

**GCG**

GOODWIN CONSULTING GROUP

**PLACER COUNTY FIRE DEPARTMENT  
FIRE FACILITIES  
IMPACT FEE STUDY**



***DRAFT REPORT***

**DECEMBER 22, 2017**

# PLACER COUNTY FIRE DEPARTMENT FIRE FACILITIES IMPACT FEE STUDY

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## ***EXECUTIVE SUMMARY***

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### **BACKGROUND**

As development occurs within the boundaries of Placer County Fire Department (“Placer County Fire” or “PCF”), additional fire protection facilities will be needed to meet the service demands of future development. Placer County Fire recently updated its fire protection facilities needs to serve future development within the PCF service area through the year 2060. Facilities and costs are delineated between (i) those facilities that are needed to serve the remaining PCF service area through 2060 and will be funded through fire impact fees, and (ii) those facilities needed to serve the major development projects in western Placer County through 2060 and will be funded through development agreements instead of fire impact fees.

Placer County anticipates entering into development agreements to fund future fire facilities for Regional University, Bickford Ranch, Placer Ranch, and other planned developments in western Placer County. Although fire facilities required to serve these developments (“Major Development Projects”) are identified in this study, these facilities are anticipated to be funded through development agreements and not through the County’s fire fee (“PCF Fire Fee”). The PCF Fire Fee program may be updated in the future to include some of the Major Development Projects and their fire facility needs, subject to approval from both, Placer County Fire and proponents of the Major Development Projects.

Development in the PCF Fire Fee program includes Placer Vineyards Specific Plan (“Placer Vineyards”), Riolo Vineyard Specific Plan (“Riolo Vineyard”), and other future development areas in the PCF service area; this area will be referred to in this report as the “Fire Fee Area”.

Facilities needed to serve future development in the Fire Fee Area are incorporated in the calculation of the PCF Fire Fee and only that portion of the facilities costs that are reasonably related to the impact from new growth will be funded through the PCF program. The PCF Fire Fee complies with the Mitigation Fee Act nexus requirements because the fees are set at the amount needed to mitigate the specific impacts that will result from new development in the Fire Fee Area. The PCF Fire Fee will fund only capital facilities and not recurring operations and maintenance costs.

PCF’s current fire fee, as described in the *Fire Facilities Impact Fee Study*, dated September 4, 2013, was adopted by the Board of Supervisors in 2013, (“2013 Fee Study”). The PCF Fire Fees proposed in this *Placer County Fire Department Fire Facilities Impact Fee Study* (“Fee Study”)

are based on revised fire facility needs, costs, and development projections through 2060. These changes are summarized in the section below.

### **SIGNIFICANT CHANGES FROM THE 2013 FEE STUDY**

Certain assumptions, facilities, and costs incorporated in this Fee Study differ from those in the 2013 Fee Study. Some of the significant changes include the following:

- The Fire Fee Area has been revised to include future development anticipated within Placer Vineyards and Riolo Vineyard. Combined, these two development projects are anticipated to include approximately 35,100 residents and 7,300 employees. In the 2013 Fee Study, the fire facilities required to serve the Placer Vineyards and Riolo Vineyard areas were assumed to be funded through separate development agreements. Therefore, future development within these two development projects was not anticipated to be subject to the PCF Fire Fee. However, on December 10, 2013, the Placer County Board of Supervisors indicated that it was amendable to taking on the obligation to construct certain public facilities, which included the fire facilities planned within the Placer Vineyards Specific Plan that would ultimately serve both Placer Vineyards and the Riolo Vineyards Specific Plan areas. The Second Amended and Restate Development Agreement(s) for Placer Vineyards and the Amended and Restate Development Agreement for Riolo Vineyards both required the ownership groups to participate in the PCF Fire Fee Program.
- The 2013 Fee Study assumes the fire service demand of an employee is equivalent to 0.69 of a resident; however, the Board of Supervisors adopted in April 2014 a revised employee weighting factor in which an employee's service demand equals 0.50 of a resident. The reduced employee weighting factor is based on a set of recommendations included in a peer review memo prepared by Economic and Planning Systems, Inc. This revised employee weighting factor reduces the estimated fire service demand for employees such that an employee is estimated to require 50% of the service that a resident does.
- Capital fire facilities planned to serve Placer Vineyards and Riolo Vineyard have been moved to the PCF Fire Fee program. In addition, fire facilities needed to serve the Placer Ranch project have been added to the capital improvement plan for the Major Development Projects. The total cost of the planned facilities for the Major Development Projects decreased from \$46.8 million in the 2013 Fee Study to \$44.3 million in this Fee Study.
- The average persons per dwelling unit assumption for residential land uses has been revised to reflect a weighted average of all future development within the Fire Fee Area, including Placer Vineyards, Riolo Vineyard, and remaining future development. The 2013 Fee Study

assumes that all future development within the Fire Fee Area would generate an average of 2.6 persons per dwelling unit compared to an average of 2.3 persons per dwelling unit in this Fee Study.

- Existing fire facilities costs have been reevaluated by the County. The total value of existing facilities has decreased from \$27.2 million in the 2013 Fee Study to \$23.4 million in this Fee Study.
- Planned facilities costs for the Fire Fee Area have increased due to updated fire station costs. This Fee Study includes nearly \$53.4 million in planned facilities costs compared to approximately \$23.1 million in total planned facilities in the 2013 Fee Study.

### **FIRE PROTECTION FACILITIES AND COSTS**

The Fee Study identifies fire facilities needed to serve development through 2060 in the Fire Fee Area. The required fire facilities and their costs were determined by Placer County Fire based on its long range needs to meet standards of coverage as recommended in the County General Plan. Facilities are delineated between those that will serve the Fire Fee Area and those that will serve the Major Development Projects.

A summary of the facilities and cost estimates related to the Fire Fee Area, which total approximately \$76.8 million, is shown below in Table A. In addition, approximately \$44.3 million in fire facilities are needed to serve the Major Development Projects. In total, existing and planned facilities required to serve development in the PCF service area through 2060 is approximately \$121.0 million.

**TABLE A  
FACILITIES COST SUMMARY**

Description	Fire Fee Area	Major Development Projects	Estimated Cost
Existing Facilities	\$23,383,672	--	\$23,383,672
Planned Facilities	\$53,366,697	\$44,292,735	\$97,659,432
<b>Total</b>	<b>\$76,750,369</b>	<b>\$44,292,735</b>	<b>\$121,043,104</b>

**PCF FIRE FEES**

A summary of the proposed PCF Fire Fee is presented below in Table B; the PCF Fire Fee includes a 2.0% administration fee that will be used to fund costs associated with administering the PCF Fire Fee program. This fee will fund fee study updates, accounting, and annual reporting required by the Mitigation Fee Act. In addition, Table B shows a comparison of the proposed PCF Fire Fees to the current fire fees.

**TABLE B  
PCF FIRE FEE SUMMARY**

Land Use	Proposed PCF Fee per SF <i>A</i>	Current PCF Fee per SF <i>B</i>	Fee Increase/ (Decrease) <i>C = A-B</i>	% Increase/ (Decrease) <i>D=C/B</i>
Residential	\$0.59	\$0.59	--	0%
Nonresidential	\$0.34	\$0.42	(\$0.08)	(19%)
Agricultural	\$0.13	\$0.12	\$0.01	8%

If adopted by the County Board of Supervisors, the proposed PCF Fire Fee will be charged to future development in the Fire Fee Area only. Expected development in the Major Development Projects will not be required to pay the proposed PCF Fire Fee and instead will mitigate their impact through development agreements.

## ***I. INTRODUCTION***

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The Placer County Fire Department currently provides fire protection and all hazard fire and emergency medical services on a year-round basis to nearly one-third of the total area in Placer County. Specifically, PCF serves residents and employees within a 475-square mile area in unincorporated Placer County that includes developing unincorporated areas in western Placer County and more rural areas to the east. A map identifying the boundaries of Placer County Fire is shown on the following page.

Service is provided by a combination of full time and volunteer firefighters. PCF includes eight fully staffed, 24-hour/day fire stations located in Colfax, Bowman, North Auburn/Atwood, Ophir, Lincoln, the Sunset Industrial Area, and Dry Creek. In addition, approximately 100 active and semi-active volunteer firefighters operate from six volunteer stations in Dutch Flat, Fowler, Paige, Thermalands, Lone Star, and Sheridan. Placer County contracts with Cal Fire to provide approximately 66 full time fire fighters. These full-time and volunteer stations currently serve approximately 44,600 residents.

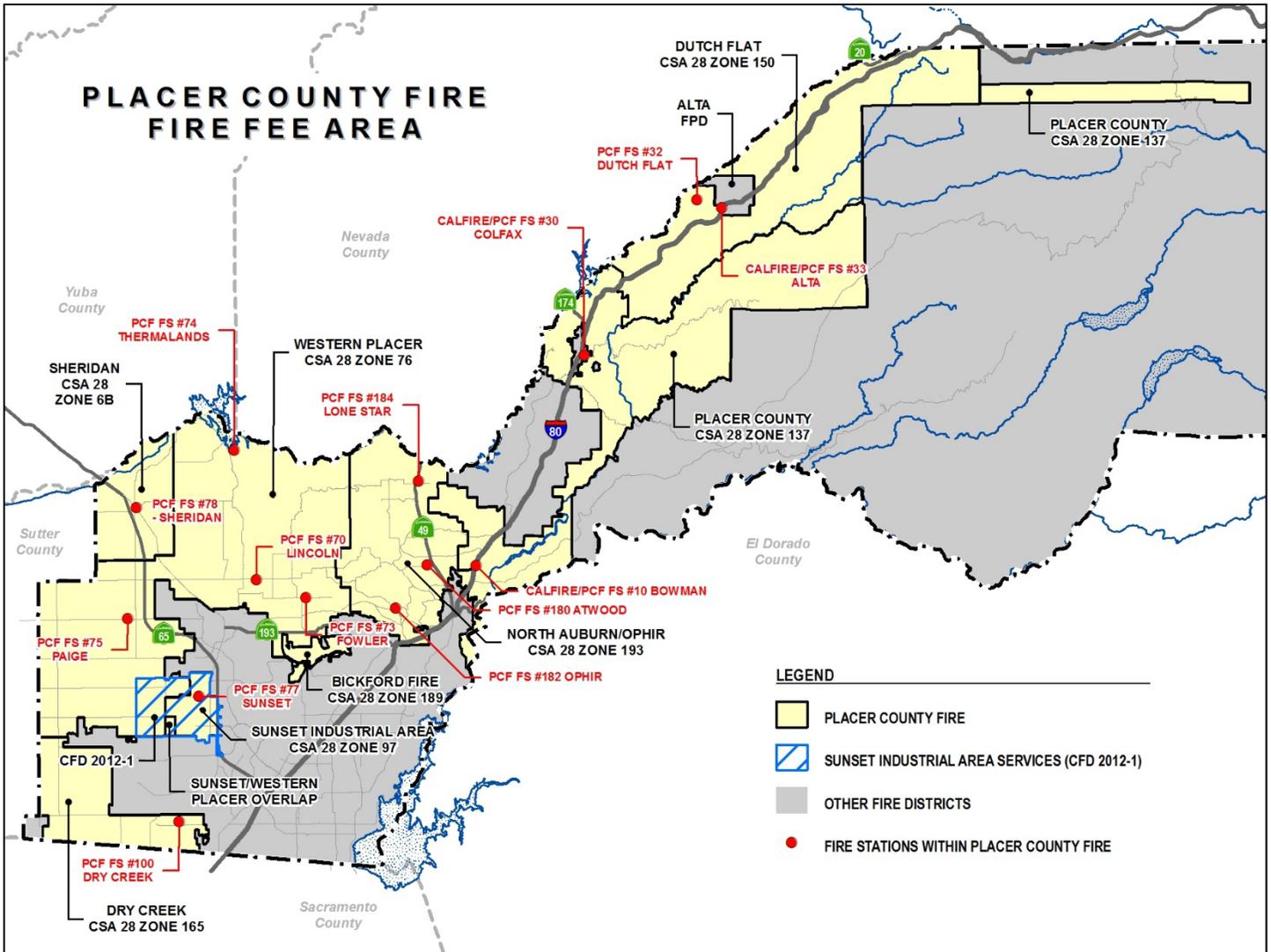
### **PURPOSE OF STUDY**

As development continues within the service boundary of Placer County Fire, additional fire facilities will be needed to meet the service demands from future development. Placer County Fire recently updated its fire facilities that will serve development within the PCF service area through the year 2060. The fire facilities are delineated between those that will be funded through the PCF Fire Fee program and those that will be funded through future development agreements.

