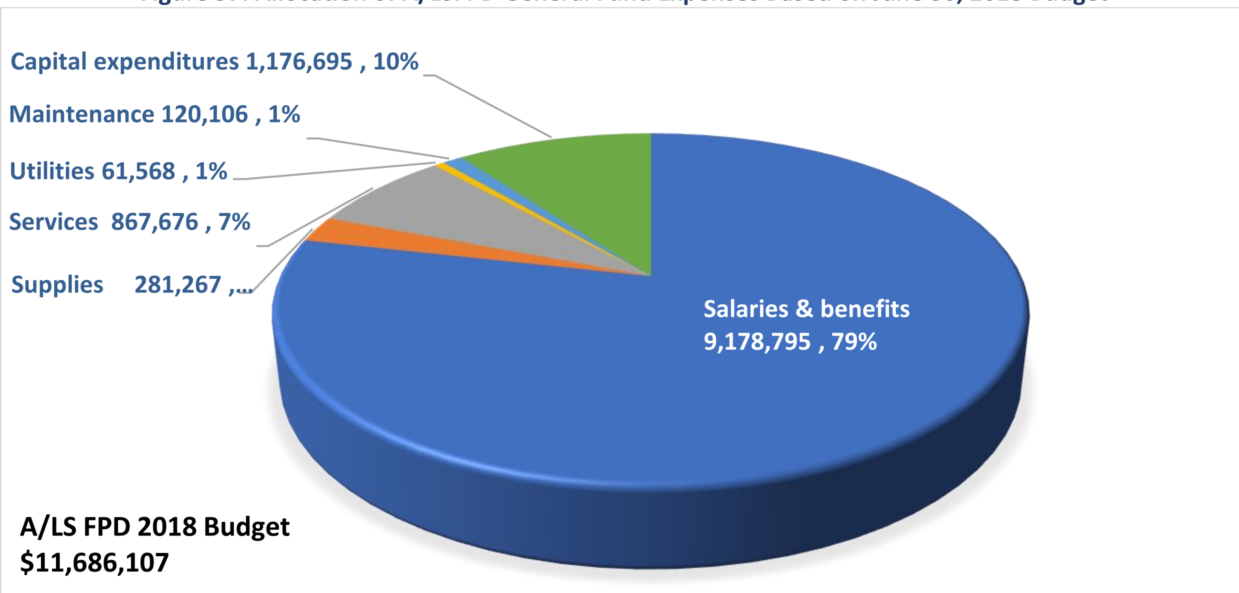
The previous figure shows the revenues generated in the Aptos/La Selva FPD General Fund have steadily increased during the review period. Property taxes have increased significantly due to the combined increase in the taxable values and the increase in population of the area. The Fire Protection Tax has not increased as this is a set amount that has remained static for several years. Governmental aid has remained relatively consistent between FY 2013 and FY 2016 but increased by approximately 25% in FY 2017. The budgeted amount is significantly lower in FY 2018 as strike team reimbursements have not been included due to the inconsistent nature of the incidents for which reimbursement is requested. Charges for services is the contribution to revenue from the operation of the ambulance service in support of the contact provider AMR.

The Aptos/La Selva FPD assesses charges for the delivery of certain services including ambulance services and plan reviews. All such revenues are deposited into the District's General Fund.

Expense

The governing body—the Board of Directors—appropriates amounts from the General Fund of the Aptos/La Selva FPD to provide the core operations of the District to meet the needs of its citizens. The funds are appropriated by the nature of the expenditure. The following figure demonstrates the allocation of the FY 2018 approved budget costs between personnel and related, supplies, other operating expenses, utilities, capital outlay, and other expenses. As expected, personnel and related costs at $9,178,795 (79%), far exceeds the other categories of expenditures. This is not unlike most career-based fire service providers elsewhere in the country.

Figure 57: Allocation of A/LSFPD General Fund Expenses Based on June 30, 2018 Budget



A significant cost is included in the personnel section that is common to most cities and districts in the country. Employee pension costs and continuing health care coverage for retirees, on a District-wide basis, are only partially funded under the June 30, 2017 actuarial calculations with outstanding accrued liabilities of $15,944,000 and $1,706,000, respectively.

Aptos/La Selva FPD's functional expenses are budgeted to a single general fund. The next figure shows, in tabular form, the actual expenses of the District for the FYE June 30, 2013 through 2017, and the budgeted amounts for 2018.

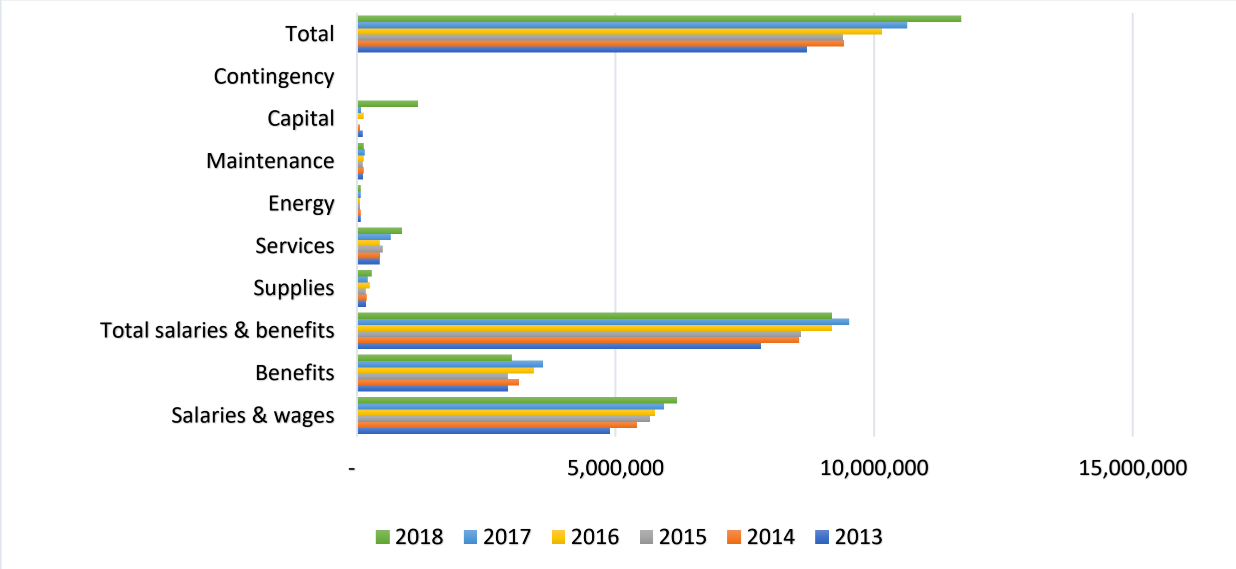
Figure 58: Aptos/La Selva FPD General Fund Expenditures

	FYE June 30					
	Actual					Budget
	2013	2014	2015	2016	2017	2018
Salaries & wages	$ 4,882,746	$ 5,413,542	$ 5,662,157	$ 5,758,947	$ 5,923,969	$ 6,189,370
Benefits	2,921,604	3,130,785	2,912,628	3,415,831	3,592,708	2,989,424
Total salaries & benefits	7,804,350	8,544,327	8,574,785	9,174,778	9,516,677	9,178,794
Supplies	176,125	181,802	160,737	236,364	201,551	281,267
Services	430,600	439,985	490,934	437,594	643,841	868,676
Energy	65,496	63,601	59,102	53,651	61,801	61,568
Maintenance	111,079	122,489	105,170	120,355	138,674	120,106
Capital	104,797	52,398	-	125,169	76,967	1,176,695
Contingency	-	-	-	-	-	-
Total	$ 8,692,447	$ 9,404,601	$ 9,390,729	$ 10,147,910	$ 10,639,512	$ 11,687,106

The various expense categories of supplies, services, maintenance, and capital, shown in the preceding graph, of the District's operations are distorted in years in which significant planned expenditures occur. The current budget includes capital expenditures for the replacement of a Type 1 engine and a water tender totaling $1,176,695 for capital expenditures in the FY 2018 budget.

The following figure graphically indicates the combined expenses of the Aptos/La Selva FPD for FY 2013 through 2017, and the budgeted amounts for 2018. Clearly indicated in the graph is the majority of the District's annual expenses are related to personnel and benefits. Operating expenses including technology charges, fleet repairs, fleet replacement charges, billing services, and fuel are the next most significant expense with Supplies and Other Charges relatively minor in the context of the overall budget. Inventory items consisting of hose, small tools, etc., is dramatically higher (over 400%) during the FY 2018 budget cycle reflecting a significant replacement of those types of items. Professional services, likewise, anticipates a significant increase (23%) in expenditures in this category.

Figure 59: Graphic Representation of Expenses for Aptos/La Selva FPD (FY 13–FY 18)



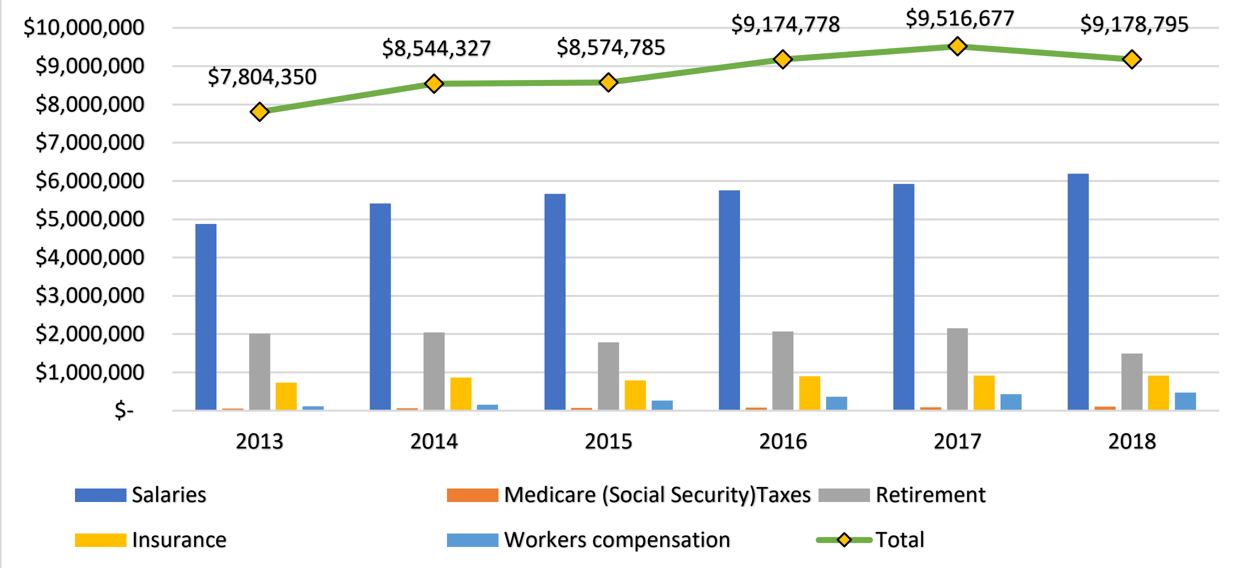
Salaries and Benefits account for 72% of the annual budget of Aptos/La Selva FPD. The escalation of the District's salaries is driven by COLA increases and by the impact of collective bargaining agreements with its organized labor groups. Another of the driving forces in these escalations is the combination of the costs of pension and medical benefits. Previously identified in the analysis is the significant amount of Unfunded Actuarial Accrued Liabilities (UAAL) for both the pension costs and the Other Post-Employment Benefits. The significant amount of these UAAL accounts is required to be amortized over a maximum period of 30 years. This results in pension payments alone amounting to approximately 17% of the salaries paid to employees on annual basis. The following figure provides a schedule showing the increases over the past five years and the budgeted amounts in FY 2018.

Figure 60: A/LSFPD Personnel Services Expenditures (FYE June 30, 2013–2018)

	FYE June 30					
	Actual					Budget
	2013	2014	2015	2016	2017	2018
Salaries	$ 4,882,746	$ 5,413,542	$ 5,662,157	$ 5,758,947	$ 5,923,969	$ 6,189,370
Medicare (Social Security)Taxes	57,937	63,765	72,050	76,995	85,264	103,166
Retirement	2,011,923	2,043,935	1,785,932	2,069,434	2,152,907	1,495,833
Insurance	733,466	864,706	789,566	902,975	918,726	919,750
Workers compensation	118,278	158,379	265,081	366,428	435,811	470,676
Total	$ 7,804,350	$ 8,544,327	$ 8,574,785	$ 9,174,778	$ 9,516,677	$ 9,178,795

The following figure provides a graphic depiction of these cost escalations.

Figure 61: A/LSFPD Personnel Services Expenditures (FYE June 30, 2013–2018)



Aptos/La Selva FPD is faced with significant unfunded pension benefits and other employee post-retirement benefits (OPEB). The District has recognized this critical issue and has begun making payments to reduce these unfunded and deferred liabilities.

The Treasurer of the County of Santa Cruz serves as the Treasurer of the District by Statute (Health and Safety Code Section 13854). The County holds all cash and reserve funds in the investment pool of Santa Cruz County under the management of the County Treasurer. Reserve fund balances are held available for funding the "dry tax season," the period between July and November and for capital outlay and mobile equipment purchases rather than borrowing additional funds for that purpose.

Findings:

- Aptos/La Selva FPD creates and provides a significant amount of historic data in its budget process which provides a challenge to an entity outside of the internal staff.
- There does not appear to be a capital reserve fund into which amounts may be set aside for future capital needs, such as apparatus replacement, station construction or major renovations, or significant equipment replacement purchases for the agency.
- Similar to a significant number of municipal or district agencies, a significant liability for unfunded pensions and other post-employment benefits has accrued.

Recommendation #9: Financial Analysis Issues A/LSFPD

- A review of the budget process should be made to develop a less cumbersome system that will "roll-up" detailed information from detailed accounts to summary sheets. Should administrative staff time allow for actual numbers to be inserted after the close of the year that would reconcile to the financial presentation numbers, a process should be developed to do so. The revenue analysis should begin with the capture of the taxable valuation of the properties within the District and the applicable tax rate being assessed against those values. This will develop the historic information of the District regarding the growth of the valuation which can be an indicator of potential revenue increases.
- It was noted that major capital expenditures for apparatus, significant improvements to stations and SCBA acquisition are typically made from operating reserves. A recommendation to "smooth" the impact of these purchases to the budget is to establish a replacement fund into which amounts would be deposited annually based on the estimated replacement cost, cost of the project, and the timing of the replacement of the asset.
- It is critical that the unfunded actuarial liabilities for pension benefits and OPEB contributions be determined through a supportable calculation with a definite amortization period established for these liabilities to be retired. Aptos/La Selva utilizes the services of an actuary; however, the amounts in the budgets did not reference their work. These payments may have a significant impact on the operation of the District and the level of services it may provide for the community.

CENTRAL FIRE PROTECTION DISTRICT

The following figure provides a summary of the Central Fire Protection District's revenues, operating budget, and debt. The representations presented here illustrate the total for the District's budgets including personnel, supplies/materials, and capital expenditures (information that will be used in future analyses in this report) and the percentage of the General Fund revenue stream required to fund each of the District's operations.

Figure 62: Central FPD Operating Budget and Financial Resources

Survey Components	Central Fire District Observations
Finance Overview	
Designated fiscal year	June 30
Assessed property value, FY 2017–18	FY2018 $9.2b
Revised current year general operating fund budget, fire district	FY 2018 $17,814,928
General fund property tax, fire district levy – current budget year	$16,759,207
Levy rate per $100 valuation	2014 – $.162506669 2015 – $.163106759 2016 – $.16451762 2017 – $.1636663 2018 – $.165183772
General Fund levy collection rate	2014 – 96.89% 2015 – 97.10% 2016 – 97.13% 2017 – 99.02%
Bonds, fire district	N/A
levy rate	N/A
Other tax levy, public safety	N/A
levy rate	N/A
Percent of General Fund	N/A

Historical Revenue and Expense

ESCI has analyzed the historical revenues and expenses from FY 2014 through FY 2017 for the Central FPD to develop relevant financial trends, strengths and weaknesses which, in conjunction with the annual budget information for FY 2018, will assist in the completion of the financial forecasts presented later in this report. The Central FPD is funded from revenues consisting primarily of property taxes and fees for services provided internally and to the community. The District operates on a fiscal year beginning July 1 and ending June 30 of the following year.

For budget and financial reporting purposes, all operational divisions and reserve accounts of the District are combined and included in the budget analysis, including the Fleet Services program operated by Central (Central Fire Protection District of Santa Cruz County, 2017, p. 5). Fees for services charged to third parties by the CFPD's Fleet Maintenance Facility are reflected as additional revenues in Central's budget analysis. The District receives fees for providing medical first response services, hazardous materials responses, and plan review services. These fees are included in the revenue section of the District's budget analysis.

As indicated in the schedule displayed in the following schedule, CFPD has experienced a positive cash flow over the past several years. The level of the cash flow has been negatively affected by the payment on the debt incurred to make a payment on the outstanding UAAL liability (the Side Fund payment) which is reflected in the Benefits section of the Cash Flow. This debt is extinguished in 2019 and will free up an annual amount in excess of $1,000,000. This payment has had the effect of minimizing the operating reserves and the ability of CFPD to expand its services on an annual basis. Additionally, as the Cash Flow reflects the combination of all funds utilized by the District, the expenditure of reserve funds from the capital budget is reflected in the Cash Flow.

Figure 63: Central FPD Cash Flows for FYE 2014–2017 and Projected for FY 2018

	FYE June 30				
	Actual				Budget
	2014	2015	2016	2017	2018
Revenues					
Property taxes	$ 12,732,497	$ 13,736,290	$ 14,657,823	$ 15,703,346	$ 16,407,469
Other	543,172	652,099	1,172,929	825,820	1,355,666
Total revenues	13,275,669	14,388,389	15,830,752	16,529,166	17,763,135
Expenses					
Salaries & wages	6,422,858	6,793,236	7,599,559	7,654,735	7,928,101
Benefits	4,296,327	4,852,496	5,320,034	5,827,795	6,604,397
Total salaries & benefits	10,719,185	11,645,732	12,919,593	13,482,530	14,532,498
Supplies	181,802	677,579	914,427	1,122,163	1,255,427
Services	397,224	352,874	576,291	632,392	627,175
Energy	63,689	62,573	62,028	65,759	67,419
Maintenance	335,314	355,937	368,748	401,895	454,706
Capital	968,140	623,870	690,874	794,322	1,380,511
Contingency	-	-	-	-	100,000
Total expenses	12,665,354	13,718,565	15,531,961	16,499,061	18,417,736
Net cash flow	$ 610,315	$ 669,824	$ 298,791	$ 30,105	$ (654,601)

The Treasurer of the County of Santa Cruz serves as the Treasurer of the District by Statute (Health and Safety Code Section 13854). The County holds all cash and reserve funds in the investment pool of Santa Cruz County under the management of the County Treasurer. Reserve fund balances are held available for funding the “dry tax season,” the period between July and November and for capital outlay and mobile equipment purchases rather than borrowing additional funds for that purpose. The District maintains a line of credit with the County of Santa Cruz for cash flow needs.[5]

Of financial significance in the District is the amount of unfunded actuarial liability for pension costs as well as OPEB liabilities. The magnitude and potential impact of these issues, individually and combined, will be discussed in the projections provided later in this report.

[5] Armanino LLP, 2017, p. 61.

Revenues

The tax rate is controlled through the Board of Equalization providing the county tax assessor the with Consumer Price Index (CPI) for adjusting the tax base. In Santa Cruz County, the taxes are assessed and collected by the County and then apportioned to the various cities and districts. The tax rate to fund the operations of Central Fire Protection District has increased from $.1625 per hundred-dollar valuation in FY 2013, to its current rate of $.1652 per hundred-dollar valuation in 2018. These rates are arrived at by combining multiple rates and values from multiple jurisdictions within the county that are serviced by the CFPD. Revenues from property taxes have steadily increased over the five-year review period beginning in FY 2014 with annual increases of 8%, 7%, 7%, and a projected 4% growth rate in FY 2018.

Figure 64: Growth in Taxable Value of CFPD

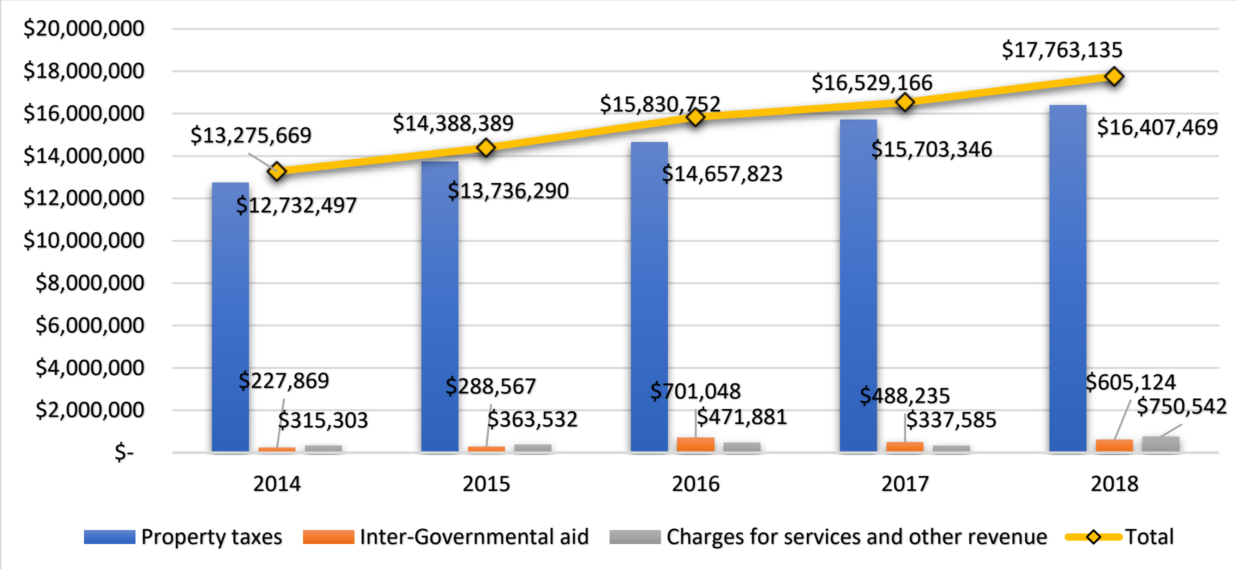
	Actual FYE June 30					
	2013	2014	2015	2016	2017	2018 Budget
Property tax values (000)	7,359,563.1	7,844,847.9	8,327,518.2	8,774,469.9	9,291,021.1	9,755,572.1

Property tax appropriations are limited under Sections 3 and 11 of Article XIII-B of the California Constitution. The Auditor-Controller has calculated the Appropriations Subject to Limitation for 2017–2018 and the calculation has been approved by the Board of Directors of the Central Fire Protection District Board on September 13, 2017 under Resolution No. 2017-21. The calculation indicates the 2017–2018 limitation on appropriations to be $35,119,702, or almost $20,000,000 above the amount appropriated for FY 17/18.

Figure 65: Central FPD Sources of Revenues (FYE 2014–2018)

Revenue	FYE June 30				
	Actual				Budget
	2014	2015	2016	2017	2018
Property taxes	12,732,497	13,736,290	14,657,823	15,703,346	16,407,469
Inter-Governmental aid	227,869	288,567	701,048	488,235	605,124
Charges for services and other revenue	315,303	363,532	471,881	337,585	750,542
Total	13,275,669	14,388,389	15,830,752	16,529,166	17,763,135

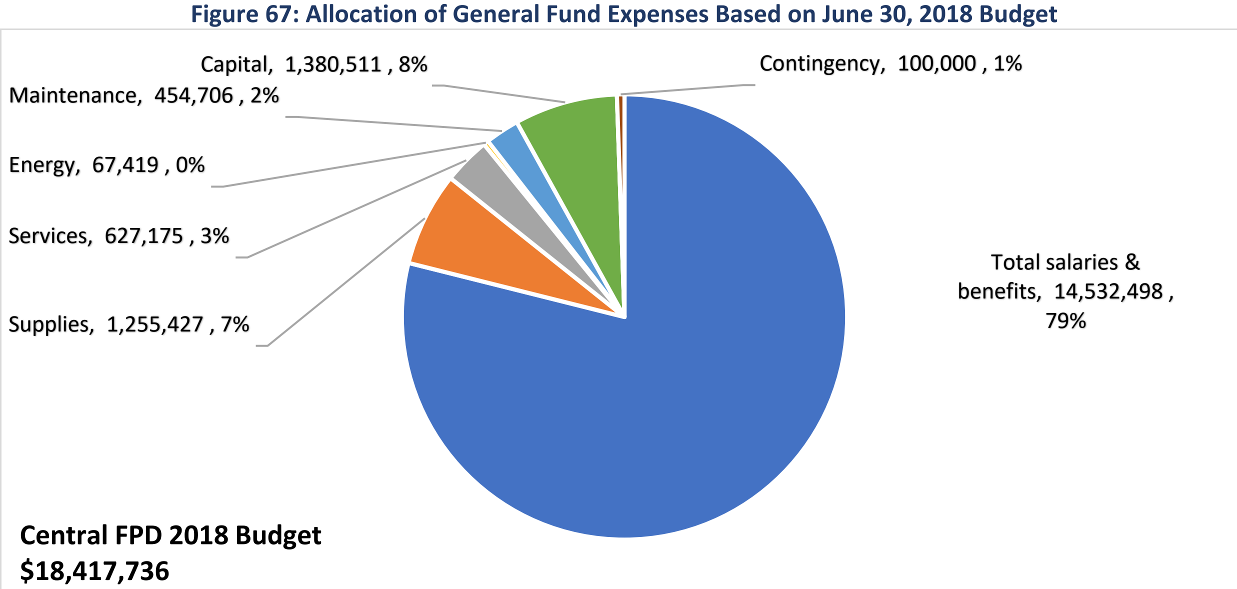
Figure 66: Central FPD Historic Source of Revenue (FY 2014–2018)



Expense

The governing body, the Board of Directors, appropriates amounts from the General Fund of the CFPD to provide the core operations of the District to meet the needs of its citizens. The funds are appropriated by the nature of the expenditure. The following figure demonstrates the allocation of the FY 2018 approved budget costs between personnel and related, supplies, other operating expenses, utilities, capital outlay, and other expenses. As is obvious and expected, personnel and related costs at $14,532,498 (79%) far exceeds the other categories of expenditures. The debt service payment on the Side Fund obligation is contained in the salaries and benefits category.

Figure 67: Allocation of General Fund Expenses Based on June 30, 2018 Budget



CFPD is authorized at 62 full-time personnel with an additional 18 part-time, paid on call firefighters. This staffing model includes the operations and support personnel in the District. CFPD provides fire suppression services, paramedic level emergency medical care, water rescue, urban search & rescue, training services, fire prevention, public education, fire investigation, emergency management, and hazardous material/rescue operations from four fire stations.

Salaries and related costs are the most significant line item in the District's operations. The District has experienced steady growth in this budgeted area driven by four significant factors. Salaries have steadily increased due to cost of living adjustments (COLA) negotiated in the labor contracts. The District has seen significant increases in pension costs including the amortization of unfunded actuarial liabilities (UAL) due to its participation in the California Public Employees' Retirement System (CalPERS) which experienced lower than expected returns on certain of its investments. Healthcare costs have increased significantly including the costs associated with providing healthcare coverage to retired employees. These Other Post-Employment Benefits (OPEB) also have developed a significant level of unfunded actuarial liability that is being amortized. Modest reductions in OPEB liabilities were realized by membership in the Trust.

In conjunction with joining the trust, the District also committed to a prepayment plan with its latest valuation actuarial methodology and continues to seek sustainable solutions to manage the cost of benefits provided to District employees. Amortization of these unfunded pension and OPEB costs is allowed by CalPERS over a 30-year period.

Figure 68: Central FPD Details of Salaries and Related Costs

Salaries and related	FYE June 30 Actual 2014	2015	2016	2017	Budget 2018
Salaries	$ 4,893,887	$ 5,044,375	$ 5,459,076	$ 5,511,139	$ 6,078,317
Holiday, Medicare taxes and extra time	491,463	456,439	582,313	758,592	605,465
Overtime	1,037,508	1,292,422	1,558,170	1,385,004	1,359,904
OPEB	32,549	413,896	413,897	330,100	508,200
PERS	1,305,349	1,372,640	1,671,058	1,864,034	2,168,637
CalPERS Sidefund	985,562	1,030,109	1,060,327	1,098,856	1,157,705
Health Insurance	1,695,238	1,758,222	1,851,974	2,103,250	2,115,894
Workers compensation	277,629	277,629	322,778	431,555	538,376
Total	$ 10,719,185	$ 11,645,732	$ 12,919,593	$ 13,482,530	$ 14,532,498

The District's annual budget also includes minimal transfers in and out for various allocations of expenses between the capital reserve accounts. These transfers have been netted out to provide no impact to the historic or forecast numbers. Also included in the annual budget is an amount for anticipated fleet replacement costs. Planned capital expenditures for the District are identified and provided for by increasing one of the capital outlay accounts including the Vehicle Replacement Fund and Capital Outlay 1 & 2. The amount of these expenditures is shown in the capital expenditure portion of the budget in the year the expenditure is made.

Figure 69: Central FPD Other Expenses and Uses of Cash (FY 2014–2018)

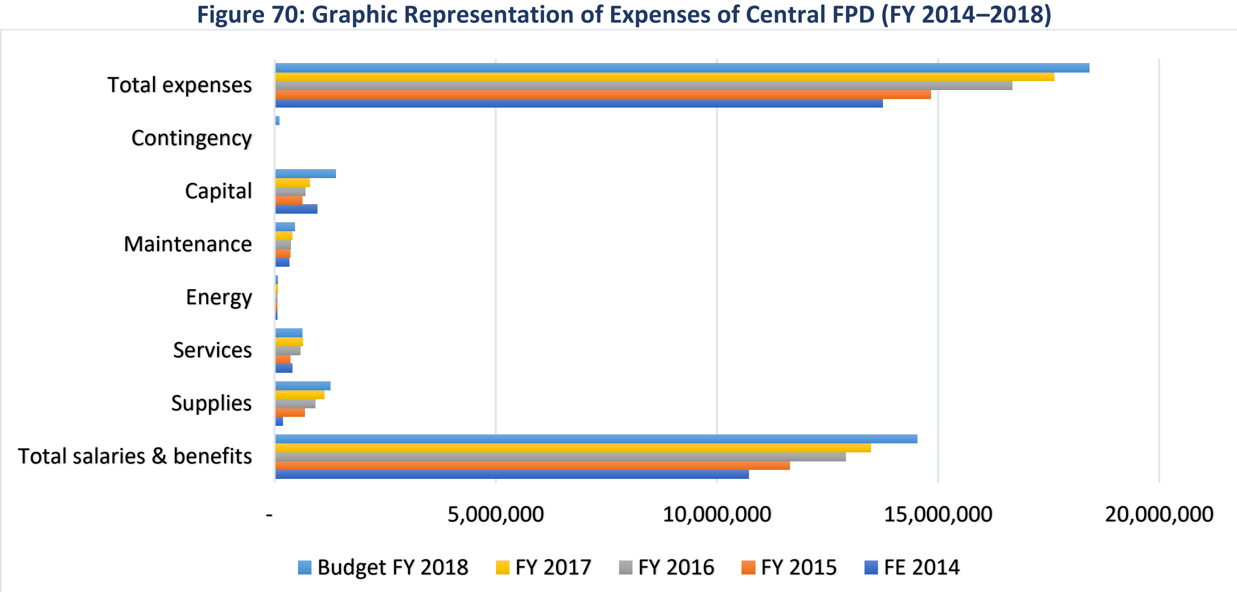
	FYE June 30				
	Actual				Budget
	2014	2015	2016	2017	2018
Supplies	$ 181,802	$ 677,579	$ 914,427	$ 1,122,163	$ 1,255,427
Services	397,224	352,874	576,291	632,392	627,175
Energy	63,689	62,573	62,028	65,759	67,419
Maintenance	335,314	355,937	368,748	401,895	454,706
Capital	968,140	623,870	690,874	794,322	1,380,511
Contingency	-	-	-	-	100,000
Total expenses	$ 1,946,169	$ 2,072,833	$ 2,612,368	$ 3,016,531	$ 3,885,238

The Treasurer of the County of Santa Cruz serves as the Treasurer of the District by Statute (Health and Safety Code Section 13854). The County holds all cash and reserve funds in the investment pool of Santa Cruz County under the management of the County Treasurer.

Reserve fund balances are held available for funding the "dry tax season," the period between July and November and for capital outlay and mobile equipment purchases rather than borrowing additional funds for that purpose. The District maintains a line of credit with the County of Santa Cruz for cash flow needs.[6]

Of financial significance to the District is the amount of unfunded actuarial liability for pension costs as well as OPEB liabilities. The magnitude and potential impact of these issues, individually and combined, will be discussed in the projections provided later in this report.

Figure 70: Graphic Representation of Expenses of Central FPD (FY 2014–2018)



[6] Armanino LLP, 2017, p. 61.

Findings:

- The CFPD accounting and budgeting records were straight forward and easily understood. Audit reports assisted in establishing some base-line cash balances to be used in the projections.

Revenues

- The budget package did not contain historical information related to the assessed value of properties within the District.
- Neither did the budget package discuss historical tax rates which would be applied against those values to arrive at property tax revenue.

Expenses

- Certain detail sheets did not total to the corresponding line in the budget summary.
- The use of capital outlay and replacement reserve funds aids in the accumulation of money for large or long-lived asset acquisition.
- A formal replacement schedule for apparatus or equipment was not discovered; however, a projection for the cost of these expenditures is provided.
- CFPD is facing a significant financial obligation to extinguish Unfunded Actuarial Accrued Liabilities for pension and OPEB costs.

Recommendation #10: Financial Issues CFPD

- ESCI recommends accumulating historic valuation and tax rate information to be used in predicting future changes in revenue from property taxes.
- The use and regular transfer to reserve funds should be the result of the development of a replacement schedule or equipment expiration schedule. Once established, the required annual transfers necessary to adequately prepare the District for the day of the purchase must be made.
- Calculations have been prepared by independent actuaries that establish an amortization program over the 30-year period allowed by CalPERS to extinguish these liabilities. These amounts are significant, but the CFPD may have options in retiring the obligation. The Bickmore Report (Appendix E: Bickmore Report (Attached)) suggests that the District may consider borrowing funds at a much lower interest rate than the current CalPERS discount rate. The issue that potentially could cause a problem with that is that CalPERS could again modify their discount and could create another tranche of unfunded liabilities. This could place the District in a position of paying on the debt used to finance out of the first problem and then being forced to pay on the newly-created liability piece.

FINANCIAL PROJECTIONS

ESCI has reviewed and analyzed the historic information and current budget information obtained from the Aptos/La Selva and Central Fire Protection Districts to develop a current consolidated budget which forms the basis of the projections of the operations for the next five years. The basis for the initial consolidated budget is a combination of the currently approved budgets of both organizations for the FY 2018 without regard to any proposed modifications. The following schedule indicates the combination for the two approved budgets for the FY 2018.

Figure 71: Combined Adopted Budgets FYE 2018

	Adopted Budgets - FY 2018		
	Aptos	Central	Consolidated
Revenues			
Property taxes	$ 11,598,564	$ 16,407,469	$ 28,006,033
Other	495,857	1,355,666	1,851,523
Total revenues	12,094,422	17,763,135	29,857,557
Expenses			
Salaries & wages	6,189,370	7,928,101	14,117,471
Benefits	2,989,425	6,604,397	9,593,822
Total salaries & benefits	9,178,795	14,532,498	23,711,293
Supplies	281,267	1,255,427	1,536,694
Services	867,676	627,175	1,494,851
Energy	61,568	67,419	128,987
Maintenance	120,106	454,706	574,812
Capital	1,176,695	1,380,511	2,557,206
Contingency	-	100,000	100,000
Total outflows	11,686,107	18,417,736	30,103,843
Net cash flow (deficit)	408,314	(654,601)	(246,287)
Cash - June 30, 2017	5,704,634	12,030,079	17,734,713
Projected cash - June 30, 2018	$ 6,112,948	$ 11,375,478	$ 17,488,426

Revenues and Expenses Without Consideration of Consolidation

ESCI developed a five-year projection for each District to evaluate the potential savings to be obtained through a consolidation of the two Districts and to identify the impact to the cash reserves of each. The projections both use a 30-year amortization period for the Unfunded Actuarial Accrued Liabilities for both the pension costs and the OPEB costs as identified in the Bickmore Report, dated March 23, 2018 (Appendix E: Bickmore Report (Attached)).

Revenues from property taxes, the most significant contributor to the Districts' revenue, are projected by the Santa Cruz County Tax Office to grow by 4% for the 2018/2019 period and ESCI will use the 4% annual growth rate during the projection period. Aptos/La Selva FPD has elected to use a 2% annual growth rate for their internal property tax projections and, as it is more conservative than the rate projected by the county tax office, is used in these projections. Revenues from other sources are projected to remain relatively static when compared with the FY 2018 budget.

Salaries and benefits continue to rise driven by COLA adjustments, increased health care costs, increased wages from negotiated labor agreements, workers compensation increases, and pension costs for the legacy programs. Growth rate for the salaries and benefits other than pension and the following is forecast at 2% per year, health insurance at 8% per year, and workers compensation at 7% per year. Projected costs for the retirement programs of both Districts are derived from calculations provided in the Bickmore Report, the basis of which is from the CalPERS Actuarial Office reports dated August 2017.

Other costs for supplies, services, energy, and maintenance are projected to grow at a 2% or lower rate during the projection period.

Aptos/La Selva Fire Protection District Five Year Cash Flow Projection

A summarization of the five-year projections for Aptos/La Selva FPD is shown in the following figure.