The Fire Fee Area includes the Placer Vineyards Specific Plan, the Riolo Vineyard Specific Plan, and other development areas in the fire district's service area; these developments will be subject to the PCF Fire Fee. The Major Development Projects category includes Regional University, Bickford Ranch, Placer Ranch, and other future developments in western Placer County. Since these developments will mitigate their fire facilities through development agreements, they will not be subject to PCF Fire Fee.

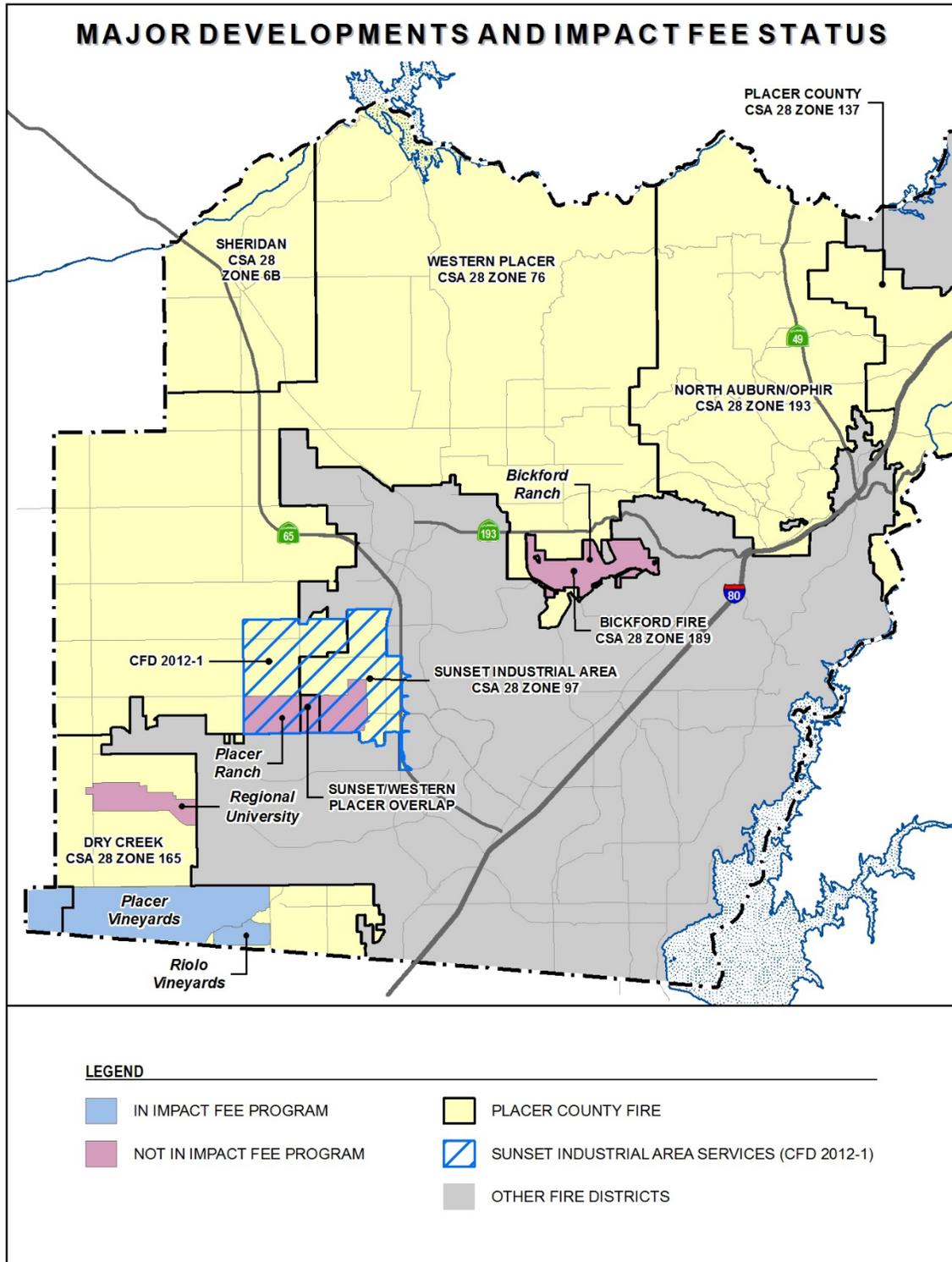
The Fire Fee Area may be revised in the future to incorporate some of the Major Development Projects and their corresponding fire facility needs, subject to approval from both Placer County Fire and project proponents.

# MAP NO. 1 FIRE FEE AREA



**PLACER COUNTY FIRE SERVICE AREA MAP**

**MAP NO. 2  
LOCATIONS OF MAJOR DEVELOPMENT PROJECTS**



As development occurs in the Fire Fee Area, new or expanded fire facilities will be required to meet the service demands of future development. If adopted, the PCF Fire Fee presented in this report will apply to all future development within the Fire Fee Area. New development within the Major Development Projects will not be subject to the proposed PCF Fire Fee since it will fund its fair share of fire facilities through development agreements. The PCF Fire Fee complies with the Mitigation Fee Act nexus requirements because it is calculated to mitigate only the specific impacts that will result from new development in the Fire Fee Area. The PCF Fire Fee will fund capital facilities but will not fund ongoing costs such as operations and maintenance.

Placer County retained Goodwin Consulting Group, Inc. to prepare this *Placer County Fire Department Fire Facilities Impact Fee Study*. The PCF Fire Fee will be implemented by the Placer County Board of Supervisors through the adoption of the fees in this Fee Study. In doing so, the PCF Fire Fee will replace the current fire fee that is based on the *Fire Facilities Impact Fee Study* that was prepared in 2013.

#### **IMPACT FEE NEXUS REQUIREMENTS (AB 1600)**

AB 1600, which was enacted by the State of California in 1987, created Section 66000 et seq. of the Government Code. AB 1600, which created the Mitigation Fee Act, requires that all public agencies satisfy the following requirements when establishing, increasing, or imposing a fee as a condition of approval for a development project:

1. Identify the purpose of the fee
2. Identify the use to which the fee will be put
3. Determine how there is a reasonable relationship between:
  - A. The fee's use and the type of development project on which the fee is imposed
  - B. The need for the public facility and the type of development project on which the fee is imposed.
  - C. The amount of the fee and the cost of the public facility or portion of the public facility attributable to the development on which the fee is imposed.

The assumptions and cost allocation methodology that were used to establish the nexus between the PCF Fire Fee and the development on which it will be levied are summarized in the subsequent chapters of this report.

## ***II. LAND USE CATEGORIES AND GROWTH PROJECTIONS***

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### **LAND USE CATEGORIES**

The Mitigation Fee Act requires that a reasonable relationship exist between the need for public facilities and the type of development on which an impact fee is imposed. The need for public facilities is related to the level of service demanded, which may vary in proportion to the number of residents or employees generated by a particular land use type. Therefore, land use categories have been defined in order to distinguish between relative impacts on facilities. The PCF Fire Fee has been calculated per square foot of building space for both residential dwelling units and nonresidential buildings. The following land use categories are identified for purposes of the PCF Fire Fee program:

- Residential:** All single family and multi-family residential developments. Single family units include all detached residential dwelling units. Multi-family units include all attached single family dwellings, such as duplexes and condominiums, and mobile homes, apartments, and dormitories.
- Nonresidential:** All commercial, office, and industrial development.
- Agricultural:** All agricultural buildings, such as barns, grain elevators, silos, and other similar buildings or structures. Agricultural buildings are defined in International Building and Fire Codes and the Placer County Code as agricultural use buildings or agricultural accessory structures, respectively, that are not open to, or being used, by the public.

Some developments may include more than one land use type, such as industrial warehouse with living quarters (e.g., a live-work designation). In these cases, the PCF Fire Fee would be calculated separately for each land use type included in the proposed development. The land use categories included in the Fee Study should adequately encompass most new development anticipated to occur within the Fire Fee Area.

## GROWTH PROJECTIONS

Estimates of the existing service population and projections of growth are critical assumptions used in the calculation of the PCF Fire Fee. Table 1 summarizes the estimated service population within the Fire Fee Area in 2017 as well as the amount of new growth anticipated through 2060. New growth anticipated through 2060 is delineated between growth within the Fire Fee Area and in the Major Development Projects.

**TABLE 1**  
**EXISTING AND FUTURE PERSONS SERVED**

	Existing <sup>1</sup> (2017) <i>A</i>	New Growth (2017-60)			Existing & Future Growth (2060) <i>E = A + D</i>
		Fire Fee Area <sup>2</sup> <i>B</i>	Major Development Projects <sup>3</sup> <i>C</i>	Subtotal <i>D = B + C</i>	
Residents	44,594	51,696	46,008	97,704	<b>142,298</b>
Employees	14,234	23,533	17,929	41,462	<b>55,696</b>
Employee Demand Factor <sup>4</sup>	0.50	0.50	0.50	0.50	<b>0.50</b>
Net Employees	7,117	11,766	8,965	20,731	<b>27,848</b>
Students	0	0	36,000	36,000	<b>36,000</b>
Student Demand Factor <sup>5</sup>	0.24	0.24	0.24	0.24	<b>0.24</b>
Net Students	0	0	8,640	8,640	<b>8,640</b>
<b>Total Persons Served</b>	<b>51,711</b>	<b>63,462</b>	<b>63,613</b>	<b>127,075</b>	<b>178,786</b>

<sup>1</sup> Based on the Demographic and Income Profile for Placer County Fire service area prepared by Esri.

<sup>2</sup> Includes Placer Vineyards and Riolo Vineyard; refer to Table 2 for breakdown of new growth anticipated within the Fire Fee Area.

<sup>3</sup> Refer to Table 3 for breakdown of new growth anticipated within the Major Development Projects.

<sup>4</sup> Based on policies adopted by the Board of Supervisors, as summarized in a peer review memo, dated March 2014, prepared by Economic and Planning Systems, Inc.

<sup>5</sup> Based on the 2013 Fire Facilities Impact Fee Study.

Sources: Placer County Fire; Placer County Planning Department; Claritas; Esri

The total service population is comprised of all residents plus certain percentages of employees and students. The exact relationship of service demand among residents, employees, and students is difficult to measure. However, in April 2014, the Board of Supervisors adopted a revised employee weighting factor in which an employee's fire service demand equals 0.50 of a resident's demand. In other words, in terms of fire service demand, an employee has an impact equal to 50% of a resident's impact on fire service.

Student demand for fire service is based on the relationship established in the 2007 Fee Study and subsequently employed in the 2013 Fee Study. It is assumed that a student impact is approximately 24% of a resident's impact on fire service. Table 2 below delineates the service population anticipated within the Fire Fee Area by 2060.

**TABLE 2  
EXISTING AND FUTURE PERSONS SERVED WITHIN THE FIRE FEE AREA**

	Existing (2017) <i>A</i>	New Growth in Fire Fee Area (2017-60)			Subtotal <i>E = B+C+D</i>	Existing & Future Growth (2060) <i>F = A + E</i>
		Placer Vineyards <sup>1</sup> <i>B</i>	Riolo Vineyard <sup>1</sup> <i>C</i>	Other <sup>1</sup> <i>D</i>		
Residents	44,594	32,814	2,295	16,587	51,696	<b>96,290</b>
Employees	14,234	7,170	100	16,263	23,533	<b>37,767</b>
Employee Demand Factor	0.50	0.50	0.50	0.50	0.50	<b>0.50</b>
Net Employees	7,117	3,585	50	8,132	11,766	<b>18,883</b>
Students	0	0	0	0	0	<b>0</b>
Student Demand Factor	0.24	0.24	0.24	0.24	0.24	<b>0.24</b>
Net Students	0	0	0	0	0	<b>0</b>
<b>Total Persons Served</b>	<b>51,711</b>	<b>36,399</b>	<b>2,345</b>	<b>24,719</b>	<b>63,462</b>	<b>115,173</b>

<sup>1</sup> Based on projections from Placer County.