Figure 72: A/LSFPD Five-Year Cash Flow Projection

	Budget FY 17/18	18/19	19/20	Projections FY 20/21	21/22	22/23
REVENUES						
Property taxes	$ 11,598,564	$ 12,060,833	$ 12,302,050	$ 12,548,091	$ 12,799,053	$ 13,055,034
Fire Protection Tax	131,104	131,104	131,104	131,104	131,104	131,104
Other	364,753	465,938	360,534	359,723	359,724	359,725
Total Revenues	12,094,422	12,657,875	12,793,688	13,038,918	13,289,881	13,545,863
EXPENSES						
Salaries	6,189,370	6,026,493	6,142,444	6,265,221	6,390,452	6,518,187
Benefits	2,989,425	3,281,902	3,779,512	4,080,093	4,382,439	4,654,498
Total salaries & benefits	9,178,795	9,308,395	9,921,956	10,345,313	10,772,890	11,172,684
Supplies	281,267	375,809	300,887	409,913	322,211	331,877
Services	867,676	921,543	649,452	728,936	690,804	711,528
Energy	61,568	58,700	62,275	64,143	66,067	68,049
Maintenance	120,106	171,581	160,812	165,637	170,606	175,724
Capital	1,176,695	1,047,600	181,414	29,504	254,928	786,078
Contingency	-	100,000	100,000	100,000	100,000	100,000
Total Expenses	11,686,107	11,983,628	11,376,797	11,843,446	12,377,506	13,345,941
Net	408,314	674,247	1,416,892	1,195,472	912,375	199,922
Beginning cash	5,704,634	6,112,948	6,787,196	8,204,087	9,399,560	10,311,935
Ending cash	$ 6,112,948	$ 6,787,196	$ 8,204,087	$ 9,399,560	$ 10,311,935	$ 10,511,857

Central Fire Protection District Five-Year Projection

Revenue projections for property taxes for the CFPD were made using the Santa Cruz County Tax Office growth rate of 4% and this rate was used annually throughout the five-year projection period. The following figure provides a summarization of the projected cash flows of CFPD for the next five years.

Salaries and wages are increased in FY 2019 with the transition from part-time to full-time in three of the administrative positions and the employment of a fire inspector to be shared with Aptos/La Selva. Beginning FY 2020, base salaries increase by .75% for step increases. In 2019, a final payment is submitted on the department's Side Fund liability. OPEB and Pension costs are forecast using the CalPERS valuation report modified for the increased employees. Health insurance costs are forecast to increase at a 5% per annum rate. The balance of the other operating costs is forecasted to increase at a 3% annual rate.

The capital expenditure represents transfers to capital reserve accounts. Capital expenditures are made from those reserves. Combined projected cash reserves remain above 50% of annual expenditures providing the cushion necessary during the period tax revenues are not being received.

Figure 73: Central Fire Protection District Five-Year Cash Flow Projection FY 2018–FY 2023

	FYE June 30					
	Budget	Projections				
	2018	2019	2020	2021	2022	2023
Revenues						
Property taxes	$ 16,407,469	$ 16,965,584	$ 17,644,207	$ 18,349,976	$ 19,083,975	$ 19,847,334
Other	1,355,666	1,160,831	1,041,547	1,055,175	1,063,236	1,071,457
Total revenues	17,763,135	18,126,415	18,685,754	19,405,151	20,147,211	20,918,791
Expenses						
Salaries & wages	7,883,899	8,547,356	8,704,582	8,864,815	9,028,115	9,194,540
Benefits	6,648,599	6,282,051	6,406,059	6,935,780	7,199,836	7,435,022
Total salaries & benefits	14,532,498	14,829,407	15,110,641	15,800,595	16,227,951	16,629,562
Supplies	1,255,427	1,328,375	1,380,723	1,435,596	1,493,143	1,553,520
Services	627,175	453,864	467,480	481,504	495,949	510,828
Energy	67,419	77,984	80,324	82,733	85,215	87,772
Maintenance	454,706	545,330	561,690	578,541	595,897	613,774
Capital	1,380,511	1,841,993	953,251	1,002,325	1,193,427	1,268,882
Debt service	-	-	-	-	-	-
Contingency	100,000	100,000	100,000	100,000	100,000	100,000
Total expenses	18,417,736	19,176,953	18,654,109	19,481,295	20,191,582	20,764,337
Net cash flow	(654,601)	(1,050,538)	31,646	(76,144)	(44,371)	154,453
Beginning cash	12,030,079	11,375,478	10,324,940	10,356,586	10,280,441	10,236,070
Ending cash	$ 11,375,478	$ 10,324,940	$ 10,356,586	$ 10,280,441	$ 10,236,070	$ 10,390,523

Combined District Five-Year Cash Flow Projection—As-Is Basis

The following figure combines the projected operating cash flows of the two Districts on a status quo basis without recognizing the projected net savings resulting from the consolidation of the Districts. As each District is achieving positive cash flow, the cash reserves are continuing to grow each year.

Figure 74: Combined District Five-Year Cash Flow Projection on an As-Is Basis FY 2019–FY 2023

	Budget			Projections FY		
	FY 17/18	18/19	19/20	20/21	21/22	22/23
Revenues						
Property taxes	$ 28,006,033	$ 29,157,522	$ 30,077,362	$ 31,029,171	$ 32,014,132	$ 33,033,472
Other	1,851,523	1,626,769	1,402,081	1,414,898	1,422,960	1,431,182
Total revenues	29,857,556	30,784,291	31,479,443	32,444,069	33,437,092	34,464,654
Expenses						
Salaries & wages	14,117,471	14,573,849	14,847,026	15,130,036	15,418,566	15,712,727
Benefits	9,593,822	9,563,953	10,185,572	11,015,873	11,582,275	12,089,520
Total salaries & benefits	23,711,293	24,137,802	25,032,598	26,145,909	27,000,841	27,802,247
Supplies	1,536,694	1,704,184	1,681,610	1,845,509	1,815,353	1,885,396
Services	1,494,851	1,375,407	1,116,932	1,210,440	1,186,754	1,222,356
Energy	128,987	136,684	142,598	146,876	151,283	155,821
Maintenance	574,812	716,911	722,502	744,177	766,503	789,498
Capital	2,557,206	2,889,593	1,134,665	1,031,829	1,448,355	2,054,960
Contingency	100,000	200,000	200,000	200,000	200,000	200,000
Total outflows	30,103,843	31,160,581	30,030,905	31,324,741	32,569,088	34,110,278
Net cash flow (deficit)	(246,287)	(376,290)	1,448,537	1,119,328	868,003	354,376
Beginning cash	17,734,713	17,488,426	17,112,135	18,560,673	19,680,000	20,548,004
Ending cash	$ 17,488,426	$ 17,112,135	$ 18,560,673	$ 19,680,000	$ 20,548,004	$ 20,902,379

CONSOLIDATION OF DISTRICTS

General Assumptions Regarding the Consolidated Forecasts

The following projections are based on the current Memorandums of Understanding, CalPERS pension contracts, employee benefit contracts, and other terms of collective bargaining agreements. No salary freezes are included in the forecasts and the challenges regarding pay disparity, benefit adjustments, and employee positions are items to be addressed during the negotiation process to consolidate the Districts. ESCI has been extremely careful not to give an appearance of pre-determining the outcome of such negotiations.

Revenues

Both Districts' revenues from property taxes continue to increase as their respective tax bases increase through property valuations and increases in population. This is anticipated to continue at a moderate level during the projection period. Revenue projections for property taxes for both Districts were made using the Santa Cruz County Tax Office growth rate of 4%. Aptos/La Selva has elected to utilize a 2% growth rate while Central has utilized the 4% rate annually throughout the five-year projection period.

Wages

Aptos/La Selva employees receive wage and benefit packages that are similar in many instances with those of Central. Differences, some substantial however, do exist between the two Districts. Wages in the A/LSFPD, overall, are somewhat higher than those in CFPD. ESCI completed a high-level comparison of several random position levels with similar responsibilities, finding that wages varied in ranges from approximately 2–7%, averaging about 7% with variances favoring employees in each District depending on classification.

Beyond baseline wages, both agencies provide additional compensation, but with considerable differences. Aptos/La Selva includes paramedic compensation in their baseline amount while Central provides such compensation based on 10% of the Firefighter 6 paygrade. Aptos includes specialty certification in the employees' baseline compensation with Central adding a set compensation for various certifications as an add-on. Aptos/La Selva provides longevity pay based on years of service, however there is no mention of this category of compensation in the Central documentation. A/LSFPD earn 312 hours of vacation pay each year while CFPD earn 288 hours each year. A discrepancy exists between the A/LSFPD and CFPD regarding education pay with the A/LSFPD employees earning more.

One of the more complex challenges to be discussed and resolved if the agencies were to elect to fully integrate will be the equitable alignment of wages and benefits between agencies. This challenge will be addressed in the recommendations included later in this report.

Benefits

Pension Costs

The component that will drive the structure of any combination of the two Districts will be the CalPERS pension contracts. The formation of a new District would require all employees to be recognized as "new" employees of the newly-formed District and consider them subject to the rules and regulations of the California Public Employee Pension Reform Act of 2013. This Act creates limits on compensation used to calculate the pension benefits of employees and will not provide a benefit comparable to that in place prior to 2013. Bickmore's research through CalPERS has indicated the preferable approach to a combination would be for the smaller agency to be merged into the larger agency and be covered by the pension contract of the larger agency.[7] That report continues by indicating the combined District may adopt a new name.

This scenario would result in Aptos/La Selva being merged into the Central FPD and the Central retirement pension contract applying to all employees effective with the merger date. This impact would only apply to service after the effective merger date. All benefits related to service prior to that date would be provided for under the pension contracts prior to the merger date. A summarization of the impact on the merger on the pension contracts is:

- There would be no impact on current PEPRA employees other than minor differences in ancillary benefits.
- Aptos/La Selva classic fire employees would be deemed as new hires for Central and would be placed in the Central Tier 2 contract formula using a 3% @ 55 calculation. As this is the same formula currently in-place at Aptos, there would be no change in pension benefit calculation. There would be a difference in the final average compensation calculation as Aptos uses a one-year rule and Central uses a three-year rule, but, again, these benefit changes would only apply to service after the merger date.
- Aptos/La Selva miscellaneous employees would be deemed new hires for Central and would be placed into the Central Tier 1 using a 2.5% @ 55 calculation formula. Analysis of the current employee roster indicates only two Aptos/La Selva employees would be affected.

Possibility of Changes to or Funding of Pension Benefits

There are only a few alternatives available to modify the costs of the pension contracts: reduce the benefits, earn more on the invested trust funds, or modify the contributions toward funding the benefits.

- A change to the benefits is not possible due to the contractual relationship between CalPERS and the employer/employee.
- Anticipated higher returns on invested trust funds is not likely in the current capital environment but a reduction in investment returns is more likely.
- Changing the pension contribution to prepay some of the unfunded liability may reduce the impact of future annual payments.

[7] Bickmore, 2018, p 20.

Other Post-Employment Benefit (OPEB) Programs: Both Districts currently contribute significant amounts towards active employee and retiree and health care programs. The Districts contribute amounts to the California Public Employees Retirement System for the current calculated costs of employee retirement benefits. Both Districts have significant unfunded actuarily calculated pension liabilities. These liabilities have been calculated by independent actuarial firms and use an amortization period in which to extinguish the liabilities. The Districts make current payments on the employee health insurance programs for the present employees and the retirees. The Districts have additional unfunded liabilities for Other Post-Employment Benefits (OPEB) that have been calculated and are being amortized over a period of time. New employees in the District are covered under modified pension and post-employment health benefits that are less costly than the legacy plans previously offered.

Each District has created multiple pension plans reflecting the various types of employees, results of labor negotiations and the effect of the California Public Employees' Pension Reform Act of 2013. Annual pension liabilities have two main components; the normal cost or the current year cost and, should the employer not have been able to fund the normal cost in its entirety each year, the amortization amount of the Unfunded Actuarial Accrued Liability (UAAL).

At June 30, 2016, UAAL for the various components of each District's retirement programs were calculated to be $24,164,832 and $17,003,065, for Central and Aptos/La Selva respectively.[8] The significant portion of these unfunded amounts are contained in the Tier 1 pension plans that have been closed to new employees for several years with the majority of those participants within 10 years of retirement age. Bickmore's research has indicated retirees and vested terminated employees outnumber the active employees in these plans. This compounds the issue as the amounts necessary to amortize these liabilities are being required of a diminishing payroll base. The end result of the issue is the commitment of a significant amount of financial resources to amortize these liabilities within the thirty-year maximum time period allowed by CalPERS. Bickmore provided schedules that compared the current actuarial calculations of each District to theirs and provided alternative calculations to the current thirty-year period. The decrease in the amortization period to 20 years significantly increased the payment amount for each District, reducing the feasibility of that alternative.

Both Districts maintain programs of Other Post-Employment Benefits (OPEB) for medical expense benefits. Regarding employee healthcare benefits, differences also exist. Both organizations provide their employees with the appropriate baseline benefits such as Medicare withholding, worker's compensation coverage, medical, dental, and vision insurance, all of which vary dependent on the employee's marital and family status, plan selection and individual collective bargaining agreements.

[8] Bickmore, 2018, p 9.

The projections utilized in the forecast are prepared by CalPERS using existing actuarial information based on rates of return promulgated by CalPERS. These calculations have been reviewed by Bickmore and Associates, who has applied a different set of criteria to the calculation to arrive at a 30-year amortization calculation and an alternative payment schedule using a 20-year amortization period. Both calculations propose to retire the unfunded liabilities within the 30-year period required by CalPERS. Both calculations are based on the discount remaining at its current rate. Should CalPERS discount rate change, these projections would require modification.

Capital Assets

Central FPD utilizes a replacement reserve fund approach that transfers funds from the General Fund to various Replacement Funds. Acquisitions of replacement apparatus, long-lived equipment, and building improvements are made from these funds. The funds appear to be adequate for the intended purpose and no provision is made in the projections for capital items. Aptos/La Selva does not have a formalized capital reserve fund in place.

A consolidation of the Districts would bring the opportunity to see a reduction in duplicative costs that are currently paid by each District. The combined costs for auditing, legal representation, other professional fees, software costs, and Board of Director-related expenses should be significantly reduced by the consolidation. In addition, elimination of redundant supervisory and administrative positions should achieve significant savings over the projection period.

Model A Forecast

ESCI was tasked with providing a forecast considering a modification to the staffing model as well as a forecast with no modification to the staffing model. Model A will include the modification of the staffing model while Model B will forecast the cashflow from the operations of a consolidated District without the modification to the staffing model.

Figure 75: Model A, Schedule of Anticipated Cost Savings Resulting from Consolidation

	Projections for FY 6-30				
	2019	**2020**	**2021**	**2022**	**2023**
Cost reductions (savings):					
Salaries & wages:					
Administrative - 3 FT positions	$ 233,868	$ 236,908	$ 239,988	$ 243,108	$ 246,268
Total salaries	233,868	236,908	239,988	243,108	246,268
Benefits:					
Pensions	33,794	38,379	38,878	39,383	39,895
Medicare tax	3,391	3,435	3,480	3,525	3,571
Health insurance	78,480	82,404	86,524	90,850	95,393
Total benefits	115,665	124,218	128,882	133,759	138,859
Total salaries and benefits	349,533	361,127	368,870	376,867	385,128
Services:					
Audit	30,000	30,000	30,000	30,000	30,000
Professional	200,000	200,000	200,000	200,000	200,000
Directors' fees and expenses	7,500	7,500	7,500	7,500	7,500
Total services	237,500	237,500	237,500	237,500	237,500
Supplies:					
Software	6,000	6,000	6,000	6,000	6,000
Total projected savings	$ 593,033	$ 604,627	$ 612,370	$ 620,367	$ 628,628

The resulting adjustments identified in the above schedule are incorporated into the projections contained in the following figure.

Figure 76: Model A, Consolidated District Projections with Anticipated Cost Savings

	Budget			Projections FY		
	FY 17/18	18/19	19/20	20/21	21/22	22/23
Revenues						
Property taxes	$ 28,006,033	$ 29,157,522	$ 30,077,362	$ 31,029,171	$ 32,014,132	$ 33,033,472
Other	1,851,523	1,626,769	1,402,081	1,414,898	1,422,960	1,431,182
Total revenues	29,857,556	30,784,291	31,479,443	32,444,069	33,437,092	34,464,654
Expenses						
Salaries & wages	14,117,471	14,573,849	14,847,026	15,130,036	15,418,566	15,712,727
Benefits	9,593,822	9,563,953	10,185,572	11,015,873	11,582,275	12,089,520
Total salaries & benefits	23,711,293	24,137,802	25,032,598	26,145,909	27,000,841	27,802,247
Supplies	1,536,694	1,704,184	1,681,610	1,845,509	1,815,353	1,885,396
Services	1,494,851	1,375,407	1,116,932	1,210,440	1,186,754	1,222,356
Energy	128,987	136,684	142,598	146,876	151,283	155,821
Maintenance	574,812	716,911	722,502	744,177	766,503	789,498
Capital	2,557,206	2,889,593	1,134,665	1,031,829	1,448,355	2,054,960
Net costs (savings) of consolidation		(593,033)	(604,627)	(612,370)	(620,367)	(628,628)
Contingency	100,000	200,000	200,000	200,000	200,000	200,000
Total outflows	30,103,843	30,567,548	29,426,279	30,712,371	31,948,721	33,481,651
Net cash flow (deficit)	(246,287)	216,743	2,053,164	1,731,698	1,488,370	983,003
Beginning cash	17,734,713	17,488,426	17,705,168	19,758,332	21,490,030	22,978,401
Ending cash	$ 17,488,426	$ 17,705,168	$ 19,758,332	$ 21,490,030	$ 22,978,401	$ 23,961,404

The ability for both Districts—individually or combined—to maintain an adequate cash reserve to fund operations between July and November is critical. From the previous schedules, both Districts individually satisfy the requirement as does the Consolidated District Cash Projections with Anticipated Cost Savings satisfies this requirement.

Model B Forecast

The previous projected savings schedule was revised per the following figure to remove the savings from the reduction in administrative staffing and related costs.

Figure 77: Savings Realized from Consolidation Without Reduction in Staffing Used in Model B

	Projections for FY 6-30				
	2019	2020	2021	2022	2023
Cost reductions (savings):					
Services:					
Audit	$ 30,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000
Professional	200,000	200,000	200,000	200,000	200,000
Directors' fees and expenses	7,500	7,500	7,500	7,500	7,500
Total services	237,500	237,500	237,500	237,500	237,500
Supplies:					
Software	6,000	6,000	6,000	6,000	6,000
Total projected savings	$ 243,500	$ 243,500	$ 243,500	$ 243,500	$ 243,500

Applying the above schedule to the forecast consolidated cash flows of the two Districts will continue to provide significant savings but approximately $380,000 less savings per year than the original cost savings forecast (Model A). The following figure indicates the net cash flow of the consolidated District without a reduction in staffing.

Figure 78: Model B, Five Year Consolidated District Financial Forecast with No Reduction in Staffing FY 2019–FY 2023

	Budget FY 17/18	Projections FY 18/19	19/20	20/21	21/22	22/23
Revenues						
Property taxes	$ 28,006,033	$ 29,157,522	$ 30,077,362	$ 31,029,171	$ 32,014,132	$ 33,033,472
Other	1,851,523	1,626,769	1,402,081	1,414,898	1,422,960	1,431,182
Total revenues	29,857,556	30,784,291	31,479,443	32,444,069	33,437,092	34,464,654
Expenses						
Salaries & wages	14,117,471	14,573,849	14,847,026	15,130,036	15,418,566	15,712,727
Benefits	9,593,822	9,563,953	10,185,572	11,015,873	11,582,275	12,089,520
Total salaries & benefits	23,711,293	24,137,802	25,032,598	26,145,909	27,000,841	27,802,247
Supplies	1,536,694	1,704,184	1,681,610	1,845,509	1,815,353	1,885,396
Services	1,494,851	1,375,407	1,116,932	1,210,440	1,186,754	1,222,356
Energy	128,987	136,684	142,598	146,876	151,283	155,821
Maintenance	574,812	716,911	722,502	744,177	766,503	789,498
Capital	2,557,206	2,889,593	1,134,665	1,031,829	1,448,355	2,054,960
Net costs (savings) of consolidation		(243,500)	(243,500)	(243,500)	(243,500)	(243,500)
Contingency	100,000	200,000	200,000	200,000	200,000	200,000
Total outflows	30,103,843	30,917,081	29,787,405	31,081,241	32,325,588	33,866,778
Net cash flow (deficit)	(246,287)	(132,790)	1,692,037	1,362,828	1,111,503	597,876
Beginning cash	17,882,724	17,636,437	17,503,646	19,195,684	20,558,511	21,670,015
Ending cash	$ 17,636,437	$ 17,503,646	$ 19,195,684	$ 20,558,511	$ 21,670,015	$ 22,267,890

Recommendation #11: Consolidation Financial Issues

Salaries

- Eliminate one Fire Chief position, utilize the savings to fund and fill the vacant Assistant Chief position with an immaterial financial impact.
- Eliminate three administrative personnel positions performing duplicative duties.
- Restructure line position compensation to create parity within a set time-period.

A consolidation will result in the absorption into CFPD of all Aptos/La Selva employees. Presently, the A/LSFPD salary structure is between two and seven percent higher than that of the CFPD, depending on rank and time in grade. ESCI recommends the Aptos/La Selva employees be held at their current pay amounts until the Central employees can, through the normal anticipated adjustments through COLA and the respective bargaining agreements, achieve salary increases sufficient to reach parity with the Aptos employees. This time-period is estimated at 12 to 18 months.

NOTE: It is beyond ESCI's Scope of Work to recommend specific employees who would be impacted by a reduction in force and or reassignment.

Pensions

- Continue to make payments required to extinguish Unfunded Actuarial Accrued Liability (UAAL) within the thirty-year amortization period required by CalPERS.
- Create a plan to utilize funding from each "former" District to extinguish the liability of each "former" District.
- Evaluate opportunities to prepay the UAAL.
- Evaluate amendments to the CalPERS contracts to minimize the financial impact to the budget.

The Bickmore Report offers additional alternatives to be considered based on other financial conditions. Some these include maintaining salary levels at their current rates for extended time frames and/or reducing or restricting the carryover of vacation or sick leave hours.

Health Insurance Benefits

- Evaluate the health insurance programs offered by CFPD versus those of ALSFPD to determine any cost saving opportunities.

Other Post-Retirement Benefits (OPEB)

- Continue make payments necessary to extinguish OPEB liabilities.
- Evaluate the array of OPEB benefits to explore cost savings opportunities.
- Review and evaluate making changes to the age and service requirements for the PEMHCA/CalPERS medical program.

Based on the difference in CFPD OPEB benefits, this category should be a topic of conversation to modify and reduce costs. Bickmore and ESCI recommend the Districts meet with a qualified and experienced benefits advisor to explore a resolution to the OPEB program differences. An additional recommendation is to review and evaluate making changes to the age and service requirements for the PEMHCA/CalPERS medical program.

Other Benefits

- An evaluation of the root cause of work related injuries should be undertaken by a safety committee to reduce these incidents and related costs.

Supplies and Services

- Merging the Districts will eliminate the cost of a separate audit but not the entire fee on a merged basis due to an increase in workload
- Merging the Districts should result in a cost savings of legal and other professional fees
- The merged Districts will be able to combine technology reducing costs
- Costs associated with a merged Board of Directors will be reduced
- Cost of the combined liability and property insurance coverages may be less than the individual District's cost for the identical coverages.

Capital Reserves

- A merger of the Districts would create the opportunity fully evaluate the capital needs of the combined agency and make provision for improvements and replacements through the implementation and funding of a capital improvement reserve account.

STAKEHOLDER INPUT

ESCI interviewed a wide variety of both District's internal and external stakeholders. The purpose of these interviews was to gain a better understanding of issues, concerns, and opinions about the emergency service delivery system, opportunities for shared services, historical barriers to consolidation, and community expectations.

It is important to note that the information solicited and provided during this process was provided in the form of "people inputs," some of which are perceptions as reported by stakeholders. All information was accepted at face value without an in-depth investigation of its origination or reliability. The project team reviewed the information for consistency and frequency of comment to identify specific patterns and/or trends. The observations included in this report were confirmed by multiple sources or the information provided was significant enough to be included. Based on the information review, the team was able to identify a series of observations, recommendations, and needs which are included in this report.

Stakeholders were identified within four separate groups: Elected & Business Community, Chief Officers, Labor Leaders and Paid Call Firefighters Representatives and, Administrative Staff. Stakeholders included members of the business environment including the Chamber of Commerce, Water Districts, Home Owners Associations, etc. The responses are summarized as follows.

Elected Officials and Business Community

Are you aware of why we are here and the purpose of this project?

- All interviewees responded that they were aware of the purpose of this LAFCO project. Each stakeholder that was interviewed was asked to share their position and background if they were so inclined to do so.

In your opinion, what are the advantages/positives/strengths of the existing emergency service delivery system?

- Responses included a common thread that both fire Districts currently have shared resources, which includes CFPD's truck company. The Districts provide good services, adequate response times, are progressive, and both provide fire and medical response services, as well as Automatic and Mutual Aid. Many believe that the two Districts are moving in a positive direction this past year and have been receiving positive comments from the public. The community of Aptos/La Selva considers the District to be "our fire department" and are pleased with the community outreach programs the District offers. Contained within one interview regarding the Aptos/La Selva Fire District, a comment was made that further supported "our fire department" which was, "the community considers the Fire Chief to be their Mayor."

What are the disadvantages/negatives/weaknesses of the existing system?

- Interviewee responses were consistent in their opinion of the disadvantages, negatives, and weaknesses of the existing system. Reoccurring comments regarding redundancy, particularly regarding having an existing system with two Fire Chiefs and 12 elected officials. Several stakeholders voiced their concern regarding long term liability issues, deteriorating condition of existing facilities and missed opportunities due to the Districts no longer sharing the Fire Prevention Program. Each District having its own Memorandum of Understanding was a concern and repeatedly noted. It was commented that in the past, there have been political differences of opinion in both Districts. Arbitrary boundaries and financial integrity was listed as a negative, primarily due to the cost of overhead, concern regarding Long Term Liability which included the absence of a Capital Improvement Plan for both equipment and facilities.
- Additional comments were made regarding some stakeholders believing that there is a feeling of entitlement and lack of customer service by the staff/Union. The two Districts have different Standard Operation of Procedures as well as Standard Operational Guidelines. It was stated that the two Districts have different Policies and Procedures. Comments regarding access and egress to and from one station is not a simple task and another station is in a floodplain. Having two different District entities with two separate headquarters, is a burden to community members having to go to two different locations to conduct business.

Does the existing system provide the residents and community with acceptable protection?

- An overwhelming "yes" response was received with this question. There is a concern that there is a lack of citizen outreach and engagement.

How important do you think it is for the District to have its own fire department?

- The consensus among stakeholders is that if the citizens receive appropriate service, they do not care about having their own fire department identity.

Do you believe there would be advantages to consolidating/partnering with the other agency(s)?

- There exists an opportunity to reposition stations and improve Mutual Aid, enhance utilization, and reassignment of existing administrative staff positions while increasing efficiency.

Disadvantages?

- Unfunded liability(s), loss of local control, and local identity were repeated several times during the interviews as a concern. Combining two organizations with two different backgrounds and values could be an advantage but only if the new agency ensures that there is an equality of firefighter salaries and benefits.

Do you believe the community would support an additional fire assessment fee or tax if the additional funding would improve operations and enhance the financial stability of a consolidation? Would you support such a measure? Do you know others who would lend support?

- Responses to these questions were an even number of yes and no answers, followed by a comment that Central Fire Protection District's constituents would be more likely to support a fire a tax/fee measure than Aptos/La Selva Fire District constituents. Shareholders were consistent in that the best mechanism to use to bring this matter to the public would need to be via a public outreach and marketing program. This program would need to be supported by evidence as to why the tax/fee measure is necessary, as well as educating the public as to the need.

In the event consolidation were to move forward, what is the one issue that, if not addressed properly, would be a deal-breaker?

- Unfunded liability, financial stability, and inadequate funding were the primary concerns. Several interviewees commented that the Unions' expectations may be unrealistic and there is concern that there will be a lack of firefighter's support which could result in a "deal breaker."
- It was also noted that the potential for demotions, reclassification of positions, and loss of advancement opportunities could also be possible "deal breakers."

As you may be aware, there have been studies as far back as 1971 that have recommended consolidation. Do you have any thoughts as to why so far, it has not happened?

- Lack of leadership, lack of support by the public, fear of loss of control, and the absence of political will.

Who do you think would be opposed to Consolidation?

- Responses regarding this question varied from community members, the Aptos/La Selva Board, and residents and citizens. Many agreed that there will be opposition and/or resistance.

Chief Officers, Labor Leaders, and Paid-Call Firefighters Representatives

What strengths contribute to the success of the fire department? What do they do well?

Aptos/La Selva Fire Protection District:

- The members of the District commented that that there exists a sense of community throughout the organization. The safety personnel believe they are innovative, progressive, talented, well equipped, have pride, and are a nimble work force. They are proud that Aptos/La Selva Fire Protection District was the first fire district to provide Advanced Live Support services in the County and provide Emergency Medical Response Services with limited resources. The District was the first in the area to provide ocean rescue services. The description of their financial status was described as "best funded."

Central Fire Protection District:

- The members of the Central Fire Protection District commented that they are an aggressive and young work force who are highly trained and highly motivated. The District offers truck operations to the District and to Aptos/La Selva Fire District, when available. The District provides quality service, is customer-friendly, and is an "all risk" fire protection district. A robust training program is available, the fleet is well maintained, and the District provides ocean rescue services, as well as emergency medical services.

What are some areas in which you think the department could make improvements?

Comparing the areas in which each department could make improvements, both agencies responded that a succession plan is needed, and Chief/Duty Officer coverage expanded in training.

What do you see as the most important critical issues faced by the fire department today?

- Succession planning, Chief Officer coverage, and update and coordination of SOPs.
- Internal legal issues, dysfunctional Board, lack of communication.
- New Chief, succession planning, and move past the distractions such as law suits, HR issues, Board/local relations, and lack of creditable leadership.
- Work-related injuries, lack of wellness program, Company Officer level training.
- Financial/liability, communication up and down the organization, and experience.
- Pension liability, infrastructure/facilities, and attrition of staff.

What opportunities, in your view, are available to improve the service and capabilities in the event consolidation were to take place?

- Shared administrative services, Chief Officer coverage, reduce or convert some safety personnel to non-safety and depth of resources;
- Co-dependent, technical team enhancement and Battalion Chief, and Division Chief Oversight;
- Elimination of duplication of overhead, improved duty coverage and consolidation of operational overhead;
- Cooperative opportunities for the first year to include: duty coverage, stream-lining/consolidation of administrative office personnel and function;
- Dedicated Training Officer and Fire Marshal
- Depth of Human Resources, economy of scale, and standardize SOPs and SOGs
- Larger pool; depth of resources, improve span of control, improve training division and addition of truck company to 1st alarms throughout both Districts
- Enhancement of specialty teams, additional resources for committees and purchasing
- Staffing/enhanced utilization of current resources and talent

What challenges do you see to consolidation?

- Merging the two Districts, political/public pushback, finances, and maintaining level of service
- Cultures and memorandums of understanding
- Cooperative agreement – no obstacle for agreements except for transition process
- Finances and local community
- Cultural differences, tactics, and integrating the standard operating procedures and SOGs
- Labor, political leadership
- Financial liabilities
- None to the cooperative services as an initial step

What do you see as the role of Paid Call Firefighters in the event both Districts consolidate?

- Opportunity to look at future work force
- Great program, benefit to the District, first step in succession planning
- Training ground for future firefighters
- Additional staffing for major incidents, utilized as option of last resort for filling daily staffing
- Provides additional staffing for community outreach projects
- Great vetting process

What drawbacks do you see to the agencies combining?

- Loss of autonomy; financial instability
- Loss of identity
- Firefighter expectations and elected officials
- Possible bankruptcy for Aptos, Board composition, finances, lack of capital outlay program, and; differences in current Memorandums of Understanding
- Loss of identity, blending the list for promotions and Board support
- Political

What are the critical issues that you believe will need to be addressed prior to moving forward with consolidation?

- Finances, Memorandums of Understanding, and buy-in
- Solid financial data, consolidation/coordination of operations and cultural differences
- Revamp the leadership model, mid-management and staffing/bidding of stations
- Full financial understanding of unfunded liabilities and consensus of governance
- Administration and Board make up

- Determine how operations will be combined prior to start-up
- Finances and succession planning
- Salary and benefit parity, perception of loss of autonomy and finances—each District must address and own its own debt

Who or what groups do you believe would oppose consolidation?

- Some Board members
- Community
- Unions depending on MOUs
- Possibly internal opposition from senior firefighters

Administrative Staff

In the event the two Districts move forward with consolidation, what duplicated costs do you believe would be eliminated and or consolidated that would result in economy of scale?

- Currently, the Districts are cost-sharing claim/accounting
- Possibly could save on staff time

What are some areas within administration do you think the department could make improvements?

- The addition of a Fleet Supervisor
- Better qualified staff
- Elimination of redundancy

What do you see as the top critical issues faced by the fire department today?

- Shortage of support staff (Administrative)
- Lack of Fleet Supervisor
- Stream-lining of systems and business practices
- Lack of financial policies (reference Aptos/La Selva Citygate Emergency Services Master Plan Study)
- Deferred Capital Equipment and Facilities expenditures and improvements
- Cultural challenges

What opportunities, in your view, are available to improve the service and capabilities in the event consolidation were to take place?

- Reorganize administrative support staff: Note
- ESCI would recommend a formal analysis of positions, needs, and qualifications should be undertaken
- Co-located administrative staff and distribution of duties

What challenges do you see to consolidation?

- Bargaining groups
- Cultural
- Power, politics, and control

What drawbacks do you see to the agencies combining?

- Differences in Memorandum of Understanding(s), i.e., pay and benefits
- Perception to loss of small town approach/feeling
- Lack of staffed office within each community

What are the three critical issues that you believe will need to be addressed prior to moving forward with consolidation?

- Finances
- Chain of Command must be understood and followed
- Fire Chief and Labor Management relations

FUTURE OPPORTUNITIES FOR COOPERATIVE EFFORTS

GENERAL PARTNERING STRATEGIES

The concept of regional cooperation and service delivery in the California fire service has significantly developed since the 1970s. While the scope and manner in which these partnerships are formed and managed has evolved and changed, the fundamental desired outcomes have stayed consistent. The recent Wine Country Firestorm, the Oakland/Berkeley Hills Firestorm, Loma Prieta and Northridge earthquakes, as well as California's unique and on-going urban interface and wildland fire problem continue to point to the need for integrated and seamless regional service delivery models.

In addition, a consistent rise in the cost of personnel, benefits, post-retirement medical benefit liabilities, and supplies and services has resulted in significant and sometimes unmanageable cost increases. These cost increases have been combined with post Proposition 13 property tax reductions and significant economic downturns that have negatively impacted other government funding mechanisms. These significant cost increases and revenue reductions have created an environment under which government and public safety agencies must create greater efficiencies while finding ways to provide effective and adequate public safety services.

Having completed the evaluation of current conditions process, ESCI is now armed with the information necessary to effectively evaluate the opportunities that exist for shared service delivery opportunities between the participating agencies. There are many ways that fire districts can work together. These can include fundamental sharing of resources and programs, or legal assimilation of multiple agencies into one, in the form of a reorganization or consolidation. The scope of this study is to compare the status quo operations of the two Districts with a single consolidated fire protection District. LAFCO code sections provide various options to achieve consolidation. These options will be presented with insight and guidance where appropriate.

ESCI's experience is that any of these options must have general alignment and agreement between the communities, elected officials, district leadership, fire administration, and labor groups to be successful. Any recommended consolidation model that does not have basic support and reasonable alignment of expectations from the aforementioned stakeholders, stands a high likelihood of not succeeding. ESCI has attempted to create recommendations and system modeling around the concepts and system design that have a reasonable chance for support and success.

This report provides a clear and understandable analysis of the current fire service delivery system. This current condition analysis was utilized to develop possible consolidation models and analyze their potential for operational enhancements and financial and administrative effectiveness and efficiencies. ESCI views these consolidation models through the lens of conducting and participating in many cooperative service studies and provides answers and recommendations that address the common concerns of regional service delivery models. ESCI has attempted to address questions and concerns identified during our data collection, site visits, and interviews.

The general themes identified and addressed in this report center around consolidation, redundancy, local identity, cost allocation, financial and operational sustainability, governance, and oversight and implementation. While no report can address every issue, question, and perspective completely, ESCI has presented a significant amount of detail and recommendations to present a path forward for the A/LSFPD and CFPD.

OPTIONS FOR SHARED SERVICES

The following discussion identifies and explains multiple approaches that may be accessed in the State of California for sharing services or partnering in the delivery of services with neighboring agencies. The presented approaches fall in a range from limited levels of partnering, many of which are already in place in the A/LSFPD and CFPD study area, up to complete integration of participating agencies into a single entity. While we will briefly discuss various options, in accordance with the project scope, ESCI has focused the report analysis and recommendations on comparing the status quo option to the consolidation model.

It is ESCI's understanding based on data review, on-site interviews, and stakeholder input, that legal unification models for A/LSFPD and CFPD have been explored in previous studies and have not had the administrative, operational, and political or community support necessary to pursue such an endeavor. While other cooperative fire service delivery models are reviewed in this report, these delivery systems are included to ensure a basic understanding of available partnering strategies.

To adequately discuss the partnering continuum, the terminology and statutory provisions that are available to decision makers must be understood. The following partner strategies, while not necessarily described by statute, differentiate between various approaches to partnering:

Status Quo (continuation of cooperative agreements and systems)

This option continues the current status of A/LSFPD and CFPD organizations without change. Both agencies continue to do business as they are today, including service provision to the two respective jurisdictions and joint response areas. There is no change to governance, staffing, or deployment of resources beyond the level of cooperation that is already in place. The current collaborative practices, through the existing cooperative service arrangements and agreements, would remain in effect.

The A/LSFPD and CFPD can continue to operate independently under this initiative, as they do at this writing. Each retains its own governance structure, under the direction of its existing separate Fire District Board of Directors, and administration of each agency continues to operate individually. While existing cooperative efforts between all the participating agencies continue, the advantages that can be gained through increased levels of collaboration will not be realized.

Advanced Auto Aid Systems

When two or more agencies participate in a full boundary drop approach to dispatching the closest resource first regardless of jurisdiction. This process can be greatly enhanced with the utilization of automatic vehicle location technology.

Functional Consolidation

When two or more agencies enter a collaborative relationship, typically through a contract for service, no permanent organizational commitment is made, and all decision-making power remains with each individual organization. Interagency collaboration can take many forms and may include shared administrative and support functions, combined operational practices, participation of fire agencies in activities such as local fire management bodies (such as fire defense boards), mutual aid agreements, and interagency disaster planning exercises. It can also provide for complete service delivery as an integrated/consolidated fire agency from one local agency to another.

This functional integrated approach is already partially in place between the A/LSFPD and CFPD in that A/LSFPD utilizes (via cooperative agreement) the services of CFPD's fleet maintenance services. In addition, the two Districts are in discussions to share Duty Officer and Fire Prevention Division resources.

One form of functional consolidation is through Contract for Service or Intergovernmental Agreement (IGA), described in greater detail below.

Contract for Service-Intergovernmental Agreement (IGA)[9]

In the State of California, authorization for an intergovernmental agreement (contract for service) for the provision of fire services between agencies as provided for by California Statute and Government Code (CGC) Section 55613-55614, and the California Public Contracting Code (CPCC) Section 20811 and 20812 are commonly referred to as a "Contract for Service."