Major Development Projects anticipated through 2060 include Regional University, Bickford Ranch, Placer Ranch, and other planned development in western Placer County, as shown below in Table 3. Although fire protection facilities required to serve these developments are identified in this Fire Fee Study, these facilities are anticipated to be funded through development agreements rather through the PCF Fire Fee. If the facilities are not funded through development agreements, they would then be funded through the PCF Fire Fee.

**TABLE 3**  
**FUTURE PERSONS SERVED WITHIN MAJOR DEVELOPMENT PROJECTS**

	Major Development Projects <sup>1</sup> (2017-60)				
	Regional University	Bickford Ranch	Placer Ranch	Other	Total
	A	B	C	D	E = A+B+C+D
Residents	10,968	4,154	13,677	17,209	<b>46,008</b>
Employees	1,264	200	16,465	0	<b>17,929</b>
Employee Demand Factor	0.50	0.50	0.50	0.50	<b>0.50</b>
Net Employees	632	100	8,233	0	<b>8,965</b>
Students	6,000	0	30,000	0	<b>36,000</b>
Student Demand Factor	0.24	0.24	0.24	0.24	<b>0.24</b>
Net Students	1,440	0	7,200	0	<b>8,640</b>
<b>Total Persons Served</b>	<b>13,040</b>	<b>4,254</b>	<b>29,110</b>	<b>17,209</b>	<b>63,613</b>

<sup>1</sup> Based on projections from Placer County. Assumes projects will have development agreement in place to mitigate impacts on the Placer County Fire Department.

Sources: Placer County Fire; Placer County Planning Department.

### ***III. FIRE PROTECTION FACILITIES AND COST ESTIMATES***

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The PCF Fire Fee program will provide funding for fire protection facilities, including fire stations, vehicles, and equipment. Approximately \$76.8 million in existing and planned fire protection facilities are required to serve development within the Fire Fee Area through 2060. A summary of existing and planned facilities required to serve development in the Fire Fee Area is provided below.

#### **EXISTING FIRE FACILITIES**

Existing fire protection facilities within the Fire Fee Area include (i) fire stations and land; (ii) vehicles and equipment; and (iii) special equipment. The total estimated value of the Fire Fee Area stations, land, vehicles, and equipment equals approximately \$23.4 million, as shown below in Table 4.

**TABLE 4  
SUMMARY OF EXISTING FACILITIES VALUES**

<b>Description</b>	<b>Estimated Value</b>
Stations	\$8,663,990
Vehicles and Equipment	\$13,112,673
Special Equipment	\$1,607,009
<b>Total</b>	<b>\$23,383,672</b>

Estimated values for existing fire stations are based on current values provided by the County. The estimated current value of existing stations, including buildings and land, total approximately \$8.7 million and are summarized in Table 5 on the following pages. Existing stations in Colfax, and Bowman are not included in Table 5 because they are owned by the State of California. Only stations and other buildings owned by PCF are included in the Fee Study. An estimated land value of \$300,000 per acre is assumed in the Fee Study.

**TABLE 5**  
**EXISTING LAND & BUILDING FACILITIES**

<b>Location</b>	<b>Quantity</b>	<b>Unit Cost <sup>1</sup></b>	<b>Current Value</b>
<u><i>Mt. Vernon Storage Building</i></u>			
Land <sup>2</sup>	-- Acres		\$100,000
Building	1,200 Sq. Ft.	\$40	\$48,000
Subtotal			\$148,000
<u><i>Vacant Land (8255 Mt. Vernon Rd)</i></u>			
Land	1.00 Acres	\$300,000	\$300,000
<u><i>Fire Station 32 - Dutch Flat <sup>3</sup></i></u>			
Land	-- Acres	--	--
Building	1,280 Sq. Ft.	--	--
Subtotal			--
<u><i>Fire Station 70 - Lincoln</i></u>			
Land	5.04 Acres	\$300,000	\$1,512,000
Building	1,797 Sq. Ft.	\$110	\$197,670
Building- Apparatus Bay	1,590 Sq. Ft.	\$80	\$127,200
Subtotal			\$1,836,870
<u><i>Fire Station 73 - Fowler</i></u>			
Land <sup>3</sup>	0.22 Acres	--	--
Building	2,448 Sq. Ft.	\$110	\$269,280
Subtotal			\$269,280
<u><i>Fire Station 74 - Thermalands</i></u>			
Land	0.29 Acres	\$300,000	\$87,000
Building-Community Center	900 Sq. Ft.	\$110	\$99,000
Building- Apparatus Bay	2,257 Sq. Ft.	\$80	\$180,560
Subtotal			\$366,560
<u><i>Fire Station 75 - Paige</i></u>			
Land	0.27 Acres	\$300,000	\$81,000
Building	2,940 Sq. Ft.	\$140	\$411,600
Subtotal			\$492,600
<u><i>Fire Station 77 - Sunset <sup>2</sup></i></u>			
Land	-- Acres	--	--
Building-Main	6,500 Sq. Ft.	--	--
Building-Storage	247 Sq. Ft.	--	--
Subtotal			--

<sup>1</sup> Building costs are based on current value estimates provided by Placer County Fire.

<sup>2</sup> Land parcel size not available; land value is based on the 2013 Fire Facilities Impact Fee Study.

<sup>3</sup> Value shown as zero because land and/or facility is not owned by PCF.

Sources: Placer County Fire

**TABLE 5 - CONTINUED**  
**EXISTING LAND & BUILDING FACILITIES CONTINUED**

<b>Location</b>	<b>Quantity</b>	<b>Unit Cost <sup>1</sup></b>	<b>Current Value</b>
<i><u>Fire Station 78 - Sheridan</u></i>			
Land	0.11 Acres	\$300,000	\$33,000
Building	1,200 Sq. Ft.	\$110	\$132,000
Subtotal			\$165,000
<i><u>Fire Station 100 - Dry Creek</u></i>			
Land	1.80 Acres	\$300,000	\$540,000
Building-Main Storage	5,035 Sq. Ft.	\$140	\$704,900
Building-Physical Training	576 Sq. Ft.	\$80	\$46,080
Building-Equipment Storage	768 Sq. Ft.	\$80	\$61,440
Subtotal			\$1,352,420
<i><u>Fire Station 180 - Atwood</u></i>			
Land	2.18 Acres	\$300,000	\$654,000
Building-Main	3,484 Sq. Ft.	\$140	\$487,760
Building-Apparatus Bay <sup>3</sup>	5,000 Sq. Ft.		--
Existing Funding toward Planned Facility			\$500,000
Subtotal			\$1,641,760
<i><u>Fire Station 182 - Ophir</u></i>			
Land	1.98 Acres	\$300,000	\$594,000
Building	5,000 Sq. Ft.	\$140	\$700,000
Subtotal			\$1,294,000
<i><u>Fire Station 184 - Lone Star</u></i>			
Land	0.94 Acres	\$300,000	\$282,000
Building	3,225 Sq. Ft.	\$140	\$451,500
Subtotal			\$733,500
<i><u>HAZMAT Storage Building at Station 10</u></i>			
Building	800 Sq. Ft.	\$80	\$64,000
<b>Total Existing Stations Cost</b>			<b>\$8,663,990</b>

<sup>1</sup> Building costs are based on current value estimates provided by Placer County Fire.

<sup>2</sup> Value shown as zero because land and/or facility is not owned by PCF.

<sup>3</sup> No cost is shown because this building is planned to be demolished and replaced with a new building.

Sources: Placer County Fire

Existing fire protection facilities also include vehicles and equipment. Table 6 on the following pages identifies the estimated value of existing vehicles as well as firefighting, emergency medical, and communications equipment for the Fire Fee Area. Based on information provided by PCF, the estimated value of existing vehicles and equipment totals more than \$13.1 million.

**TABLE 6**  
**EXISTING VEHICLES & EQUIPMENT INVENTORY & VALUES**

		ID	Vehicle Value	Equipment Value	Estimated Value
<i>Station 10</i>					
2011	SMEAL METRO - SPARTAN	E10	\$550,000	\$95,000	\$645,000
2003	SPARTAN - PUMPER	E200	\$317,100	\$95,000	\$412,100
2006	VORTECH - TAGALONG	IMT	\$25,483	\$10,000	\$35,483
2009	GMC - TC5500 4X4	REP2332	\$80,000	\$95,000	\$175,000
2002	DODGE - RAM 2500	T2307	\$28,000	\$35,000	\$63,000
2014	FORD - F250 3/4 TON 4X4	D2304	\$47,560	\$35,000	\$82,560
Subtotal			\$1,048,143	\$365,000	\$1,413,143
<i>Station 32</i>					
2003	HI TECH - SPARTAN	E32	\$360,000	\$95,000	\$455,000
1987	INTERNATIONAL - BRUSH	BR32	\$12,000	\$65,000	\$77,000
Subtotal			\$372,000	\$160,000	\$532,000
<i>Station 70</i>					
2011	SMEAL METRO - SPARTAN	E70	\$550,000	\$95,000	\$645,000
2012	FORD - F150	U70	--	\$35,000	\$35,000
Subtotal			\$550,000	\$130,000	\$680,000
<i>Station 73</i>					
1990	INTERNATIONAL - BRUSH/4900	BR73	\$150,000	\$65,000	\$215,000
1995	W.S. DARLEY - SPARTAN	E73	\$250,000	\$95,000	\$345,000
2002	INTERNATIONAL - PUMPER/5600 CAFS	WT73	\$290,000	\$45,000	\$335,000
Subtotal			\$690,000	\$205,000	\$895,000
<i>Station 74</i>					
1981	INTERNATIONAL - 1724	BR74	\$20,000	\$65,000	\$85,000
1995	FL 70 DARLEY - FREIGHT	E74	\$153,800	\$95,000	\$248,800
2010	INTERNATIONAL - TANKER/PUMPER	WT74	\$285,335	\$45,000	\$330,335
Subtotal			\$459,135	\$205,000	\$664,135
<i>Station 75</i>					
1989	INTERNATIONAL - BRUSH	BR75	\$10,000	\$65,000	\$75,000
2000	HME - PUMPER	E75	\$275,000	\$95,000	\$370,000
1993	CHEVROLET - BLAZER	U75	\$35,000	--	\$35,000
2010	INTERNATIONAL - TANKER/PUMPER	WT75	\$285,335	\$45,000	\$330,335
Subtotal			\$605,335	\$205,000	\$810,335
<i>Station 77</i>					
2011	FORD - EXPEDITION	BR2317	\$28,641	\$35,000	\$63,641
2003	INTERNATIONAL - BRUSH/4400 CAFS	BR77	\$225,000	\$65,000	\$290,000
2017	TOYNE - PUMPER	E77	\$495,982	\$120,000	\$615,982
2009	SPARTAN - GLADIATOR	T77	\$735,189	\$215,000	\$950,189
2009	FORD - F250 4X4 CREW CAB	U77	\$29,529	\$35,000	\$64,529
2015	FEATHERLITE - PERFECTFIT		\$14,780	\$30,000	\$44,780
1999	FORD - F350	U50	--	\$35,000	\$35,000
2015	ZODIAC/EVINRUDE/KARAVAN	RB74	\$8,884	--	\$8,884
Subtotal			\$1,538,005	\$535,000	\$2,073,005

Source: Placer County Fire

**TABLE 6 - CONTINUED**  
**EXISTING VEHICLES & EQUIPMENT INVENTORY & VALUES CONTINUED**

		ID	Vehicle Value	Equipment Value	Estimated Value
<u>Station 78</u>					
1990	E-ONE / FORD - MODEL 9	E78	\$100,000	\$95,000	\$195,000
<u>Station 100</u>					
2009	FORD - EXPEDITION	B2310	\$30,132	\$35,000	\$65,132
2003	HIGH TECH - SPARTAN	E100	\$317,100	\$95,000	\$412,100
1993	WEST STATES - SPARTAN	E101	\$40,000	\$95,000	\$135,000
2011	FORD - CREW CAB	U100	--	\$35,000	\$35,000
2010	INTERNATIONAL - TANKER/PUMPER	WT100	\$285,335	\$45,000	\$330,335
1987	FORD - BRUSH	BR100	\$10,000	\$65,000	\$75,000
	Subtotal		\$682,567	\$370,000	\$1,052,567
<u>Station 180</u>					
2014	FORD - F250 3/4 TON 4X4	B2318	\$44,898	\$35,000	\$79,898
1990	INTERNATIONAL - BRUSH/4900	BR181	\$150,000	\$65,000	\$215,000
2000	KME - PUMPER/RENEGADE	E180	\$260,000	\$150,000	\$410,000
2000	AMER LAFRANCE - WALK IN	HM10	\$200,000	\$150,000	\$350,000
2003	E-ONE/FORD - RESCUE/A110F350	R180	\$55,000	\$85,000	\$140,000
2008	SPARTAN/SMEAL - AERIAL	T180	\$530,461	\$215,000	\$745,461
2012	INTERSTATE - ILRD10216TA2	HT DECON	\$7,060	\$35,000	\$42,060
2006	GMC - SIERRA	U10	--	\$35,000	\$35,000
1997	FORD - EXPEDITION	U180	\$28,500	\$35,000	\$63,500
	Subtotal		\$1,275,919	\$805,000	\$2,080,919
<u>Station 182</u>					
2014	KENWORTH - FIRST RESPONDER	BS182	\$295,420	--	\$295,420
2011	SMEAL METRO - SPARTAN	E182	\$550,000	\$95,000	\$645,000
1998	FORD - EXPEDITION	U182	\$30,000	\$35,000	\$65,000
1990	INT'L/KME - PUMPER/F-2674	WT182	\$165,000	\$45,000	\$210,000
1990	INTERNATIONAL - BRUSH/4900	BR182	\$150,000	\$65,000	\$215,000
	Subtotal		\$1,190,420	\$240,000	\$1,430,420
<u>Station 184</u>					
1990	KME - PUMPER/FIREFOX 1250	E184	\$225,000	\$95,000	\$320,000
1990	INTERNATIONAL - PUMPER/F-2674	WT184	\$165,000	\$45,000	\$210,000
	Subtotal		\$390,000	\$140,000	\$530,000
<u>Station 50/96</u>					
	AMER LAFRANCE - 2000	HM50	\$200,000	\$150,000	\$350,000
<u>CDRA</u>					
2009	FORD - EXPEDITION	P2327	\$31,976	\$20,000	\$51,976
2009	FORD - EXPEDITION	P2328	--	\$20,000	\$20,000
2015	BANDIT - CHIPPER/150	CH1	\$45,000	--	\$45,000
2015	BANDIT - CHIPPER/150	CH2	\$45,000	--	\$45,000
2005	BANDIT - CHIPPER/150XP	CH3	\$29,933	--	\$29,933
2007	BANDIT - CHIPPER/150XP	CH4	\$35,365	--	\$35,365
2015	BANDIT - CHIPPER/150	CH5	\$40,049	--	\$40,049
2006	GMC - SIERRA	U14	--	\$35,000	\$35,000
2014	FORD - F250 3/4 TON 4X4	U15	--	\$35,000	\$35,000
2006	GMC - SIERRA	U16	\$33,826	\$35,000	\$68,826
	Subtotal		\$261,149	\$145,000	\$406,149
<b>Total Existing Vehicles &amp; Equipment Value</b>			<b>\$9,362,673</b>	<b>\$3,750,000</b>	<b>\$13,112,673</b>

Source: Placer County Fire

Existing fire protection equipment also includes special equipment such as turnout gear, communication infrastructure, pre-emption emitters and infrastructure, and SCBA packs, bottles, tablets, and radios. Placer County Fire reports the estimated value for special equipment totals approximately \$1.6 million as shown in Table 7.

**TABLE 7  
EXISTING SPECIAL EQUIPMENT INVENTORY**

Description	Unit Cost	Units	Total Value
Turnout Gear	\$3,200	195	\$624,000
Communications Infrastructure	\$406,360	1	\$406,360
Pre-Emption Emitters	\$2,000	35	\$70,000
Pre-Emption Emitter Infrastructure	\$200,000	1	\$200,000
SCBA Packs, Bottles, Tablets, & Radios	\$7,666	40	\$306,649
<b>Total Special Equipment Value</b>			<b>\$1,607,009</b>

*Source: Placer County Fire; MSA Bauer Compressors*

### **PLANNED FIRE FACILITIES TO ACCOMMODATE NEW GROWTH**

Although Placer County Fire is primarily a “rural service” provider, it anticipates transitioning to a provider of both rural and urban services over the next several decades. The transition will require additional fire facilities to serve development through 2060.

Placer County Fire analyzed the fire facilities needed to serve development within the Fire Fee Area through 2060 based on the levels of service defined in the Placer County General Plan. PCF further delineated the facilities between those needed to serve (i) the Fire Fee Area and (ii) the Major Development Projects. A summary of the planned fire facilities required to serve development within the Fire Fee Area through 2060 is discussed in this chapter. Planned facilities required to serve the Major Development Projects, which are anticipated to be funded through development agreements, are included in Chapter VI of this report.

The Placer County General Plan specifies that the County will encourage fire protection agencies to maintain the following minimum Insurance Service Organization (“ISO”) ratings and response time standards:

- Urban areas – ISO 4; four minute response time
- Suburban areas – ISO 6; six minute response time
- Rural areas – ISO 8; eight minute response time

Planned fire protection facilities required to serve development in the Fire Fee Area include (i) fire stations and land; (ii) vehicles and equipment; (iii) special equipment; and (iv) the Fire Fee Area’s fair share of regional fire facilities costs. The total estimated cost of planned fire facilities for the Fire Fee Area is approximately \$53.4 million, as shown in Table 8.

**TABLE 8  
SUMMARY OF PLANNED FACILITIES COSTS**

Description	Estimated Cost
Stations	\$31,687,480
Vehicles and Equipment	\$5,782,741
Special Equipment	\$375,000
Share of Regional Facilities	\$15,521,477
<b>Total</b>	<b>\$53,366,697</b>

Planned new stations and station upgrades for the Fire Fee Area are presented in Table 9. These facilities include the construction of four new stations, an upgrade to Station 180 in Atwood, and land acquisition for the east and west stations in Placer Vineyards. The construction and land costs total approximately \$31.7 million. Estimated construction values are based on a current cost study prepared by Placer County staff and attached as Appendix B.

**TABLE 9  
PLANNED FIRE FEE AREA STATIONS**

Description	Quantity	Unit Cost <sup>1</sup>	Total Cost
<u>Gold Run / Magra Volunteer Station</u>			
Building	4,000 Sq. Ft.	\$700	\$2,800,680
<u>North Lincoln Station</u>			
Building	10,000 Sq. Ft.	\$700	\$7,001,700
<u>Upgrade Station 180 Atwood</u>			
Building <sup>2</sup>	10,000 Sq. Ft.	\$700	\$6,501,700
<u>Placer Vineyards - East Station</u>			
Land	2.50 Acres	\$300,000	\$750,000
Building	10,000 Sq. Ft.	\$700	\$7,001,700
Subtotal			\$7,751,700
<u>Placer Vineyards - West Station</u>			
Land	2.00 Acres	\$300,000	\$630,000
Building	10,000 Sq. Ft.	\$700	\$7,001,700
Subtotal			\$7,631,700
<b>Total Planned Stations Cost</b>			<b>\$31,687,480</b>

<sup>1</sup> Unit cost is based on current construction estimates compiled by Placer County Dept. of Public Works and Facilities (See Appendix B).

<sup>2</sup> Total value excludes \$500,000 that has already been paid toward this project.

Source: Placer County

PCF will also need new vehicles and equipment to serve development in the Fire Fee Area. Planned vehicles and equipment for each station are shown in Table 10 and total approximately \$5.8 million.

**TABLE 10**  
**PLANNED FIRE FEE AREA VEHICLES & EQUIPMENT**

Vehicle Type	Estimated Cost
<i><u>Gold Run / Magra Volunteer Station</u></i>	
Type III Fire Engine	\$532,675
Type I Water Tender	\$457,236
Subtotal	<u>\$989,911</u>
<i><u>Colfax/Magra Area</u></i>	
Medium Rescue	\$512,000
<i><u>North Lincoln Station</u></i>	
Type I Fire Engine	\$803,414
Type III Fire Engine	\$532,675
Subtotal	<u>\$1,336,089</u>
<i><u>Placer Vineyards- East Station</u></i>	
Type I Ladder Truck	\$1,212,913
Type I Fire Engine	\$803,414
Utility Vehicle	\$62,500
Subtotal	<u>\$2,078,827</u>
<i><u>Placer Vineyards- West Station</u></i>	
Type I Fire Engine	\$803,414
Utility Vehicle	\$62,500
Subtotal	<u>\$865,914</u>
<b>Total Planned Vehicle Cost</b>	<b><u>\$5,782,741</u></b>

Source: Placer County Administrative Services Procurement Division

Table 11 identifies the special equipment needed to serve future development in the Fire Fee Area. Cost estimates provided by PCF total approximately \$0.4 million.

**TABLE 11  
PLANNED FIRE FEE AREA SPECIAL EQUIPMENT**

<b>Description</b>	<b>Estimated Cost</b>
<i><u>Gold Run / Magra Volunteer Station</u></i>	
Protective Clothing, Personal Supplies, etc.	\$50,000
<i><u>Lincoln Station 70</u></i>	
Swift Water Equipment, Ropes, etc.	\$30,000
Protective Clothing, Personal Supplies, etc.	<u>\$25,000</u>
Subtotal	\$55,000
<i><u>Dry Creek Station 100</u></i>	
Protective Clothing, Personal Supplies, etc.	\$40,000
Swift Water Equipment, Ropes, etc.	<u>\$30,000</u>
Subtotal	\$70,000
<i><u>North Lincoln Station</u></i>	
Protective Clothing, Personal Supplies, etc.	\$50,000
<i><u>Placer Vineyards- East Station</u></i>	
Protective Clothing, Personal Supplies, etc.	\$75,000
<i><u>Placer Vineyards- West Station</u></i>	
Protective Clothing, Personal Supplies, etc.	\$75,000
<b>Total Planned Special Equipment Cost</b>	<b>\$375,000</b>

*Source: Placer County Fire*

In addition to the new facilities serving the Fire Fee Area, Placer County Fire plans to construct or purchase regional facilities that will serve development within the entire PCF. These facilities include a regional support center, vehicles, and equipment, as shown in Table 12. The costs associated with these facilities total approximately \$24.1 million. Since these regional facilities will serve the entire PCF, which includes the Fire Fee Area and the Major Development Projects, the total regional facilities cost must be allocated between all development within the Fire Fee Area and the Major Development Projects.