The California Government Code and Public Contracting Code is written with the intent of being liberally construed relating to contracting for public safety services by cities and fire districts, and states, in part, that:

> *CPCC 20811. When a district board determines that it is in the public interest, a district may contract with any other public agency for fire protection services, rescue services, emergency medical services, hazardous material emergency response services, ambulance services, and any other emergency services for the protection of lives and property.*

This permissive statute allows for a local agency, which includes cities and districts to enter into a written agreement with any other unit or units of a local agency for the performance of any or all fire services and activities that a party to the agreement, its officers or agencies, have authority to perform. The agreement may provide for the performance of a function or activity:

(1) By a consolidated and fully integrated department;
(2) By jointly providing for administrative officers and services;
(3) By means of facilities or equipment jointly constructed, owned, leased, or operated;
(4) By services and or functions provided by one of the parties for any other party;

[9] California Government Code and California Public Contracting Code, Sections 55513–55614, 55631, 55632, 20811, 20812.

Collaborative approaches under the CGC can include shared or contracted programmatic services, often referred to as *functional unification* or *functional consolidation*. Approaches may include shared administrative service, training programs, fire prevention outreach, or numerous other functional collaborative strategies. This approach can also include a fully integrated/consolidated fire district with services contracted to another local agency.

California law, regulations, and policy directives declares intergovernmental cooperation as a matter of statewide concern and grants special districts broad power to contract with other governmental entities for any function or activity the agencies have authority to perform.

Operational Consolidation

Operational consolidation occurs when two or more separate departments join operationally or administratively to form one organization. The entities remain largely separate; however, they deliver service as if they were one agency.

CFPD and A/LSFPD are doing this to some degree with their agreement to share prevention services and the duty chief pilot program.

Full operational consolidation would allow re-distribution of personnel and resources across jurisdictional boundaries putting them where they are needed. An example of this would be the relocation of CFPD's truck company to A/LSFPD station one and the crew from CFPD Station #3 to A/LSFPD Station #1 to staff the truck. The truck and personnel remain as CFPD assets; however, they are positioned in a way to benefit both Districts regardless of boundaries.

Joint Powers Authority

(CGC Section 6500, et seq.)

Joint powers are exercised when the public officials of two or more agencies agree to create another legal entity or establish a joint approach to work on a common problem, fund a project, or act as a representative body for a specific activity.

Before 2016, LAFCOs did not have authority over contracts between government agencies such as Joint Powers Agreements/Agencies (JPAs). However, changes in the law require cities and districts to apply to LAFCO for approval of a JPA in certain circumstances. These circumstances are described in detail in Appendix D.

Many of the changes in the laws governing LAFCO are in response to confusion among citizens regarding who and how their local government services are provided. Also, constituents are requesting increased transparency in government. LAFCOs are expected to provide resources to sort out government service providers, as well as assist in the coordination and long-range planning of those services. LAFCO's role has expanded from oversight of boundary changes to conducting studies that analyze the efficient and economical provision of local government services.

Legal Unification

The concept of legal unification means combining two or more existing organizations into a single, unified, agency. Doing so includes all aspects of the organization's policies, administration, governance, financing, functions, and operations. Legal integration of fire services in California can be achieved in a number of ways, the most common forms for fire districts are: district formation, consolidation, reorganization, annexation, or formation of a Joint Powers Agency (JPA). District formation, consolidation, reorganization, and annexation are changes of organization which require approval by LAFCO (Appendix C). In some cases, the formation or expansion of a JPA also requires LAFCO approval (Appendix D). LAFCO is described in greater detail in the Service Review section of this report.

The component that will drive the structure of any combination of the two Districts will be the CalPERS pension contracts. The formation of a new district would trigger all employees to be classified as "new" employees of the new district and considered subject to the rules and regulations of the California Public Employee Pension Reform Act of 2013. This Act creates limits on compensation used to calculate the pension benefits of employees and will not provide a benefit comparable to that in place prior to 2013. Bickmore's research through CalPERS has indicated the preferable approach to formation of a new district would be a reorganization where one agency would annex into the other agency and be covered by the pension contract of the annexing agency.[10] The name of the annexing district could be changed to reflect the combined districts. LAFCO could specify the district name as part of the terms and conditions of approval.

The terms and conditions of the consolidation spell out pertinent aspects of bringing the two agencies together. It is common to include the composition of the Board of the combined District with details regarding representation from each District area. Consolidated districts may prefer to retain representation from each area, while others are comfortable with the lines fading over time.

When districts consolidate all assets are combined including property, facilities, and equipment. In this report ESCI has presented property, facilities, and equipment inventory of both Districts, as well as, identified the condition of these assets. This baseline provides a basis for negotiating fair distribution and can be included in the terms and conditions.

Personnel are crucial to fire service both safety and non-safety. Consolidation can include combining all or part of the personnel. The agencies requested that ESCI provide two optional organizational charts, the first providing maximum efficiency (Figure 80**Error! Reference source not found.**) and the second combining all existing personnel (Figure 85). The maximum efficiency option could be a goal to be achieved over time. ESCI has identified differences between the two Districts' pay and benefit packages. Tiered and phased approaches can address these disparities over time, however, negotiations must occur prior to consolidation and be included in the terms and conditions.

[10] Bickmore, 2018, p 20.

It is important to address the liabilities of districts when considering a consolidation. Once again, this matter should be negotiated and included in the terms and conditions. The liabilities of each district must be balanced since each district would not want to bear the liabilities of the other. ESCI has identified each district's liabilities with recommendations to balance the differences.

Consolidation Process

The initiation of a proposal through application to LAFCO can occur as follows:

1. Resolution of Application by the districts: (CGC Section 56853)
   It is most effective if both districts pass substantially similar resolutions of application for a consolidation. The Commission is required to approve or conditionally approve the proposal. The resolutions of application may contain the terms and conditions of the consolidation. It is expected the districts would have negotiated and come to agreement on board composition, employee MOUs and effective date. The Commission may order any material change in the conditions; however, the districts are to receive mailed notice and no action may occur for 30 days. If either district requests, action can only occur after notice and hearing.
2. Petition: (CGC Sections 56864.1, 56865, and 56870)
   Application can be made to LAFCO by petition. In the case of fire protection districts registered voters within the districts would be required. The number of signatures required depends on the changes of organization requested in the application. For example, an application for consolidation of districts would require at least 5 percent of the registered voters within each of the districts.
3. LAFCO Resolution Initiating Proposal: (CGC Section 56375)
   The Commission has the authority to initiate a proposal for consolidation. This action must be as the result of the recommendations of a study including a Service Review and/or Sphere of Influence (SOI) study or update. The current study by ESCI qualifies as the necessary study. Although the Commission has the authority to initiate a consolidation, it would be most unlikely for Santa Cruz LAFCO to take this action based on precedent set by the Commission. Santa Cruz LAFCO has never initiated a consolidation proposal. Each LAFCO has the authority to adopt Policies and Procedures which reflect local conditions. Also, the Commission is composed of locally elected officials responding to the needs of their constituents.

Terms and Conditions

Many of the issues brought forward during the interview of stakeholders can be addressed in LAFCO's terms and conditions. The legislature provided the Commission with a full range of terms and conditions which can be determined as part of LAFCO approval of a proposal. The full text of the code section is provided in Appendix B. The following is a summary of this section of the enabling act (CGC Sections 56885 et seq.).

1. Authorize continuation of another relevant legislative hearing.
2. The completion of another change of organization.
3. The approval or disapproval of a resolution ordering a change of organization.

4. In the case of district dissolution; prohibit increasing compensation or obligating revenue beyond the current budget.
5. Continue or hold relevant action for a period not to exceed six months.
6. Set the election date to coordinate with another change of organization.
7. Require a single ballot question regarding more than one change of organization considered at the same time.
8. Not provide conditions that directly regulate land use.
9. Payment for transfer or use of existing property, real or personal.
10. The levying of taxes or assessments for the payment for existing property.
11. The transfer or apportionment of bonds, contracts, or other obligations.
12. The incurring of new indebtedness on behalf of all or any part of any local agency and the establishment of zones of benefit in accordance with the principal act.
13. The acquisition, improvement, disposition, sale, transfer, or division of any property, real or personal.
14. The disposition, transfer, or division of any moneys or funds, including cash on hand and moneys due but uncollected, and any other obligations.
15. The establishment, continuation, or termination of any office, department, or board including any of their functions as authorized by the principal act.
16. The employment, transfer, or discharge of employees, the continuation, modification, or termination of existing employment contracts, civil service rights, seniority rights, retirement rights, and other employee benefits and rights.
17. Designation of a districts as the successor to any district that is extinguished as a result of a change of organization, for the purpose of succeeding to the rights, duties and obligations of the extinguished district.
18. As provided in the principal act of the district, the designation of the legislative body, method of selection and number of members.
19. The initiation, conduct, or completion of proceedings of another proposal.
20. The fixing of the effective date or dates of a change of organization.
21. Any terms and conditions authorized or required by the principal act with respect to any change or organization.
22. The continuation or provision of any service provided at that time, or previously authorized by an official act of the district.
23. The levying of assessments, general or special taxes subject to voter approval.
24. The extension or continuation of any previously authorized assessment by the district or a successor district.
25. Any other matter necessary or incidental to any of the terms and conditions specified in Article 2. Terms and Conditions.
26. Any or the terms and conditions may be made applicable to all or any part of any district or any territory annexed or detached from the district.

Protest Provisions

(CGC Sections 57051, 57077.2)

The commission may order the consolidation without confirmation by the voters if it has been initiated by district resolutions. However, the commission is required to order the consolidation subject to voter confirmation if one of the following occurs:

a. Written protests have been submitted by at least 25% of landowners owning at least 25% of the assessed value of land within the territory.
b. Written protests have been submitted by at least 25% of the registered voters residing within the territory.

If the commission has initiated the proposal confirmation by the voters is required if either of the following occurs:

a. Protests have been signed by at least 10% of the landowners within the territory who own at least 10% of the assessed value of land within the territory.
b. Protests have been signed by at least 10% of the registered voters entitled to vote within the territory.

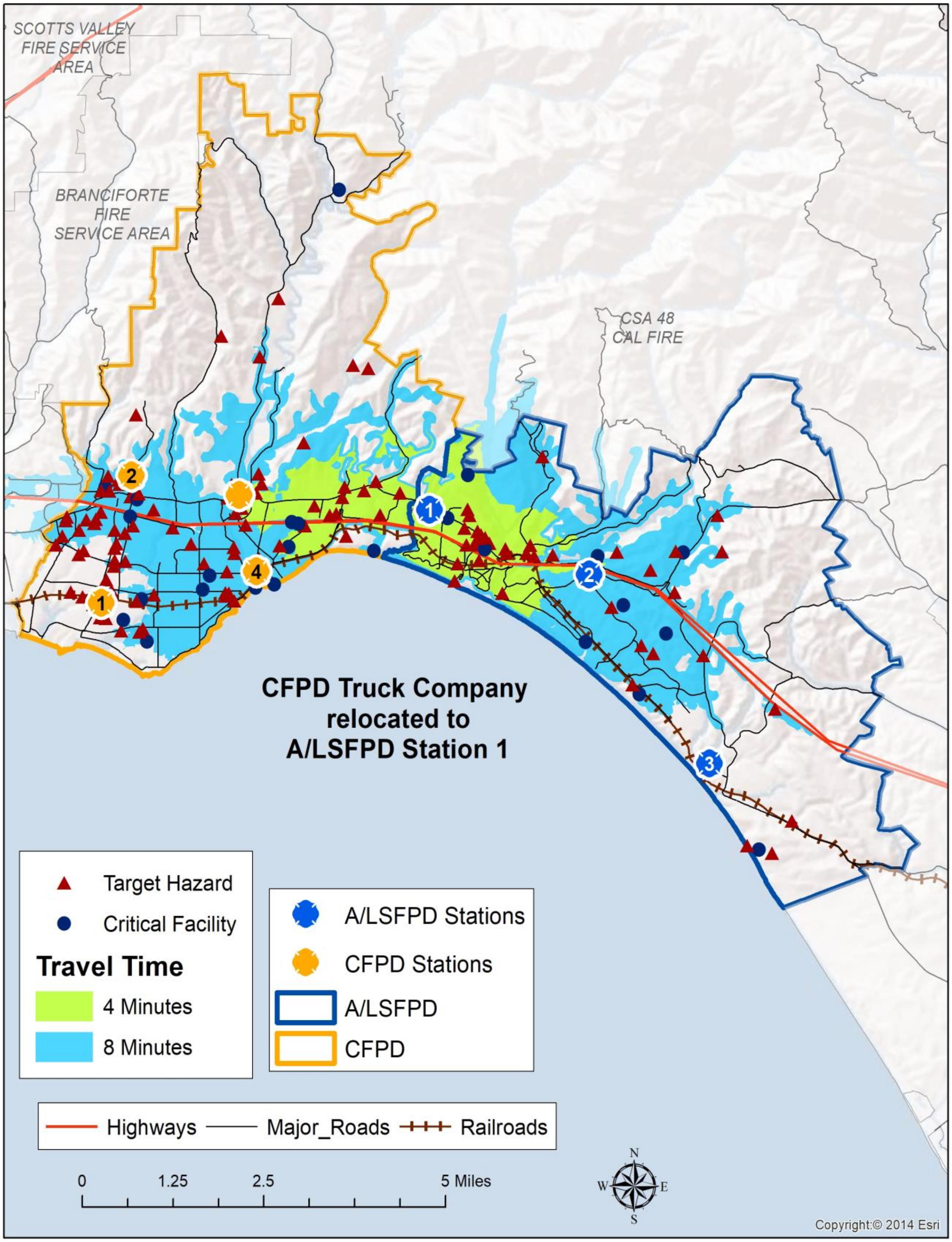
CONCLUDING RECOMMENDATIONS

Recommendation #12: Short Term and Long Term

- As a precursor to consolidation, ESCI recommends that consideration be given to Aptos/La Selva contracting all administrative functions and fire prevention duties to Central Fire Protection District. Note: During the development of this study, the districts entered into a pilot program to share Battalion Chief and Division Chief Duty Officer coverage and have initiated negotiations of an agreement to share fire prevention services.
- ESCI recommends that the Aptos/La Selva and CFPD fully consolidate. This option would result in the savings identified in Figure 82. ESCI also recommends that consideration be given moving the CFPD truck company from CFPD Station #2 to A/LSFPD Station #1 and relocating the crew from CFPD Station #3 to A/LSFPD Station #1 for the purpose of staffing the truck company full-time.

The following figure demonstrates the results that moving the CFPD truck company to A/LSFPD Station #1 would have related to first alarm structure fires, target hazards, and critical facilities. Also, the following figure demonstrates the eight-minute travel time coverage for the relocated truck company as it relates to the Districts' identified target hazards and critical facilities.

Figure 79: Truck Company Relocation Response Map

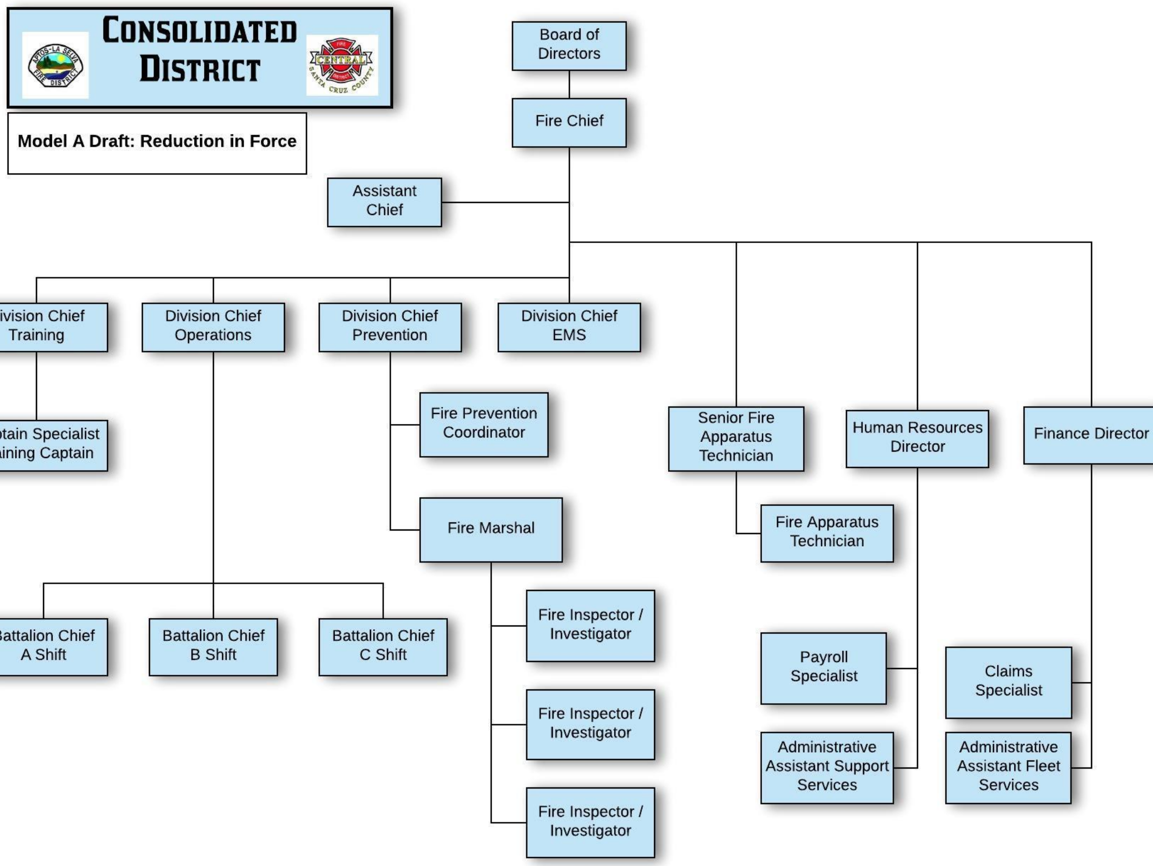


Two Staffing Models

Per the Mid-County Fire Agency Consolidation Feasibility Study and Service Review Request for Proposals, ESCI was directed to develop two staffing models for a consolidated District; one with reduction in force (Model A) and one retaining all current staffing positions (Model B). It should be clearly understood ESCI has no authority to implement the recommendations in this report. Any staffing or benefit changes are subject to negotiations.

The following figure is a draft organizational chart if the Districts decide to proceed with consolidation. This version of the organizational chart presents the most efficient model with a reduction in force (Model A). This could be a long-term plan for optimal efficiency.

Figure 80: Model A Draft Organizational Chart of Consolidated District—Reduction in Force



The following figure from the finance section (Figure 74) represents a projected five-year budget combining the two Districts on a status quo basis without recognizing the projected net savings resulting from consolidation. This figure provides a basis for the two staffing models.

Figure 81: Combined District Five-Year Cash Flow Projection on an As-Is Basis FY 2019–FY 2023

	Budget			Projections FY		
	FY 17/18	18/19	19/20	20/21	21/22	22/23
Revenues						
Property taxes	$ 28,006,033	$ 29,157,522	$ 30,077,362	$ 31,029,171	$ 32,014,132	$ 33,033,472
Other	1,851,523	1,626,769	1,402,081	1,414,898	1,422,960	1,431,182
Total revenues	29,857,556	30,784,291	31,479,443	32,444,069	33,437,092	34,464,654
Expenses						
Salaries & wages	14,117,471	14,573,849	14,847,026	15,130,036	15,418,566	15,712,727
Benefits	9,593,822	9,563,953	10,185,572	11,015,873	11,582,275	12,089,520
Total salaries & benefits	23,711,293	24,137,802	25,032,598	26,145,909	27,000,841	27,802,247
Supplies	1,536,694	1,704,184	1,681,610	1,845,509	1,815,353	1,885,396
Services	1,494,851	1,375,407	1,116,932	1,210,440	1,186,754	1,222,356
Energy	128,987	136,684	142,598	146,876	151,283	155,821
Maintenance	574,812	716,911	722,502	744,177	766,503	789,498
Capital	2,557,206	2,889,593	1,134,665	1,031,829	1,448,355	2,054,960
Contingency	100,000	200,000	200,000	200,000	200,000	200,000
Total outflows	30,103,843	31,160,581	30,030,905	31,324,741	32,569,088	34,110,278
Net cash flow (deficit)	(246,287)	(376,290)	1,448,537	1,119,328	868,003	354,376
Beginning cash	17,734,713	17,488,426	17,112,135	18,560,673	19,680,000	20,548,004
Ending cash	$ 17,488,426	$ 17,112,135	$ 18,560,673	$ 19,680,000	$ 20,548,004	$ 20,902,379

The following figure provides projected cost savings for the consolidated District from various sources including reduced staffing (Model A).

Figure 82: Model A Schedule of Anticipated Cost Savings Resulting from Consolidation

	Projections for FY 6-30				
	2019	2020	2021	2022	2023
Cost reductions (savings):					
Salaries & wages:					
Administrative - 3 FT positions	$ 233,868	$ 236,908	$ 239,988	$ 243,108	$ 246,268
Total salaries	233,868	236,908	239,988	243,108	246,268
Benefits:					
Pensions	33,794	38,379	38,878	39,383	39,895
Medicare tax	3,391	3,435	3,480	3,525	3,571
Health insurance	78,480	82,404	86,524	90,850	95,393
Total benefits	115,665	124,218	128,882	133,759	138,859
Total salaries and benefits	349,533	361,127	368,870	376,867	385,128
Services:					
Audit	30,000	30,000	30,000	30,000	30,000
Professional	200,000	200,000	200,000	200,000	200,000
Directors' fees and expenses	7,500	7,500	7,500	7,500	7,500
Total services	237,500	237,500	237,500	237,500	237,500
Supplies:					
Software	6,000	6,000	6,000	6,000	6,000
Total projected savings	$ 593,033	$ 604,627	$ 612,370	$ 620,367	$ 628,628

The projected savings schedule was revised per the following figure to remove the savings from the reduction in administrative staffing and related costs.

Figure 83: Model B Savings Realized from Consolidation Without Reduction in Staffing

	Projections for FY 6-30				
	2019	2020	2021	2022	2023
Cost reductions:					
Services:					
Audit	30,000	30,000	30,000	30,000	30,000
Professional	200,000	200,000	200,000	200,000	200,000
Directors' fees and expenses	7,500	7,500	7,500	7,500	7,500
Total services	237,500	237,500	237,500	237,500	237,500
Supplies:					
Software	6,000	6,000	6,000	6,000	6,000
Total projected savings	243,500	243,500	243,500	243,500	243,500

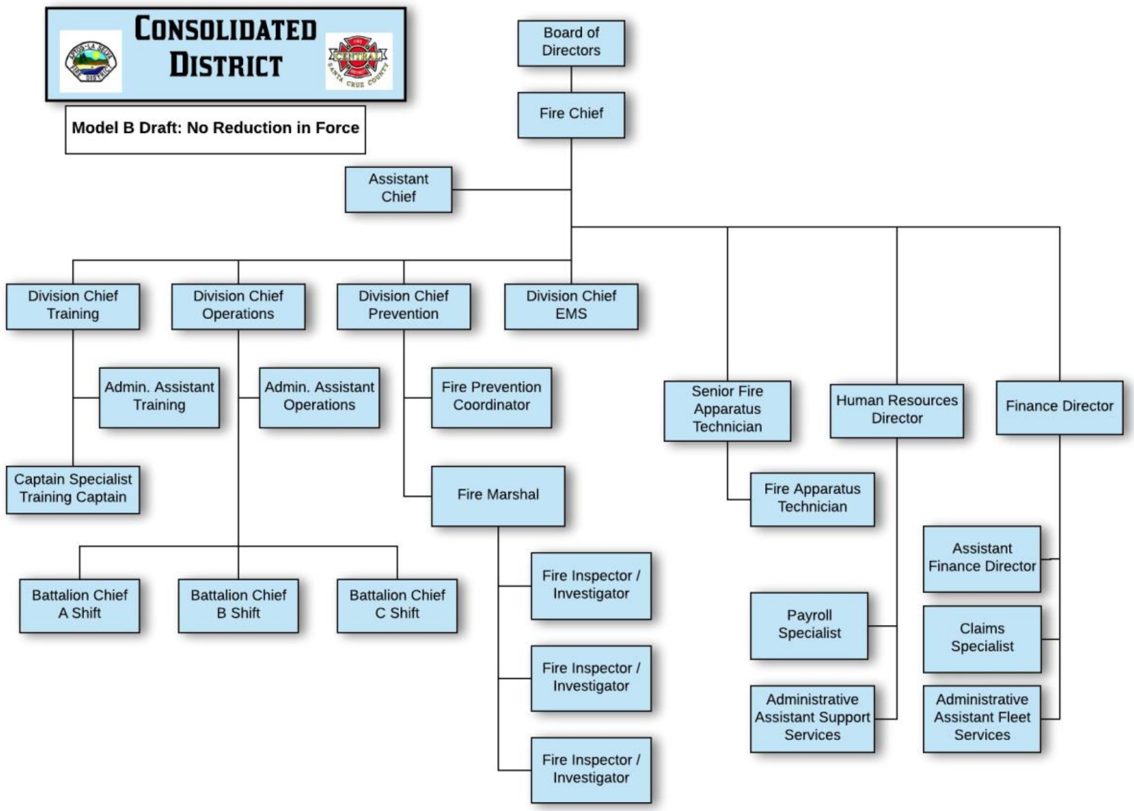
Applying the above schedule to the forecast consolidated cash flows of the two Districts will continue to provide significant savings but approximately $380,000 less savings per year than the cost savings forecast in Model A. The following figure indicates the net cash flow of the consolidated District without a reduction in staffing.

Figure 84: Model B Five-Year Consolidated District Financial Forecast with No Reduction in Staffing FY 2019–FY 2023

	Budget			Projections FY		
	FY 17/18	18/19	19/20	20/21	21/22	22/23
Revenues						
Property taxes	$ 28,006,033	$ 29,157,522	$ 30,077,362	$ 31,029,171	$ 32,014,132	$ 33,033,472
Other	1,851,523	1,626,769	1,402,081	1,414,898	1,422,960	1,431,182
Total revenues	29,857,556	30,784,291	31,479,443	32,444,069	33,437,092	34,464,654
Expenses						
Salaries & wages	14,117,471	14,573,849	14,847,026	15,130,036	15,418,566	15,712,727
Benefits	9,593,822	9,563,953	10,185,572	11,015,873	11,582,275	12,089,520
Total salaries & benefits	23,711,293	24,137,802	25,032,598	26,145,909	27,000,841	27,802,247
Supplies	1,536,694	1,704,184	1,681,610	1,845,509	1,815,353	1,885,396
Services	1,494,851	1,375,407	1,116,932	1,210,440	1,186,754	1,222,356
Energy	128,987	136,684	142,598	146,876	151,283	155,821
Maintenance	574,812	716,911	722,502	744,177	766,503	789,498
Capital	2,557,206	2,889,593	1,134,665	1,031,829	1,448,355	2,054,960
Net costs (savings) of consolidation		(243,500)	(243,500)	(243,500)	(243,500)	(243,500)
Contingency	100,000	200,000	200,000	200,000	200,000	200,000
Total outflows	30,103,843	30,917,081	29,787,405	31,081,241	32,325,588	33,866,778
Net cash flow (deficit)	(246,287)	(132,790)	1,692,037	1,362,828	1,111,503	597,876
Beginning cash	17,882,724	17,636,437	17,503,646	19,195,684	20,558,511	21,670,015
Ending cash	$ 17,636,437	$ 17,503,646	$ 19,195,684	$ 20,558,511	$ 21,670,015	$ 22,267,890

The following figure represents a draft organizational chart reflective of the recommendation to consolidate the Districts retaining all current staffing positions (Model B).

Figure 85: Model B Draft Organizational Chart of Consolidated District—No Reduction in Force



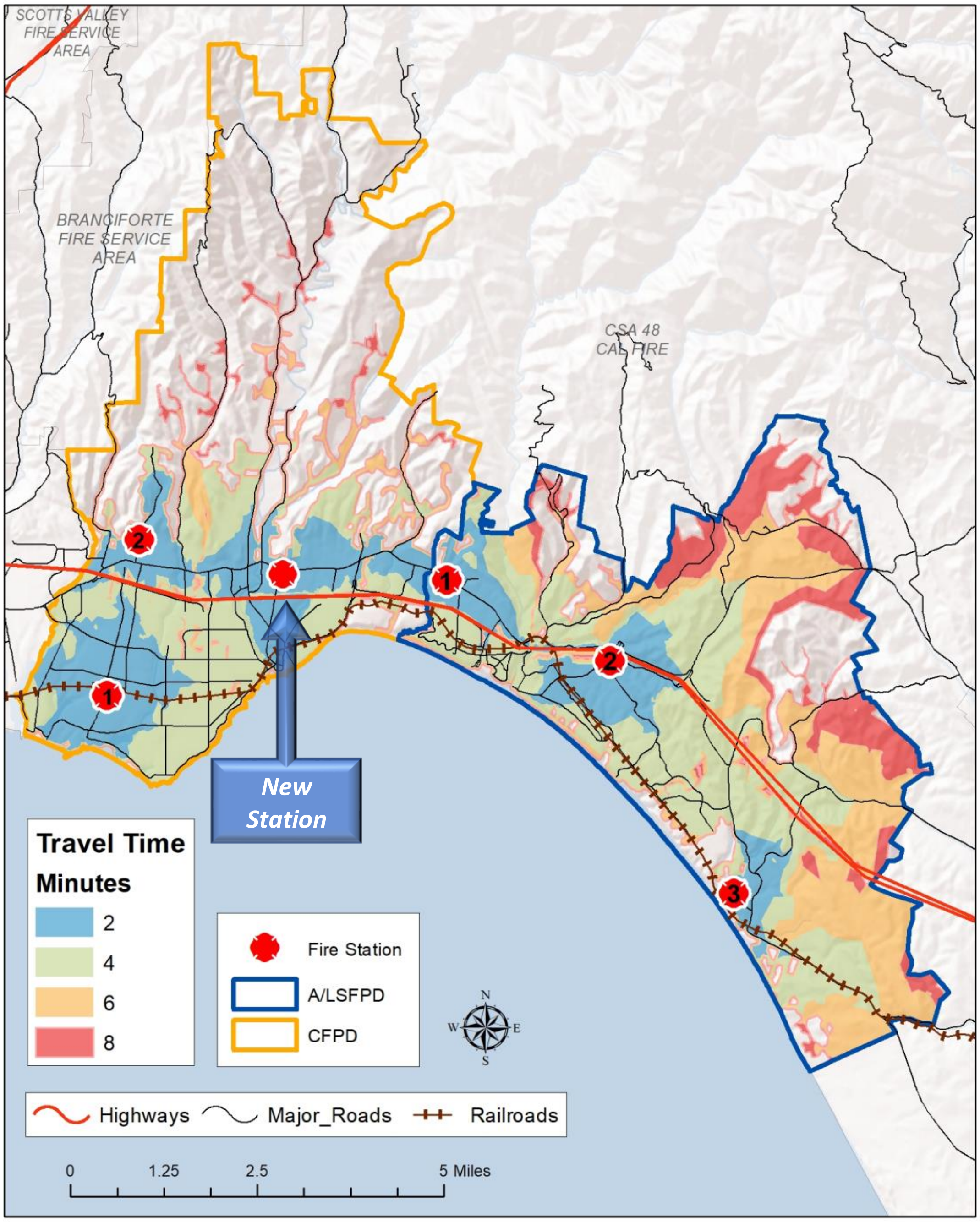
Findings:

- The consolidation of the Aptos/La Selva and Central Fire Protection Districts with all current positions remaining is financially feasible though still technically challenging. The differences in compensation and benefits packages and the nuances in the collective bargaining agreements will require some accommodations by employees and management of both districts. Funding from cost savings in certain categories may be used to mitigate some of the differences between the compensation and benefit programs until a single collective bargaining agreement can be negotiated.
- Additionally, capital expenditure and reserve programs must be consolidated and reconciled to create a system that will better manage the use of the reserve balances.

Recommendation #13: Station Relocation

ESCI recommends that regardless of consolidation, a new station be constructed at a key location such as indicated in Figure 86 which provides enhanced Effective Response Force (ERF) coverage and allows for the closure of the two stations that are located in the floodplain.

Figure 86: New Configuration of Stations—New Station at Capitola & Soquel Travel Time



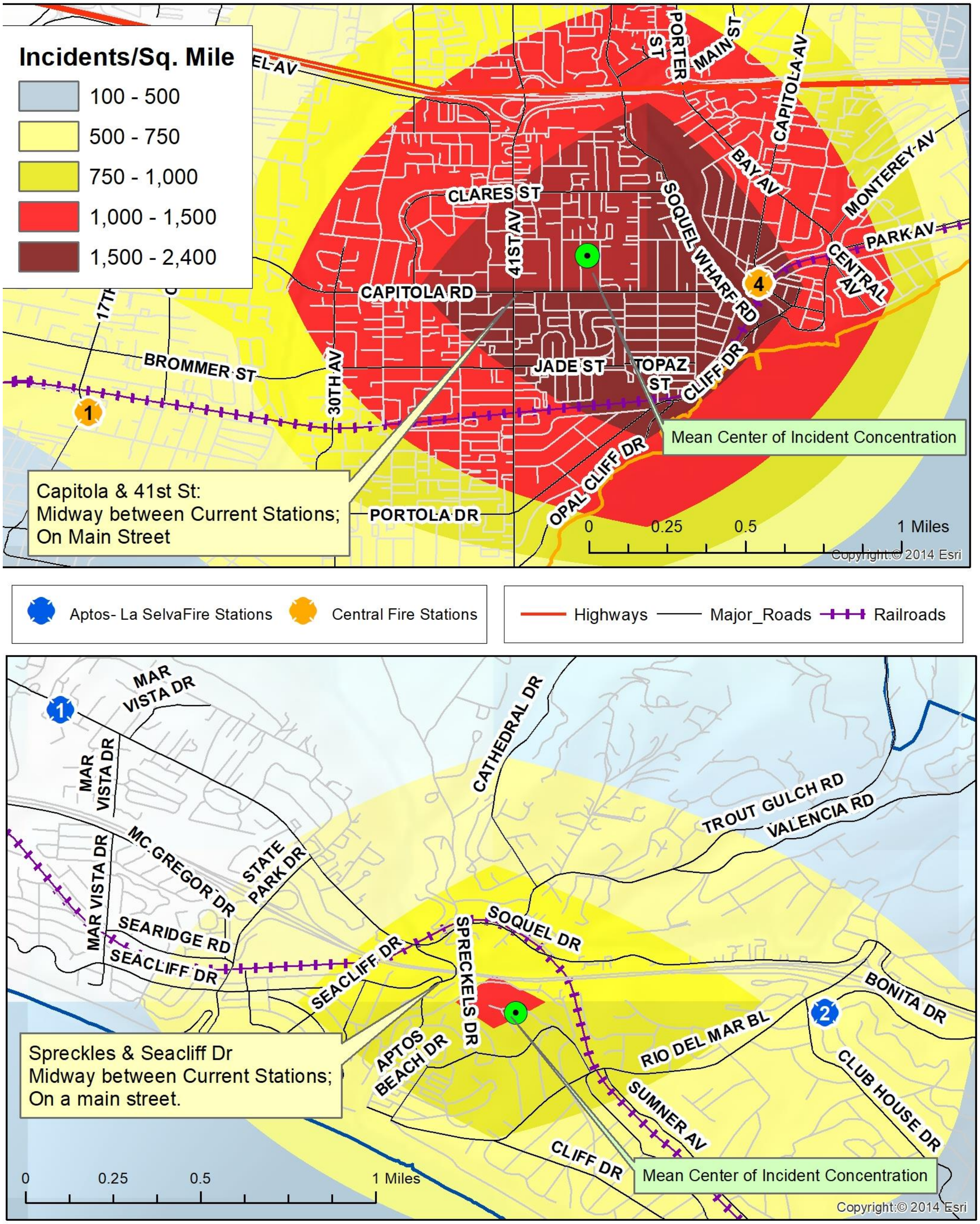
> ***Recommendation #14: Quick Attack Units***
> ESCI Recommends that consideration be given to establishing one to two peak-hour, quick attack units similar to the example in the following figure.

Figure 87: Quick Attack Example

> ***Recommendation #15: Staffing Quick Attack Unit***
> ESCI recommends the quick attack be staffed with an operator and a FF, one of which should be a paramedic. Establishment of this type of unit/s will lower response times during peak demand hours and enhance Emergency Response Force and initial attack among other benefits. Consideration should be given to initiating a pilot project possibly using an existing piece of apparatus staffed with overtime positions.

The following figure displays proposed locations for quick attack response units.

Figure 88: Incident Concentration & Proposed Locations for Quick Attack Response Units



Recommendation #16: Preparation for LAFCO Process

These recommendations apply to consolidation and the LAFCO process.

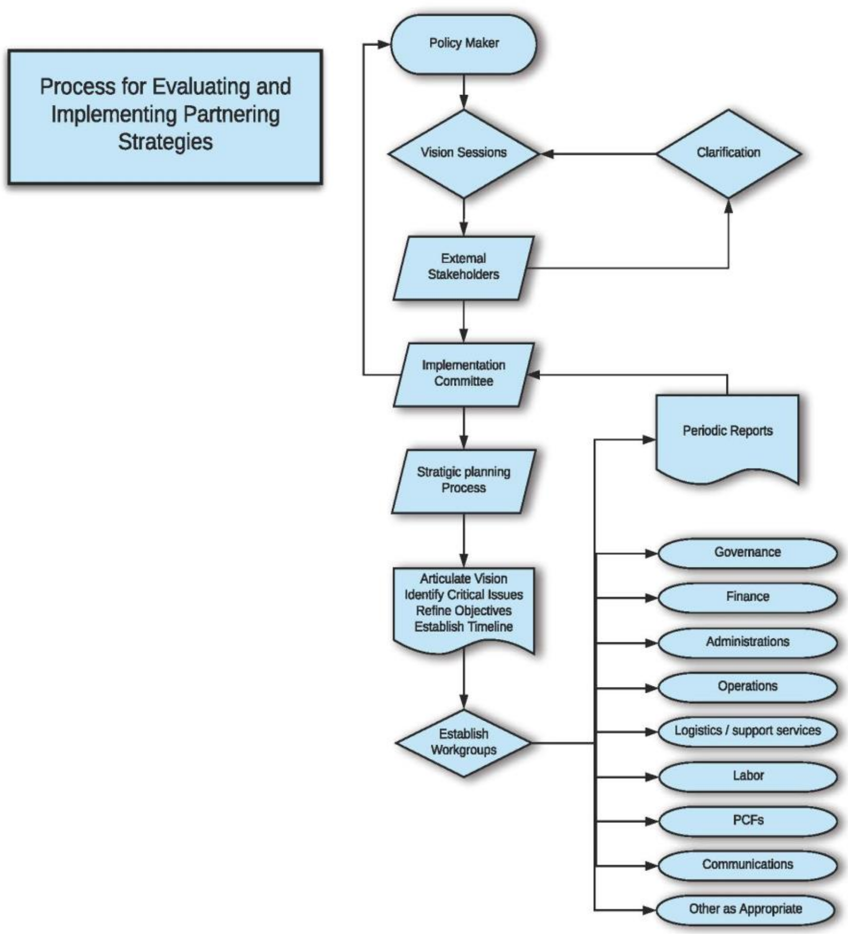
- The Districts should meet to negotiate all pertinent matters to be included in terms and conditions.
- Consolidation should take the form of a reorganization with one District annexing the other.
- Board of Director representation should be determined choosing one of the following options:
  - Five-member board of directors with two representatives from each existing District area and one "at large" representative from the newly combined area.
  - Five-member board of directions with one representative from each of the pre-consolidation areas (Aptos, La Selva, Live Oak, Soquel, and Capitola).
- Zone of benefit designations should be included in the terms and conditions to maintain fire suppression assessments in A/LS rural areas.
- The Districts should pass substantially similar resolutions of application to LAFCO which include relevant terms and conditions.
- The Districts should develop informational material regarding the benefits of consolidation and to answer questions. This material should be distributed both internally and externally.
- The Districts should conduct informational public workshops.

IMPLEMENTATION PLAN

Many studies and reports have been published and presented to clients over the years by ESCI. Often, clients are overwhelmed with information and options. It takes time to digest the report and then figure out what to do next. ESCI finds it helpful to offer a process whereby the clients can break the process down into smaller segments. Those smaller pieces allow policy-makers, fire chiefs, and communities to examine details and have discussions about what is possible. The following is offered as a framework to consider in the initial stages of evaluation. It is a strategic planning approach to partnerships and mergers or consolidations.

The following flowchart outlines a process whereby these strategies can be further refined, other critical issues identified, timelines assigned, and specific tasks developed and implemented for partnering strategies.

Figure 89: Process for Evaluating & Implementing Partnering Strategies



The process flowchart starts with the policymakers convening a series of facilitated meetings to discuss the recommendations within the study and develop a shared vision of both agencies. Key external stakeholders are often invited into the process to lend their expertise and perspective, ensuring that the community at large is represented in these important deliberations.

Often, internal stakeholders have difficulty with "possibilities thinking" because of their close association with the status quo, which is human nature. The external stakeholders add valuable perspective by asking key questions and challenging the status quo. It is of extreme importance that the facilitator(s) be neutral parties absent of any predetermined biases.

Establish Implementation Working Groups

As the flowchart indicates, various Implementation Working Groups should be established that will be charged with the responsibility of performing the necessary detailed work involved in analyzing and weighing critical issues and identifying specific tasks. Membership for these Implementation Working Groups should be identified as part of that process as well.

The number and titles of the working groups will vary depending on the type and complexity of the strategies begin pursued. The following list provides some key recommended working groups used in most collaboration processes and a description of some of their primary assigned functions and responsibilities.

Joint Implementation Committee (Task Force)

This committee is typically made up of the fire chiefs or chief executives of each of the participating agencies but may also include outside stakeholders such as business and community interests. The responsibilities of this group are to:

- Develop goals and objectives which flow from the joint vision statement approved by the policymakers' vision sessions.
- Include recommendations contained in this report where appropriate.
- Establish the work groups and commission their work.
- Identify anticipated critical issues the work groups may face and develop contingencies to address these.
- Establish timelines to keep the work groups and the processes on task.
- Receive regular updates from the work group chairs.
- Provide regular status reports to the policymakers as a committee.

Governance Working Group

This group will be assigned to examine and evaluate various governance options for the cooperative service or consolidation effort. A recommendation and the proposed process steps will be provided back to the Joint Implementation Committee and the Policy-Maker Group. Once approved, this working group is typically assigned the task of shepherding the governance establishment through to completion. The membership of this group typically involves one or more elected officials and senior management from each participating agency. This group should recommend Board composition and representation for the consolidated District. Equality of representation on the working group and on the consolidated District Board are a key premise.

Finance Working Group

This group will be assigned to review the financial projections contained in the study and complete any refinements or updating necessary. The group will look at all possible funding mechanisms and will work in partnership with the Governance Working Group to determine impact on local revenue sources and options. Where revenue is to be determined by formula rather than a property tax rate, such as in a contractual cooperative venture, this group will evaluate various formula components and model the outcomes, resulting in recommendations for a final funding methodology and cost distribution formula. The membership of this group typically involves senior financial managers and staff analysts and may also include representatives from the agencies' administrative staffs.

Administration Working Group

Working in partnership with the Governance Working Group, this group will study all of the administrative and legal aspects of the selected strategies they are assigned and will identify steps to ensure the process meets all administrative best practices and the law. Where necessary, this group will oversee the preparation and presentation of policy actions such as proposed ordinances, joint resolutions, dissolutions, and needed legislation to the policymakers. The membership of this group typically involves senior management staff from the entities involved and may also include legal counsel.

Operations Working Group

This group will be responsible for an extensive amount of work and may need to establish multiple sub-groups to accommodate its workload. The group will work out all of the details necessary to make operational changes required by the strategy. This involves detailed analysis of assets, processes, procedures, service delivery methods, deployment, and operational staffing. Detailed integration plans, steps, and timelines will be developed. The group will coordinate closely with the Logistics/Support Services Working Group. The membership of this group typically involves senior management, mid-level officers, training staff, Paid-Call firefighter leadership and labor representatives. This list often expands with the complexity of the services provided by the agencies.

Logistics/Support Services Working Group

This group will be responsible for any required blending of capital assets, disposition of surplus, upgrades necessary to accommodate operational changes, and the preparation for ongoing administration and logistics of the cooperative effort. The membership of this group typically involves mid-level agency management, administrative, and support staffs. Where involved, support functions such as Maintenance or Fire Prevention may also be represented.

Labor Working Group

This group will have the responsibility, where necessary, for blending the workforces involved. This often includes the analysis of differences between collective bargaining agreements, shifts schedules, policies, and working conditions. The process also includes work toward developing a consensus between the bargaining units on any unified agreement that would be proposed. Often, once the future vision is articulated by the policy-makers, labor representatives are willing to step up and work together as a team to identify challenges presented by differing labor agreements and offer potential consensus solutions.

The membership of this group typically involves labor representatives from each bargaining unit, senior management and, as needed, legal counsel.

Communication Working Group

Perhaps one of the most important, this group will be charged with developing an internal and external communication policy and procedure to ensure consistent, reliable, and timely distribution of information related exclusively to the cooperative effort or consolidation. The group will develop public information releases to the media and will select one or more spokespersons to represent the communities in their communication with the public on this particular process. The importance of speaking with a common voice and theme both internally and externally cannot be overemphasized. Fear of change can be a strong force in motivating a group of people to oppose that which they do not clearly understand. A well-informed workforce and public will reduce conflict. The membership of the group typically involves public information officers and senior management.

Meet, Identify, Challenge, Refine, and Overcome

Once the working groups are established, they will set meeting schedules and begin their various responsibilities and assignments. It will be important to maintain organized communication up and down the chain of command. The working group chairs should also report regularly to the Joint Implementation Committee. When new challenges, issues, impediments, or opportunities are identified by the working groups, this needs to be communicated to the Joint Implementation Committee right away so that the information can be coordinated with findings and processes of the other working groups. Where necessary, the Joint Implementation Committee and a working group chairperson can meet with the policy-makers to discuss significant issues that may require a refinement of the original joint vision.

The process is continual as the objectives of the plan are accomplished one by one. When sufficient objectives have been met, the Joint Implementation Committee can declare various goals as having been fully met, subject to implementation approval by the policy bodies. This formal turning point will mark the time at which implementation ends and integration of the agencies, to whatever extent has been recommended, begins.

SERVICE REVIEW AND SPHERE OF INFLUENCE UPDATE

This section provides background on Local Agency Formation Commission (LAFCO), Spheres of Influence (SOI), and Service Reviews originally called Municipal Service Reviews.

LOCAL AGENCY FORMATION COMMISSION (LAFCO)

The composition of LAFCO provides an ideal position to oversee regional service issues of local government. The Commission is comprised of two County Supervisors, two City Council members, one public member, and in Santa Cruz County two special District members. Commissioners are expected to "take off the hats" of their respective agency and consider issues relevant to the County as a whole.

LAFCO was originally formed in 1963 and has changed over the years to address a variety of issues. For example, *The Commission on the 21st Century* recommended updates and changes to LAFCO. As a result, in 2000, the laws governing LAFCOs were amended making significant revisions to the existing law.[11] LAFCO's mandate, role, and composition all changed at this time.

LAFCOs were initially formed in response to post World War II population growth and urban sprawl that occurred in California. At that time cities were expanding their boundaries; special districts were proliferating, and agricultural land was being lost to urbanization at alarming rates. There was no oversight to the turf wars that occurred.

LAFCOs were formed for the following purpose:

- Discourage urban sprawl
- Preserve agricultural and open-space lands
- Efficiently extend local government services

Prior to the changes in 2000, LAFCOs reacted to applications submitted regarding boundary changes, formation of cities or districts, changes in district powers, and conducted studies. LAFCO was given the authority to proactively initiate consolidations or reorganizations as a result of their studies. In addition to Sphere of Influence boundaries, LAFCOs were responsible for city and special district Service Reviews within their purview.

[11] California Government code 56000 et seq.

SERVICE REVIEW

The Commission has the authority to conduct a Service Review by type of service, for an individual agency or by area. In 2005, Santa Cruz LAFCO conducted a service review of all municipal type services within the County and continued to update these reviews over the years. Most recently, in 2016 Santa Cruz LAFCO conducted a Service Review by type of service, specifically district fire service providers within the County titled *Review of Fire Districts Services and Spheres of Influence*. Determinations considered by the Commission in this Service Review included:

- Infrastructure needs and deficiencies.
- Growth and population projections for the affected area.
- The location and characteristics of any disadvantaged communities within or contiguous to the agency's Sphere of Influence.
- The present and planned capacity of public facilities, adequacy of public services, and infrastructure needs, or deficiencies related to sewers, municipal and industrial water, and structural fire protection in any disadvantaged, unincorporated communities within or contiguous to the agency's sphere of influence.
- The financial ability of agencies to provide services.
- The status of, and opportunities for, shared facilities.
- Accountability for community service needs, including governmental structure and operational efficiencies.
- Any other matter related to efficient service delivery, as required by commission policy.

Service reviews provide an opportunity for local agencies to inform their constituents about the services they provide, best practices used, and how the services can be understood in a regional setting. Opportunities to share and improve services can be identified as a result.

Service Review Update Factors

One of the functions of the current study is to update the service reviews of A/LSFPD and CFPD. Service review factors are listed and addressed, or the corresponding section of the report is provided which addresses the factor.

Infrastructure needs and deficiencies:

This factor has been addressed in report section as follows:

- Capital Assets and Assessment of Current Infrastructure

Growth and population projections for the affected area:

ESCI staff were instructed to rely on data produced by Citygate in the 2017–18 reports of the two Districts. Population growth projections were studied, and the following conclusions were drawn by Citygate:

Aptos/La Selva Fire Protection District:

- The District's population is projected to grow a very modest 11 percent over the next 18 years to 2035.
- The District's higher population density areas are essentially built out, with zoning regulations limiting new development to existing town centers and concentrated urban areas.
- With the exception of the Aptos Village mixed-use project, future development will be predominantly limited to single-family dwellings.

Central Fire Protection District:

- Population and housing units within the District are projected to grow a very modest 7 percent and 8 percent respectively over the next 18 years to 2035, with zoning regulations limiting new development to existing town centers and concentrated urban areas.

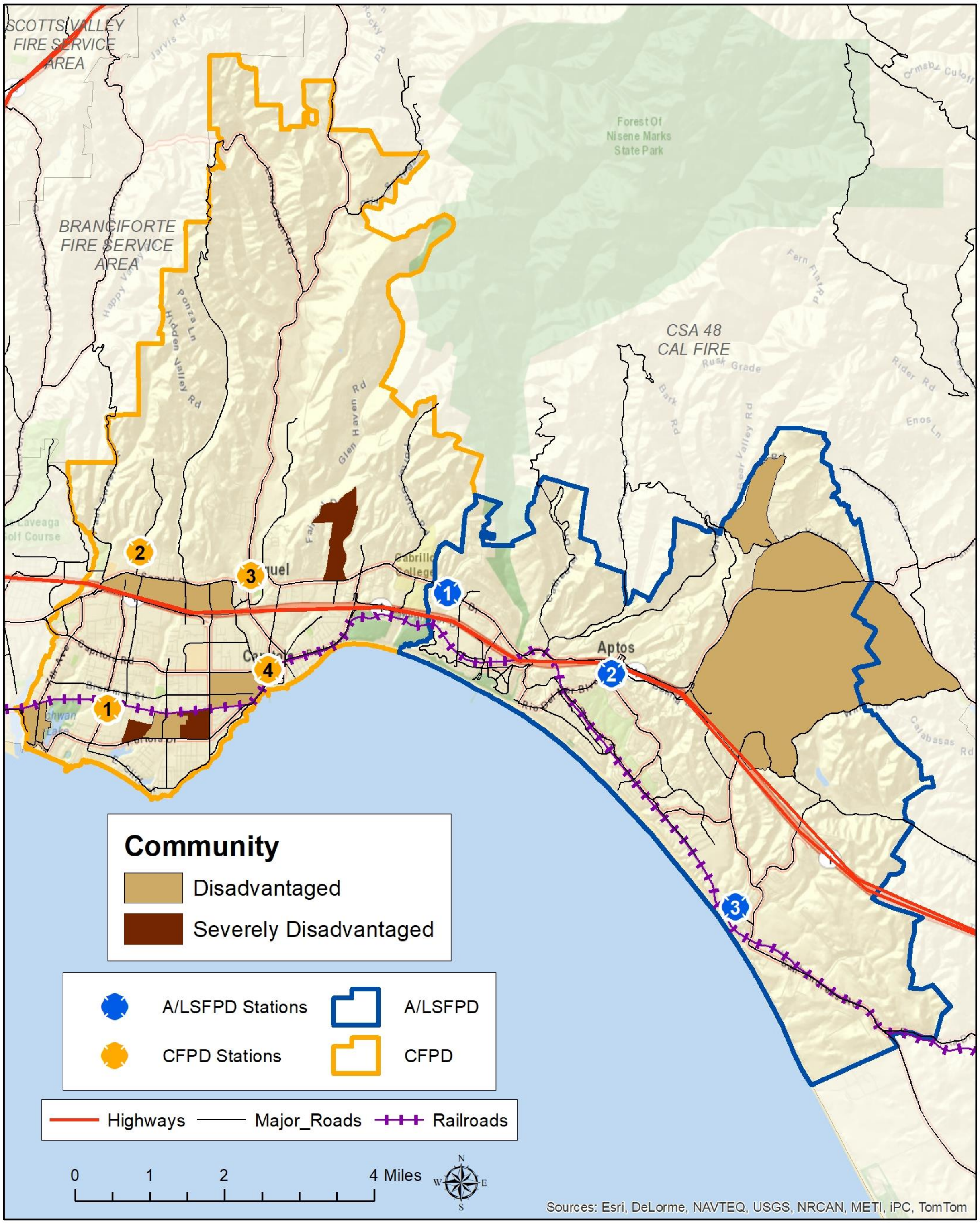
Disadvantaged Communities:

The Commission's Service Review Report of 2016 identified disadvantaged unincorporated communities within or contiguous to County Fire Protection Districts' Spheres of Influence. The term "disadvantaged community" is defined in Water Code Section 79505.5 as a community with an annual median household income that is less than 80 percent of the statewide annual median household income. In 2014, the state annual median household income was $61,489, and 80% of that is $49,191.

The map shown in the following figure from the Commission's Report shows the areas within the County that meet the definition of disadvantaged communities.

It was determined in the 2016 Service Review that "disadvantaged areas receive the same level of fire protection as areas with higher median household incomes in the respective fire agencies." ESCI staff agrees with this conclusion and has determined (Service Delivery Section) there has been no reduction of service to the disadvantaged areas within A/LSFPD and CFPD.

Figure 90: Disadvantaged Communities, Santa Cruz County, California



The present and planned capacity of public facilities, adequacy of public services, and infrastructure needs, or deficiencies related to sewers, municipal and industrial water, and structural fire protection in any disadvantaged, unincorporated communities within or contiguous to the agency's Sphere of Influence.

It is not within the scope of this project to evaluate public facilities of sewers and water supply. However, this report has evaluated the present and planned public facilities of structural fire protection. This factor is addressed in the Capital Assets and Improvements section of this report.

Financial ability to provide services:

The Financial Analysis section of this report provides extensive detail and analysis of the financial ability of the agencies to provide service. The analysis in this section includes historic, current, and future financial forecast of the Districts. ESCI staff and the actuarial firm of Bickmore have conducted thorough analysis to produce financial forecast for the consolidated District.

Shared facilities:

The Future Opportunities for Cooperative Efforts section of this report includes General Partnering Strategies, Options for Shared Services. The Financial Analysis includes analysis and projections for consolidation of the Districts in the Consolidated Budget portion.

Accountability for community service needs:

This factor has been addressed in various sections of this report as follows:

- Organizational Overview
- Management Components
- Capital Assets and Improvements
- Staffing and Personnel Management
- Stakeholder Input
- Service Delivery, Demand, and Performance
- Financial Analysis

Recommendation #17: Service Review Update
That the Commission conduct a public hearing and accept this Service Review for A/LSFPD and CFPD.

SPHERE OF INFLUENCE UPDATE

In addition to the Service Review Update, one of the functions of this report is to update the Sphere of Influence (SOI) for the Districts as well as provide a recommended SOI for the consolidated District.

SOI Determinations

State law defines a SOI as the probable physical boundaries and service area of a local agency as determined by the county LAFCO. The Commission is required to adopt and/or amend the SOI at a public hearing. This action by the Commission requires the determination be based upon the following:

- The present and planned land uses in the area, including agricultural and open-space lands.
- The present and probable need for public facilities and services in the area.
- The present capacity of public facilities and adequacy of public services that the agency provides or is authorized to provide.
- The existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency.
- For a city or district that provides sewers, water, or structural fire protection, the present and probable need for those services in any disadvantaged unincorporated communities within the existing sphere of influence.

The SOI adopted by LAFCO is mapped and provided visually as a boundary. In some cases, the SOI boundary is contiguous with the boundary of an agency. Boundary changes (annexation, detachment, consolidation, dissolution, etc.) are required by state law to be consistent with LAFCO policies and the adopted SOI of the agency.

The service review of Districts conducted in 2016 Santa Cruz LAFCO included an update of the adopted SOIs. There were no changes made to the existing SOIs for A/LSFPD or for CFPD as a result of the study. These boundaries are show in the following figures.

Figure 91: Sphere of Influence for A/LSFPD

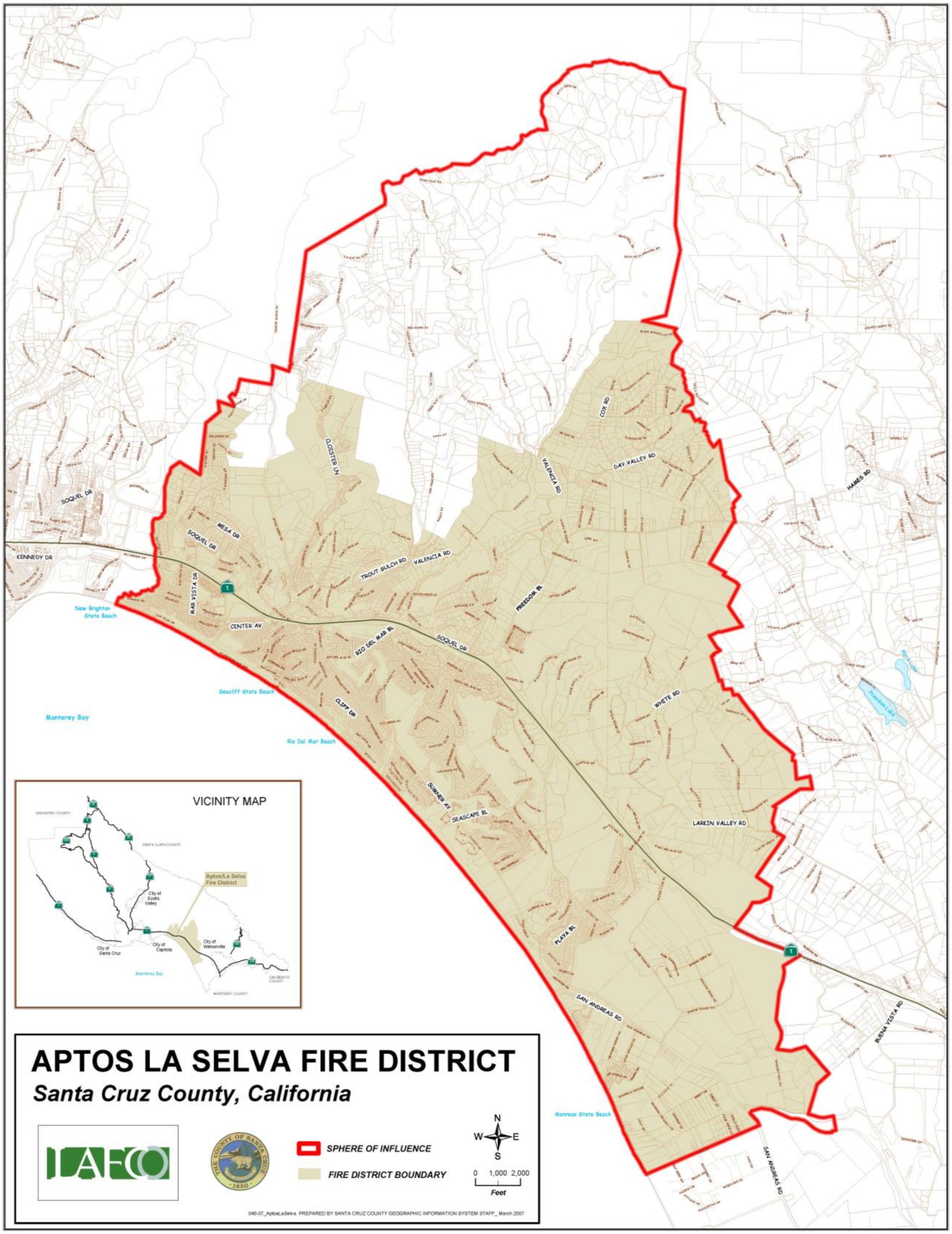
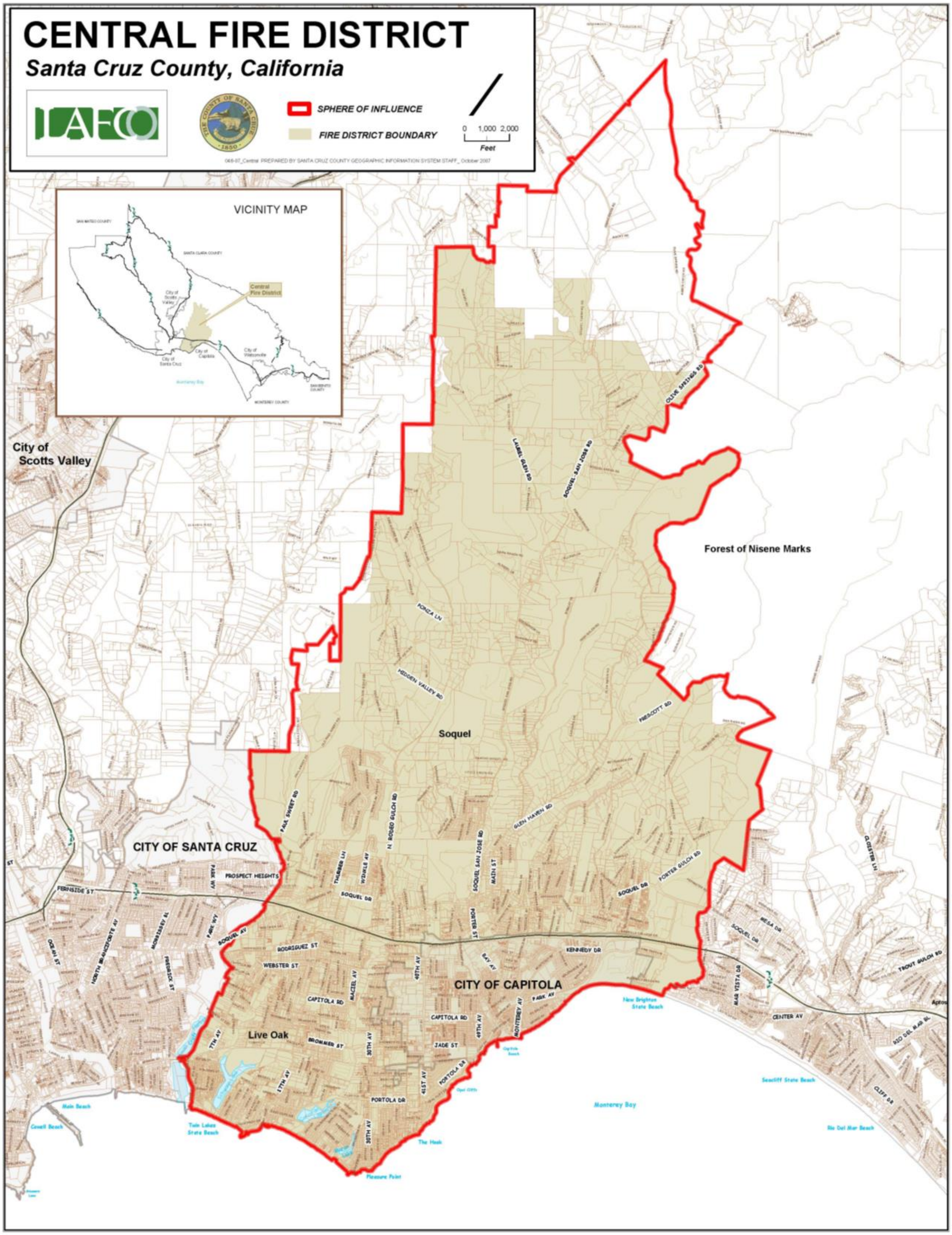


Figure 92: Sphere of Influence for CFPD



The Service Review factors addressed in the current study conducted by ESCI also provide a basis for the SOI update. No substantial or significant changes were found to indicate the need to amend the current SOI boundaries for the Districts. Also, the Districts did not propose any SOI amendments as part of the study.

Findings:

- Present and planned land use in both Districts has not changed significantly since the 2016 Service Review and SOI Update.
- The present and probable need for public facilities and services has been addressed in this report with recommendations.
- The present capacity of public facilities and adequacy of public facilities has been addressed in this report with recommendations.
- Social or economic communities of interest were not determined as relevant by the Commission in the 2016 report. Therefore, this factor has not been addressed in the current report.
- The present and probable need for public facilities and services in disadvantaged communities has been addressed in this report in conjunction with needs and services to the districts as a whole. The level and quality of service is consistent throughout the Districts.

Recommendation #18: SOI Update

That the Commission update the SOIs for A/LSFPD and CFPD without amendment or changes to the existing SOI boundaries.

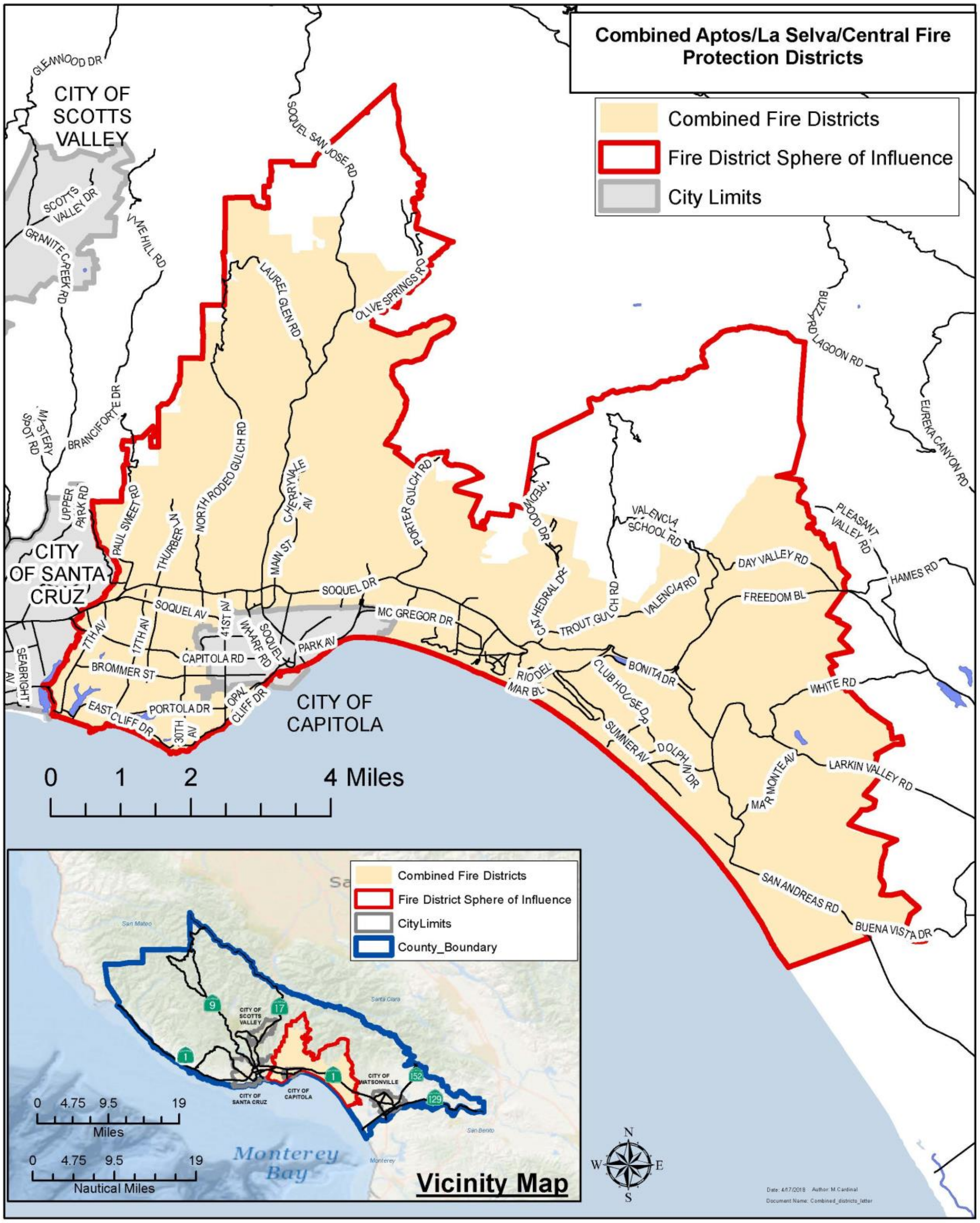
SPHERE OF INFLUENCE FOR THE CONSOLIDATED DISTRICTS

ESCI has been tasked with recommending a proposed SOI for the consolidation of A/LSFPD and CFPD. Noted in the previous section are the SOI factors considered for each District as separate entities. No changes were warranted for the existing SOIs. Therefore, the SOI for the consolidated District is determined to be a combining of the two current SOIs as shown in the following figure.

Recommendation #19: SOI for Consolidated Districts

ESCI recommends that, at the time of consolidation, the Commission adopt a SOI for the new agency which reflects a combination of the existing SOIs for A/LSFPD and CFPD.

Figure 93: Proposed Sphere of Influence for the Combined A/LSFPD and CFPD



APPENDICIES

APPENDIX A: REFERENCES

Armanino LLP (2017). *Central Fire Protection District of Santa Cruz County Financial Statements June 30, 2016 and 2015.* San Jose, CA.

Bickmore (2018). *Mid-County Fire Agency 2018 Consolidation Feasibility Study*.

Central Fire Protection District of Santa Cruz County (2017). *Fiscal Year 2017–2018 Adopted Budget*. Santa Cruz, CA.

Bartell Associates, LLC (2017). *Aptos/La Selva Fire Protection District CalPERS Miscellaneous and Safety Pension Plans.* Mateo, CA.

Rael & Letson, Consultants and Actuaries (2017). *Central Fire Protection District of Santa Cruz June 30, 2017 GASB 75 Valuation and Retiree Welfare Study.* San Mateo, CA.

APPENDIX B: LAFCO TERMS AND CONDITIONS

GOVERNMENT CODE - GOV

TITLE 5. LOCAL AGENCIES [50001 - 57550]

(Title 5 added by Stats. 1949, Ch. 81.)

DIVISION 3. CORTESE-KNOX-HERTZBERG LOCAL GOVERNMENT REORGANIZATION ACT OF 2000 [56000 - 57550]

(Heading of Division 3 amended by Stats. 2001, Ch. 388, Sec. 1.)

PART 3. COMMISSION PROCEEDINGS FOR A CHANGE OF ORGANIZATION OR REORGANIZATION [56650 - 56898]

(Heading of Part 3 amended by Stats. 1985, Ch. 1599, Sec. 8.)

CHAPTER 6. Commission Decision [56880 - 56898]

(Chapter 6 added by Stats. 2000, Ch. 761, Sec. 211.)

ARTICLE 2. Terms and Conditions [56885 - 56890]

(Article 2 added by Stats. 2000, Ch. 761, Sec. 211.)

56885.

The commission may, at any time, authorize any legislative body holding a hearing pursuant to this division, to continue the hearing to a date or dates extending beyond the dates specified in this division.

(Added by Stats. 2000, Ch. 761, Sec. 211. Effective January 1, 2001.)

56885.5.

(a) In any commission order giving approval to any change of organization or reorganization, the commission may make that approval conditional upon any of the following factors:

(1) Any of the conditions set forth in Section 56886.

(2) The initiation, conduct, or completion of proceedings for another change of organization or a reorganization.

(3) The approval or disapproval, with or without election, as may be provided by this division, of any resolution or ordinance ordering that change of organization or reorganization.

(4) With respect to any commission determination to approve the disincorporation of a city, the dissolution of a district, or the reorganization or consolidation of agencies that results in the dissolution of one or more districts or the disincorporation of one or more cities, a condition that prohibits a district that is being dissolved or a city that is being disincorporated from taking any of the following actions, unless it first finds that either an emergency situation exists as defined in Section 54956.5, or the legislative body of the successor, as designated by the commission has taken action approving one or more of the following actions:

(A) Approving any increase in compensation or benefits for members of the governing board, its officers, or the executive officer of the agency.

(B) Appropriating, encumbering, expending, or otherwise obligating, any revenue of the agency beyond that provided in the current budget at the time the commission approves the dissolution or disincorporation.

(b) If the commission so conditions its approval, the commission may order that any further action pursuant to this division be continued and held in abeyance for the period of time designated by the commission, not to exceed six months from the date of that conditional approval.

(c) The commission order may also provide that any election called upon any change of organization or reorganization shall be called, held, and conducted before, upon the same date as, or after the date of any election to be called, held, and conducted upon any other change of organization or reorganization.

(d) The commission order may also provide that in any election at which the questions of annexation and district reorganization or, incorporation and district reorganization, or disincorporation and district reorganization are to be considered at the same time, there shall be a single question appearing on the ballot upon the issues of annexation and district reorganization or incorporation and district reorganization.

(Amended by Stats. 2015, Ch. 304, Sec. 10. (AB 851) Effective January 1, 2016.)

56886.

Any change of organization or reorganization may provide for, or be made subject to one or more of, the following terms and conditions. If a change of organization or reorganization is made subject to one or more of the following terms and conditions in the commission's resolution making determinations, the terms and conditions imposed shall prevail in the event of a conflict between a specific term and condition authorized pursuant to this section and any of the general provisions of Part 5 (commencing with Section 57300). However, none of the following terms and conditions shall directly regulate land use, property development, or subdivision requirements:

(a) The payment of a fixed or determinable amount of money, either as a lump sum or in installments, for the acquisition, transfer, use, or right of use of all or any part of the existing property, real or personal, of any city, county, or district.

(b) The levying or fixing and the collection of any of the following, for the purpose of providing for any payment required pursuant to subdivision (a):

(1) Special, extraordinary, or additional taxes or assessments.

(2) Special, extraordinary, or additional service charges, rentals, or rates.

(3) Both taxes or assessments and service charges, rentals, or rates.

(c) The imposition, exemption, transfer, division, or apportionment, as among any affected cities, affected counties, affected districts, and affected territory of liability for payment of all or any part of principal, interest, and any other amounts which shall become due on account of all or any part of any outstanding or then authorized but thereafter issued bonds, including revenue bonds, or other contracts or obligations of any city, county, district, or any improvement district within a local agency, and the levying or fixing and the collection of any (1) taxes or assessments, or (2) service charges, rentals, or rates, or (3) both taxes or assessments and service charges, rentals, or rates, in the same manner as provided in the original authorization of the bonds and in the amount necessary to provide for that payment.

(d) If, as a result of any term or condition made pursuant to subdivision (c), the liability of any affected city, affected county, or affected district for payment of the principal of any bonded indebtedness is increased or decreased, the term and condition may specify the amount, if any, of that increase or decrease which shall be included in, or excluded from, the outstanding bonded indebtedness of that entity for the purpose of the application of any statute or charter provision imposing a limitation upon the principal amount of outstanding bonded indebtedness of the entity.

(e) The formation of a new improvement district or districts or the annexation or detachment of territory to, or from, any existing improvement district or districts.

(f) The incurring of new indebtedness or liability by, or on behalf of, all or any part of any local agency, including territory being annexed to any local agency, or of any existing or proposed new improvement district within that local agency. The new indebtedness may be the obligation solely of territory to be annexed if the local agency has the authority to establish zones for incurring indebtedness. The indebtedness or liability shall be incurred substantially in accordance with the laws otherwise applicable to the local agency.

(g) The issuance and sale of any bonds, including authorized but unissued bonds of a local agency, either by that local agency or by a local agency designated as the successor to any local agency which is extinguished as a result of any change of organization or reorganization.

(h) The acquisition, improvement, disposition, sale, transfer, or division of any property, real or personal.

(i) The disposition, transfer, or division of any moneys or funds, including cash on hand and moneys due but uncollected, and any other obligations.

(j) The fixing and establishment of priorities of use, or right of use, of water, or capacity rights in any public improvements or facilities or any other property, real or personal. However, none of the terms and conditions ordered pursuant to this subdivision shall modify priorities of use, or right of use, to water, or capacity rights in any public improvements or facilities that have been fixed and established by a court or an order of the State Water Resources Control Board.