**TABLE 12**  
**PLANNED REGIONAL SUPPORT CENTER**

	Quantity	Unit Cost	Total Cost
<u>Facilities</u>			
Land	12.5 Acres	\$300,000	\$3,750,000
Fleet Reserve Storage Building			\$375,000
Pump Testing and Drafting Pit			\$50,000
Service Center Building			\$500,000
Apparatus Maintenance Facility			\$2,500,000
Training Classrooms			\$2,500,000
Training Tower and Props			\$4,250,000
Alternate Command Center/EOC Facility			\$5,000,000
Subtotal			\$18,925,000
<u>Systemwide Support Vehicles</u>			
Air Unit/Rehab Unit			\$330,000
Training Officer Vehicle (2)			\$76,000
Prevention Captain Vehicle			\$38,000
Officer/Command Vehicle			\$38,000
Support Vehicle			\$25,000
Service Center Support Vehicle			\$38,000
Subtotal			\$545,000
<u>Equipment</u>			
Placer County Fire Portion of Radio System- one time cost			\$2,059,386
Radio System Support Net			\$200,000
Placer County Fire Mobile Data Terminal System			\$100,000
Paramedic Equip. and Supplies System Increases			\$80,000
Diagnostic Scanner Tool			\$15,000
Mapping System and Hardware			\$75,000
Thermal Imaging Equipment			\$75,000
Protective Clothing, Personal Supplies, etc.			\$130,000
Portable Lifts and Associated Equipment			\$105,000
Training Tower/Burn Building Supplies			\$100,000
Administration Center Supplies, etc.			\$500,000
Communications Support Supplies			\$25,000
Dispatch Pods (3)			\$240,000
Call Taking Pods (3)			\$60,000
Maintenance Facility Equipment and Supplies			\$250,000
Confined Space/Heavy Rescue Props			\$100,000
HazMat Props and Equipment			\$100,000
Drafting/Pump testing Equipment			\$5,000
Driving Course Equipment			\$5,000
Roof Simulators			\$50,000
Command Simulators			\$50,000
Training Aids and Manuals			\$50,000
Audio/Visual Equip			\$50,000
Service Center Prot. Clothing, Personal Supplies, etc.			\$200,000
Subtotal			\$4,624,386
<b>Total</b>			<b>\$24,094,386</b>

Source: Placer County Fire

Table 13 presents the fair share allocation of regional facility costs based on the number of persons served by 2060. Based on this cost allocation methodology, the Fire Fee Area is allocated approximately \$15.5 million and the Major Development Projects are allocated approximately \$8.6 million of the regional facilities costs.

**TABLE 13**  
**ALLOCATION OF PLANNED REGIONAL COSTS**

	Persons Served Growth	% of Persons Served	Share of Regional Facilities Cost
Fire Fee Area - Total by 2060	115,173	64.4%	\$15,521,477
Major Development Projects	63,613	35.6%	\$8,572,909
<b>Total</b>	<b>178,786</b>	<b>100.0%</b>	<b>\$24,094,386</b>

**TOTAL FACILITIES COST FOR THE FIRE FEE AREA**

Existing facilities in the Fire Fee Area total nearly \$23.4 million and include stations, vehicles, and equipment. In addition, planned facilities for the Fire Fee Area total approximately \$53.4 million and include new stations and station upgrades, new vehicles and equipment, and a fair share of the total regional facilities cost. The total cost of existing and planned facilities included in the Fire Fee calculation is approximately \$76.8 million, as shown below in Table 14.

**TABLE 14**  
**TOTAL FACILITIES COST FOR THE FIRE FEE AREA**

<b>Description</b>	<b>Existing Facilities</b>	<b>Planned Facilities</b>	<b>Total Cost</b>
Stations	\$8,663,990	\$31,687,480	\$40,351,470
Vehicles and Equipment	\$13,112,673	\$5,782,741	\$18,895,414
Special Equipment	\$1,607,009	\$375,000	\$1,982,009
Regional Facilities	--	\$15,521,477	\$15,521,477
<b>Total</b>	<b>\$23,383,672</b>	<b>\$53,366,697</b>	<b>\$76,750,369</b>

#### ***IV. FIRE FEE CALCULATION METHODOLOGY***

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When impact fees are calculated, an analysis must be presented in enough detail to demonstrate that logical and thorough consideration was applied in the process of determining how the fee relates to the impact created by new development. Various findings pursuant to the Mitigation Fee Act must be made to ensure that there is a reasonable relationship between the amount of the fee and the development on which that fee will be levied. The following section of the report outlines the methodology used in this Fee Study to calculate the PCF Fire Fee.

##### **FEE METHODOLOGY**

The methodology used to calculate the PCF Fire Fee ensures that each land use category funds its equitable share of the fire protection facilities based on the impact that its residents or employees will have on PCF. Following is a summary of the steps used to calculate the PCF Fire Fee:

- 1) Determine the number of existing and future persons served expected through 2060 within the Fire Fee Area. The number of persons served equals the sum of residents, 50% of employees (i.e., employee-equivalents), and 24% of students (i.e., student-equivalents).
- 2) Determine the existing and new fire facilities needed to serve development through 2060 within the Fire Fee Area, including the Fire Fee Area's fair share of regional facilities.
- 3) Estimate the total cost of the fire facilities needed to serve development in the Fire Fee Area through 2060. Existing deficiencies or that portion of an improvement cost allocated to existing development cannot be funded with PCF Fire Fees from future development; Placer County Fire will need to find alternate sources to fund existing deficiencies or existing development's share of the cost.
- 4) Based on the projected 2060 service population within the Fire Fee Area, calculate the cost per person served by dividing the cost from Step 3 by the total service population from Step 1. The cost per resident is equal to the cost per person served; while the cost per employee is equal to the cost per person served multiplied by 0.50 (i.e., employee weighting factor).
- 5) Estimate the cost per residential dwelling unit or cost per 1,000 nonresidential building square feet by multiplying the applicable occupancy factor (i.e., average persons per residential dwelling unit or employees per 1,000 building square feet) by the cost per resident or employee from Step 4.

- 6) For residential uses, divide the cost per residential dwelling unit by 2,650 square feet to determine the fee per square foot of residential building space. For nonresidential uses, divide the cost per 1,000 nonresidential building square feet to determine the fee per square foot of nonresidential building space.
  
- 7) Determine the PCF Fire Fee per square foot of residential or nonresidential development by adding a 2.0% administration fee to fund the cost of administering the PCF Fire Fee program.

By applying this fee methodology, the amount of the PCF Fire Fee for each land use is based on the estimated impact of the development on the PCF and thus a nexus or reasonable relationship is established between the amount of the PCF Fire Fee and the cost of the facilities attributable to each type of development.

## OCCUPANCY ASSUMPTIONS

New development in the Fire Fee Area will create demand for fire protection facilities. For purposes of the PCF Fire Fee program, demand is measured by the service population anticipated within the Fire Fee Area by 2060.

While the nonresidential occupancy factor used in the PCF Fire Fee calculation is consistent with the employee occupancy assumption in the 2013 Fee Study, the residential occupancy factor has been revised to reflect a weighted average of all future development within the Fire Fee Area, including Placer Vineyards, Riolo Vineyard, and other remaining future development. By allocating facilities costs to residential and nonresidential uses based on its demand for fire protection facilities (i.e., service population based on occupancy factors), this Fee Study ensures that each land use category will fund its fair-share of the required facilities.

**TABLE 15**  
**OCCUPANCY ASSUMPTIONS**

<b>Land Use</b>	<b>Assumption</b>
Residential <sup>1</sup>	2.30 Persons per Dwelling Unit
Nonresidential <sup>2</sup>	1.01 Employees per 1,000 SF

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<sup>1</sup> Estimated weighted average persons per dwelling unit for future development within the Fire Fee Area (i.e., Placer Vineyards, Riolo Vineyard, and Others).

<sup>2</sup> Based on the 2013 Fire Facilities Impact Fee Study.

*Sources: Placer County Fire*

## ***V. NEXUS FINDINGS AND PCF FIRE FEE***

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Future development within the Fire Fee Area will create demand for fire protection facilities to serve future residents and employees. The PCF Fire Fee program will fund future development's fair share of costs to construct fire stations, purchase land, vehicles, and equipment, and pay its fair share of regional facilities costs. The PCF Fire Fee, as calculated in this Nexus Study meets the Mitigation Fee Act nexus requirements, as outlined below.

### **Purpose of Fee**

The purpose of the PCF Fire Fee is to fund the fire facilities identified in this Fee Study that are needed to mitigate the impacts from new development through 2060 within the Fire Fee Area.

### **Use of Fee**

PCF Fire Fee revenue will be used to fund the fire protection facilities needed to provide fire protection service within the Fire Fee Area. These facilities and their corresponding costs are presented in Tables 4 through 13 of this Fee Study.

### **Reasonable Relationship Between the Fee's Use and the Type of Development**

New development anticipated through 2060 within the Fire Fee Area will generate a need for fire protection services and facilities. The increase in development will create the need for additional fire facilities and personnel to provide emergency services to the developing areas within the Fire Fee Area. Fee revenue will be used to fund a fair-share portion of these fire facilities to serve new residential and nonresidential development in the Fire Fee Area.

### **Reasonable Relationship Between the Need for the Facility and the Type of Development**

New residential and nonresidential development in the Fire Fee Area will generate residents and employees as well as residential and nonresidential structures that will require fire protection services. New development will require additional fire facilities to maintain the existing level of service and to provide fire protection and emergency services to the developing areas in the Fire Fee Area. In order to maintain Placer County Fire's current level of fire protection service, PCF must construct local and regional fire stations and purchase land, vehicles, and equipment.

### **Reasonable Relationship Between the Amount of the Fee and the Cost of the Facility**

The relationship between the amount of the fee and the portion of the facility cost attributable to the development type is based on the number of persons served. Residents and employees are the primary beneficiaries of fire facilities; therefore, the cost of fire facilities has been allocated in this Fee Study to both residential and nonresidential land uses based on the estimated number of persons generated from these types of development.

The number of persons served equals the number of residents, employee-equivalents, and student-equivalents that will be provided with fire protection services. Based on this demand, a proportionate share of the cost of fire facilities is allocated to existing and future residential and nonresidential development types. This cost allocation, shown in Table 16, establishes a fee per resident and per employee. The fee per resident or employee is then converted to a fee per square foot of building space for each land use category to ensure that a reasonable relationship exists between the Fire Fee and the portion of the facility attributed to each development type within the Fire Fee Area.

#### **EXISTING AND PLANNED FIRE FACILITIES COST SUMMARY**

Table 14 summarizes the costs of the fire facilities needed to serve the Fire Fee Area through 2060. The total cost of these facilities, which has been calculated based on the current estimated value of existing fire stations, vehicles, and equipment as well as the estimated cost of planned fire stations, vehicles, equipment, and regional facilities, equals approximately \$76.8 million.

#### **PCF FIRE FEE CALCULATION**

Tables 16 and 17 detail the calculation of the PCF Fire Fee. Dividing the total fire facilities cost of approximately \$76.8 million cost by the estimated 115,173 persons served at 2060, equals a cost of \$666 per person served. The cost per person served is then converted to a cost per resident and cost per employee, as shown in Table 16. The cost per resident and per employee is converted to a fee per square foot for residential and nonresidential building space based on the occupancy assumptions and the assumed average size of a residential unit in the PCF service area. A summary of the proposed PCF Fire Fee is presented in Table 17.

**TABLE 16  
FIRE FEE AREA COST PER PERSON SERVED**

Existing Fire Facilities	\$23,383,672
Planned Fire Facilities	\$53,366,697
<b>Total Fire Facilities [A]</b>	<b>\$76,750,369</b>
Existing Persons Served	51,711
New Persons Served (2017-60) <sup>1</sup>	63,462
<b>Total Persons Served [B]</b>	<b>115,173</b>
<b>Cost per Persons Served [A / B]</b>	<b>\$666</b>
<i>Cost per Resident</i>	<i>\$666</i>
<i>Cost per Employee <sup>2</sup></i>	<i>\$333</i>

<sup>1</sup> Excludes future population in Major Development Projects.

<sup>2</sup> Assumes one employee is weighted to equal to 0.50 residents.

Source: Goodwin Consulting Group, Inc.

**TABLE 17  
PCF FIRE FEE CALCULATION**

Land Use	Cost per Resident/ Employee <i>A</i>	Estimated Density <sup>1</sup> <i>B</i>	Cost per DU/ 1,000 SF <i>C = A x B</i>	Square Feet <i>D</i>	Cost/SF <i>E = C / D</i>	Admin- istration <sup>2</sup> (2.0%) <i>F = E * 0.02</i>	Fee per SF <sup>3</sup> <i>G = E + F</i>
		<i>per Dwelling Unit</i>					
Residential	\$666	2.30	\$1,533	2,650	\$0.58	\$0.01	\$0.59
		<i>per 1,000 Bldg. SF</i>					
Nonresidential	\$333	1.01	\$337	1,000	\$0.33	\$0.01	\$0.34
Agricultural Buildings <sup>3</sup>					\$0.12	\$0.01	\$0.13

<sup>1</sup> Estimated density shown as persons per dwelling unit for residential uses and employees per 1,000 square feet for non-residential uses.