(k) The establishment, continuation, or termination of any office, department, or board, or the transfer, combining, consolidation, or separation of any offices, departments, or boards, or any of the functions of those offices, departments, or boards, if, and to the extent that, any of those matters is authorized by the principal act.

(l) The employment, transfer, or discharge of employees, the continuation, modification, or termination of existing employment contracts, civil service rights, seniority rights, retirement rights, and other employee benefits and rights.

(m) The designation of a city, county, or district, as the successor to any local agency that is extinguished as a result of any change of organization or reorganization, for the purpose of succeeding to all of the rights, duties, and obligations of the extinguished local agency with respect to enforcement, performance, or payment of any outstanding bonds, including revenue bonds, or other contracts and obligations of the extinguished local agency.

(n) The designation of (1) the method for the selection of members of the legislative body of a district or (2) the number of those members, or (3) both, where the proceedings are for a consolidation, or a reorganization providing for a consolidation or formation of a new district and the principal act provides for alternative methods of that selection or for varying numbers of those members, or both.

(o) The initiation, conduct, or completion of proceedings on a proposal made under, and pursuant to, this division.

(p) The fixing of the effective date or dates of any change of organization, subject to the limitations of Section 57202.

(q) Any terms and conditions authorized or required by the principal act with respect to any change of organization.

(r) The continuation or provision of any service provided at that time, or previously authorized to be provided by an official act of the local agency.

(s) The levying of either of the following:

> (1) Assessments or fees, including the imposition of a fee pursuant to Section 50029 or 66484.3. For the purposes of this section, imposition of a fee as a condition of the issuance of a building permit does not constitute direct regulation of land use, property development, or subdivision requirements.
>
> (2) General or special taxes subject to approval by the voters.

(t) The extension or continuation of any previously authorized charge, fee, assessment, or tax by the local agency or a successor local agency in the affected territory.

(u) The transfer of authority and responsibility among any affected cities, affected counties, and affected districts for the administration of special tax and special assessment districts, including, but not limited to, the levying and collecting of special taxes and special assessments, including the determination of the annual special tax rate within authorized limits; the management of redemption, reserve, special reserve, and construction funds; the issuance of bonds which are authorized but not yet issued at the time of the transfer, including not yet issued portions or phases of bonds which are authorized; supervision of construction paid for with bond or special tax or assessment proceeds; administration of agreements to acquire public facilities and reimburse advances made to the district; and all other rights and responsibilities with respect to the levies, bonds, funds, and use of proceeds that would have applied to the local agency that created the special tax or special assessment district.

(v) Any other matters necessary or incidental to any of the terms and conditions specified in this section. If a change of organization, reorganization, or special reorganization provides for, or is made subject to one or more of, the terms and conditions specified in this section, those terms and conditions shall be deemed to be the exclusive terms and conditions for the change of organization, reorganization, or special reorganization, and shall control over any general provisions of Part 5 (commencing with Section 57300).

(Amended by Stats. 2015, Ch. 304, Sec. 11. (AB 851) Effective January 1, 2016.)

56886.1.

When applicable, the terms and conditions of any change of organization or reorganization shall provide public utilities, as defined in Section 216 of the Public Utilities Code, 90 days following the recording of the certificate of completion to make the necessary changes to impacted utility customer accounts.

(Added by Stats. 2001, Ch. 388, Sec. 21. Effective January 1, 2002.)

56886.3.

If the terms and conditions of any change of organization provide for the formation of a new improvement district, or the annexation or detachment of territory to, or from, an existing improvement district, the commission shall do all of the following:

(a) Exclude any lands proposed to be formed into, or to be annexed to, the improvement district which the commission finds will not be benefited by becoming a part of the improvement district.

(b) Exclude any lands proposed to be detached from an improvement district which the commission finds will be benefited by remaining a part of the improvement district.

(Added by renumbering Section 57053 by Stats. 2000, Ch. 761, Sec. 226. Effective January 1, 2001.)

56886.5.

(a) If a proposal includes the formation of a district or the incorporation of a city, the commission shall determine whether existing agencies can feasibly provide the needed service or services in a more efficient and accountable manner. If a new single-purpose local agency is deemed necessary, the commission shall consider reorganization with other single-purpose local agencies that provide related services.

(b) If a proposal includes the consolidation of two or more special districts not formed pursuant to the same principal act, the commission shall determine whether any service provided at that time could be discontinued due to a lack of authority under the principal act of the successor. If a new single-purpose local agency is deemed necessary to provide the needed service or services, the commission shall consider the formation of a new district that is authorized to provide the service or services.

(Amended (as amended by Stats. 2004, Ch. 471, Sec. 4) by Stats. 2007, Ch. 98, Sec. 7. Effective January 1, 2008.)

56886.6.

The commission shall not impose a condition for the provision of services by the annexing city to an area which has not been placed within that city's adopted sphere of influence, as defined in Section 56076, unless that condition would mitigate effects which are a direct result of the annexation.

In the case of any annexation proposal for which a certificate of completion was not recorded prior to January 1, 1985, a condition imposed thereon which does not comply with the requirements of this section is null and void and shall not affect the validity of or terminate the annexation proceedings.

(Added by renumbering Section 56376 by Stats. 2011, Ch. 300, Sec. 66. (AB 1430) Effective January 1, 2012.)

56886.7.

(a) The commission shall not impose any condition on an annexing local agency with respect to the standards or frequency of maintenance of any existing street or road within the annexed territory.

(b) The commission shall not impose a condition which requires a local agency to improve an existing public facility which is not owned by the agency.

(c) This section shall not be construed as authorizing a commission to impose any conditions which it is not otherwise authorized to impose.

(Added by renumbering Section 56376.5 by Stats. 2011, Ch. 300, Sec. 67. (AB 1430) Effective January 1, 2012.)

56887.

Any change of organization or reorganization may be conditionally approved by a local agency formation commission subject to the certification by the California Coastal Commission of an amendment to the local coastal program of a city or a county.

(Added by Stats. 2000, Ch. 761, Sec. 211. Effective January 1, 2001.)

56887.5.

If any change of organization or reorganization pertains to city or district territory which is located, in whole or in part, within the boundaries of any city or county, any terms and conditions authorized by Section 56886 may be made applicable to that city or county. However, no indebtedness or liability which is subject to the requirement of an election, under the provisions of Section 18 of Article XVI of the California Constitution, shall be incurred or assumed by any city or county, except as provided in Section 18 of Article XVI of the California Constitution.

(Added by Stats. 2000, Ch. 761, Sec. 211. Effective January 1, 2001.)

56889.

If any commission order approving or conditionally approving a change of organization or reorganization would result in the annexation to a city of land that is subject to a contract executed pursuant to the Williamson Act (Chapter 7 (commencing with Section 51200) of Division 1), for which the commission has determined pursuant to Section 56754 that the city shall succeed to the contract, the commission shall impose a condition that requires the city to adopt the rules and procedures required by the Williamson Act, including but not limited to the rules and procedures required by Sections 51231, 51237, and 51237.5.

(Added by Stats. 2000, Ch. 761, Sec. 211. Effective January 1, 2001.)

56890.

Any of the terms and conditions authorized by Section 56886 may be made applicable to all or any part of any city or district or any improvement district within that local agency or any territory annexed to, or detached from, any city or district or improvement district within that local agency.

(Added by Stats. 2000, Ch. 761, Sec. 211. Effective January 1, 2001.)

Source: https://leginfo.legislature.ca.gov

APPENDIX C: LAFCO LEGAL UNIFICATION OPTIONS

A common question regarding legal unification is "What is LAFCO's role?" The general rule of thumb is LAFCO approval is required for formal cooperation, such as:

- City or district incorporation or disincorporation
- Amendments to Spheres of Influence or Service Boundaries
- Annexation or detachment of areas
- Consolidation of districts
- Merger of cities
- Reorganizations: multiple changes of boundary or organization
- Change in authorized service (i.e., Community Service District adding a service)
- New or extended service outside the boundary of an agency

District Formation

(CGC Section 56039)

A new special district is formed after an extensive legal process and study requiring LAFCO approval. Fire districts are formed under and governed by the Fire Protection District Law (Health & Safety Code §13800, et seq.). The full range of roles and responsibilities are provided within the Act. LAFCO enabling legislation and local policies discourage the formation of new single-purpose special districts.

Merger

(CGC Section 56056)

A merger happens when a special district loses its autonomy and a city takes over its service operations. This term does not apply when there is no city involved in the joining of fire districts.

Consolidation

(CGC Section 56030)

A consolidation occurs when two or more special districts legally combine under the same enabling act. All aspects of the two districts are combined including the board of directors, district territory, services, facilities, personnel, assets and liabilities. Both A/LSFPD and CFPD have experienced the consolidation process.

Reorganization

(CGC Section 56073)

A reorganization takes place when one or more actions occur in a single proposal. For example, a community service district with fire service function transfers that service to a fire district and the service territory is annexed into the fire district. Another example discussed in the section "District Formation" is a reorganization which would occur if one fire district annexed another district to achieve a consolidation without forming a separate new district. All employees would be covered by the pension contract of the annexing district. The name of the district could change to reflect the combined agency. This action could be one of the terms and conditions of approval adopted by LAFCO.

Annexation

(CGC Section 56017)

An annexation occurs when a city or district attaches additional territory to its boundary. Annexation to one or the other fire district is not the subject of this study.

APPENDIX D: LAFCO JPA REQUIREMENTS

GOVERNMENT CODE - GOV

TITLE 5. LOCAL AGENCIES [50001 - 57550]

(Title 5 added by Stats. 1949, Ch. 81.)

DIVISION 3. CORTESE-KNOX-HERTZBERG LOCAL GOVERNMENT REORGANIZATION ACT OF 2000 [56000 - 57550]

(Heading of Division 3 amended by Stats. 2001, Ch. 388, Sec. 1.)

PART 1. GENERAL [56000 - 56160]

(Part 1 added by Stats. 1985, Ch. 541, Sec. 3.)

CHAPTER 3. Introductory and General Provisions [56100 - 56134]

(Chapter 3 added by Stats. 1985, Ch. 541, Sec. 3.)

56134.

(a) (1) For the purposes of this section, "fire protection contract" means a contract or agreement for the exercise of new or extended fire protection services outside a public agency's jurisdictional boundaries, as authorized by Chapter 4 (commencing with Section 55600) of Part 2 of Division 2 of Title 5 of this code or by Article 4 (commencing with Section 4141) of Chapter 1 of Part 2 of Division 4 of the Public Resources Code, except those contracts entered into pursuant to Sections 4143 and 4144 of the Public Resources Code, that does either of the following:

(A) Transfers responsibility for providing services in more than 25 percent of the area within the jurisdictional boundaries of any public agency affected by the contract or agreement.

(B) Changes the employment status of more than 25 percent of the employees of any public agency affected by the contract or agreement.

(2) A contract or agreement for the exercise of new or extended fire protection services outside a public agency's jurisdictional boundaries, as authorized by Chapter 4 (commencing with Section 55600) of Part 2 of Division 2 of Title 5 of this code or Article 4 (commencing with Section 4141) of Chapter 1 of Part 2 of Division 4 of the Public Resources Code, except those contracts entered into pursuant to Sections 4143 and 4144 of the Public Resources Code, that, in combination with other contracts or agreements, would produce the results described in subparagraph (A) or (B) of paragraph (1) shall be deemed a fire protection contract for the purposes of this section.

(3) For the purposes of this section, "jurisdictional boundaries" shall include the territory or lands protected pursuant to a fire protection contract entered into on or before December 31, 2015. An extension of a fire protection contract entered into on or before December 31, 2015, that would produce the results described in subparagraph (A) or (B) of paragraph (1) shall be deemed a fire protection contract for the purposes of this section.

(b) Notwithstanding Section 56133, a public agency may provide new or extended services pursuant to a fire protection contract only if it first requests and receives written approval from the commission in the affected county pursuant to the requirements of this section.

(c) A request by a public agency for commission approval of new or extended services provided pursuant to a fire protection contract shall be made by the adoption of a resolution of application as follows:

> (1) In the case of a public agency that is not a state agency, the application shall be initiated by the adoption of a resolution of application by the legislative body of the public agency proposing to provide new or extended services outside the public agency's current jurisdictional boundaries.
>
> (2) In the case of a public agency that is a state agency, the application shall be initiated by the director of the state agency proposing to provide new or extended services outside the agency's current jurisdictional boundaries and be approved by the Director of Finance.
>
> (3) In the case of a public agency that is a local agency currently under contract with a state agency for the provision of fire protection services and proposing to provide new or extended services by the expansion of the existing contract or agreement, the application shall be initiated by the public agency that is a local agency and be approved by the Director of Finance.

(d) The legislative body of a public agency or the director of a state agency shall not submit a resolution of application pursuant to this section unless both of the following occur:

> (1) The public agency does either of the following:
>
> > (A) Obtains and submits with the resolution a written agreement validated and executed by each affected public agency and recognized employee organization that represents firefighters of the existing and proposed service providers consenting to the proposed fire protection contract.
> >
> > (B) Provides, at least 30 days prior to the hearing held pursuant to paragraph (2), written notice to each affected public agency and recognized employee organization that represents firefighters of the existing and proposed service providers of the proposed fire protection contract and submits a copy of each written notice with the resolution of application. The notice shall, at minimum, include a full copy of the proposed contract.
>
> (2) The public agency conducts an open and public hearing on the resolution, conducted pursuant to the Ralph M. Brown Act (Chapter 9 (commencing with Section 54950) of Part 1 of Division 2 of Title 5) or the Bagley-Keene Open Meeting Act (Article 9 (commencing with Section 11120) of Chapter 1 of Part 1 of Division 3 of Title 2), as applicable.

(e) A resolution of application submitted pursuant to this section shall be submitted with a plan which shall include all of the following information:

> (1) The total estimated cost to provide the new or extended fire protection services in the affected territory.
>
> (2) The estimated cost of the new or extended fire protection services to customers in the affected territory.

(3) An identification of existing service providers, if any, of the new or extended services proposed to be provided and the potential fiscal impact to the customers of those existing providers.

(4) A plan for financing the exercise of the new or extended fire protection services in the affected territory.

(5) Alternatives for the exercise of the new or extended fire protection services in the affected territory.

(6) An enumeration and description of the new or extended fire protection services proposed to be extended to the affected territory.

(7) The level and range of new or extended fire protection services.

(8) An indication of when the new or extended fire protection services can feasibly be extended to the affected territory.

(9) An indication of any improvements or upgrades to structures, roads, sewer or water facilities, or other conditions the public agency would impose or require within the affected territory if the fire protection contract is completed.

(10) A determination, supported by documentation, that the proposed fire protection contract meets the criteria established pursuant to subparagraph (A) or (B) of paragraph (1) or paragraph (2), as applicable, of subdivision (a).

(f) The applicant shall cause to be prepared by contract an independent fiscal analysis to be submitted with the application pursuant to this section. The analysis shall review and document all of the following:

(1) A thorough review of the plan for services submitted by the public agency pursuant to subdivision (e).

(2) How the costs of the existing service provider compare to the costs of services provided in service areas with similar populations and of similar geographic size that provide a similar level and range of services and make a reasonable determination of the costs expected to be borne by the public agency providing new or extended fire protection services.

(3) Any other information and analysis needed to support the findings required by subdivision (j).

(g) The clerk of the legislative body of a public agency or the director of a state agency adopting a resolution of application pursuant to this section shall file a certified copy of the resolution with the executive officer.

(h) (1) The executive officer, within 30 days of receipt of a public agency's request for approval of a fire protection contract, shall determine whether the request is complete and acceptable for filing or whether the request is incomplete. If a request does not comply with the requirements of subdivision (d), the executive officer shall determine that the request is incomplete. If a request is determined incomplete, the executive officer shall immediately transmit that determination to the requester, specifying those parts of the request that are incomplete and the manner in which they can be made complete. When the request is deemed complete, the executive officer shall place the request on the agenda of the next commission meeting for which adequate notice can be given but not more than 90 days from the date that the request is deemed complete.

(2) The commission shall approve, disapprove, or approve with conditions the contract for new or extended services following the hearing at the commission meeting, as provided in paragraph (1). If the contract is disapproved or approved with conditions, the applicant may request reconsideration, citing the reasons for reconsideration.

(i) (1) The commission shall not approve an application for approval of a fire protection contract unless the commission determines that the public agency will have sufficient revenues to carry out the exercise of the new or extended fire protection services outside its jurisdictional boundaries, except as specified in paragraph (2).

(2) The commission may approve an application for approval of a fire protection contract where the commission has determined that the public agency will not have sufficient revenue to provide the proposed new or different functions or class of services, if the commission conditions its approval on the concurrent approval of sufficient revenue sources pursuant to Section 56886. In approving a proposal, the commission shall provide that, if the revenue sources pursuant to Section 56886 are not approved, the authority of the public agency to provide new or extended fire protection services shall not be exercised.

(j) The commission shall not approve an application for approval of a fire protection contract unless the commission determines, based on the entire record, all of the following:

(1) The proposed exercise of new or extended fire protection services outside a public agency's jurisdictional boundaries is consistent with the intent of this division, including, but not limited to, the policies of Sections 56001 and 56300.

(2) The commission has reviewed the fiscal analysis prepared pursuant to subdivision (f).

(3) The commission has reviewed any testimony presented at the public hearing.

(4) The proposed affected territory is expected to receive revenues sufficient to provide public services and facilities and a reasonable reserve during the three fiscal years following the effective date of the contract or agreement between the public agencies to provide the new or extended fire protection services.

(k) At least 21 days prior to the date of the hearing, the executive officer shall give mailed notice of that hearing to each affected local agency or affected county, and to any interested party who has filed a written request for notice with the executive officer. In addition, at least 21 days prior to the date of that hearing, the executive officer shall cause notice of the hearing to be published in accordance with Section 56153 in a newspaper of general circulation that is circulated within the territory affected by the proposal proposed to be adopted and shall post the notice of the hearing on the commission's Internet Web site.

(l) The commission may continue from time to time any hearing called pursuant to this section. The commission shall hear and consider oral or written testimony presented by any affected local agency, affected county, or any interested person who appears at any hearing called and held pursuant to this section.

(m) This section shall not be construed to abrogate a public agency's obligations under the Meyers-Milias-Brown Act (Chapter 10 (commencing with Section 3500) of Division 4 of Title 1).

(Amended by Stats. 2016, Ch. 165, Sec. 1. (AB 2910) Effective January 1, 2017.)

Source: https://leginfo.legislature.ca.gov

APPENDIX E: BICKMORE REPORT (ATTACHED)

Bickmore

March 23, 2018

Ms. Dawn Mittleman
Senior Associate & Project Manager
Emergency Services Consulting International
25030 SW Parkway Ave
Suite 330
Wilsonville, OR 97070

Re: Bickmore's report on the 2018 Mid-County Fire Agency Consolidation Feasibility Study

Dear Ms. Mittleman

Attached please find our section of the report of the 2018 Mid-County Fire Agency Consolidation Feasibility Study.

This is certainly a complex topic and a challenging analysis. We appreciate being a part of this project team. Once you have had an opportunity to review our report, we would be happy to review this with you and the others ESCI members involved in the project.

Sincerely,

Catherine L. MacLeod

Catherine L. MacLeod, FSA, FCA, EA, MAAA
Director, Postemployment Benefit Actuarial Services

Enclosure

Bickmore

Mid-County Fire Agency

2018
Consolidation Feasibility Study

Submitted March 2018

Objective of Bickmore's Analysis

Summarize the current pension and other post-employment benefit liabilities of the districts, the projected liabilities of a consolidated district, and provide some analysis of whether the liabilities of a consolidated district could be reduced or better managed as a consolidated new district, or as a reorganization in which one of the existing districts becomes the successor agency (via a dissolution of one district, annexation to the other district, and reorganization of the governing board).

Bickmore's section of the Feasibility analysis is organized into 4 primary sections:

1. **Overview of current postemployment benefits**.
   These benefits include pension (retirement income), other postemployment benefits ("OPEB", e.g., retiree healthcare) and other sources of income that can be applied toward one or both (i.e., accumulated unused sick leave benefits).

2. **Unfunded liabilities and projected cash flows for current benefit programs**
   These are provided separately for pension, OPEB and sick leave benefits and are shown in dollar values as well as a percentage of payroll. The primary information in this section is taken from the most recently available valuation reports provided to the Districts regarding their pension and OPEB benefits.

3. **General Findings and Discussion**
   Identify key differences, issues and or limitations in various programs as currently structured. Some changes are currently in process, making comparison more challenging.

4. **Ideas and Recommendations**
   Possible general program financing and/or program changes are explored at a high level.

Section 1: Overview of Current Postemployment Benefits

These benefits include pension (retirement income), other postemployment benefits ("OPEB", e.g., retiree healthcare) and other sources of income that can be applied toward one or both (i.e., accumulated unused sick leave benefits).

These benefits are summarized on the following pages of this section.

Summary of Current Pension Benefit (CalPERS Retirement Plan) Provisions

The following chart compares the primary benefit provisions under the CalPERS retirement plans in which current members participate. Aptos/La Selva members have only one Classic plan formula for miscellaneous and safety members, where Central members have two Classic plans. Note the formula difference for Central Classic Tier 1 Safety members hired prior to January 1, 2011 as compared to Aptos/La Selva Safety members.

Agency	Central						Aptos/La Selva			
Tier (Classic/PEPRA)	Classic Tier 1	Classic Tier 2	PEPRA	Classic Tier 1	Classic Tier 2	PEPRA	Classic	PEPRA	Classic	PEPRA
Hire Date	< 1/1/2011	> 12/31/2010	Any[1]	< 1/1/2011	> 12/31/2010	Any[1]	Any	Any[1]	Any	Any[1]
Benefit Provision	Active Misc			Active Fire			Active Misc		Active Fire	
Benefit Formula	**2.5% @ 55**	**2.5% @ 55**	**2% @ 62**	**3% @ 50**	**3% @ 55**	**2.7% @ 57**	**3% @ 60**	**2% @ 62**	**3% @ 55**	**2.7% @ 57**
Social Security Coverage	No	No	No	No	No	No	No	No	No	No
Full/Modified	Full	Full	Full	Full	Full	Full	Full	Full	Full	Full
Employee Contribution Rate	8.00%	8.00%	6.25%	9.00%	9.00%	11.50%	8.00%	6.25%	9.00%	11.50%
Final Average Compensation Period	**One Year**	**Three Year**	**Three Year**	**One Year**	**Three Year**	**Three Year**	**One Year**	**Three Year**	**One Year**	**Three Year**
Sick Leave Credit	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Non-Industrial Disability	Standard	Standard	Standard	**Standard**	**Standard**	**Standard**	Standard	Standard	**Improved**	**Improved**
Industrial Disability	No	No	No	Yes	Yes	Yes	No	No	Yes	Yes
Pre-Retirement Death Benefits										
Optional Settlement 2W	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1959 Survivor Benefit Level	**Indexed**	**Indexed**	**Indexed**	**Indexed**	**Indexed**	**Indexed**	**No**	**No**	**level 4**	**level 4**
Special	No	No	No	Yes	Yes	Yes	No	No	Yes	Yes
Alternate (firefighters)	No	No	No	No	No	No	No	No	No	No
Post-Retirement Death Benefits										
Lump Sum	**$5,000**	**$5,000**	**$5,000**	**$5,000**	**$5,000**	**$5,000**	**$500**	**$500**	**$500**	**$500**
Survivor Allowance (PRSA)	No	No	No	No	No	No	No	No	No	No
COLA	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%

[1] *Typically, though not always, employees hired on or after January 1, 2013.*

Summary of Current OPEB Provisions: Retiree Medical Benefits

<table>
<tr><th></th><th colspan="3">Central Fire Medical Benefits</th><th>Aptos/La Selva Fire Medical Benefits</th></tr>
<tr><th>Hire Date</th><th>Management</th><th>Administrative</th><th>Local 3605</th><th>All Units</th></tr>
<tr><td>Before April 1, 2005

(no change for Central Fire Local 3605 or Mgmt until January 2018)</td><td rowspan="3">**Tier 1**
100% of premium for retiree and covered dependents, up to the applicable Active Cap*
Eligibility:
CalPERS retirement
5 years District service

2018 Active Caps
Single Party: $870.99
Two Party: $1,742.00
Family: $2,264.59</td><td rowspan="2">**Tier 1**
100% of premium retiree and covered dependents, up to the applicable Active Cap*
Eligibility:
CalPERS retirement
5 years District service

2018 Active Caps
Single Party: $870.99
Two Party: $1,742.00
Family: $2,264.59</td><td rowspan="3">**Tier 1**
100% of premium for retiree and covered dependents, up to the applicable Active Cap*
Eligibility:
CalPERS retirement
5 years District service

2018 Active Caps
Single Party: $870.99
Two Party: $1,742.00
Family: $2,264.59</td><td>**Tier 1**
Less than 15 years of District service:
– PEMHCA minimum ($133 in 2018)
15 or more years of District service:
– PEMHCA minimum, *plus*
– $350 per month of additional District contributions until age 65
Eligibility:
CalPERS retirement</td></tr>
<tr><td>After March 31, 2005;
Before July 1, 2014

(change affects Aptos/La Selva only)</td><td rowspan="3">**Tier 2**
PEMHCA minimum only
$133 per month in 2018
Eligibility:
CalPERS retirement</td></tr>
<tr><td>After June 30, 2014;
Before January 1, 2018

(change affects Central Fire Admin staff only)</td><td>**Tier 2**
Vested percentage** of the single party Active Cap*
Eligibility:
CalPERS retirement
10 years CalPERS service

2018 Single Active Cap: $870.99</td></tr>
<tr><td>After December 31, 2017</td><td>**Tier 2**
85% of the retiree only premium
Eligibility:
CalPERS retirement
20 years District service
Else: PEMHCA Minimum ($133)</td><td>**Tier 3**
85% of the retiree only premium
Eligibility:
CalPERS retirement
20 years District service
Else: PEMHCA Minimum ($133)</td><td>**Tier 2 change not yet adopted**
85% of the retiree only premium
Eligibility:
CalPERS retirement
20 years District service
Else: PEMHCA Minimum ($133)</td></tr>
</table>

** Practice is to set the active cap to 85% of 3rd highest Bay Area premium. If this does not cover the full premium for 1/2 of the Bay area plans, the District will meet and confer.*

*** 50% after 10 years of District service, increasing by 5% per year to 100% for 20 or more District years of service.*

As required by PEMHCA, both agencies are required to contribute at least the PEMHCA minimum to all employees who retire from the respective agency and elect CalPERS medical coverage. The minimum is $133 per month in 2018, increasing by medical CPI each year.

Summary of Current OPEB Provisions: Retiree Dental, Life Insurance and Vision Coverage
(Continued)

<table>
<tr><th></th><th colspan="3">Central Fire Dental & Life Insurance* Benefits</th><th>Aptos/La Selva Fire Dental & Life Ins Benefits</th></tr>
<tr><th>Hire Date</th><th>Management</th><th>Local 3605</th><th>Administrative</th><th>All Units</th></tr>
<tr><td>Before January 1, 2018</td><td colspan="3">Tier 1
Dental: District pays fixed percentage of premium for retiree and eligible enrolled dependents
Life Ins: District pays fixed percentage of retiree only life insurance premium (no AD&D)

District percentage is 25% with 10 years of public agency service, increasing by 2.5% for each year of service up to a maximum of 100% for 40 or more years of public agency service.

Minimum Eligibility for dental & life ins benefits:
CalPERS retirement and at least 10 years of District service</td><td rowspan="2">District retiree dental coverage:
No District subsidy.
Retirees may keep dental coverage but are responsible for 100% of the premium.

District retiree life insurance coverage:
Retirees may convert their District policy to an individual policy upon retirement. No District subsidy is provided for life insurance. (Note: because coverage is converted to individual on an age-based premium basis, no OPEB liability results to the District).</td></tr>
<tr><td>After December 31, 2017</td><td colspan="2">Tier 2
Dental: District pays fixed percentage of premium for retiree and eligible enrolled dependents
Life Ins: District pays fixed percentage of retiree only life insurance premium (no AD&D)

Percentage is 50% with 20 years of public agency service, increasing by 2.5% for each year of service up to a maximum of 100% after 40 years.
Minimum Eligibility:
CalPERS retirement & at least 20 years District service</td><td>Tier 2
No District subsidy.

Retirees may keep dental and life insurance coverage* but are responsible for 100% of the premium.</td></tr>
<tr><td>Face Value of Life Insurance</td><td>Under age 65: $100,000
Ages 65-69: $65,000
Ages 70+: $50,000

Premium per $1,000 in coverage for 2018: $0.17</td><td>Under age 65: $100,000
Ages 65-69: $65,000
Ages 70+: $50,000

Premium per $1,000 in coverage for 2018: $0.17</td><td>Under age 65: $100,000
Ages 65-69: $65,000
Ages 70+: $50,000

Premium per $1,000 in coverage for 2018: $0.17</td><td>N/A</td></tr>
</table>

** Because premiums are not based on age, life insurance coverage made available to Central Fire retirees will also include an implicit subsidy OPEB liability, separate and in addition to any liability for the District portion of the premium.*

Vision benefits: Both agencies allow retirees to participate in the vision plans made available to active employees. Neither agency provides any subsidy toward vision premiums and, accordingly, there is no OPEB liability assumed to exist relating to vision coverage.

Summary of Postemployment Benefits

(Continued)

District Retiree Health Savings Plan contributions: For employees hired after March 31, 2005, Aptos/La Selva contributes $35 per month into individual accounts in a Retiree Health Savings Plan.

Sick Leave Conversion Benefits: In addition to retiree pension and defined benefit OPEB benefits (medical, dental, and life insurance benefits), and/or District RHSA contributions, each agency offers employees the option to convert accumulated unused sick leave into additional years of pension service credit and/or into an account balance held on behalf of the retiree which may be applied toward the retiree's portion of any healthcare premiums.

> *Pension service credit*: Unused sick leave or vacation hours converted to additional pension service credit will ultimately increase the pension liability. GASB accounting standards do not require that accumulated unused sick leave be accounted for under GASB 68 (pension accounting) until such conversion occurs. Thus, at the time the additional service is purchased at the employee's separation from service and/or retirement, it creates an immediate increase in the unfunded actuarial accrued liability (UAAL).

> *Retiree health savings account (RHSA) credit:* Unused sick leave hours converted to a lump sum value may not have any true cash surrender value (i.e., the account may not be liquated for other purposes); nonetheless, these accounts represent dollars generally expected to be drawn down by retirees and thus represent additional benefits provided. RHSAs are not considered "defined benefit" OPEB and thus are not considered in an actuary's valuation prepared under GASB (45 or 75) for reporting in financial statements. Instead, conversion of unused sick leave into an RHSA should be accounted for under GASB Statement 16, Accounting for Compensated Absences. Any such anticipated payouts at termination or retirement should be expensed annually in such fashion as to fully accrue the expected disbursement by the employee's termination or retirement date.

Aptos/La Selva sick leave conversion benefits

The following summarizes Local 3535 benefits; variations for management/administrative staff are not described here.

(a) *While actively employed*, 50% of any hours accumulated in excess of 2400 are cashed out at the current rate of pay. The remaining 50% of excess hours over 2400 are banked *each year* for conversion to additional pension service credit.

(b) *At termination or retirement*,
   a. 50% of unused hours (up to ½ of 1200 plus ½ of current year accumulated unused hours) are converted at the final rate of pay to the retiree health savings account.
   b. 50% of unused hours (up to ½ of 1200 plus ½ of current year accumulated unused hours) are added to the all prior banked hours and converted pension service credit.

Information provided by Aptos/La Selva indicates recent retiree health savings account balances vary widely at the time of retirement, ranging from $25,000 to $75,000 or more. Similarly, the average additional years of pension service credit provided by banked hours fell between 1 and 2½ years.

Central Fire sick leave conversion benefits: Sick leave accrues (for fire safety employees) at the rate of 24 hours per month and employees may accrue an unlimited amount of sick leave hours.

(a) *While actively employed (and upon completion of the Firefighter probationary period)*,

   a. If the employee's accumulated sick leave balance is less than 2912 hours, the employee has the *option* to cash out 3 hours of unused sick leave for 1 hour's worth of pay, up to a maximum of 48 hours of pay. This option is not available to employees who use more than 72 hours of sick leave per year.
   b. If the employee's accumulated sick leave balance is 2912 hours or more, the employee has the *option* to receive cash payment for 25% of the current year's sick leave accrual, based on the pay rate in effect during the last pay period of the calendar year.

(b) *At termination or retirement*, employees may choose the following options:

   a. Convert 100% of unused hours to pension service credit.
   b. Receive cash payment for 25% of unused hours at pay at time of separation. Cash reimbursement is capped at 728 hours for 56-hour average work week employees and at 520 hours for 40-hour average work week employees. All remaining unused sick leave hours are converted to pension service credit.

Generally speaking, for non-safety employees, the provisions described above apply, though with the monthly accrual and maximum hours may be less.

Section 2: Unfunded Liabilities and Projected Cash Flows for Current Benefit Programs

In this section, we summarize the unfunded liabilities and projected annual contributions requirements for each District. This information is provided separately for pension, OPEB and, to a limited extent, for sick leave benefits which may be available for conversion to pension or OPEB at the time of retirement. Where appropriate, information is shown in dollar values as well as a percentage of payroll.

Information in this section begins with results excerpted from the most recently available valuation reports provided to the Districts regarding their pension and OPEB benefits. Bickmore projected future annual costs based on information and assumptions stated in each of those reports, and by applying general actuarial projection methodology.

This information is summarized on the following pages of this section.

Pension

Background terminology: The (discounted) expected cost of all future benefits is referred to as the **Present Value of Projected Benefits** (PVPB). In theory, if the entire PVPB were set aside in a trust today *and* if future earnings each year exactly equaled the discount rate *and* all other assumptions regarding the cost of benefits were met, then the trust would have sufficient assets to cover all future benefits. However, pension plans are rarely able to be funded immediately and fully. Instead, an annual cost is developed for each individual member. The accumulated total of annual costs for all *prior* years of service worked is referred to as the **Actuarial Accrued Liability** (AAL). The current year service cost is referred to as the **Normal Cost.** These pieces fit together as follows:

Actuarial Accrued Liability (costs allocated to prior service years)	Normal Cost (curr yr cost)	PV of Future Normal Costs (costs assigned to future service)
Present Value of Projected Benefits (PV of projected Total Plan Liability for all current plan members)		

Ideally, the trust holds assets greater than or equal to the Actuarial Accrued Liability. When this happens, the employer's annual cost to fund the plan is just the normal cost. When assets are less than the AAL, the shortfall is referred to as **the Unfunded Actuarial Accrued Liability** (UAAL). In this case, the employer's required annual contributions include both the normal cost plus an amortization payment designed to systematically pay down the UAAL.

Current unfunded pension liabilities: The chart below summarizes the UAAL for each of the Central and Aptos/La Selva retirement plans as of the most recent actuarial valuation date, June 30, 2016.

Pension Benefits: Unfunded Actuarial Accrued Liability as of June 30, 2016						
Plan		Central UAAL	Unfunded %	Aptos/La Selva UAAL	Unfunded %	Combined
Miscellaneous	Tier 1	$ 873,229	27%	$ 502,811	23%	$ 1,376,040
Miscellaneous	Tier 2	11,214	7%	-	-	11,214
Miscellaneous	PEPRA	3,874	9%	4,477	12%	8,351
Safety	Tier 1	23,253,557	30%	16,478,284	27%	39,731,841
Safety	Tier 2	21,131	6%	-	-	21,131
Safety	PEPRA	1,827	7%	16,493	9%	18,320
Total All		**$ 24,164,832**	**30%**	**$ 17,002,065**	**27%**	**$ 41,166,897**

The unfunded liabilities for the Tier 2 and PEPRA plans are not large in dollars. While the unfunded percentage is relatively low, this should not be dismissed as inconsequential. These plans have only been in existence for a few years and should hopefully maintain an unfunded amount of +/- 5%. Nonetheless, this is not the area of greatest concern. PEPRA employees are, on average, between 25 and 30 years from normal retirement.

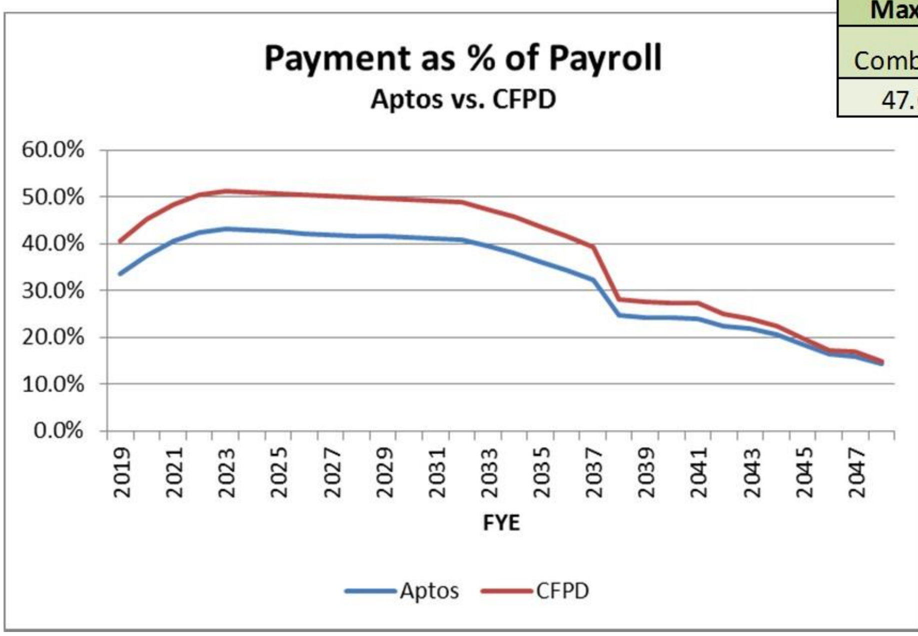
The unfunded portion of past service liabilities (UAAL) for all Tier 1 plans range from 23% to 30% unfunded. These plans are essentially closed to new employees and most of these active employees are within 10 years of their normal retirement age. The retirees and vested terminated employees outnumber the active employees, and the majority of the plan liability relates to these retirees. The result is a diminishing payroll base over which to overlay the required contributions. Combined with the finite periods for paying down the UAAL, this creates a bottleneck of costs over roughly the next 20 years.

Projected future pension contribution levels: In developing the annual contribution levels (now formally referred to as Actuarially Determined Contributions, or ADC), CalPERS converts the normal cost to a percent of payroll. It also determines the various components of the UAAL to amortization payments, where the period varies based on the source (e.g., investment experience, assumption changes, plan changes, etc.). There are two significant elements causing faster-than-usual increases in the annual contribution levels:

- CalPERS is phasing in the decrease in the discount rate from 7.5% down to 7.0%. As the discount rate decreases, both the UAAL and normal costs increase.
- CalPERS also grades in or "ramps up" the amortization payment for each new component so the initial impact on employer contributions is less pronounced. Unfortunately the result is that contribution levels will be increasing for many more years before they begin decreasing, because of the ramping up of the amortization payments.[1]

In projecting future annual pension contributions, we combined and weighted the amounts for all Central Fire Plans and for all Aptos/La Selva plans. The charts below show the progression of these projected contributions as a percentage of payroll over time.

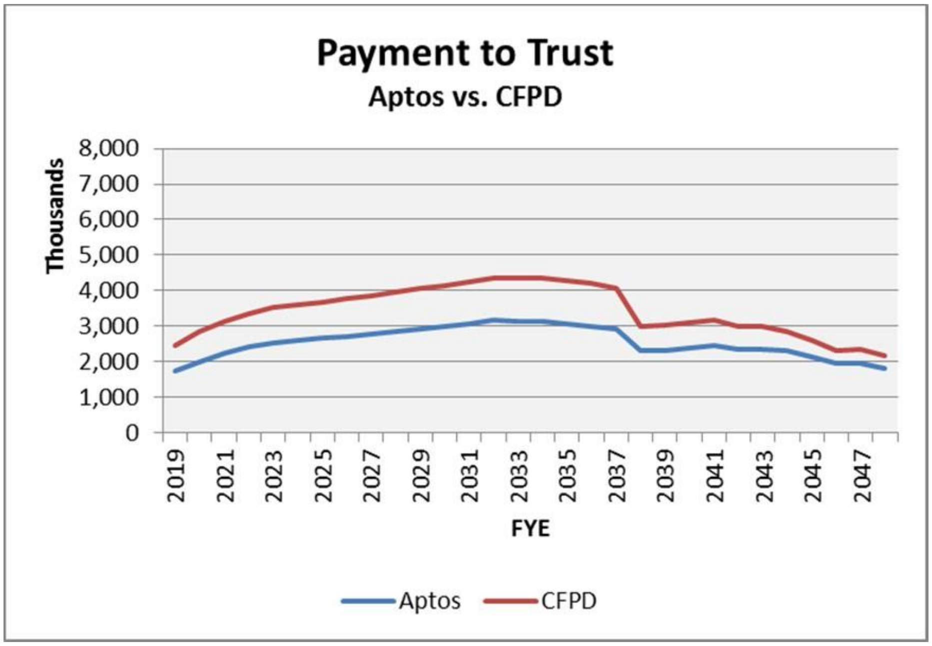
Max Payment as % of Payroll		
Combined	Aptos	CFPD
47.6%	43.3%	51.3%



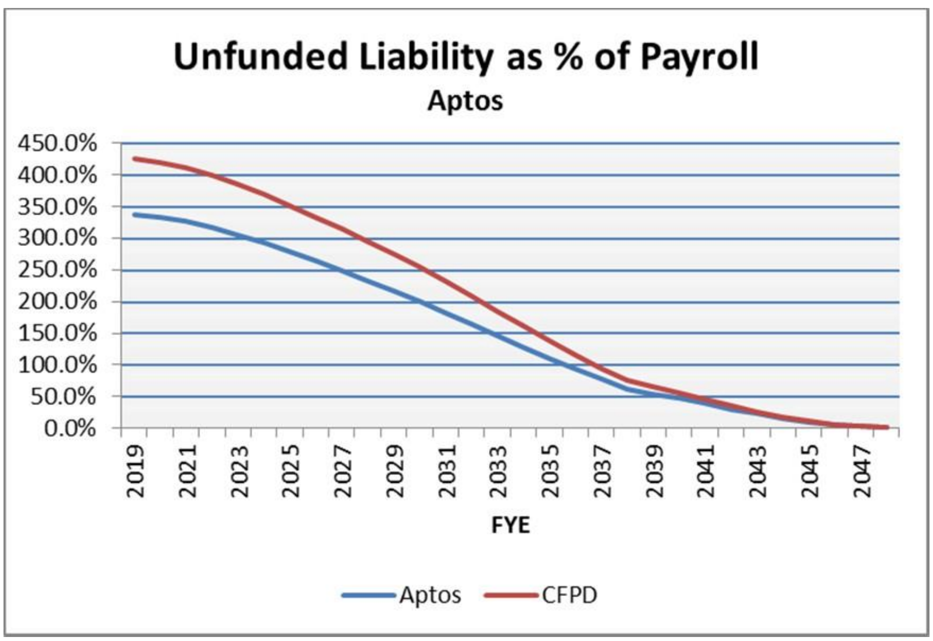
[1] The CalPERS Board very recently approved changes to some of its amortization policies, including reduced amortization periods, level dollar payments instead of level % of pay payments and elimination of most ramp up and ramp down of the payment amounts. These changes will be applied prospectively only (to future amortization bases) and potentially first impact employer contribution levels for fiscal year 2021-22. See CalPERS Employer Bulletin dated February 16, 2018 for details. Preliminary estimates are that contribution levels could be increased by as much as 2% of pay per year from this date forward. *Given the timing of this announcement, the impact of these changes has not been considered in this analysis.*

These charts illustrate the annual payments based on a projection of the current amortization methodology and projected future costs. Increases in early years reflect the 5 year gradual ramp up of amortization payments as well as the phase in of lower discount rates. The decreases reflect when separate portions of the UAAL are grading down, then eventually are fully amortized.

The chart below illustrates the projected contribution levels in dollars (thousands) for each of the Districts.



Provided all assumptions are met going forward (i.e., no future gains, losses or assumption changes), this chart illustrated the expected pay down of the UAAL for each District.



In making these projections, we made the following assumptions:

Payroll growth	3.0%
Aggregate Salary Increase	3.0%

Payroll reduction factor -5.0% (Classic plans only)

Please recognize the following limitations of these projections:

- Projections rely on information published in CalPERS funding valuation reports.
- These are not based on open group projections. A short term projection of normal cost as a % of payroll was used through the year 2024 and the last value was held constant thereafter.
- No future gains and losses are assumed to occur.
- Potential additional future decreases in the long term rate of return (discount rate) were not factored into this analysis. To the extent that CalPERS does further lower the discount rate in years where asset gains occur, this is expected to create a bias toward additional plan losses.

Cautionary note: The pension cost projections in this report are based on the expectation that all assumption will be exactly met in future years. This has clearly not been the case in the past, however. These benefit commitments are long term promises which carry significant risk and potentially increased underfunding, especially since the tax base is not guaranteed, assets returns are not guaranteed, and future assumptions regarding life expectancy, payroll increases, and other important factors impacting benefit liabilities are not guaranteed.

Other Postemployment Benefits (OPEB)

Background terminology: The same basic actuarial terminology applies for OPEB as for pensions. The (discounted) cost of all future benefits is referred to as the **Present Value of Projected Benefits** (PVPB). The accumulated total of annual costs for all *prior* years of service worked is referred to as the **Actuarial Accrued Liability** (AAL). The current year service cost is referred to as the **Normal Cost.**

However, there are a few key differences for OPEB compared to pensions:

- OPEB are typically provided only to employees who retire from the agency. Separation of service prior to retirement typically results in forfeiture of benefits other than pensions. It is our understanding that this is true for both District plans.
- There are two significant types of OPEB liability: “Explicit subsidy” liability and “Implicit subsidy” liability. These are described further below.
- Prefunding of OPEB liability is optional, not mandatory as with California public employer pensions; and
- Benefit changes are potentially possible for current retirees and current active employees, as well as for future employees. We recognize, however, that legally possible changes are not synonymous with politically or operationally desirable changes.

Explicit versus Implicit OPEB Subsidies: The true value that retirees receive by being able to continue their coverage through the District is that their healthcare *claims* are paid. Their benefit is their expected *claims* minus the portion of premiums they are required to pay; the future cost of that benefit (claims minus retiree co-pay) represents the employer’s liability. While not true for all individuals, in general it is true that:

> Medical plan premiums are higher than claims for active employees
> Medical plan premiums are lower than claims of pre-Medicare retirees

Thus retirees are benefitting on two levels: Some or all of their monthly premiums are being paid and they are being charged a lower rate for coverage than they would likely have to pay if not covered under this employer arrangement. Typically, the employer's OPEB liability is developed separately for these two benefit components.

1. The *explicit subsidy* refers to the portion of retiree premiums that the employer will pay (i.e., the total premium minus the retiree portion of the premium). The explicit subsidy represents real dollars that the District is expected to pay out the door toward the cost of retiree coverage.
2. The *implicit subsidy* refers to the price break the retiree is receiving on the premium rate itself and is calculated as (estimated) retiree *claims* minus the total premium charged for the retiree's coverage.

   The implicit subsidy is also being paid every month by the employer, but it goes out the door imbedded in active employee premiums. Behind the scenes, the insurers siphon off a portion of premiums remitted for active employee coverage to pay some of the higher claims costs for retirees not covered by their premiums.

Suppose instead that pre-Medicare retiree premiums were not being subsidized by active employee premiums. The insurers would have 3 premium levels: one set of rates for active employees/dependents, another set of rates for pre-Medicare retirees/dependents and one other set of rates for Medicare retirees/dependents. Currently, CalPERS sets the premium rates for Medicare retirees based on claims experience for these members only, so no change would be expected to these rates. However, in this hypothetical three-tier rate structure, the rates for active employees would go down and the premiums for pre-Medicare retirees would go up, probably substantially. Such a rate structure change may or may not ever occur at CalPERS. If it does not, building up trust assets to prefund this liability may be seen as unnecessary. If the rate structure were to change, however, the Districts may or may not be contractually liable for paying the higher (pre-Medicare) retiree premium rates. *The explicit subsidy liability plus the implicit subsidy liability represents the actuary's current best estimate of what the total liability would be if retiree premiums were based on retiree claims experience alone*.

For financial reporting purposes, the employer is required to report the projected long term liability for both the explicit and implicit subsidy benefits. OPEB funding can be more flexible; the employer may choose which portion of the liability, if any, to prefund. However, the level of prefunding will impact the calculation of the liability that will be reported in financial statements.

OPEB cost projection methodology: We started by preparing our own projections of these benefits, based on our understanding/interpretation of the assumptions and methodology stated in the July 2017 valuations completed by each District's actuary (Bartel & Associates and Rael & Letson). We then prepared long term projections of how the population, liabilities and annual benefit payments would change over the next 25 years. To the extent that a current employee was assumed to separate from service or retire from the District, we "replaced" them with a new active employee, assumed to be hired at the historical average age of new hires. In preparing the future year projections for Central Fire, we assumed that the Local Fire members would approve the change in benefits recently approved for Management employees.

We next compared our results for fiscal years ending June 2018 and 2019 with those presented in the 2017 OPEB valuation reports. There are many nuances to some assumptions that can have a not-insignificant impact on the long term liability. In addition, each actuary has his or her own unique model by which to convert group premium rates to an age based premium equivalent rate. Implicit subsidy OPEB liability results can be fairly different as a result. To neutralize the effect of differences between our 2017 valuation results and those of Bartel/Rael & Letson, we pro-rated our initial two years' results up or down as needed to be equal to the results from the 2017 valuation reports. We then maintained this ratio of our results to the 2017 valuation results in projections for the balance of the 25 year period.

Current unfunded OPEB liabilities: The number of active and retired employees covered by the most recent OPEB actuarial valuations are shown here. As noted above, employees who terminate or transfer from the Districts do not retain rights to future retiree healthcare or life insurance benefits.

District	**Central**	**Aptos/La Selva**
Actives	53	37
Retirees	53	26
Total	106	63

The dollar amount of OPEB liability is directly affected by the long term funding policy and expected contribution levels. For purposes of this report, we have assumed that each District's current policy of contributing 100% of each year's actuarially determined contributions will continue indefinitely into the future. The chart below summarizes the UAAL for each of the Central and Aptos/La Selva retirement plans as of the most recent actuarial valuation date, June 30, 2017.

OPEB: Unfunded Actuarial Accrued Liability as of June 30, 2017			
District	Central*	Aptos/La Selva**	Combined
Discount rate used	7.28%	6.75%	
Explicit Subsidy AAL	*$ 13,802,000*	$ 1,529,000	$ 15,331,000
Implicit Subsidy AAL	*4,170,000*	882,000	5,052,000
Total AAL	**17,972,000**	**2,411,000**	20,383,000
OPEB Trust Assets	1,356,000	705,000	2,061,000
Unfunded AAL	**$ 16,616,000**	**$ 1,706,000**	**$ 18,322,000**
Assets as % of AAL	7.5%	29.2%	10.1%
UAAL as % of payroll	231.2%	34.5%	151.0%

** The split of liability between explicit and implicit subsidy portions was estimated from the report.*

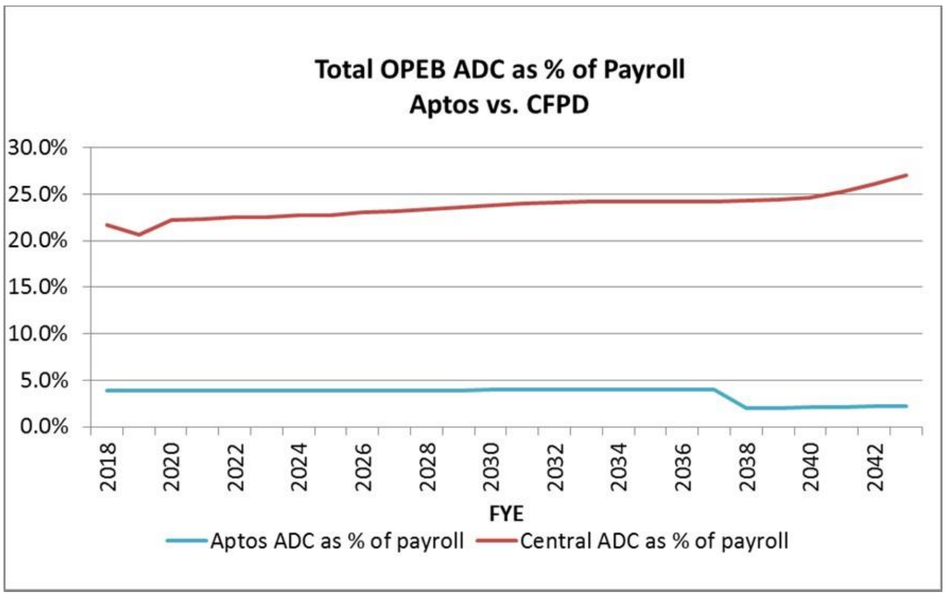
*** Excludes amounts converted to retiree health savings which may be applied toward the retirees' portion of premiums.*

For Aptos/La Selva, the current OPEB trust assets are reasonably almost half (46%) of the explicit subsidy liability only. For Central Fire, OPEB prefunding is relatively new and assets still represent a very small percentage of the District's total OPEB liability. Note that the liabilities for the two Districts were calculated using somewhat different discount rates. The 2017 valuation for Central Fire suggests that if the same 6.75% discount rate were used as was used for Aptos/La Selva, the unfunded AAL would be about $1.1 million higher (i.e., $17.7 million rather than $16.6 million). In a later section we show this comparison, including adjustment for healthcare trend assumption differences.

Projected future OPEB contribution levels: In developing the annual contribution levels (now referred to as Actuarially Determined Contributions, or ADC), we assumed each District would continue to develop the ADC based on their current OPEB funding policy. For each, the ADC is determined as the sum of:

- The amount attributed to service performed in the current fiscal year (the normal cost) and
- A payment toward amortization of the unfunded actuarial accrued liability (UAAL). The remaining amortization period for Aptos/La Selva is 20 years; Central Fire recently reset its amortization period back to 30 years.

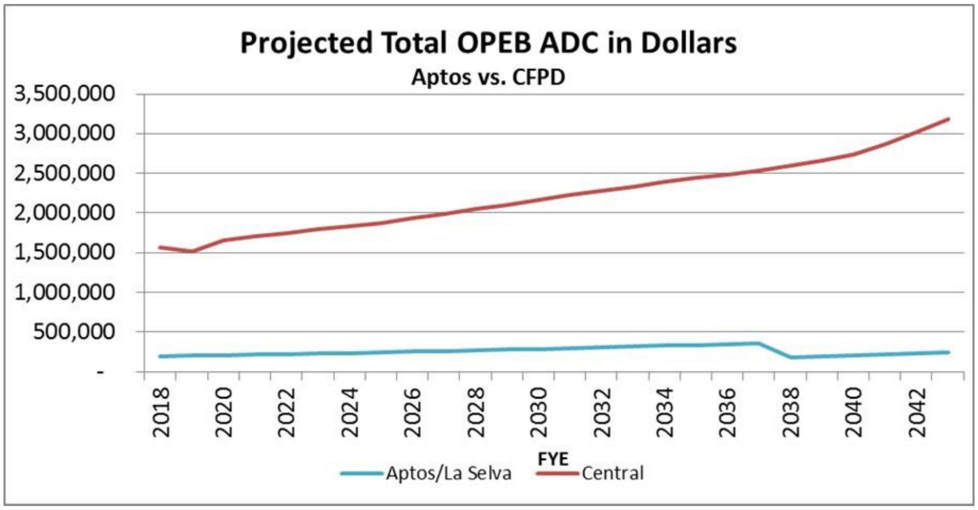
In theory, the ADC represents an annual contribution which, if contributed each year, should enable each District to keep up with current year OPEB cost accruals (the normal cost) and pay down their existing unfunded past service OPEB liability (the UAAL) over the remaining period already established by each District.



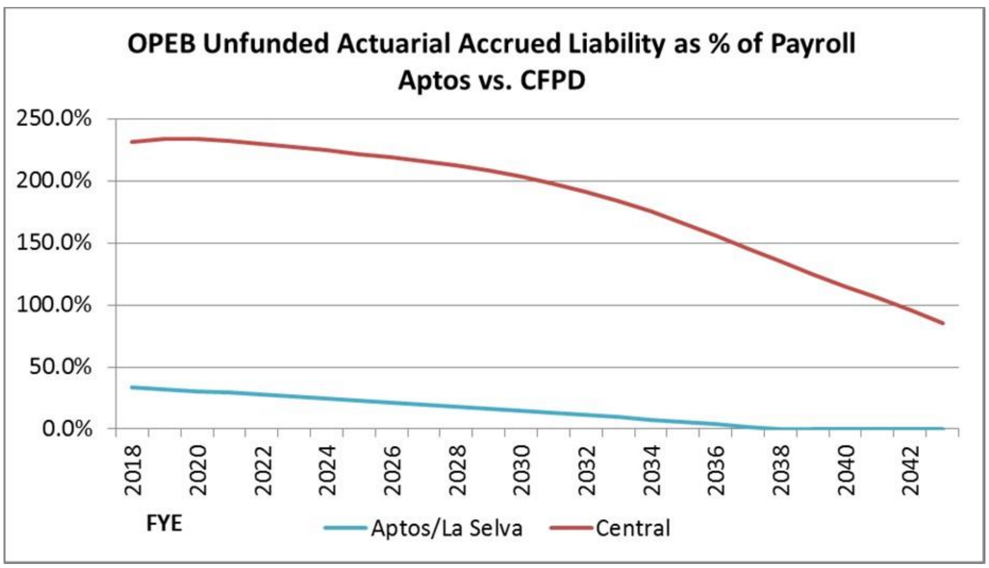
The decreases reflect when separate portions of the UAAL are grading down, then eventually are fully amortized. The remaining amortization period for Central Fire extends beyond the length of this projection, ending in 2037.

For Aptos/La Selva, the explicit and implicit subsidy portions of the annual contribution level (ADC) are about evenly split at roughly 2% of payroll each throughout this period. For Central Fire, the implicit subsidy portion ranges from 5.5% - 6.0% of payroll, with the explicit subsidy component making up the majority of the ADC.

The projected annual OPEB contribution levels, in dollars, are shown for each District below.



Provided all assumptions are met going forward (i.e., no future gains, losses or assumption changes), this chart illustrated the expected pay down of the UAAL for each District.

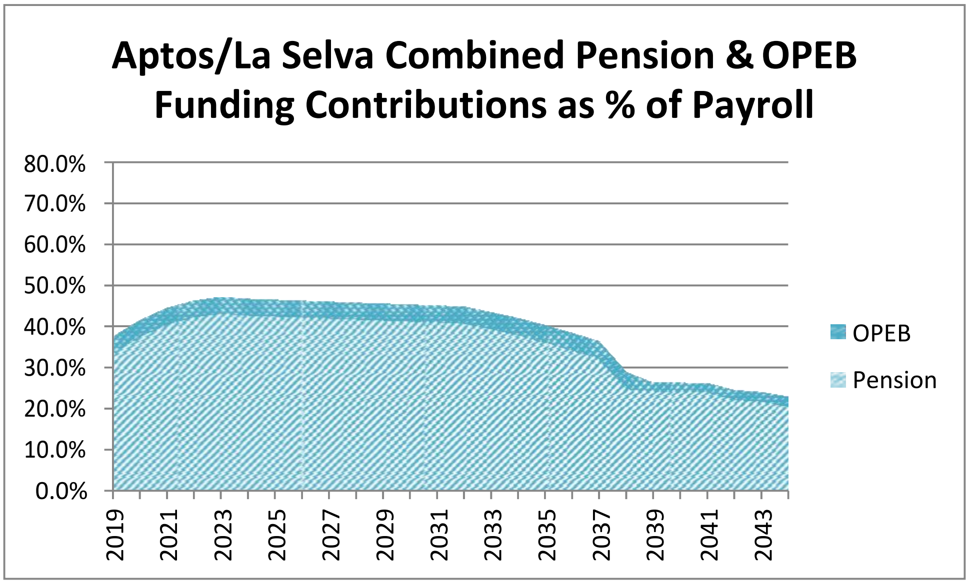


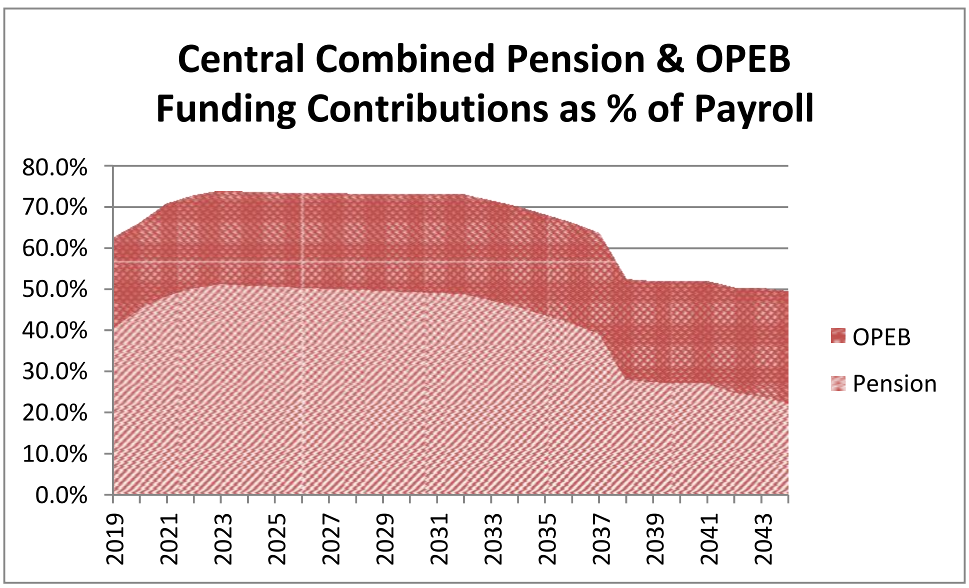
These projections are based on the premise that all current assumptions will be exactly met, so there will be no future gains or losses that will need to be addressed in future years. Please recognize the following limitations of these projections:

- Projections rely on the results of the June 2017 valuation reports. As noted above, we adjusted our results to dovetail to results provided in those reports prior to making our long-term projections.
- No future gains and losses are assumed to occur.
- Potential additional future decreases in the long term rate of return (discount rate) were not factored into this analysis. To the extent that CalPERS (CERBT) lowers the discount rate in the future, results for Central Fire, at least, are expected to increase.

Combined Pension and OPEB Cost Projections

We combined the expected future contribution levels for pension and OPEB funding for each District for the next 25 years. The charts below summarize the results.





Accumulated Unused Sick Leave Liabilities

Accumulated unused vacation time or sick leave which may be converted to **pension service credits** at retirement is not incorporated in either the pension or OPEB valuations. As noted earlier in this document, unused sick leave or vacation hours converted to additional pension service credit will ultimately increase the pension liability, though this potential impact is not required to be recognized under GASB 68 (pension accounting) until such conversion occurs. Thus, at the time the additional service is purchased at the employee's separation from service and/or retirement, it creates an immediate increase in the unfunded actuarial accrued liability (UAAL).

For employees of Aptos/La Selva, accumulated unused vacation time or sick leave which may be converted to **a Retiree Health Savings Account (RHSA)** at retirement is not incorporated in either the pension or OPEB valuations. As stated previously, RHSAs are not considered "defined benefit" OPEB and thus are not considered in an actuary's valuation prepared under GASB 45 or 75 for reporting in financial statements. Instead, conversion of unused sick leave into an RHSA should be accounted for under GASB Statement 16, Accounting for Compensated Absences. Any such anticipated payouts at termination or retirement should be expensed annually in such fashion as to fully accrue the expected disbursement by the employee's termination or retirement date. Our understanding is that Aptos/La Selva is not currently prefunding the amounts expected to be converted to an RHSA upon retirement; nor are we aware that the District is recognizing a liability for the discounted accumulated unused sick leave/vacation benefits. Instead, the District includes only the amounts expected to be converted by employees retiring in the upcoming year in its annual budget.

We understand that, based on observed experience, Aptos/La Selva generally expects employees to utilize all or most of their vacation time each year, while using little to none of their available sick leave hours each year. Accordingly, we project that employees retiring with at least 8.3 years of Aptos/La Selva service would accrue the maximum possible hours available to be converted to an RHSA. The chart below illustrates the value of the final RHSA deposit, based on 3 samples ages at employment, starting salary, assumed annual salary increases, and retirement age.

From these 3 samples, we can anticipate that for many retirees of Aptos/La Selva, the vacation and unused sick leave conversion provision may result in a sizable RHSA contribution at the time of retirement. These balances could potentially cover several years' worth of healthcare premiums and out-of-pocket expenses.

Aptos LaSelva Projected $ to be Converted to Retiree Health Savings at Retirement			
Age at Hire	30	45	45
Age at Retirement	57	57	50
Starting Salary	70,000	60,000	50,000
Annual Salary Increase	3.25%	3.25%	4.00%
Projected Final Salary	166,008	88,071	60,833
Assumed Sick Leave Hours Saved per Year	288	192	288
Maximum Sick Leave Accrual Permitted	2400	1600	2400
Assumed Sick Leave Hours Converted to RHS	600	400	360
Expected Conversion to RHS	**$47,887**	**$16,937**	**$10,529**

Section 3: General Findings

In this section, we identify differences, issues and or limitations in the current programs. At the time this report was prepared, some changes were in the process of being made. There is limited information on some of these recent changes.

General Findings and Discussion Related to District Pension Benefits

The chart below provides a snapshot of the retirement (pension) formulas for the two districts. Only two formulas differ, as shown in red.

<table>
<tr><th colspan="5">Miscellaneous Retirement Formuals</th></tr>
<tr><td></td><td colspan="2">Central Fire</td><td colspan="2">Aptos/La Selva</td></tr>
<tr><td>Formula Type</td><td>Hire Date</td><td>Formula</td><td>Hire Date</td><td>Formula</td></tr>
<tr><td>Tier 1 Misc</td><td>Prior to 1/1/2013</td><td>2.5% @ 55</td><td>Prior to 1/1/2013</td><td>3% @60</td></tr>
<tr><td>PEPRA Misc</td><td>On/after 1/1/2013</td><td>2% @ 62</td><td>On/after 1/1/2013</td><td>2% @ 62</td></tr>
<tr><th colspan="5">Fire Safety Retirement Formuals</th></tr>
<tr><td></td><td colspan="2">Central Fire</td><td colspan="2">Aptos/La Selva</td></tr>
<tr><td>Formula Type</td><td>Hire Date</td><td>Formula</td><td>Hire Date</td><td>Formula</td></tr>
<tr><td>Tier 1 Fire</td><td>Prior to 7/1/2011</td><td>3% @ 50</td><td rowspan="2">Prior to 1/1/2013</td><td>3% @ 55</td></tr>
<tr><td>Tier 1 Fire</td><td>7/1/11 to 12/31/12</td><td>3% @ 55</td><td>3% @ 55</td></tr>
<tr><td>PEPRA Fire</td><td>On/after 1/1/2013</td><td>2.7% @ 57</td><td>On/after 1/1/2013</td><td>2.7% @ 57</td></tr>
</table>

Impact of Merger on Contracted Pension Benefits: We contacted CalPERS to confirm details of how retirement formulas are handled and employees treated when two separate agencies merge. CalPERS confirmed that if a new District is formed and new contract issued with CalPERS, all employees will be considered PEPRA employees. For obvious reasons, this is unlikely to occur. The most common approach is for the smaller agency to merge into and be covered by the existing contract of the larger agency. This does not preclude the continuing (now merged) agency from adopting a new name. If this approach were followed, Aptos/La Selva would be merged into the Central Fire retirement contract with CalPERS.

- There appears to be no impact on the PEPRA employees, either miscellaneous or safety, since the formulas are the same. There may be some differences in ancillary benefits.
- All Classic fire employees from Aptos/La Selva would be deemed as new hires for Central. Since they are Classic PERS members, however, they would be put into the Central Tier 2 formula (3% @ 55). Since this is the same formulas currently applicable to these employees, there would be no change in the basic formula.

  However, other plan provisions would also be impacted, such as non-industrial disability benefits, pre-and post-retirement death benefits and the Final Average Compensation Period. Please refer to the Summary of Current Pension Benefit provisions in the first section for details. The provision most likely of concern would be final average compensation, which for Aptos/La Selva is 1 year and for Central is 3 years. *Note that any differences in benefits would be applicable only to service after the date of the merger.* Benefits relating to all service for Aptos/La Selva prior to the merger would be based on the Aptos/La Selva contract provisions.
- All Classic miscellaneous employees from Aptos/La Selva would be deemed as new hires for Central. Since they are Classic PERS members, however, they would be put into the Central Tier 1 formula (2.5% @ 55). Based on employee data provided to us, it appears that this formula change would impact 2 current miscellaneous Aptos/La Selva employees

  For employees retiring on or before age 55, the adjusted benefit percent payable under the 2.5% @ 55 and 3% @60 formulas are the same. However, for employees retiring after age 55, there is no adjustment (increase) in the formula applied under the 2.5% @55 formula. The chart below summarizes the benefit factor at ages 50 to 60. The factor remains the same for all ages over 60.

	Age										
Formula	50	51	52	53	54	55	56	57	58	59	60
2.5% @ 55	2.0	2.1	2.2	2.3	2.4	2.5	2.5	2.5	2.5	2.5	2.5
3% @ 60	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0

As noted above, any differences in benefits would be applicable only to service after the date of the merger. Benefits relating to all service for Aptos/La Selva prior to the merger would be based on the Aptos/La Selva contract provisions.

Other ancillary benefit provisions for Central miscellaneous Tier 1 employees are generally the same as or slightly more favorable that for Aptos/La Selva miscellaneous Tier 1 members.

Potential for Changing Benefits or Funding for Pension Benefits: Generally speaking, there are only a few ways to modify annual pension costs: (a) to reduce benefits; (b) to earn more on trust assets invested toward the eventual payment of those benefits; and/or (c) to modify the cash flow of contributions toward financing of those benefits. The following summarizes the opportunities for these 3 components of cost control.

(a) *Changing existing pension benefits is not currently possible:* While this continues to be tested in the courts, to our knowledge, there has been no fully successful challenge in California to the premise that existing public employee pension benefits may not be changed for existing employees.[2] This is true with respect to service already worked as well as service that the employee may work in the future, prior to separation of service from that employer. At best, turnover of current employees will, in most instances, result in replacement of separating employees with new employees covered by PEPRA retirement benefits. While funding for PEPRA benefits are essentially on track, remaining past and future service costs for Classic employees and retirees will need to be funded.

Finding: There are no current options to control CalPERS pension benefit costs by reducing the benefits themselves.

(b) *Higher trust returns are not expected:* For each additional dollar of earnings on invested assets, there is one less dollar required to be contributed by employers to fund future benefits. Returns on trust assets CalPERS trust assets have generally been strong over the program's history and it often performs better than other public and private plan trusts. However, these potential returns are not without substantial risk. In addition, current capital market projections are for generally lower returns that have been experience in the past 10-20 years. At the time the June 2016 actuarial valuations were prepared, the long term assumed return was 7.375%. However, there is a 95% chance that these returns could range from -3.0% to 17.0%, representing substantial potential volatility. Rather than trying to invest more aggressively, CalPERS has taken

[2] Rulings in the Stockton bankruptcy case and three other recent cases (all under appeal) indicate that the so-called "California Rule" may not be an immutable bar to modifying existing pension benefit contracts. Governor Brown recently submitted a brief arguing that government agencies should be able to adjust pension benefits for current workers. However, even if changes are legally possible in the future, the District(s) may feel strongly that changes for current employee pension benefits should not be made.

steps to both lower the assumed long term rate of return (to at least 7.0%) and to reduce volatility levels in these funds.

Finding: It is unrealistic to assume that future contribution levels will come down because trust assets will continually outperform expectations.

(c) *There is considerable theoretical basis to consider the actual liability for the District's benefits to be much higher than the value calculated by discounting liabilities at the assumed trust rate:* The assumed trust rate of return includes a substantial risk premium. By discounting the benefit liabilities and developing contribution levels using the trust return rate, CalPERS is essentially assuming that this risk premium/return will be earned indefinitely. This is an optimistic approach and one which CalPERS is currently working to reduce as it gradually decreases the assumed discount rate and to shorten amortization periods.

If the Districts were to try to settle (sell) this liability, no one, including CalPERS, would buy it based on current valuation liability. Agencies leaving CalPERS are moved to a Terminated Agency Pool (TAP). The applicable rate used to value liabilities in the TAP was 2.44% as of June 2016, compared to 7.375% used to value the liabilities for ongoing plans.

Finding: Contributing at the currently projected levels may result in additional cost increases (in excess of those projected herein) if retirement plan asset returns in the next 10-15 years are lower than the discount rate used in the June 30, 2016 valuations.

(d) *Changing pension contribution cash flows:* California pension law requires that an employer contribute 100% or more of the actuarially determined contributions (ADC) each year. Projections show these are increasing for a number of years, then gradually expected to decrease as unfunded past service costs (UAAL) are paid down (amortized) and the *active* employee group migrates from mostly Classic to almost entirely PEPRA members. Thus, while it is not possible to contribute less than the ADC, the Districts may pursue one of several options for addressing the substantial projected increases in coming years (see Recommendations section).

General Findings and Discussion Related to District OPEB

The two OPEB programs are significantly different: Unlike the pension benefits, the OPEB programs provided to retired employees of Aptos/La Selva and retirees of Central Fire are materially different.

In the Aptos/La Selva plan, the primary lifetime benefit is the PEMHCA minimum (currently $133 per month, increasing by CPI medical each year). This is a good basic plan design to minimize the impact of CalPERS medical program requirements.

- Only the retiree receives this minimum benefit; no dependent benefits are provided, except to a surviving spouse who also receives survivor pension benefits.
- Only employees hired prior to 2005 may receive a temporary additional benefit of $350 per month until age 65.
- Additional modest monthly contributions are made to retiree health savings accounts each month. These are current annual expenses and do not create an unfunded liability for the District.
- No other subsidized benefits are provided.

In the Central Fire plan, with very limited exception, all District employees hired prior to 2018 are eligible for retiree medical benefits equal to what active employees receive and cover the retiree and eligible dependents.

- Eligibility for benefits requires only that the employee retire under PERS within 4 months of ending employment with the District. There is no minimum District service requirement.
- There are caps on the monthly benefits ($870/$1742/$2265), but they are established at levels where the employee/ retiree can choose from several plans with premiums less than the caps.
- These caps are not reduced after Medicare; thus, 100% of medical premiums are paid for retirees and their dependents on Supplemental Medicare plans.
- Recent reductions in benefit levels were negotiated for employees hired after 2017, however, these changes will not reduce the existing OPEB liability since no benefit changes were made for existing employees or retirees.

  Note: There appear to be PEMHCA compliance issues with how the recent new changes were adopted. Revised PEMHCA resolutions will likely need to be adopted for all current and new employees. In addition, a pre-tax flexible benefit plan and retiree healthcare reimbursement plan may need to be adopted to fully implement the new changes and remain in compliance with PEMHCA/CalPERS requirements. It is our understanding that the District is aware of and working to resolve these issues and we believe it is important that they do so.

- Central Fire also pays a percentage of retiree dental and life insurance premiums (from 25% - 100%) for those retiring with at least 10 and up to 40 years of District service.

Providing such different benefits for current employees poses a significant issue for the Districts as they consider a merger of operations. It is quite challenging to have similarly situated employees providing equivalent services with such disparate benefit levels.

- *If left at these different levels*, the merged District will need to monitor and handle ongoing employee concerns and frustrations.
- *If benefits for Aptos/La Selva employees (not current retirees) are increased to the same OPEB levels as those provided for current Central District employees*, based on original District hire dates, the projected liability for Aptos/La Selva is estimated to more than double from $2,411,000 to $5,144,000. The Actuarially Determined Contribution levels (ADC) are estimated to more than triple, from $199,000 to $613,000.

  In developing these estimated increases in the AAL and ADC, we used a 6.75% discount rate and assumed 95% of future Aptos/La Selva retirees would elect this more generous benefit in retirement. This expected rate of retiree participation is what was used in the 2015 OPEB valuation prepared for Central Fire Protection District.

The 2017 OPEB valuation/study results are not directly comparable: Some of the assumptions used to prepare the actuarial valuations are different, which makes a direct comparison of liabilities difficult. Several key differences include:

- The discount rates: 7.28% for Central and 6.75% for Aptos/La Selva. All other things being equal, higher discount rates produce a lower projected liability and annual contribution requirement.
- Future healthcare trend: Higher increases were assumed for at least 10 years in the Aptos/La Selva valuation than for Central Fire.
- Amortization period: Shorter period for Aptos/La Selva (20 years remaining); Central had a 26 year period, but recently increased it back to 30 years.

We did not attempt to re-develop the valuation results using identical assumptions, as this was not within the scope of this project. However, the Rael & Letson June 2017 Retiree Welfare Study did provide the liability developed at 6.73%. We made an additional rough adjustment to account for the difference in future healthcare trend assumptions to arrive at values on a more comparable basis. The chart below shows the Central UAAL as in the 2017 report and as adjusted, compared to Aptos/La Selva.