<sup>2</sup> Estimated at 2% of the total fee; to pay for PCF's costs related to fee study updates, collection, accounting and annual reporting.

<sup>3</sup> The proposed fee for agricultural buildings is equal to 20% of the residential fee based on the type of calls anticipated for agricultural buildings. PCF reports that approximately 20% of residential fire calls relate to actual fires, while the remaining 80% are for medical responses.

Source: Goodwin Consulting Group, Inc.

### PCF FIRE FEE SUMMARY

The PCF Fire Fee includes a 2.0% administration fee mark-up that will be used to fund costs associated with administering the PCF Fire Fee program. This fee will fund fee study updates, accounting, and the annual reporting required by the Mitigation Fee Act.

**TABLE 18**  
**PCF FIRE FEE SUMMARY**

<b>Land Use</b>	<b>Fee per SF</b>
Residential	\$0.59
Nonresidential	\$0.34
Agricultural	\$0.13

### FUNDING SHORTFALL

This Fee Study allocates a portion of existing and planned facilities costs to future development to ensure that new development in the Fire Fee Area pays its fair-share of those facilities. Comparing the total planned facilities cost of approximately \$53.4 million to future development's fair-share of the total fire facilities cost of approximately \$42.3 million, produces a funding shortfall of approximately \$11.1 million. However, Placer County Fire has approximately \$3.6 million in existing fire fee funds that could be used to offset a portion of the potential funding shortfall, as shown in Table 19. The net funding shortfall is reduced to approximately \$7.4 million after accounting for fire fee fund balances, as shown in Table 20.

**TABLE 19**  
**FIRE FEE FUND BALANCE**

Capital Facilities	\$3,422,998
North Auburn/Ophir Fire Mitigation	\$212,260
<b>Fire Fee Fund Balance <sup>1</sup></b>	<b>\$3,635,258</b>

<sup>1</sup> Fire fee fund balance as of May 1, 2017.

Sources: Placer County Fire

**TABLE 20**  
**PLANNED FIRE FEE AREA FACILITIES FUNDING SHORTFALL**

Total Cost of Planned Fee Area Facilities [A]	\$53,366,697
Cost per Persons Served [B]	\$666
New Persons Served in Fire Fee Area [C]	<u>63,462</u>
Projected Fire Facilities Impact Fee Revenue [D = B * C]	\$42,290,571
Fee Funding Shortfall [E = A - D]	\$11,076,127
Existing Fire Fee Fund Balance [F]	<u>\$3,635,258</u>
Non-Impact Fee Revenue Needed [G = E - F]	\$7,440,869

The estimated \$7.4 million shortfall represents approximately 14% of the planned facilities cost for the Fire Fee Area. This portion of planned facilities costs must be funded through revenue sources other than impact fees from future development. Non-fee revenues are needed because the total cost of planned facilities exceeds future development's fair-share of fire facilities costs.

## ***VI. MAJOR DEVELOPMENT PROJECTS***

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### **PLANNED FIRE FACILITIES IN MAJOR DEVELOPMENT PROJECTS**

In addition to analyzing fire facilities needs for the Fire Fee Area, Placer County Fire analyzed fire facilities needed to serve the Major Development Projects. The stations, vehicles, and equipment needed to serve the Major Development Projects are anticipated to be provided through developer agreements, rather than the proposed PCF Fire Fee. However, the PCF Fire Fee may be revised in the future to include the Major Development Projects and corresponding fire facility needs, subject to approval from both Placer County Fire and project proponents.

The Major Development Projects include Regional University, Bickford Ranch, Placer Ranch, and other major developments in west Placer County that are anticipated to fund fire facilities through a development agreement. Planned facilities for the Major Development Projects reflect Placer County Fire's current expectations of development and facility needs. Changes to the development plans may change facility plans that would be incorporated in future updates of the Fee Study. Also, estimated costs included in the Fee Study do not include financing costs.

Planned fire protection facilities required to serve the Major Development Projects include (i) fire stations and land; (ii) vehicles and equipment; (iii) special equipment; and (iv) a fair share of regional facilities costs. The total estimated cost of the planned facilities equals approximately \$44.3 million, as shown in Table 21. Detailed cost estimates related to planned stations, vehicles, and equipment are presented in Tables 22 through Table 24.

**TABLE 21**  
**SUMMARY OF PLANNED FACILITY COSTS IN THE**  
**MAJOR DEVELOPMENT PROJECTS**

Description	Estimated Cost
Buildings and Land	\$30,106,800
Vehicles and Equipment	\$5,283,025
Special Equipment	\$330,000
Share of Regional Facilities	\$8,572,909
<b>Total</b>	<b>\$44,292,735</b>

**TABLE 22**  
**PLANNED STATIONS IN THE MAJOR DEVELOPMENT PROJECTS**

Development	Quantity	Unit Cost	Total Cost
<i>Placer Ranch</i>			
Building	10,000 Sq. Ft.	\$700	\$7,001,700
Land	1.00 Acres	\$300,000	\$300,000
Subtotal			\$7,301,700
<i>Regional University Station</i>			
Building	10,000 Sq. Ft.	\$700	\$7,001,700
Land	2.50 Acres	\$300,000	\$750,000
Subtotal			\$7,751,700
<i>Bickford Station</i>			
Building	10,000 Sq. Ft.	\$700	\$7,001,700
Land	1 Acre	\$300,000	\$300,000
Subtotal			\$7,301,700
<i>Other Major Developments</i>			
Building	10,000 Sq. Ft.	\$700	\$7,001,700
Land	2.50 Acres	\$300,000	\$750,000
Subtotal			\$7,751,700
<b>Total</b>			<b>\$30,106,800</b>

*Sources: Placer County Fire*

**TABLE 23**  
**PLANNED VEHICLES & EQUIPMENT IN THE MAJOR DEVELOPMENT PROJECTS**

<b>Vehicle Type</b>	<b>Estimated Cost</b>
<i><u>Placer Ranch</u></i>	
Type I Fire Engine	\$803,414
Utility Vehicle	\$62,500
Subtotal	\$865,914
<i><u>Regional University Fire Station</u></i>	
Type I Fire Engine	\$803,414
Type I Ladder Truck (1/2)	\$606,457
Utility Vehicle	\$62,500
Subtotal	\$1,472,370
<i><u>Bickford Station</u></i>	
Type I Fire Engine	\$803,414
Utility	\$62,500
Subtotal	\$865,914
<i><u>Other Major Developments</u></i>	
Type I Ladder Truck	\$1,212,913
Type I Fire Engine	\$803,414
Utility Vehicle	\$62,500
Subtotal	\$2,078,827
<b>Total</b>	<b>\$5,283,025</b>

*Source: Placer County Administrative Services Procurement Division*

**TABLE 24**  
**PLANNED SPECIAL EQUIPMENT IN THE MAJOR DEVELOPMENT PROJECTS**

<b>Equipment</b>	<b>Estimated Cost</b>
<i>Placer Ranch</i>	
Protective Clothing, Personal Supplies, etc.	\$75,000
<i>Regional University Station</i>	
Protective Clothing, Personal Supplies, etc.	\$75,000
<i>Bickford Station</i>	
Protective Clothing, Personal Supplies, etc.	\$75,000
<i>Other Major Developments</i>	
Protective Clothing, Personal Supplies, etc.	\$105,000
<b>Total</b>	<b>\$330,000</b>

*Sources: Placer County Fire*

In addition to new facilities serving the Major Development Projects, Placer County Fire plans to construct or purchase facilities that will serve development within the entire PCF service area. These facilities include a regional support center, vehicles, and equipment. A fair share of the total regional facilities cost is allocated to the Major Development Projects based on the number of persons served in PCF at 2060. As shown in Table 13, Major Development Projects are anticipated to fund approximately \$8.6 million in regional facilities cost through developer agreements.

## ***VII. PROGRAM IMPLEMENTATION AND ADMINISTRATION***

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### **FEE IMPLEMENTATION**

According to the California Government Code, prior to levying a new fee or increasing an existing fee, an agency must hold at least one open and public meeting. At least ten days prior to this meeting, the agency must make data on infrastructure costs and funding sources available to the public. Notice of the time and place of the meeting, and a general explanation of the matter, are to be published in accordance with Section 6062a of the Government Code, which states that publication shall occur twice, with at least five days intervening, commencing at least ten days before the hearing, in a newspaper regularly published once a week or more.

The PCF Fire Fee will need to be approved by the Placer County Board of Supervisors through a fee resolution to adopt the proposed PCF Fire Fee. Once the last action associated with adopting the PCF Fire Fee is completed, it shall become effective sixty days later. This procedure also applies to future fee increases.

### **ANNUAL INFLATION UPDATE**

The PCF Fire Fees may be adjusted in future years to reflect revised facility and/or equipment costs or receipt of funding from alternative sources. In addition to such adjustments, in January of each calendar year, or another date, as designated by Placer County Fire, the cost estimates and the PCF Fire Fees may also be adjusted by the average percentage increase, if any, in the 20-city Construction Cost Index (CCI) and the San Francisco CCI as reported in the *Engineering News Record* for the twelve-month period ending December of the prior year. The average percentage increase is calculated each year by adding the percent change in the 20-city CCI to the percent change in the San Francisco CCI and then dividing this total by two.

The *Engineering News Record* CCI and Consumer Price Index, as reported by the U.S Bureau of Labor Statistics, were evaluated for the PCF Fire Fee annual adjustment factor. Based on a review of the planned fire facilities needed to accommodate new growth, a majority of the remaining facilities must be constructed as opposed to vehicles and equipment that must be purchased. Consequently, the Fee Study includes an annual adjustment factor based on an average of the 20-city CCI and San Francisco CCI, which track changes in construction costs over time.

## **FEE STUDY UPDATES**

The Fee Study may be subject to annual updates based on changes in developable land, land uses, facilities and land costs, or economic conditions. In addition to the annual updates, Placer County Fire prepares a new fire facilities plan every five years, or as needed based on substantive policy level changes.

## **ADMINISTRATION FEE COMPONENT OF THE PCF FIRE FEE**

The PCF Fire Fee includes an administration fee component equal to 2.0% of facilities costs. Based on Placer County's experience administering past fire fee programs, the 2.0% fee rate should be sufficient to cover its cost of administering the PCF Fire Fee program. Placer County should monitor its administration costs in the following years and adjust the rate, if necessary.

## **PROGRAMMING REVENUES AND PROJECTS WITH THE CIP**

Placer County Fire should maintain a Capital Improvement Program ("CIP") to adequately plan for future infrastructure needs. The CIP should also identify fee revenue with specific projects. The use of the CIP in this manner shows a reasonable relationship between new development and the use of those revenues. Appendix A presents the current five-year CIP for the Fire Fee Area.

Placer County Fire may decide to alter the scope of the planned facilities or to substitute new projects as long as those new projects continue to represent an expansion of the PCF's facilities. If the total cost of facilities varies from the total cost used to calculate the PCF Fire Fee, PCF should consider revising the PCF Fire Fee accordingly.

## **ANNUAL AND FIVE-YEAR REPORTING REQUIREMENTS**

The Mitigation Fee Act requires PCF to report every year and every fifth year certain financial information regarding the fees. PCF must make available within 180 days after the last day of each fiscal year the following information from the prior fiscal year:

- 1) A brief description of the type of fee in the account or fund
- 2) The amount of the fee
- 3) The beginning and ending balance in the account or fund
- 4) The amount of the fee collected and the interest earned
- 5) An identification of each public improvement for which fees were expended and the amount of expenditures
- 6) An identification of an approximate date by which time construction on the improvement will commence if it is determined that sufficient funds exist to complete the project

- 7) A description of each interfund transfer or loan made from the account and when it will be repaid
- 8) Identification of any refunds made once it is determined that sufficient monies have been collected to fund all fee-related projects

PCF must make this information available for public review and must also present it at the next regularly scheduled public meeting not less than 15 days after this information is made available to the public.