OPEB: Unfunded Actuarial Accrued Liability as of June 30, 2017			
District	Central - in report	Central - adjusted	Aptos/La Selva**
Discount rate used	7.28%	*6.75%*	6.75%
Total AAL	**17,972,000**	***20,788,480***	**2,411,000**
OPEB Trust Assets	1,356,000	1,356,000	705,000
Unfunded AAL	**$ 16,616,000**	***$ 19,432,480***	**$ 1,706,000**
Assets as % of AAL	7.5%	6.5%	29.2%
UAAL as % of payroll	231.2%	270.4%	34.5%

If the ADC (funding level) for both Districts were developed using the same discount rate, healthcare trend and amortization period (20 years), the ADC for Central would be roughly 25% higher than the ADC level recently approved by the District.

Potential for Changing Benefits or Funding for OPEB: As with pension benefits, there are limited ways to modify OPEB liabilities and annual contribution levels: (a) reduce benefits; (b) earn more on trust assets invested toward the eventual payment of those benefits; (c) modify contribution cash flows toward financing of those benefits; (d) special considerations relating to the funding of the implicit subsidy OPEB liability. The following summarizes these OPEB cost control opportunities.

(a) *OPEB can often be changed*: There appears to be a lower legal threshold for changing retiree healthcare benefits than for pension benefits. While wording in bargaining agreements should be closely scrutinized, in many cases, employees and employers have negotiated lower benefits. Many agencies have made benefit changes impacting future employees, current employees and, in some cases, for current retirees.

Due regard should be given to prior negotiations. Often pay increases or other MOU provisions are traded in favor of improved retiree healthcare benefits. Cutting back benefits for current retirees and/or current employees should consider these prior negotiations in arriving at a mutually reasonable solution to any proposed reductions in current OPEB.

Changes which impact liabilities typically involve one or more of the following: more restrictive eligibility requirements, reducing the amount of benefits for the retiree and/or covered dependents, considering differences before and after Medicare, and shortening the period over which benefits are paid. Two areas which are often met with more openness by employees are: (1) creating specific eligibility requirements based on minimum District service and/or retirement age; (2) adjusting benefit levels after Medicare to be a percentage of premiums comparable to the percentage paid prior to Medicare.

The type of OPEB can also be changed, from a predominantly "defined benefit" program to a predominantly "defined contribution" program. A defined benefit program involves payment of benefits after employment ends, such as payment of all or a portion of retiree premiums. A defined contribution program is one which sets aside contributions toward retiree costs but while each employee is active. Aptos/La Selva's retiree health savings contributions are a type of defined contribution OPEB. The contribution is a current year expense and funds are accumulated in accounts set aside for each employee to be used only in retirement. There is no unfunded OPEB liability relating to defined contribution OPEB plans.

(b) *Increased trust contributions in the short term ultimately reduce employer contributions*: Ultimately, retiree healthcare benefits will be paid from a combination of direct payments by the agency and investment earnings. In an unfunded plan, the agency earns little, if anything, on current operating revenue or reserves applied to pay current benefits. Anytime dollars can be set aside in a trust able to invest in assets with higher returns, the ultimate cash amounts required to be paid by the agency go down. The more that is set aside in the trust and the earlier it is contributed, the greater the earnings from those assets over the long term.

Both Districts have established irrevocable OPEB trust accounts with the California Employers' Retiree Benefit Trust (CERBT) and in recent years have contributed 100% of the Actuarially Determined Contributions, through a combination of direct retiree premium payments and contributions to the trust.

(c) *There is no prefunding mandate for OPEB:* Unlike public agency retirement (pension) benefits in California, there is no federal or state requirement that OPEB be funded on an actuarial basis.

This may appear to be in contradiction with item (b) above which advocates for prefunding of OPEB. While there is no mandate that OPEB be prefunded, these liabilities do represent commitments to current and future retirees. Prefunding improves benefit security for employees and instills faith that the District intends to fulfill these commitments. Unless secured by segregated assets in an irrevocable OPEB trust, the risk increases that future financial resources may not be sufficient funds to pay these benefits in the future. Prefunding also improves taxpayer equity by paying (setting aside funds) for these benefits during the years employees are providing the services those taxpayers receive, rather than passing along the costs to future taxpayers who will not benefit from the services of the employees receiving the benefits. Finally, and not unimportantly, GASB 75 now requires reporting of the unfunded OPEB liability in the body of the financial statements. A high unfunded liability can have implications of securing financing and/or the cost of debt.

What this lack of OPEB funding mandate offers is potential flexibility when needed. In a world of limited financial resources, particularly with very high *but temporary* required pension contribution levels, adjusting the OPEB funding strategy to dovetail with the pension funding strategy can be a very helpful tool. It is critical, however, that this not be used as a long-term funding avoidance technique, but rather a short-to-medium term strategy during extremely challenging times.

(d) *Implicit subsidy liability considerations*: A significant aspect of OPEB financing that should be considered is the prefunding of the implicit subsidy liability. As explained earlier, the explicit subsidy liability (for direct retiree premium costs) *plus* the implicit subsidy liability (excess of retiree claims over premiums charged for retiree coverage) represents the actuary's current best estimate of what the total liability would be if retiree premiums were based on retiree claims experience alone. In the current medical programs offered by the two Districts (CalPERS), there are only two premium levels. While pre-Medicare retiree claims (as a group) are expected to exceed the premiums charged for their coverage, the shortfall is covered each month and year by a portion of premiums paid by or on behalf of active employees.

The following hypothetical example illustrates this treatment. While the total cash outlay by the employer on behalf of actives and retirees is $500,000, for OPEB accounting purposes, $25,000 of the amount paid for active employees is shifted to retiree benefit expense.

Hypothetical Illustration of Implicit Subsidy Recognition	For Active Employees	For Retired Employees
Prior to implicit subsidy recognition		
Premiums paid by agency during fiscal year	$ 450,000	$ 50,000
Accounting Treatment	Compensation Cost for Active Employees	Contribution to Plan & Benefits paid from Plan
After implicit subsidy recognition		
Premiums paid by agency during fiscal year	$ 450,000	$ 50,000
Implicit subsidy adjustment	$ (25,000)	$ 25,000
Accounting cost of premiums paid	$ 425,000	$ 75,000
Accounting Treatment	Reduces: Compensation Cost for Active Employees	Increases: Contribution to Plan & Benefits paid from Plan

If each year's implicit subsidy amount is covered by contributions for active employees in the same year, the funding seems to be taking care of itself. This raises the question of whether or not prefunding of the implicit subsidy liability is of value. There will be no escaping the requirement that the long term implicit subsidy liability will still need to be reported in the agency's financial statements, but whether or not to set aside funds in advance in trust is a separate decision to make.

While perhaps not on the immediate horizon, there is some risk that the implicit subsidy liability could be 'converted' from simply an accounting liability to an explicit subsidy liability. Suppose CalPERS (or any subsequent medical provider chosen by the Districts) were to separate the premium rates for active employees and pre-Medicare retirees and base each on its own claims experience. The premium rates for active employees would go down and the rates for pre-Medicare retirees would increase, eliminating any implicit subsidy between active employees and retirees.[3] However the direct (explicit) premium cost for retirees would now be higher. Depending on how employment agreements are worded, the agency may or may not be 'on the hook' for the paying the higher retiree premium rates. If the wording refers to the District paying a percentage of *retiree* premiums, if the retiree premium increased significantly from separate rating, the District could very well be committed to paying that percentage of a much higher premium. On the other hand, if those agreements are written with the agency paying some percentage of *active* premium rates, if retiree premiums are rated separately from actives and the active premiums decrease, then the District's commitment could decrease as well.

Finally, it is worth stating that the only implicit subsidy which creates a reportable OPEB liability for an employer is one between its own members or other members of the healthcare program/pool in which the employer participates. If the employer were to partially subsidize the cost of retiree healthcare obtained elsewhere, i.e., through a spouse or from a subsequent employer, there is no implicit subsidy liability for the employer relating to such other coverage. Some agencies have intentionally provided the same (or a slightly reduced) subsidy toward other coverage in order to reduce the implicit subsidy OPEB liability that must be reported. This must be done carefully, however.

- In some plans, where the employer paid premium is fairly low, not all retirees continue their health coverage through the employer; some find other coverage and the employer incurs no liability for them (unless the retiree is eligible to and later returns to the plan). In this situation, if the employer were to begin subsidizing the same modest benefit amount toward any medical coverage, all retirees would potentially receive it and the direct (explicit) retiree expense would increase. In this case, even though the implicit liability would go down, there could potentially be a higher net cost.
- By contrast, if employer-paid retiree benefits are quite generous, virtually all qualifying retirees would be expected to continue coverage and the employer would incur both an explicit and implicit subsidy liability (at least until retirees reach age 65). If this employer were to offer the same (or even a slightly reduced) premium benefit to retirees choosing other coverage, the explicit subsidy liability may remain essentially the same, but the implicit subsidy liability would be eliminated for any retirees choosing other coverage.

[3] Eliminating a subsidy of retiree healthcare premiums by active employee premiums does not mean that there may not still be one subset of retirees which subsidizes another retiree subset. There is some difference of opinion amongst actuaries as to whether any implicit intra-retiree subsidies must be considered in an OPEB valuation. Regardless, even if so, the resulting implicit subsidy liability created by age-adjusting a retiree-only premium structure would be expected to results in a significantly smaller implicit subsidy liability than one developed from blended active/retiree premium rates.

Section 4: Ideas and Recommendations

Bickmore’s focus was specifically estimating the trajectory of the pension and OPEB liabilities and annual contribution levels that will be required of each District. While we are able to make general suggestions, we are limited in our ability to make specific recommendations. These options must be considered in the context of the overall fiscal situations of each District.

Pension Ideas and Recommendations

As noted in the prior section, there is little opportunity for the Districts to control the contribution levels for the retirement plans. To the extent possible, the Districts should consider one or a combination of some of the following options to manage the annual pension contribution requirements:

- *Ride out the pension contribution cash flow as it occurs*.

  These contribution levels include funding based on currently expected trust returns, though some margin is being introduced gradually by CalPERS. Built into this approach is the assumption of the risk that in the short term, there is a 50% chance that trust returns will be less than expected, thus increasing the level of pension underfunding.

- *Contribute more than the required Actuarially Determined Contribution (ADC) each year, on a formal or ad hoc basis*.

  Taking this approach offers some advantages. If all assumptions are met, higher contributions now will decrease the expected contributions needed later. If all assumptions *are not* met, having made higher contributions sooner will soften the inevitable increase in contributions.

  Focusing back on the suitability of risk free versus trust return discussed earlier, whenever possible, we believe it is advisable to increase current contributions based on a risk-free or high quality bond yield. Doing so provides a cushion; ideally, contributions would be reduced only if/when assets outperform the high-quality bond yield. Funding based on expected trust returns basically gives the agency a 50/50 chance of being underfunded and chasing a UAAL.

- *Assuming the current cost of debt is less than the discount rate on the UAAL, borrow to pay off/down unfunded liability*.

  This strategy is immediately appealing if it is expected that the rate at which the District can borrow is substantially less than what is assumed the District will earn in the trust. For example, if the trust were assured to earn 6% each year and the District can borrow at 3.5%, then this strategy is demanded, not just recommended. Basic finance would see this situation as arbitrage – the District borrows at 3.5% to immediately settle (i.e. pay off) another debt at 6%.

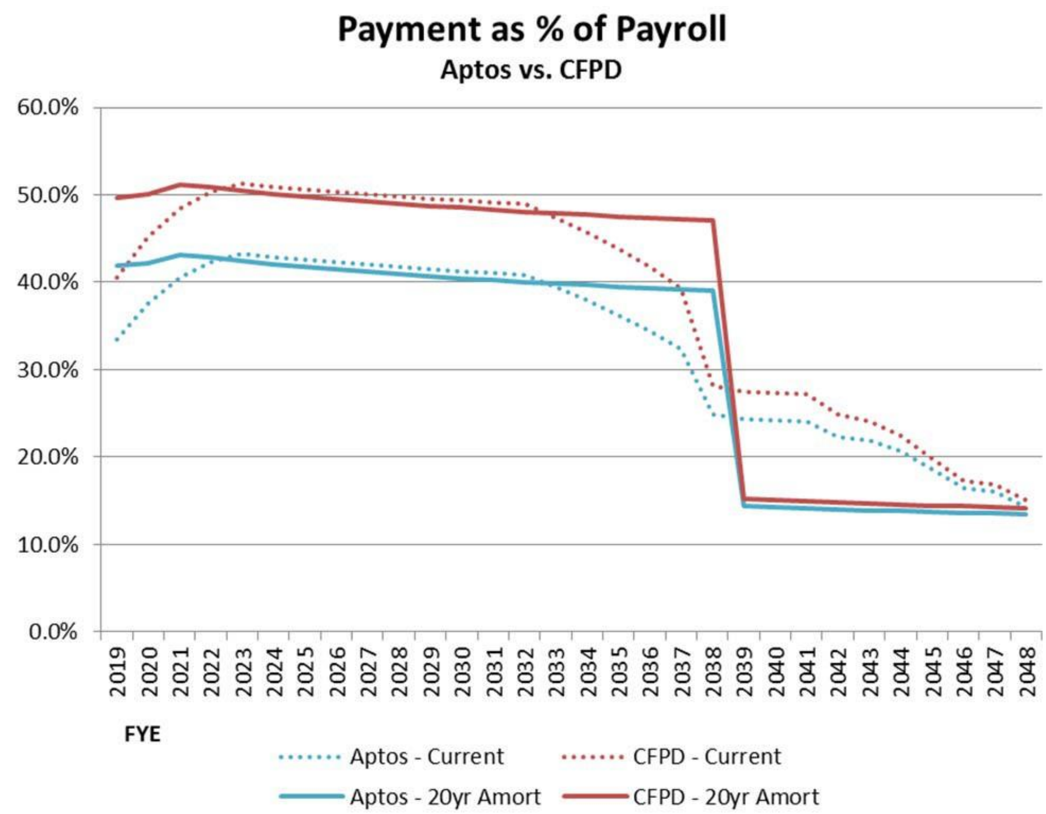
  There is a 'catch', of course. This strategy comes with risk, and risk comes at a price. If the District were to borrow at a reduced rate to pay off its current unfunded pension liability, the District wins so long as the immediate and future returns exceed their borrowing rate. But if trust asset returns were to suffer substantially in an early year, then the District must pay off **both** the borrowed money **and** also pay for the increase in unfunded liability created by the shortfall in the trust returns. In financial terms, this strategy is simply old fashioned leverage whereby the District borrows money to invest in a risky asset. As with any leverage, when it works it works very well. But when it doesn't work, the pain is multiplied.

- *Invest existing reserves in an ancillary trust to (hopefully) secure higher return on those funds until they are deployed to pay annual pension contributions to CalPERS.*

  This strategy typically does not carry as much risk as the risk of borrowing. Investing assets in an ancillary trust provides the District with substantial flexibility since the funds have not yet been formally committed to the CalPERS retirement plan trust. Nonetheless, assets are segregated toward the purpose of funding. The upside is that the ancillary trust should be expected to yield a higher return, net of expenses, than invested District reserves. The downside, however, is that unless the rate earned on the ancillary trust is at least equal to the trust rate used to determine payments on the unfunded liability, the strategy has a cost. District revenue/reserves could be paid directly to CalPERS to pay off or reduce the higher rate unfunded liability (see the first bullet point above). In diverting funds to an ancillary trust, the District retains control on when to remit the funds to CalPERS, but the cost of doing so is the difference between the CalPERS trust rate and the lower ancillary trust rate.

- *Smooth the projected pension contribution levels by consolidating amortization bases into one:*

  To the extent that reserves and/or annual revenue permits increasing the current level of pension funding, the Districts may consider consolidating the individual amortization bases into a single base to be amortized over a single fixed period. The chart compares projected future pension contributions as a percentage of payroll based on the current, individual amortization bases (dotted lines) to estimated pension contribution levels if the UAAL for each District were consolidated into a single base amortized over 20 years (solid lines).



- *Share port of the employer cost with employees:* Under PEPRA, this already happens to a significant extent. District members contribute 6.25% for miscellaneous and 11.5% safety, but not less than 50% of the total normal cost rate. However, while classic safety member benefits are better than those provided under PEPRA formulas, their employee contribution levels are less than their PEPRA counterparts. It is permissible under PERS for employers and employees to negotiate having employees pick up a portion of the employer contribution rate. This can be accomplished via formal amendment to the CalPERS contract or by changing bargaining agreements only.[4]

[4] See September 2014 League of California Cities report: Controlling Employee Pension & Retiree Medical Benefit Costs

- *Other options for dire circumstances:* Other options might be available, but only under very dire circumstances when all other considerations take a back seat to achieving meaningful cost reductions. These options might include limiting components of compensation and/or other benefits which could reduce the impact on pension liabilities, including: (a) reducing payroll on which pension benefits are based (i.e., freeze on compensation increases); and/or (b) reducing/restricting the carryover of sick leave or vacation hours or their conversion to pension service credit. Our understanding is that the District is not immediately, or into the foreseeable future, threatened with bankruptcy due to these benefits. In such circumstances a discussion of these items might be warranted.

OPEB Ideas and Recommendations

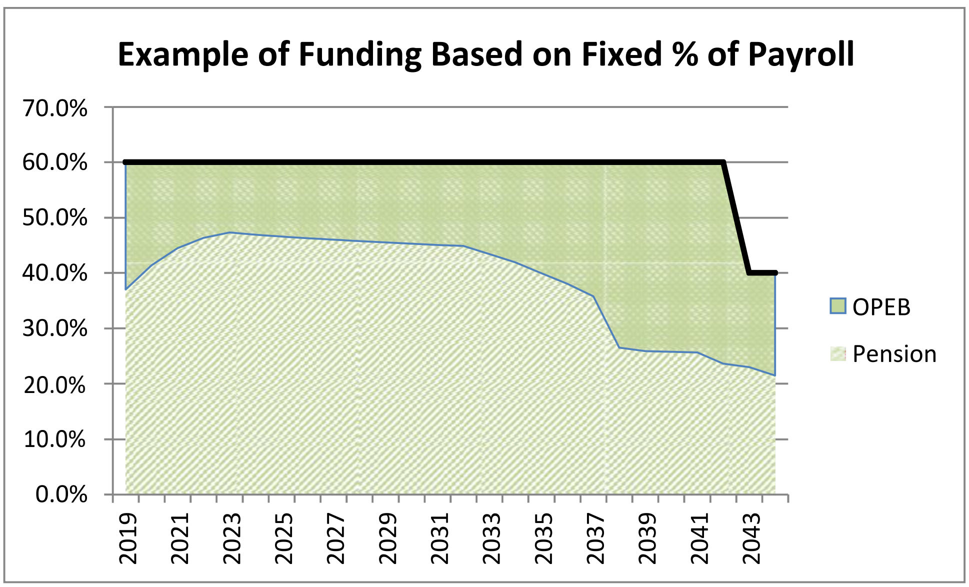
- *Commit/continue to prefund the current OPEB liability over a reasonable, finite period of time.*

  Ideally, District contributions would be greater than or equal to each year's Actuarially Determined Contributions (ADC).

  If possible, develop and contribute the ADC, developed including both the explicit subsidy and implicit subsidy, at least until the explicit subsidy AAL is fully funded.

  If possible, develop the OPEB liability using a discount rate somewhat lower than the expected long term trust rate of return. This will provide some margin (hedge) against potential lower returns. Aptos/La Selva is currently doing this; Central Fire is not.

  The general OPEB funding recommendations above should be followed whenever reasonably possible. However, some flexibility can be incorporated in extremely challenging years, so long as it is introduced in the context of a specific long term funding plan. Consider the following possible approach: With some modest additional projections, the Districts could set a uniform combined percentage of pay contribution level for pension and OPEB set at a level expected to be sufficient to adequately fund both programs over a fixed period, such as 20-25 years. Whatever portion of this total contribution is not applied toward required pension funding would be contributed to the OPEB plan(s). The chart below illustrates this using a hypothetical example where the remaining period for amortizing the unfunded OPEB liability is 24 years.



  In summary, contribute aggressively when possible, reduce OPEB funding levels only when pension funding requirements are excessive; consider whether or not to prefund the implicit subsidy liability, at least in lean years.

- *Ensure PEMHCA resolutions and other groundwork are in place to support Central Fire retiree medical benefits:* As noted earlier, the recently adopted OPEB changes adopted for Management and Administrative employees may not have been implemented correctly. CalPERS will invoice the District and withhold the retirees' portion of premiums from their pension checks in accordance with the PEMHCA resolutions on file with CalPERS. These resolutions cannot simply be adopted by the District without also submitting the changes to CalPERS. Further, PEMHCA does not allow for different benefit levels for employees in the same group (e.g., Fire Safety) based solely on their hire date or retirement date. Different benefit levels such as these may only be constructed outside of the PEMHCA resolution and typically require introduction of a flexible benefit plan for active employees and/or retiree healthcare reimbursements. See additional discussion below.

- *Review current MOU wording* in contracts to determine whether the Districts would or would not be liable for paying higher premium rates for pre-Medicare retirees if the rate structure were changed from two sets of rates (Basic/Supplemental Medicare premium rates) to three sets (Active, pre-Medicare retiree and Supplemental Medicare retiree).

- *Meet with qualified, experienced benefits advisor regarding how to resolve the current OPEB program differences.* Current benefits and the related liabilities/costs are radically different from each other. If the Districts merge, options include: (1) leaving the separate predecessor District programs in place as is; (2) increasing Aptos/La Selva benefits up to Central Fire levels; (3) decreasing Central Fire benefits to the Aptos/La Selva level; or (4) trying to create uniform benefits somewhere in the middle. The 1st would theoretically have no impact on current OPEB liability forecasts, though could create substantial morale issues. The 3rd would seem highly unlikely to be accomplished, though would reduce Central's OPEB liability substantially. The 2nd approach would significantly increase the OPEB liability for Aptos/la Selva members. The 4th approach would accommodate many different possible designs. We recommend the Districts engage a knowledgeable and experienced benefits advisor to assist in developing alternative designs and to participate in negotiations regarding any changes to these programs.

- *Consider CalPERS/PEMHCA coverage and benefit requirements:* Note that while covered by the CalPERS medical program, all employees who retire from the Districts under PERS will be required to receive no less than the PEMHCA Minimum benefit (currently $133 per month) with no additional age or service requirements permitted to be added. This means service retirement at age 50 or older (52 if a miscellaneous PEPRA employee) or an approved disability retirement. The Districts may incorporate more restrictive age and service requirements (including vesting) for any benefits paid in addition to the PEMHCA minimum benefits. To do so, however, generally requires a flexible benefit plan overlay to maintain current benefit levels for active employees and/or additional documentation and administration to provide benefits for retirees in excess of what is described in the PEMHCA resolutions.

- *If changes to OPEB for current and/or future employees are indicated, we recommend that some or all of the following elements be considered:*
    - Incorporate a minimum District service requirement for benefits paid in excess of the PEMHCA minimum benefit.

      Central Fire provides generous retiree medical benefits with no minimum required service to the District. With 5 or more PERS service years and retirement *from* Central Fire, employees qualify for lifetime medical benefits for the retiree, spouse and other eligible dependents. Except perhaps in the case of disability or death while in active service, providing benefits in retirement for a period longer than the years of service actually provided to the District and local taxpayers should be re-evaluated.

Many employees understand this and are often open to incorporating a minimum service requirement (e.g., 10 years) to be eligible for some benefits and possibly longer to qualify for higher benefits.

- Incorporate a higher minimum age requirement for benefits paid in excess of the PEMHCA minimum benefit.

  While pension benefit formulas are reduced for retirements prior to normal retirement age, the Districts' OPEB benefits are not. Currently, those retiring prior to normal retirement age simply receive the same benefits longer. Except perhaps in the case of disability or death while in active service, providing unreduced OPEB prior to normal retirement age should be reviewed.

- Consider limiting or reducing benefits provided for non-disabled dependents of retirees.

  While generally supportive of providing retirement benefits for long service public employees, many taxpayers express frustration over paying for medical coverage for dependent children of retirees. We suggest the Districts explore extending the service required to be eligible for subsidized coverage of non-disabled dependent children and/or reducing benefits paid for such dependents in retirement. Some agencies draw the line at the age at which the retiree qualifies for coverage under Medicare; others require that if any other coverage is available to adult dependent children that the children must enroll in other coverage in lieu of the coverage as a dependent of the retiree.

- Consider lower benefit maximums for Medicare retirees.

  The Central Fire OPEB program limits benefits to 85% of the single, two party or family *Basic Plan* premiums of the 3rd highest rate plan in the Bay area. These monthly benefit limits are not currently reduced for Medicare retirees. Because all Supplemental Medicare plan rates are well below the monthly maximums, there is effectively no limit imposed on Medicare retirees. This is a disincentive for those members to choose reasonably priced coverage. Imposing similar limits on Medicare retirees involves them in the need to make wise cost decisions regarding their continuing healthcare coverage.

- Consider requiring a minimum percent of premium co-pay for all retirees.

  At present, maximum benefits for Central Fire are set at levels where the retiree can choose one of several plans and be able to have 100% of the premiums paid by the District. Many benefits experts believe best practices include having all members pay at least a modest portion (e.g., 5%) of the premiums to remain aware of the cost of coverage and be more responsible healthcare consumers.

- Study any potential reduction in the implicit subsidy liability by providing the same (or slightly reduced) premium subsidy toward outside (non-District) retiree medical coverage.

  Based on the two current benefit programs, this is likely to be ineffective for Aptos/La Selva and could increase the explicit subsidy liability if retirees currently declining CalPERS medical would then qualify for a District-paid benefit. However, for Central Fire, given the high levels of retiree participation expected, encouraging or supporting retirees' selection of other coverage would likely have minimal impact on the explicit subsidy liability but could materially reduce the implicit subsidy liability.

- Consider a reduction in defined benefit OPEB levels (contributions toward current retiree premiums) and make meaningful contributions to retiree health savings accounts for active employees.

  A defined contribution made by the District each pay period and accumulated in a retiree health savings account is an effective method of tying the benefit to each year of service provided by an employee. The amounts are negotiated and budgeted each year. Whatever the accounts accumulate to in value becomes the retiree's to ration out toward his or her healthcare costs. Typically the amounts are not forfeited if the employee separates from service prior to retirement, though often the amounts are not made available to them until their retirement has commenced.

  A defined contribution OPEB may be somewhat ineffective for some employees. Those closer to retirement age now will have little opportunity to accumulate sufficient funds to be applied toward the cost of their retiree medical premiums. Stair-step contribution levels based on the employee's age at the time benefits are transitioned can help minimize this impact.

  A defined contribution (retiree health savings allowance) alone puts the entire burden on retirees to manage their accounts to cover their medical premiums over their lifetime. It may be preferable to retain some level of defined benefit (monthly retiree premium subsidy paid by the Districts). The required PEMHCA minimum contribution accomplishes this on some level. The Districts could consider what additional subsidy level would be appropriate which, when combined with retiree health savings account contributions, would produces a reasonable total benefit.

  Aptos/La Selva's OPEB program for employees hired after 2005 provides this structure of combined defined benefit/defined contribution OPEB. The primary question here is whether these benefit levels are adequate.

Accumulated Unused Leave Recommendations

- *Accumulated unused sick leave or vacation hours should be recognized as potential liabilities when employment ends.*

  To the extent not currently being valued, each District should reflect the present value of projected accumulated unused sick leave/vacation amounts expected to be paid when employees separate from service.

  To the extent that such amounts are expected to be cashed out or converted to a lump sum amount to be contributed to a retiree health savings account, the projected value at the time of separation should be estimated, including accumulated hours and pay level at such time.

  To the extent that any such accumulated unused amounts are highly probable to be converted to additional pension service credits, the projected additional pension liability should be estimated and amounts set aside annually (in reserve or as additional contributions made to CalPERS), At the time of retirement when such additional service is credited, the District should make a full lump sum payment to CalPERS roughly equal to the additional unfunded liability created by the increase in the pension benefit.

- *Some accumulated unused sick leave hours should be cashed out or converted to Retiree Health Savings Accounts annually or bi-annually.*

  As conceptually intended to be used, some percentage of sick leave is expected to be paid at the employee's current rate of pay. Some accumulation is expected/encouraged to be available in the event of a significant health event and obviously in these situations, the then-current pay rate would apply. However, allowing unlimited or very large amounts of unused sick leave to accumulate until retirement escalates the value and liability to the Districts. Modifying these programs to allow a reasonable maximum accumulation of hours (e.g., 1200 – 1500) helps reduce the impact of the pay-rate escalation on the cost of this benefit. It also helps to prevent an unplanned increase in the unfunded pension benefit for new retirees who convert this unused sick leave to additional years of pension service credit.

  Aptos/La Selva has implemented a modest feature like this already in its sick leave program. Accumulated hours in excess of 2400 each year are cashed out. This concept could be introduced by Central Fire and/or taken further, by (a) reducing the number of hours available for carry forward to retirement and (b) offering the option to have the annually-required "cash out" of hours instead be deposited in a retiree health savings account.

Appendix 1: Pension Cost Projection Detail

Beginning Fiscal Year	Ending Fiscal Year	FYE	ALL COMBINED Projected Normal Cost	Amortization Pmt	Total ARC Payment	UAAL	Payroll	Total Payment as % of Payroll	UAAL as % of Payroll
7/1/2018	**6/30/2019**	2019	1,950,371	2,248,605	4,198,976	43,273,423	11,260,298	37.3%	384.3%
7/1/2019	6/30/2020	2020	2,052,570	2,785,761	4,838,331	44,134,788	11,608,012	41.7%	380.2%
7/1/2020	6/30/2021	2021	2,241,824	3,119,459	5,361,283	44,503,070	11,965,945	44.8%	371.9%
7/1/2021	6/30/2022	2022	2,270,038	3,480,124	5,750,162	44,552,729	12,334,407	46.6%	361.2%
7/1/2022	6/30/2023	2023	2,299,937	3,752,847	6,052,784	44,232,321	12,713,720	47.6%	347.9%
7/1/2023	6/30/2024	2024	2,331,555	3,852,797	6,184,352	43,605,682	13,104,212	47.2%	332.8%
7/1/2024	6/30/2025	2025	2,364,925	3,968,380	6,333,305	42,829,259	13,506,223	46.9%	317.1%
7/1/2025	6/30/2026	2026	2,400,082	4,087,432	6,487,514	41,875,806	13,920,104	46.6%	300.8%
7/1/2026	6/30/2027	2027	2,437,064	4,210,054	6,647,118	40,728,671	14,346,215	46.3%	283.9%
7/1/2027	6/30/2028	2028	2,475,908	4,336,356	6,812,264	39,369,871	14,784,926	46.1%	266.3%
7/1/2028	6/30/2029	2029	2,516,654	4,466,448	6,983,102	37,779,984	15,236,619	45.8%	248.0%
7/1/2029	6/30/2030	2030	2,559,343	4,600,441	7,159,784	35,938,038	15,701,688	45.6%	228.9%
7/1/2030	6/30/2031	2031	2,604,018	4,738,453	7,342,471	33,821,403	16,180,537	45.4%	209.0%
7/1/2031	6/30/2032	2032	2,650,724	4,880,608	7,531,332	31,405,657	16,673,585	45.2%	188.4%
7/1/2032	6/30/2033	2033	2,699,507	4,801,871	7,501,378	28,664,445	17,181,259	43.7%	166.8%
7/1/2033	6/30/2034	2034	2,750,414	4,714,017	7,464,431	25,802,658	17,704,004	42.2%	145.7%
7/1/2034	6/30/2035	2035	2,803,495	4,534,769	7,338,264	22,820,847	18,242,274	40.2%	125.1%
7/1/2035	6/30/2036	2036	2,858,801	4,340,524	7,199,325	19,804,870	18,796,538	38.3%	105.4%
7/1/2036	6/30/2037	2037	2,916,385	4,060,779	6,977,164	16,767,745	19,367,279	36.0%	86.6%
7/1/2037	6/30/2038	2038	2,976,303	2,329,930	5,306,233	13,796,510	19,954,996	26.6%	69.1%
7/1/2038	6/30/2039	2039	3,038,611	2,307,759	5,346,370	12,399,683	20,560,200	26.0%	60.3%
7/1/2039	6/30/2040	2040	3,103,368	2,376,993	5,480,361	10,922,817	21,183,419	25.9%	51.6%
7/1/2040	6/30/2041	2041	3,170,636	2,448,303	5,618,939	9,265,290	21,825,197	25.7%	42.5%
7/1/2041	6/30/2042	2042	3,240,477	2,088,218	5,328,695	7,411,626	22,486,094	23.7%	33.0%
7/1/2042	6/30/2043	2043	3,312,957	2,024,505	5,337,462	5,794,383	23,166,685	23.0%	25.0%
7/1/2043	6/30/2044	2044	3,388,143	1,756,455	5,144,598	4,123,886	23,867,565	21.6%	17.3%
7/1/2044	6/30/2045	2045	3,466,105	1,257,917	4,724,022	2,607,952	24,589,345	19.2%	10.6%
7/1/2045	6/30/2046	2046	3,546,916	727,886	4,274,802	1,496,810	25,332,655	16.9%	5.9%
7/1/2046	6/30/2047	2047	3,630,648	667,505	4,298,153	852,950	26,098,142	16.5%	3.3%
7/1/2047	6/30/2048	2048	3,717,380	232,293	3,949,673	224,174	26,886,476	14.7%	0.8%

UAAL = Unfunded Actuarial Accrued Liability

			TOTAL CFPD						
Beginning Fiscal Year	**Ending Fiscal Year**	**FYE**	**Projected Normal Cost**	**Amortization Pmt**	**Total ARC Payment**	**UAAL**	**Payroll**	**Total Payment as % of Payroll**	**UAAL as % of Payroll**
7/1/2018	**6/30/2019**	2019	1,091,668	1,374,754	2,466,422	25,827,491	6,083,572	40.5%	424.5%
7/1/2019	6/30/2020	2020	1,146,914	1,686,225	2,833,139	26,307,721	6,266,079	45.2%	419.8%
7/1/2020	6/30/2021	2021	1,252,658	1,874,169	3,126,827	26,500,617	6,454,061	48.4%	410.6%
7/1/2021	6/30/2022	2022	1,266,881	2,077,017	3,343,898	26,512,989	6,647,683	50.3%	398.8%
7/1/2022	6/30/2023	2023	1,282,032	2,231,641	3,513,673	26,316,077	6,847,114	51.3%	384.3%
7/1/2023	6/30/2024	2024	1,298,128	2,294,967	3,593,095	25,944,418	7,052,527	50.9%	367.9%
7/1/2024	6/30/2025	2025	1,315,189	2,363,816	3,679,005	25,479,730	7,264,103	50.6%	350.8%
7/1/2025	6/30/2026	2026	1,333,232	2,434,730	3,767,962	24,909,429	7,482,026	50.4%	332.9%
7/1/2026	6/30/2027	2027	1,352,277	2,507,772	3,860,049	24,223,585	7,706,487	50.1%	314.3%
7/1/2027	6/30/2028	2028	1,372,343	2,583,005	3,955,348	23,411,473	7,937,681	49.8%	294.9%
7/1/2028	6/30/2029	2029	1,393,452	2,660,496	4,053,948	22,461,510	8,175,812	49.6%	274.7%
7/1/2029	6/30/2030	2030	1,415,626	2,740,311	4,155,937	21,361,189	8,421,086	49.4%	253.7%
7/1/2030	6/30/2031	2031	1,438,887	2,822,519	4,261,406	20,097,014	8,673,719	49.1%	231.7%
7/1/2031	6/30/2032	2032	1,463,259	2,907,195	4,370,454	18,654,421	8,933,930	48.9%	208.8%
7/1/2032	6/30/2033	2033	1,488,766	2,867,393	4,356,159	17,017,693	9,201,948	47.3%	184.9%
7/1/2033	6/30/2034	2034	1,515,433	2,822,586	4,338,019	15,301,501	9,478,007	45.8%	161.4%
7/1/2034	6/30/2035	2035	1,543,288	2,726,905	4,270,193	13,505,168	9,762,347	43.7%	138.3%
7/1/2035	6/30/2036	2036	1,572,357	2,622,943	4,195,300	11,675,503	10,055,217	41.7%	116.1%
7/1/2036	6/30/2037	2037	1,602,668	2,464,213	4,066,881	9,818,627	10,356,874	39.3%	94.8%
7/1/2037	6/30/2038	2038	1,634,251	1,364,183	2,998,434	7,989,286	10,667,580	28.1%	74.9%
7/1/2038	6/30/2039	2039	1,667,137	1,353,780	3,020,917	7,164,902	10,987,608	27.5%	65.2%
7/1/2039	6/30/2040	2040	1,701,356	1,394,394	3,095,750	6,290,502	11,317,236	27.4%	55.6%
7/1/2040	6/30/2041	2041	1,736,941	1,436,226	3,173,167	5,309,530	11,656,753	27.2%	45.5%
7/1/2041	6/30/2042	2042	1,773,926	1,217,051	2,990,977	4,212,863	12,006,455	24.9%	35.1%
7/1/2042	6/30/2043	2043	1,812,345	1,163,709	2,976,054	3,262,431	12,366,649	24.1%	26.4%
7/1/2043	6/30/2044	2044	1,852,236	996,856	2,849,092	2,297,176	12,737,649	22.4%	18.0%
7/1/2044	6/30/2045	2045	1,893,634	703,350	2,596,984	1,433,633	13,119,778	19.8%	10.9%
7/1/2045	6/30/2046	2046	1,936,579	391,337	2,327,916	810,538	13,513,371	17.2%	6.0%
7/1/2046	6/30/2047	2047	1,981,111	364,003	2,345,114	464,803	13,918,773	16.8%	3.3%
7/1/2047	6/30/2048	2048	2,027,270	126,311	2,153,581	121,896	14,336,336	15.0%	0.9%