For the fifth fiscal year following the first deposit into the fee account, and every five years thereafter, PCF must make the following findings with respect to any remaining funds in the fee account, regardless of whether those funds are committed or uncommitted:

- 1) Identify the purpose to which the fee is to be put
- 2) Demonstrate a reasonable relationship between the fee and the purpose for which it is charged
- 3) Identify all sources and amounts of funding anticipated to complete financing any incomplete improvements
- 4) Designate the approximate dates on which funding in item (3) above is expected to be deposited into the fee account

As with the annual disclosure, the five-year report must be made public within 180 days after the end of PCF's fiscal year and must be reviewed at the next regularly scheduled public meeting. PCF must make these findings, otherwise, the law requires that it refund the money on a prorated basis to the then current record owners of the development project.

## VIII. ANNUAL AND FIVE-YEAR REPORTING

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Government Code Sections 66001 and 66006 require local agencies to submit annual and five-year reports detailing the status of development impact fees. Annual reports must be made available to the public no later than 180 days after the end of the fiscal year and must be presented to the Board of Supervisors at least fifteen days after it is made available to the public. This chapter of the report presents the annual report for fiscal year 2016-17 and the five-year report ending June 30, 2017.

### Annual Report Pursuant to Government Code 66006

The annual report provides the following information:

- 1) **Brief description of the fee** – the Placer County Fire fee is levied on development within the department’s service area to fund capital improvements such as construction or expansion of fire stations and purchase of fire apparatus, vehicles, and equipment.
- 2) **The amount of the fee** - the fire fee rates for FY 2016-17 are \$0.59 per square foot of residential unit space; \$0.42 per square foot of nonresidential building space; and \$0.12 per square foot of agricultural building space.
- 3) **Beginning and ending balance in the fee accounts**

#### Fire Fee Fund Balance FY 2016-17

	1-Jul-16	30-Jun-17
Placer County Capital Facilities	\$3,108,014	\$3,422,998
North Auburn/Ophir Fire Mitigation	\$210,170	\$0
<b>Fire Fee Fund Balance</b>	<b>\$3,318,184</b>	<b>\$3,422,998</b>

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**4) Amount of fees collected and interest earning in FY 2016-17**

**Fire Fee Collected and Interest Earned in FY 2016-17**

	Fees	Interest
Placer County Capital Facilities	\$340,468	\$44,463
North Auburn/Ophir Fire Mitigation	\$0	\$2,595
<b>Fire Fee Fund Balance</b>	<b>\$340,468</b>	<b>\$47,058</b>

**5) An identification of each public improvement on which fees were expended in FY 2016-17 and the amount of the expenditures on each improvement, including the total percentage of the cost of the public improvement that was funded with fees.**

The fire department spent \$280,600 to pay for debt service for the County interoperable communication system in FY 2016-17. The amount represents the fire department’s share of the debt service cost; of this amount \$256,749, or 92% of the funded amount, was paid from fire fees. The fire department’s total share of the debt service is \$1.6 million, which is approximately 23.5% of the total \$6.8 million debt service amount and is paid over five years, ending in FY 2019-20.

**6) An identification of an approximate date by which the construction of the public improvement will commence if the local agency determines that sufficient funds have been collected to complete the financing on an incomplete public improvement.**

The County estimates that financing for this project will be completed in FY 2019-20.

**7) A description of each interfund transfer or loan made from this account.**

A balance of \$212,765 in the North Auburn/Ophir Fire Mitigation Fire Fee fund was transferred to the Placer County Fire Fee fund in FY 2016-17 to consolidate this fund into the Placer County Fire Fee fund.

**8) Refunds made in FY 2016-17 pursuant to subdivision (e) of Section 66001 and any allocations pursuant to subdivision (f) of Section 66001.**

None

## **Five-Year Report Pursuant to Government Code 66001**

The five-year report provides the following information:

- 1) **Identify the purpose to which the fee is to be put** – The purpose of the PCF Fire Fee is to fund the fire facilities identified in this Fee Study that are needed to mitigate the impacts from new development through 2060 within the Fire Fee Area.
- 2) **Demonstrate a reasonable relationship between the fee and the purpose for which it is charged** – this Fire Fee Study demonstrates that a reasonable relationship exists between the fee and the purpose of which it is charged. New development anticipated through 2060 within the Fire Fee Area will generate a need for fire protection services and facilities. The increase in development will create the need for additional fire facilities and personnel to provide emergency services to the developing areas within the Fire Fee Area. Fee revenue will be used to fund a fair-share portion of these fire facilities to serve new residential and nonresidential development in the Fire Fee Area.
- 3) **Identify all sources and amount of funding anticipated to complete financing in incomplete improvements identified in paragraph (2) of subdivision (a) of Section 66001** – Table 20 of this Fire Fee Study identifies a shortfall of \$7.4 million dollars for the capital improvement plan (CIP) facilities identified herein. Placer County anticipates funding this shortfall with various available sources but primarily with the County’s General Fund.
- 4) **Designate the approximate dates on which the funding is expected to be deposited into the appropriate fund** - the capital improvement plan includes fire stations, apparatus, vehicles and equipment that will be constructed or purchased over the life of the CIP. Development in the County is projected to occur over the next 40+ years but this is a broad estimate. Funding for the various facilities will occur throughout development and it is not known at this time when funding for each of the specific facilities will be needed since this will depend on where and when development occurs in the County.

# **APPENDIX A**

## **CAPITAL IMPROVEMENT PLAN**

**APPENDIX A: CAPITAL IMPROVEMENT PLAN**

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This appendix presents the five-year Capital Improvement Plan (“CIP”) for the Fire Fee Area. The CIP includes an estimate of the potential PCF Fire Fee revenue available to fund fire facilities and an estimated allocation of funding to specific capital improvement projects on an annual basis. The five-year CIP spans from fiscal year (“FY”) 2017-18 through FY 2021-22.

**PCF FIRE FEE REVENUE PROJECTIONS**

PCF Fire Fee revenue projections included in the CIP are based on the projected development in the Fire Fee Area, which does not include the Major Development Projects. The average annual number of new residents and employees projected in the Fire Fee Area is presented below in Table A.1. These projections are based on the development assumptions shown in Table 1 of the Fee Study.

**TABLE A.1  
DEVELOPMENT PROJECTIONS WITHIN THE FIRE FEE AREA (2017-60)**

	<b>Total</b>	<b>Annual Average</b>
Number of Years		43
New Fee Area Residents	51,696	1,202
New Fee Area Employees	23,533	547

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A projection of annual PCF Fire Fee revenue for the next five years (i.e., FY 2017-18 through FY 2021-22) is presented in Table A.2. PCF Fire Fee revenue is estimated based on the anticipated development for each year, expressed as a percentage of the average annual development over the planning period. Development estimates used here are conservative based on the existing state of the economy so as to avoid overestimating Fire Fee revenue.

**TABLE A.2**  
**FIRE FEE REVENUE PROJECTIONS**

Description	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
<i>Residential</i>					
Annual Average New Residents	1,202	1,202	1,202	1,202	1,202
Est. % of Average	25%	50%	75%	100%	100%
Est. New Residents	301	601	902	1,202	1,202
Cost per Resident <sup>1</sup>	\$680	\$680	\$680	\$680	\$680
Impact Fee Revenue <sup>1</sup>	\$204,295	\$408,591	\$612,886	\$817,181	\$817,181
<i>Nonresidential</i>					
Annual Average New Employees	547	547	547	547	547
Est. % of Average	25%	25%	50%	75%	100%
Est. New Employees	137	137	274	410	547
Cost per Employee <sup>1</sup>	\$340	\$340	\$340	\$340	\$340
Impact Fee Revenue <sup>1</sup>	\$46,499	\$46,499	\$92,999	\$139,498	\$185,998
<i>Agricultural</i>					
Est. New Agricultural Bldg SF <sup>2</sup>	0	0	0	0	0
Cost per SF <sup>1</sup>	\$0.13	\$0.13	\$0.13	\$0.13	\$0.13
Impact Fee Revenue <sup>1</sup>	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>Total Impact Fee Revenue</b>	<b>\$250,795</b>	<b>\$455,090</b>	<b>\$705,885</b>	<b>\$956,680</b>	<b>\$1,003,179</b>

<sup>1</sup> Includes a 2% administration charge.

<sup>2</sup> There is not enough development data to project annual fee revenue from this source.

Sources: Placer County Fire

The anticipated development over the next five year period reflects a moderate real estate market as well as start of development for Placer Vineyards and Riolo Vineyard. Consequently, development in FY 2017-18 and FY 2018-19 is expected to be below the annual average for the planning horizon, resulting in total annual revenues of approximately \$0.7 million for these two years. As the economy stabilizes and the Placer Vineyards and Riolo Vineyard development ramps up, the pace of residential development is anticipated to increase to 75% in FY 2019-20. Annual revenues will also increase correspondingly and are projected to reach approximately \$0.7 million in FY 2019-20. When the estimated pace of residential development reaches 100% of the annual average for the planning horizon in FY 2020-21 and FY 2021-22, annual fee revenues will total

approximately \$1.0 million. To account for the reduced pace of development in these early years, the pace of development will need to eventually exceed the annual average if the forecasted level of new development is to be achieved within the 2060 planning horizon.

Tables A.3 through A.6 present the current CIP for Placer County Fire through FY 2021-22. The CIP shows projected spending from FY 2017-18 through FY 2021-22 for station improvements, vehicles, equipment, and annual updates. Cost estimates are based on data provided by Placer County Fire.

**TABLE A.3  
PLANNED LAND & BUILDINGS CIP**

Description	Total Cost	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
None	\$0	\$0	\$0	\$0	\$0	\$0
<b>Subtotal</b>		<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

*Source: Placer County Fire*

**TABLE A.4  
PLANNED VEHICLES & EQUIPMENT CIP**

Description	Total Cost	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
<i>System Wide</i>						
Vehicle Apparatus Replacement Plan	\$2,817,863	\$261,487	\$269,332	\$696,530	\$704,263	\$886,251
<b>Subtotal</b>		<b>\$261,487</b>	<b>\$269,332</b>	<b>\$696,530</b>	<b>\$704,263</b>	<b>\$886,251</b>

*Source: Placer County Executive Office*

**TABLE A.5  
PLANNED SPECIAL EQUIPMENT CIP**

Description	Total Cost	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
<i>System Wide</i>						
SCBA Purchase Plan	\$1,430,000	\$315,000	\$70,000	\$430,000	\$430,000	\$185,000
County Interoperable Communications Sys.		\$280,600	\$238,800	\$400,000	\$0	\$0
<b>Subtotal</b>		<b>\$595,600</b>	<b>\$308,800</b>	<b>\$830,000</b>	<b>\$430,000</b>	<b>\$185,000</b>

*Sources: Placer County Fire*

**TABLE A.6  
ANNUAL PLAN UPDATE CIP**

	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Annual CIP and Fire Fee Update	\$9,800	\$9,800	\$9,800	\$9,800	\$9,800

*Sources: Placer County Fire*

Table A.7 compares estimated annual CIP costs against projected annual PCF Fire Fee revenues for FY 2017-18 through FY 2021-22. In addition to PCF Fire Fee revenue anticipated from future development, approximately \$3.6 million in existing PCF Fire Fee revenue will be used to pay for CIP costs anticipated over the next 5-year period. Given the current spending plan and estimated revenue collections, the PCF Fire Fee fund is anticipated to decrease to approximately \$1.8 million at the end of the 5-year CIP period.

**TABLE A.7**  
**TOTAL CIP COSTS AND REVENUES**

	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Beginning Fire Fee Fund Balance	\$3,635,258	\$3,019,166	\$2,886,324	\$2,055,879	\$1,868,496
Estimated Fire Fee Revenue	\$250,795	\$455,090	\$705,885	\$956,680	\$1,003,179
Annual Total CIP Costs	\$866,887	\$587,932	\$1,536,330	\$1,144,063	\$1,081,051
Fire Fee Fund Net Change	(\$616,092)	(\$132,842)	(\$830,445)	(\$187,383)	(\$77,872)
Year End Fire Fee Fund Balance	\$3,019,166	\$2,886,324	\$2,055,879	\$1,868,496	\$1,790,624

*Sources: Placer County Fire*

## **APPENDIX B**

### **FIRE STATION COST ESTIMATE**



# Placer County Fire Station Cost Study

This study is intended to help establish present day fire station project costs for the Placer County Fire Department Fire Facilities Impact Fee Study. Three recent local fire station projects were identified that have similar characteristics to the new stations proposed in the impact fee study. Site and building improvement similarities were main drivers when selecting the below cost model comparisons. The average of these project cost numbers, along with some adjustments for missing or different characteristics, are used to provide the basis of a typical new fire station price tag. Property / land cost and construction cost escalation is not included.