UAAL = Unfunded Actuarial Accrued Liability

Beginning Fiscal Year	Ending Fiscal Year	FYE	TOTAL Aptos/La Selva Projected Normal Cost	Amortization Pmt	Total ARC Payment	UAAL	Payroll	Total Payment as % of Payroll	UAAL as % of Payroll
7/1/2018	**6/30/2019**	2019	858,702	873,851	1,732,553	17,445,932	5,176,726	33.5%	337.0%
7/1/2019	6/30/2020	2020	905,655	1,099,536	2,005,191	17,827,067	5,341,933	37.5%	333.7%
7/1/2020	6/30/2021	2021	989,166	1,245,290	2,234,456	18,002,453	5,511,884	40.5%	326.6%
7/1/2021	6/30/2022	2022	1,003,157	1,403,107	2,406,264	18,039,740	5,686,724	42.3%	317.2%
7/1/2022	6/30/2023	2023	1,017,906	1,521,206	2,539,112	17,916,244	5,866,606	43.3%	305.4%
7/1/2023	6/30/2024	2024	1,033,427	1,557,830	2,591,257	17,661,264	6,051,685	42.8%	291.8%
7/1/2024	6/30/2025	2025	1,049,736	1,604,564	2,654,300	17,349,529	6,242,120	42.5%	277.9%
7/1/2025	6/30/2026	2026	1,066,850	1,652,702	2,719,552	16,966,377	6,438,078	42.2%	263.5%
7/1/2026	6/30/2027	2027	1,084,787	1,702,282	2,787,069	16,505,086	6,639,728	42.0%	248.6%
7/1/2027	6/30/2028	2028	1,103,565	1,753,351	2,856,916	15,958,398	6,847,244	41.7%	233.1%
7/1/2028	6/30/2029	2029	1,123,202	1,805,952	2,929,154	15,318,474	7,060,807	41.5%	217.0%
7/1/2029	6/30/2030	2030	1,143,717	1,860,130	3,003,847	14,576,849	7,280,601	41.3%	200.2%
7/1/2030	6/30/2031	2031	1,165,131	1,915,934	3,081,065	13,724,389	7,506,818	41.0%	182.8%
7/1/2031	6/30/2032	2032	1,187,466	1,973,413	3,160,879	12,751,236	7,739,654	40.8%	164.8%
7/1/2032	6/30/2033	2033	1,210,741	1,934,478	3,145,219	11,646,752	7,979,311	39.4%	146.0%
7/1/2033	6/30/2034	2034	1,234,980	1,891,431	3,126,411	10,501,157	8,225,997	38.0%	127.7%
7/1/2034	6/30/2035	2035	1,260,206	1,807,864	3,068,070	9,315,679	8,479,927	36.2%	109.9%
7/1/2035	6/30/2036	2036	1,286,444	1,717,581	3,004,025	8,129,367	8,741,320	34.4%	93.0%
7/1/2036	6/30/2037	2037	1,313,717	1,596,566	2,910,283	6,949,118	9,010,405	32.3%	77.1%
7/1/2037	6/30/2038	2038	1,342,051	965,747	2,307,798	5,807,224	9,287,416	24.8%	62.5%
7/1/2038	6/30/2039	2039	1,371,474	953,979	2,325,453	5,234,781	9,572,592	24.3%	54.7%
7/1/2039	6/30/2040	2040	1,402,013	982,599	2,384,612	4,632,315	9,866,184	24.2%	47.0%
7/1/2040	6/30/2041	2041	1,433,695	1,012,077	2,445,772	3,955,760	10,168,445	24.1%	38.9%
7/1/2041	6/30/2042	2042	1,466,552	871,167	2,337,719	3,198,763	10,479,638	22.3%	30.5%
7/1/2042	6/30/2043	2043	1,500,612	860,796	2,361,408	2,531,952	10,800,036	21.9%	23.4%
7/1/2043	6/30/2044	2044	1,535,908	759,599	2,295,507	1,826,710	11,129,916	20.6%	16.4%
7/1/2044	6/30/2045	2045	1,572,471	554,567	2,127,038	1,174,319	11,469,567	18.5%	10.2%
7/1/2045	6/30/2046	2046	1,610,336	336,549	1,946,885	686,272	11,819,283	16.5%	5.8%
7/1/2046	6/30/2047	2047	1,649,538	303,502	1,953,040	388,147	12,179,370	16.0%	3.2%
7/1/2047	6/30/2048	2048	1,690,111	105,982	1,796,093	102,278	12,550,141	14.3%	0.8%

UAAL = Unfunded Actuarial Accrued Liability

Central – Miscellaneous Tier 1 Classic

Date	Current Schedule		Alternative Schedules			
			20 yr Amort		15 yr Amort	
	Balance	Payment	Balance	Payment	Balance	Payment
6/30/2015						
6/30/2016						
6/30/2017						
6/30/2018	930,716	49,938	930,716	69,573	930,716	84,654
6/30/2019	947,609	60,800	927,263	71,661	911,636	87,194
6/30/2020	954,493	67,789	921,392	73,810	888,517	89,809
6/30/2021	954,643	75,515	912,861	76,025	860,983	92,504
6/30/2022	946,797	81,624	901,407	78,305	828,626	95,279
6/30/2023	932,044	84,072	886,744	80,655	791,008	98,137
6/30/2024	913,664	86,595	868,565	83,074	747,653	101,081
6/30/2025	891,316	89,192	846,539	85,566	698,050	104,114
6/30/2026	864,628	91,868	820,306	88,133	641,647	107,237
6/30/2027	833,199	94,624	789,478	90,777	577,847	110,454
6/30/2028	796,596	97,463	753,637	93,501	506,008	113,768
6/30/2029	754,352	100,387	712,330	96,306	425,438	117,181
6/30/2030	705,962	103,398	665,071	99,195	335,389	120,696
6/30/2031	650,884	106,500	611,332	102,171	235,056	124,317
6/30/2032	588,528	105,416	550,546	105,236	123,571	128,047
6/30/2033	522,699	104,170	482,102	108,393		
6/30/2034	453,305	100,970	405,338	111,645		
6/30/2035	382,109	97,485	319,543	114,994		
6/30/2036	309,273	47,624	223,951	118,444		
6/30/2037	282,733	47,103	117,733	121,997		
6/30/2038	254,775	46,508				
6/30/2039	225,372	47,904				
6/30/2040	192,355	49,341				
6/30/2041	155,413	42,485				
6/30/2042	122,851	41,621				
6/30/2043	88,782	36,908				
6/30/2044	57,085	26,909				
6/30/2045	33,411	16,276				
6/30/2046	19,010	14,644				
6/30/2047	5,237	5,427				

Central – Miscellaneous Tier 2 Classic

Date	Current Schedule		Alternative Schedules			
			20 yr Amort		15 yr Amort	
	Balance	Payment	Balance	Payment	Balance	Payment
6/30/2015						
6/30/2016						
6/30/2017						
6/30/2018	2,431	547	2,431	547	2,431	547
6/30/2019	2,044	563	2,044	563	2,044	563
6/30/2020	1,611	580	1,611	580	1,611	580
6/30/2021	1,129	597	1,129	597	1,129	597
6/30/2022	594	615	594	615	594	615
6/30/2023	-	-	-	-	-	-
6/30/2024	-	-	-	-	-	-
6/30/2025	-	-	-	-	-	-
6/30/2026	-	-	-	-	-	-
6/30/2027	-	-	-	-	-	-
6/30/2028	-	-	-	-	-	-
6/30/2029	-	-	-	-	-	-
6/30/2030	-	-	-	-	-	-
6/30/2031	-	-	-	-	-	-
6/30/2032	-	-	-	-	-	-
6/30/2033	-	-	-	-	-	-
6/30/2034	-	-	-	-	-	-
6/30/2035	-	-	-	-	-	-
6/30/2036	-	-	-	-	-	-
6/30/2037	-	-	-	-	-	-
6/30/2038	-	-	-	-	-	-
6/30/2039	-	-	-	-	-	-
6/30/2040	-	-	-	-	-	-
6/30/2041	-	-	-	-	-	-
6/30/2042	-	-	-	-	-	-
6/30/2043	-	-	-	-	-	-
6/30/2044	-	-	-	-	-	-
6/30/2045	-	-	-	-	-	-
6/30/2046	-	-	-	-	-	-
6/30/2047	-	-	-	-	-	-

Central – Miscellaneous PEPRA

Date	Current Schedule		Alternative Schedules			
			20 yr Amort		15 yr Amort	
	Balance	Payment	Balance	Payment	Balance	Payment
6/30/2015						
6/30/2016						
6/30/2017						
6/30/2018	6,850	1,540	6,850	1,540	6,850	1,540
6/30/2019	5,760	1,586	5,760	1,586	5,760	1,586
6/30/2020	4,541	1,634	4,541	1,634	4,541	1,634
6/30/2021	3,182	1,683	3,182	1,683	3,182	1,683
6/30/2022	1,673	1,734	1,673	1,734	1,673	1,734
6/30/2023	-	-	-	-	-	-
6/30/2024	-	-	-	-	-	-
6/30/2025	-	-	-	-	-	-
6/30/2026	-	-	-	-	-	-
6/30/2027	-	-	-	-	-	-
6/30/2028	-	-	-	-	-	-
6/30/2029	-	-	-	-	-	-
6/30/2030	-	-	-	-	-	-
6/30/2031	-	-	-	-	-	-
6/30/2032	-	-	-	-	-	-
6/30/2033	-	-	-	-	-	-
6/30/2034	-	-	-	-	-	-
6/30/2035	-	-	-	-	-	-
6/30/2036	-	-	-	-	-	-
6/30/2037	-	-	-	-	-	-
6/30/2038	-	-	-	-	-	-
6/30/2039	-	-	-	-	-	-
6/30/2040	-	-	-	-	-	-
6/30/2041	-	-	-	-	-	-
6/30/2042	-	-	-	-	-	-
6/30/2043	-	-	-	-	-	-
6/30/2044	-	-	-	-	-	-
6/30/2045	-	-	-	-	-	-
6/30/2046	-	-	-	-	-	-
6/30/2047	-	-	-	-	-	-

Central – Safety Tier 1 Classic

Date	Current Schedule		Alternative Schedules			
			20 yr Amort		15 yr Amort	
	Balance	Payment	Balance	Payment	Balance	Payment
6/30/2015						
6/30/2016						
6/30/2017						
6/30/2018	24,846,878	1,321,308	24,846,878	1,857,366	24,846,878	2,259,969
6/30/2019	25,310,170	1,621,144	24,754,697	1,913,087	24,337,512	2,327,768
6/30/2020	25,496,935	1,801,284	24,597,978	1,970,480	23,720,327	2,397,601
6/30/2021	25,510,809	1,995,546	24,370,231	2,029,594	22,985,261	2,469,529
6/30/2022	25,324,409	2,143,153	24,064,431	2,090,482	22,121,451	2,543,615
6/30/2023	24,971,307	2,207,448	23,672,986	2,153,196	21,117,166	2,619,923
6/30/2024	24,525,542	2,273,671	23,187,686	2,217,792	19,959,743	2,698,521
6/30/2025	23,978,279	2,341,881	22,599,659	2,284,326	18,635,516	2,779,476
6/30/2026	23,319,974	2,412,138	21,899,322	2,352,856	17,129,739	2,862,861
6/30/2027	22,540,319	2,484,502	21,076,322	2,423,441	15,426,506	2,948,746
6/30/2028	21,628,179	2,559,037	20,119,485	2,496,145	13,508,664	3,037,209
6/30/2029	20,571,534	2,635,808	19,016,744	2,571,029	11,357,714	3,128,325
6/30/2030	19,357,410	2,714,882	17,755,080	2,648,160	8,953,715	3,222,175
6/30/2031	17,971,806	2,796,329	16,320,443	2,727,605	6,275,173	3,318,840
6/30/2032	16,399,618	2,757,480	14,697,680	2,809,433	3,298,921	3,418,405
6/30/2033	14,751,736	2,713,784	12,870,446	2,893,716		
6/30/2034	13,027,601	2,621,696	10,821,118	2,980,527		
6/30/2035	11,271,736	2,521,640	8,530,697	3,069,943		
6/30/2036	9,490,055	2,413,221	5,978,702	3,162,041		
6/30/2037	7,689,320	1,314,192	3,143,064	3,256,903		
6/30/2038	6,894,616	1,304,897				
6/30/2039	6,050,936	1,344,043				
6/30/2040	5,104,469	1,384,365				
6/30/2041	4,046,418	1,171,970				
6/30/2042	3,130,424	1,119,415				
6/30/2043	2,201,333	957,194				
6/30/2044	1,371,820	674,286				
6/30/2045	774,283	373,543				
6/30/2046	444,313	348,518				
6/30/2047	115,941	120,140				

Central – Safety Tier 2 Classic

Date	Current Schedule		Alternative Schedules			
			20 yr Amort		15 yr Amort	
	Balance	Payment	Balance	Payment	Balance	Payment
6/30/2015						
6/30/2016						
6/30/2017						
6/30/2018	35,997	383	35,997	2,351	35,997	2,691
6/30/2019	38,255	1,062	36,216	2,421	35,864	2,772
6/30/2020	39,976	1,780	36,378	2,494	35,637	2,855
6/30/2021	41,080	2,541	36,477	2,569	35,307	2,940
6/30/2022	41,476	3,346	36,505	2,646	34,864	3,029
6/30/2023	41,067	3,447	36,456	2,725	34,297	3,119
6/30/2024	40,524	3,550	36,321	2,807	33,594	3,213
6/30/2025	39,834	3,657	36,091	2,891	32,742	3,309
6/30/2026	38,983	3,766	35,757	2,978	31,727	3,409
6/30/2027	37,955	3,879	35,308	3,067	30,535	3,511
6/30/2028	36,735	3,996	34,734	3,159	29,148	3,616
6/30/2029	35,303	4,116	34,021	3,254	27,551	3,725
6/30/2030	33,642	4,239	33,159	3,352	25,723	3,837
6/30/2031	31,731	4,366	32,131	3,452	23,645	3,952
6/30/2032	29,547	4,497	30,924	3,556	21,294	4,070
6/30/2033	27,066	4,632	29,520	3,662	18,646	4,192
6/30/2034	24,262	4,239	27,902	3,772	15,677	4,318
6/30/2035	21,658	3,818	26,051	3,885	12,359	4,448
6/30/2036	19,299	3,368	23,946	4,002	8,662	4,581
6/30/2037	17,233	2,888	21,565	4,122	4,554	4,718
6/30/2038	15,511	2,375	18,884	4,246		
6/30/2039	14,194	2,447	15,877	4,373		
6/30/2040	12,706	2,520	12,516	4,504		
6/30/2041	11,032	2,596	8,772	4,639		
6/30/2042	9,156	2,673	4,612	4,779		
6/30/2043	7,061	2,754				
6/30/2044	4,728	2,155				
6/30/2045	2,844	1,518				
6/30/2046	1,480	841				
6/30/2047	718	744				

Central – Safety PEPRA

Date	Current Schedule		Alternative Schedules			
			20 yr Amort		15 yr Amort	
	Balance	Payment	Balance	Payment	Balance	Payment
6/30/2015						
6/30/2016						
6/30/2017						
6/30/2018	4,619	1,038	4,619	1,038	4,619	1,038
6/30/2019	3,883	1,070	3,883	1,070	3,883	1,070
6/30/2020	3,061	1,102	3,061	1,102	3,061	1,102
6/30/2021	2,146	1,135	2,146	1,135	2,146	1,135
6/30/2022	1,128	1,169	1,128	1,169	1,128	1,169
6/30/2023	-	-	-	-	-	-
6/30/2024	-	-	-	-	-	-
6/30/2025	-	-	-	-	-	-
6/30/2026	-	-	-	-	-	-
6/30/2027	-	-	-	-	-	-
6/30/2028	-	-	-	-	-	-
6/30/2029	-	-	-	-	-	-
6/30/2030	-	-	-	-	-	-
6/30/2031	-	-	-	-	-	-
6/30/2032	-	-	-	-	-	-
6/30/2033	-	-	-	-	-	-
6/30/2034	-	-	-	-	-	-
6/30/2035	-	-	-	-	-	-
6/30/2036	-	-	-	-	-	-
6/30/2037	-	-	-	-	-	-
6/30/2038	-	-	-	-	-	-
6/30/2039	-	-	-	-	-	-
6/30/2040	-	-	-	-	-	-
6/30/2041	-	-	-	-	-	-
6/30/2042	-	-	-	-	-	-
6/30/2043	-	-	-	-	-	-
6/30/2044	-	-	-	-	-	-
6/30/2045	-	-	-	-	-	-
6/30/2046	-	-	-	-	-	-
6/30/2047	-	-	-	-	-	-

Aptos/La Selva – Miscellaneous Classic

Date	Current Schedule		Alternative Schedules			
			20 yr Amort		15 yr Amort	
	Balance	Payment	Balance	Payment	Balance	Payment
6/30/2015						
6/30/2016						
6/30/2017						
6/30/2018	540,688	27,126	540,688	40,418	540,688	49,179
6/30/2019	552,455	33,847	538,682	41,630	529,604	50,654
6/30/2020	558,126	38,591	535,272	42,879	516,173	52,174
6/30/2021	559,299	43,924	530,316	44,166	500,178	53,739
6/30/2022	555,033	47,936	523,661	45,491	481,381	55,351
6/30/2023	546,294	49,374	515,143	46,855	459,526	57,012
6/30/2024	535,421	50,855	504,583	48,261	434,340	58,722
6/30/2025	522,211	52,381	491,787	49,709	405,524	60,484
6/30/2026	506,446	53,952	476,547	51,200	372,757	62,298
6/30/2027	487,890	55,571	458,638	52,736	335,693	64,167
6/30/2028	466,288	57,238	437,816	54,318	293,959	66,092
6/30/2029	441,365	58,955	413,820	55,948	247,153	68,075
6/30/2030	412,825	60,724	386,365	57,626	194,840	70,117
6/30/2031	380,348	62,546	355,146	59,355	136,553	72,221
6/30/2032	343,587	61,363	319,833	61,136	71,787	74,387
6/30/2033	305,342	60,052	280,071	62,970		
6/30/2034	265,633	57,407	235,476	64,859		
6/30/2035	225,737	54,550	185,635	66,804		
6/30/2036	185,860	27,781	130,101	68,809		
6/30/2037	170,780	27,303	68,396	70,873		
6/30/2038	155,083	26,770				
6/30/2039	138,781	27,573				
6/30/2040	120,444	28,401				
6/30/2041	99,897	24,869				
6/30/2042	81,495	25,835				
6/30/2043	60,734	23,849				
6/30/2044	40,500	18,172				
6/30/2045	24,657	12,132				
6/30/2046	13,904	10,796				
6/30/2047	3,743	3,878				

Aptos/La Selva – Miscellaneous PEPRA

Date	Current Schedule		Alternative Schedules			
			20 yr Amort		15 yr Amort	
	Balance	Payment	Balance	Payment	Balance	Payment
6/30/2015						
6/30/2016						
6/30/2017						
6/30/2018	6,095	1,370	6,095	1,370	6,095	1,370
6/30/2019	5,124	1,411	5,124	1,411	5,124	1,411
6/30/2020	4,040	1,454	4,040	1,454	4,040	1,454
6/30/2021	2,831	1,497	2,831	1,497	2,831	1,497
6/30/2022	1,488	1,542	1,488	1,542	1,488	1,542
6/30/2023	-	-	-	-	-	-
6/30/2024	-	-	-	-	-	-
6/30/2025	-	-	-	-	-	-
6/30/2026	-	-	-	-	-	-
6/30/2027	-	-	-	-	-	-
6/30/2028	-	-	-	-	-	-
6/30/2029	-	-	-	-	-	-
6/30/2030	-	-	-	-	-	-
6/30/2031	-	-	-	-	-	-
6/30/2032	-	-	-	-	-	-
6/30/2033	-	-	-	-	-	-
6/30/2034	-	-	-	-	-	-
6/30/2035	-	-	-	-	-	-
6/30/2036	-	-	-	-	-	-
6/30/2037	-	-	-	-	-	-
6/30/2038	-	-	-	-	-	-
6/30/2039	-	-	-	-	-	-
6/30/2040	-	-	-	-	-	-
6/30/2041	-	-	-	-	-	-
6/30/2042	-	-	-	-	-	-
6/30/2043	-	-	-	-	-	-
6/30/2044	-	-	-	-	-	-
6/30/2045	-	-	-	-	-	-
6/30/2046	-	-	-	-	-	-
6/30/2047	-	-	-	-	-	-

Aptos/La Selva – Safety Classic

Date	Current Schedule		Alternative Schedules			
			20 yr Amort		15 yr Amort	
	Balance	Payment	Balance	Payment	Balance	Payment
6/30/2015						
6/30/2016						
6/30/2017						
6/30/2018	16,870,665	838,951	16,870,665	1,261,124	16,870,665	1,534,485
6/30/2019	17,245,539	1,057,682	16,808,075	1,298,958	16,524,813	1,580,520
6/30/2020	17,421,407	1,198,451	16,701,666	1,337,927	16,105,753	1,627,936
6/30/2021	17,464,378	1,350,688	16,547,029	1,378,065	15,606,655	1,676,774
6/30/2022	17,352,767	1,464,520	16,339,395	1,419,406	15,020,141	1,727,077
6/30/2023	17,114,970	1,508,456	16,073,610	1,461,989	14,338,246	1,778,889
6/30/2024	16,814,108	1,553,709	15,744,098	1,505,848	13,552,373	1,832,256
6/30/2025	16,444,166	1,600,321	15,344,836	1,551,024	12,653,241	1,887,224
6/30/2026	15,998,640	1,648,330	14,869,318	1,597,554	11,630,841	1,943,840
6/30/2027	15,470,508	1,697,780	14,310,513	1,645,481	10,474,371	2,002,155
6/30/2028	14,852,186	1,748,714	13,660,835	1,694,846	9,172,184	2,062,220
6/30/2029	14,135,484	1,801,175	12,912,090	1,745,691	7,711,721	2,124,087
6/30/2030	13,311,564	1,855,210	12,055,439	1,798,062	6,079,441	2,187,809
6/30/2031	12,370,888	1,910,867	11,081,341	1,852,003	4,260,750	2,253,444
6/30/2032	11,303,165	1,873,115	9,979,509	1,907,564	2,239,919	2,321,047
6/30/2033	10,195,815	1,831,379	8,738,844	1,964,790		
6/30/2034	9,050,046	1,750,457	7,347,380	2,023,734		
6/30/2035	7,903,630	1,663,031	5,792,218	2,084,446		
6/30/2036	6,763,258	1,568,785	4,059,451	2,146,980		
6/30/2037	5,636,444	938,444	2,134,094	2,211,389		
6/30/2038	5,079,698	927,209				
6/30/2039	4,493,534	955,026				
6/30/2040	3,835,316	983,676				
6/30/2041	3,098,866	846,298				
6/30/2042	2,450,457	834,961				
6/30/2043	1,765,976	735,750				
6/30/2044	1,133,819	536,395				
6/30/2045	661,615	324,417				
6/30/2046	374,243	292,706				
6/30/2047	98,535	102,104				

Aptos/La Selva – Safety PEPRA

Date	Current Schedule		Alternative Schedules			
			20 yr Amort		15 yr Amort	
	Balance	Payment	Balance	Payment	Balance	Payment
6/30/2015						
6/30/2016						
6/30/2017						
6/30/2018	28,484	6,404	28,484	6,404	28,484	6,404
6/30/2019	23,949	6,596	23,949	6,596	23,949	6,596
6/30/2020	18,880	6,794	18,880	6,794	18,880	6,794
6/30/2021	13,232	6,998	13,232	6,998	13,232	6,998
6/30/2022	6,956	7,208	6,956	7,208	6,956	7,208
6/30/2023	-	-	-	-	-	-
6/30/2024	-	-	-	-	-	-
6/30/2025	-	-	-	-	-	-
6/30/2026	-	-	-	-	-	-
6/30/2027	-	-	-	-	-	-
6/30/2028	-	-	-	-	-	-
6/30/2029	-	-	-	-	-	-
6/30/2030	-	-	-	-	-	-
6/30/2031	-	-	-	-	-	-
6/30/2032	-	-	-	-	-	-
6/30/2033	-	-	-	-	-	-
6/30/2034	-	-	-	-	-	-
6/30/2035	-	-	-	-	-	-
6/30/2036	-	-	-	-	-	-
6/30/2037	-	-	-	-	-	-
6/30/2038	-	-	-	-	-	-
6/30/2039	-	-	-	-	-	-
6/30/2040	-	-	-	-	-	-
6/30/2041	-	-	-	-	-	-
6/30/2042	-	-	-	-	-	-
6/30/2043	-	-	-	-	-	-
6/30/2044	-	-	-	-	-	-
6/30/2045	-	-	-	-	-	-
6/30/2046	-	-	-	-	-	-
6/30/2047	-	-	-	-	-	-

Pension Obligation Bond

Date	Current Schedule		Alternative Schedules			
			20 yr Amort		15 yr Amort	
	Balance	Payment	Balance	Payment	Balance	Payment
6/30/2015						
6/30/2016						
6/30/2017						
6/30/2018	1,183,262	1,131,055	1,183,262	1,131,055	1,183,262	1,131,055
6/30/2019	54,661	54,661	54,661	54,661	54,661	54,661
6/30/2020	-	-	-	-	-	-
6/30/2021	-	-	-	-	-	-
6/30/2022	-	-	-	-	-	-
6/30/2023	-	-	-	-	-	-
6/30/2024	-	-	-	-	-	-
6/30/2025	-	-	-	-	-	-
6/30/2026	-	-	-	-	-	-
6/30/2027	-	-	-	-	-	-
6/30/2028	-	-	-	-	-	-
6/30/2029	-	-	-	-	-	-
6/30/2030	-	-	-	-	-	-
6/30/2031	-	-	-	-	-	-
6/30/2032	-	-	-	-	-	-
6/30/2033	-	-	-	-	-	-
6/30/2034	-	-	-	-	-	-
6/30/2035	-	-	-	-	-	-
6/30/2036	-	-	-	-	-	-
6/30/2037	-	-	-	-	-	-
6/30/2038	-	-	-	-	-	-
6/30/2039	-	-	-	-	-	-
6/30/2040	-	-	-	-	-	-
6/30/2041	-	-	-	-	-	-
6/30/2042	-	-	-	-	-	-
6/30/2043	-	-	-	-	-	-
6/30/2044	-	-	-	-	-	-
6/30/2045	-	-	-	-	-	-
6/30/2046	-	-	-	-	-	-
6/30/2047	-	-	-	-	-	-

Appendix 2: OPEB Cost Projection Detail

Central OPEB Projections
FYE 2018 – 2030

Central OPEB - long term annual cost projections for current OPEB program

Open group projections. Assumes each employee who separates from District service is replaced by a new (PEPRA) misc or safety employee
Assumes Local 3605 adopts the same OPEB structure as adopted by Management.

Central	FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030
Projected Salary	7,186,000	7,329,000	7,476,000	7,625,000	7,778,000	7,933,000	8,092,000	8,254,000	8,419,000	8,587,000	8,759,000	8,934,000	9,113,000
Explicit Only													
Benefit Payments	781,000	842,000	898,000	946,000	982,000	1,033,000	1,102,000	1,117,000	1,220,000	1,325,000	1,430,000	1,549,000	1,674,000
% of payroll	2.0%	2.1%	2.2%	2.2%	2.1%	1.9%	1.8%	1.7%	1.7%	1.7%	1.8%	1.8%	1.8%
Actuarially Determined Contribution	1,561,000	1,514,000	1,660,000	1,704,000	1,749,000	1,790,000	1,839,000	1,878,000	1,938,000	1,990,000	2,046,000	2,105,000	2,168,000
Explicit Benefit Payments	781,000	842,000	898,000	946,000	982,000	1,033,000	1,102,000	1,117,000	1,220,000	1,325,000	1,430,000	1,549,000	1,674,000
Implicit Subsidy	314,000	376,000	445,000	499,000	530,000	529,000	596,000	505,000	561,000	617,000	689,000	791,000	950,000
Trust Contributions	466,000	296,000	317,000	259,000	237,000	228,000	141,000	256,000	157,000	48,000	(73,000)	(235,000)	(456,000)
ADC as % of payroll	21.7%	20.7%	22.2%	22.3%	22.5%	22.6%	22.7%	22.8%	23.0%	23.2%	23.4%	23.6%	23.8%
Components of ADC	1,561,000	1,514,000	1,660,000	1,704,000	1,749,000	1,790,000	1,839,000	1,878,000	1,938,000	1,990,000	2,046,000	2,105,000	2,168,000
Normal Cost	458,000	465,000	472,000	481,000	490,000	494,000	505,000	505,000	520,000	526,000	534,000	546,000	563,000
Amortization of UAAL	1,103,000	1,049,000	1,188,000	1,223,000	1,259,000	1,296,000	1,334,000	1,373,000	1,418,000	1,464,000	1,512,000	1,559,000	1,605,000
ADC % of payroll	21.7%	20.7%	22.2%	22.3%	22.5%	22.6%	22.7%	22.8%	23.0%	23.2%	23.4%	23.6%	23.8%
Normal Cost as % of payroll	6.4%	6.3%	6.3%	6.3%	6.3%	6.2%	6.2%	6.1%	6.2%	6.1%	6.1%	6.1%	6.2%
Amortization of UAAL as % o	15.3%	14.3%	15.9%	16.0%	16.2%	16.3%	16.5%	16.6%	16.8%	17.0%	17.3%	17.5%	17.6%
ADC by Liability Type	1,561,000	1,514,000	1,660,000	1,704,000	1,749,000	1,790,000	1,839,000	1,878,000	1,938,000	1,990,000	2,046,000	2,105,000	2,168,000
Explicit portion of ADC	1,163,000	1,128,000	1,200,000	1,237,000	1,276,000	1,313,000	1,355,000	1,392,000	1,440,000	1,483,000	1,531,000	1,584,000	1,645,000
Implicit portion of ADC	398,000	386,000	460,000	467,000	473,000	477,000	484,000	486,000	498,000	507,000	515,000	521,000	523,000

Central OPEB Projections
FYE 2031 – 2043

Central OPEB - long term annual cost projections for current OPEB program

Open group projections. Assumes each employee who separates from District service is replaced by a new (PEPRA) misc or safety employee
Assumes Local 3605 adopts the same OPEB structure as adopted by Management.

Central	FYE 2031	FYE 2032	FYE 2033	FYE 2034	FYE 2035	FYE 2036	FYE 2037	FYE 2038	FYE 2039	FYE 2040	FYE 2041	FYE 2042	FYE 2043
Projected Salary	9,295,000	9,481,000	9,671,000	9,864,000	10,062,000	10,263,000	10,468,000	10,677,000	10,891,000	11,109,000	11,331,000	11,558,000	11,789,000
Explicit Only													
Benefit Payments	1,782,000	1,894,000	1,972,000	2,071,000	2,151,000	2,204,000	2,214,000	2,267,000	2,271,000	2,212,000	2,244,000	2,296,000	2,306,000
% of payroll	1.7%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.5%	1.5%	1.5%	1.5%	1.6%	1.6%
Actuarially Determined Contribution	2,226,000	2,284,000	2,337,000	2,392,000	2,439,000	2,484,000	2,535,000	2,597,000	2,659,000	2,738,000	2,866,000	3,014,000	3,184,000
Explicit Benefit Payments	1,782,000	1,894,000	1,972,000	2,071,000	2,151,000	2,204,000	2,214,000	2,267,000	2,271,000	2,212,000	2,244,000	2,296,000	2,306,000
Implicit Subsidy	1,051,000	1,201,000	1,287,000	1,451,000	1,531,000	1,543,000	1,494,000	1,553,000	1,445,000	1,116,000	1,115,000	1,144,000	1,025,000
Trust Contributions	(607,000)	(811,000)	(922,000)	(1,130,000)	(1,243,000)	(1,263,000)	(1,173,000)	(1,223,000)	(1,057,000)	(590,000)	(493,000)	(426,000)	(147,000)
ADC as % of payroll	23.9%	24.1%	24.2%	24.2%	24.2%	24.2%	24.2%	24.3%	24.4%	24.6%	25.3%	26.1%	27.0%
Components of ADC	2,226,000	2,284,000	2,337,000	2,392,000	2,439,000	2,484,000	2,535,000	2,597,000	2,659,000	2,738,000	2,866,000	3,014,000	3,184,000
Normal Cost	579,000	596,000	614,000	634,000	653,000	672,000	694,000	719,000	743,000	768,000	797,000	827,000	859,000
Amortization of UAAL	1,647,000	1,688,000	1,723,000	1,758,000	1,786,000	1,812,000	1,841,000	1,878,000	1,916,000	1,970,000	2,069,000	2,187,000	2,325,000
ADC % of payroll	23.9%	24.1%	24.2%	24.2%	24.2%	24.2%	24.2%	24.3%	24.4%	24.6%	25.3%	26.1%	27.0%
Normal Cost as % of payroll	6.2%	6.3%	6.3%	6.4%	6.5%	6.5%	6.6%	6.7%	6.8%	6.9%	7.0%	7.2%	7.3%
Amortization of UAAL as % o	17.7%	17.8%	17.8%	17.8%	17.7%	17.7%	17.6%	17.6%	17.6%	17.7%	18.3%	18.9%	19.7%
ADC by Liability Type	2,226,000	2,284,000	2,337,000	2,392,000	2,439,000	2,484,000	2,535,000	2,597,000	2,659,000	2,738,000	2,866,000	3,014,000	3,184,000
Explicit portion of ADC	1,709,000	1,778,000	1,853,000	1,934,000	2,020,000	2,113,000	2,213,000	2,322,000	2,441,000	2,569,000	2,709,000	2,866,000	3,047,000
Implicit portion of ADC	517,000	506,000	484,000	458,000	419,000	371,000	322,000	275,000	218,000	169,000	157,000	148,000	137,000

Aptos/La Selva OPEB Projections
FYE 2018 – 2030

Aptos/La Selva OPEB - long term annual cost projections for current OPEB program

Open group projections. Assumes each employee who separates from District service is replaced by a new (PEPRA) misc or safety employee

Aptos/La Selva	FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030
Projected Salary	5,094,000	5,247,000	5,404,000	5,566,000	5,733,000	5,905,000	6,083,000	6,265,000	6,453,000	6,647,000	6,846,000	7,051,000	7,263,000
Explicit Only													
Benefit Payments	101,000	108,000	117,000	123,000	123,000	111,000	111,000	107,000	111,000	116,000	123,000	125,000	132,000
% of payroll	2.0%	2.1%	2.2%	2.2%	2.1%	1.9%	1.8%	1.7%	1.7%	1.7%	1.8%	1.8%	1.8%
Actuarially Determined Contribution	199,000	204,000	210,000	216,000	221,000	229,000	236,000	243,000	251,000	260,000	269,000	277,000	288,000
Explicit Benefit Payments	101,000	108,000	117,000	123,000	123,000	111,000	111,000	107,000	111,000	116,000	123,000	125,000	132,000
Implicit Subsidy	63,000	72,000	85,000	97,000	97,000	85,000	83,000	70,000	64,000	67,000	66,000	70,000	78,000
Trust Contributions	35,000	24,000	8,000	(4,000)	1,000	33,000	42,000	66,000	76,000	77,000	80,000	82,000	78,000
ADC as % of payroll	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	4.0%
Components of ADC	199,000	204,000	210,000	216,000	221,000	229,000	236,000	243,000	251,000	260,000	269,000	277,000	288,000
Normal Cost	74,000	75,000	79,000	81,000	84,000	88,000	93,000	97,000	101,000	107,000	112,000	117,000	124,000
Amortization of UAAL	125,000	129,000	131,000	135,000	137,000	141,000	143,000	146,000	150,000	153,000	157,000	160,000	164,000
ADC % of payroll	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	4.0%
ADC by Liability Type	199,000	204,000	210,000	216,000	221,000	229,000	236,000	243,000	251,000	260,000	269,000	277,000	288,000
Explicit portion of ADC	103,000	105,000	107,000	109,000	110,000	113,000	117,000	120,000	123,000	127,000	131,000	135,000	140,000
Implicit portion of ADC	96,000	99,000	103,000	107,000	111,000	116,000	119,000	123,000	128,000	133,000	138,000	142,000	148,000

Aptos/La Selva OPEB - projection of unused sick leave to retiree health savings

	96,000	91,000	88,000	91,000	120,000	95,000	78,000	80,000	86,000	78,000	72,000	87,000	60,000

Aptos/La Selva OPEB Projections
FYE 2031 – 2043

Aptos/La Selva OPEB - long term annual cost projections for current OPEB program

Open group projections. Assumes each employee who separates from District service is replaced by a new (PEPRA) misc or safety employee

Aptos/La Selva	**FYE 2031**	**FYE 2032**	**FYE 2033**	**FYE 2034**	**FYE 2035**	**FYE 2036**	**FYE 2037**	**FYE 2038**	**FYE 2039**	**FYE 2040**	**FYE 2041**	**FYE 2042**	**FYE 2043**
Projected Salary	7,481,000	7,705,000	7,936,000	8,174,000	8,420,000	8,672,000	8,932,000	9,200,000	9,476,000	9,761,000	10,053,000	10,355,000	10,666,000
Explicit Only													
Benefit Payments	130,000	120,000	127,000	129,000	134,000	141,000	142,000	138,000	143,000	149,000	155,000	161,000	168,000
% of payroll	1.7%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.5%	1.5%	1.5%	1.5%	1.6%	1.6%
Actuarially Determined Contribution	298,000	306,000	319,000	329,000	339,000	351,000	361,000	183,000	196,000	205,000	215,000	226,000	238,000
Explicit Benefit Payments	130,000	120,000	127,000	129,000	134,000	141,000	142,000	138,000	143,000	149,000	155,000	161,000	168,000
Implicit Subsidy	81,000	62,000	75,000	71,000	52,000	59,000	57,000	46,000	53,000	59,000	60,000	66,000	84,000
Trust Contributions	87,000	124,000	117,000	129,000	153,000	151,000	162,000	(1,000)	-	(3,000)	-	(1,000)	(14,000)
ADC as % of payroll	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	2.0%	2.1%	2.1%	2.1%	2.2%	2.2%
Components of ADC	298,000	306,000	319,000	329,000	339,000	351,000	361,000	183,000	196,000	205,000	215,000	226,000	238,000
Normal Cost	130,000	136,000	145,000	153,000	161,000	169,000	178,000	187,000	197,000	207,000	218,000	229,000	242,000
Amortization of UAAL	168,000	170,000	174,000	176,000	178,000	182,000	183,000	(4,000)	(1,000)	(2,000)	(3,000)	(3,000)	(4,000)
ADC % of payroll	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	2.0%	2.1%	2.1%	2.1%	2.2%	2.2%
ADC by Liability Type	298,000	306,000	319,000	329,000	339,000	351,000	361,000	183,000	196,000	205,000	215,000	226,000	238,000
Explicit portion of ADC	144,000	148,000	153,000	157,000	161,000	163,000	164,000	78,000	82,000	85,000	90,000	94,000	99,000
Implicit portion of ADC	154,000	158,000	166,000	172,000	178,000	188,000	197,000	105,000	114,000	120,000	125,000	132,000	139,000

Aptos/La Selva OPEB - projection of unused sick leave to retiree health savings

	64,000	96,000	68,000	75,000	75,000	78,000	66,000	71,000	63,000	70,000	75,000	81,000	79,000