	FIRE STATION COST MODEL COMPARABLES*				
	Sacramento Fire Station #15 1700 W El Camino Avenue, Sacramento	Roseville Fire Station #1** 50 Lincoln Street, Roseville	Folsom Fire Station #39 2139 Ritchie Street, Folsom		
Project Information	<p>This project was competitively bid in 2017 with a contract awarded to Simile Construction. The station is currently in construction with a 2018 completion date. Emergency signalization is included in this number. The non-construction cost only represents A&amp;E fees at this time. City management time was not provided and is indicated as an estimate. Construction contingency is an estimated placeholder to allow consistency with the other two projects. The FFE number is a placeholder based on information given to date. Non-construction cost does not include project management time and is indicated as a separate line item below.</p>			<p>This competitively bid construction contract was awarded to Carter-Kelly for construction in 2017. The station has 2018 completion date. A separate contractor built the initial, Phase 1, site work, including grading, pad, stubbed utilities. Emergency signal is included in the Phase 2 construction cost below. At this time, no Phase 1 costs are reflected in the numbers below. Phase 2 building construction started out at \$7.2M but was value engineered to \$6.1M. Some FFE is included in the construction cost. The separate FFE number below was provided by the City. Non-construction cost does not include project management time and is indicated as a separate line item.</p>	<p>The competitively bid construction contract was awarded in 2017 to SW Allen Construction and has a 2018 projected completion date. The project includes emergency signal improvements as a part. FFE is not entirely included in the construction number. Project management time is not a part of the non-construction cost number and is shown estimated as a separate number.</p>
Site Area (acres)	1.55	1.25	1.2		
Building Area (square-feet)	9,311	11,240	9,933		
	<b>Project Costs*</b>			<b>Project Costs Average</b>	
Construction Cost (site and building)	\$ 5,951,000	\$ 6,200,496	\$ 5,195,376	\$ 5,782,291	
Non-Construction Cost	\$ 821,238	\$ 862,496	\$ 718,978	\$ 800,904	
Project Management	\$ 101,167	\$ 105,000	\$ 100,000	\$ 102,056	
FFE (furniture, fixtures, equip.) and Com.	\$ 100,000	\$ 100,000	\$ 113,500	\$ 104,500	
Construction Contingency	\$ 325,000	\$ 303,320	\$ 259,769	\$ 296,030	
Escalation / Property Cost	n/a	n/a	n/a	n/a	
<b>TOTAL PROJECT COST</b>	<b>\$ 7,298,405</b>	<b>\$ 7,571,312</b>	<b>\$ 6,387,623</b>		
CONSTRUCTION COST / SF	\$ 639.14	\$ 551.65	\$ 523.04	\$ 571.27	
NON-CONSTRUCTION COST / SF	\$ 88.20	\$ 76.73	\$ 72.38	\$ 79.11	
PROJECT MANAGEMENT COST / SF	\$ 10.87	\$ 9.34	\$ 10.07	\$ 10.09	
FFE / SF	\$ 10.74	\$ 8.90	\$ 11.43	\$ 10.35	
CONST. CONTINGENCY / SF	\$ 34.90	\$ 26.99	\$ 26.15	\$ 29.35	
<b>PROJECT COST / SF</b>	<b>\$ 783.85</b>	<b>\$ 673.60</b>	<b>\$ 643.07</b>	<b>\$ 700.17</b>	

PLACER COUNTY FIRE STATION COST MODEL	
Project Information	The numbers below represent the estimated project costs for a typical new Placer County fire station with a relatively flat site that has been rough graded, in close proximity to utilities and adjacent to a finished street section. Cost averages above were used as comparisons only and not used solely for the purpose of establishing a new fire station cost model.
Site Area (acres)	2-2.5
Building Area (square-feet)	10,000
	<b>PROJECT COSTS (est.)      ESTIMATE DESCRIPTION</b>
Construction Cost (site and building)	\$ 5,712,747 \$571.27 / SF, average of construction cost per square-foot above, multiplied by 10,000 SF.
Non-Construction Cost	\$ 791,060 \$79.11 / SF, average of non-construction cost per square-foot above, multiplied by 10,000 SF.
Project Management	\$ 100,915 \$10.09 / SF, average of project management cost per square-foot above, multiplied by 10,000 SF.
FFE (furniture, fixtures, equip.) and Com.	\$ 103,544 \$10.35 / SF, average of FFE cost per square-foot above, multiplied by 10,000 SF.
Construction Contingency	\$ 293,476 \$29.35 / SF, average of construction contingency above, multiplied by 10,000 SF.
Escalation / Property Cost	n/a Any potential construction cost escalation is to be included as a part of overall impact fee reviews/adjustments in the future.
<b>TOTAL PROJECT COST (est.)</b>	<b>\$ 7,001,742</b> Estimated total project cost based on averages of individual station costs above.
<b>PROJECT COST / SF (est.)</b>	<b>\$ 700.17</b> Based on 10,000 square-foot fire station.

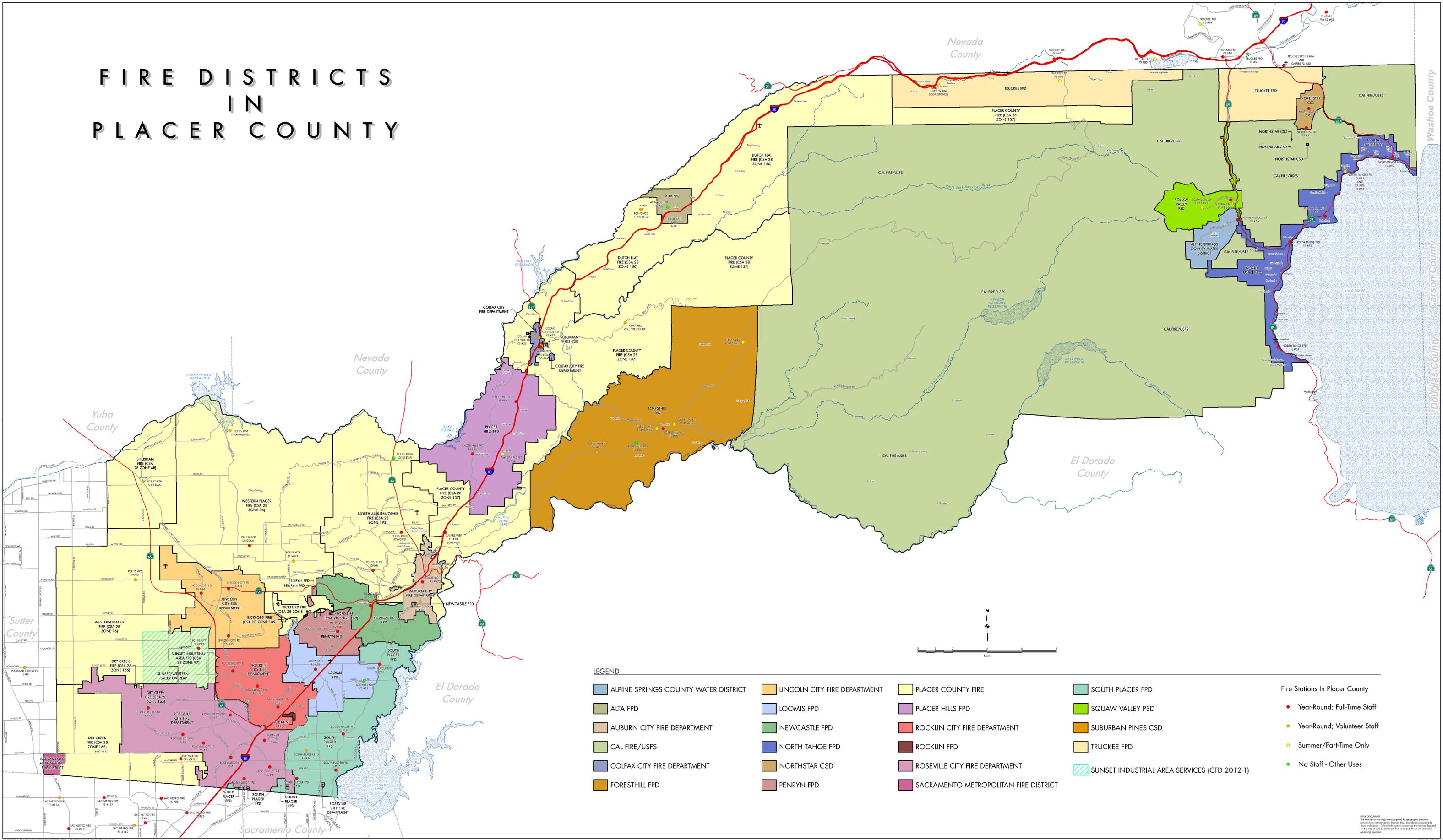
\* Fire station project information / costs have been provided by representatives of or collected from the Cities of Sacramento, Roseville and Folsom. Numbers shown italicized and shaded are estimates and not provided to the County.

\*\*Roseville Fire Station #1 Phase 2 building construction costs only - Phase 1 site preparation and utilities infrastructure construction and non-construction costs were not included in the cost model numbers.

# **APPENDIX C**

## **FIRE DISTRICTS IN PLACER COUNTY**

# FIRE DISTRICTS IN PLACER COUNTY



**LEGEND**

ALPINE SPRINGS COUNTY WATER DISTRICT	LINCOLN CITY FIRE DEPARTMENT	PLACER COUNTY FIRE	SOUTH PLACER FPD	<b>Fire Stations In Placer County</b> Year-Round; Full-Time Staff Year-Round; Volunteer Staff Summer/Part-Time Only No Staff - Other Uses
ALTA FPD	LOOMIS FPD	PLACER HILLS FPD	SQUAW VALLEY PSD	
AUBURN CITY FIRE DEPARTMENT	NEWCASTLE FPD	ROCKLIN CITY FIRE DEPARTMENT	SUBURBAN PINES CSD	
CAL FIRE/USFS	NORTH TAHOE FPD	ROCKLIN FPD	TRUCKEE FPD	
COLFAX CITY FIRE DEPARTMENT	NORTHSTAR CSD	ROSEVILLE CITY FIRE DEPARTMENT	SUNSET INDUSTRIAL AREA SERVICES (CFD 2012-1)	
FORESTHILL FPD	PENRYN FPD	SACRAMENTO METROPOLITAN FIRE DISTRICT		

DATA DISCLAIMER: The data on this map were prepared for geographic purposes and are not intended to be used for legal purposes. The data is provided as a general reference only. Official information covering the fire districts should be obtained from recorded documents and local governing agencies.

## **APPENDIX D**

### **APPARATUS COST ESTIMATE**

## Placer County Apparatus

Apparatus Type	Year	Cost Range	Cost	Cost With Taxes	BLS (Outfitting Cost)	ALS (Outfitting Cost)	Total Cost	Interest Rate	Lease Term	Monthly Payment	Yearly payment
Placer County Type 1 engine (Placer County's Current Spec)	2016		\$ 524,488.00	\$ 562,513.38	\$ 150,000.00	\$ 210,000.00	\$ 772,513.38	5%	7 Years	(\$11,659.30)	(\$133,505.62)
	2017		\$ 545,467.52	\$ 585,013.92	\$ 156,000.00	\$ 218,400.00	\$ 803,413.92	5%	7 Years	(\$12,125.67)	(\$138,845.85)
	2018		\$ 567,286.22	\$ 608,414.47	\$ 162,240.00	\$ 227,136.00	\$ 835,550.47	5%	7 Years	(\$12,610.70)	(\$144,399.68)
	2019		\$ 589,977.67	\$ 632,751.05	\$ 168,729.60	\$ 236,221.44	\$ 868,972.49	5%	7 Years	(\$13,115.12)	(\$150,175.67)
	2020		\$ 613,576.78	\$ 658,061.09	\$ 175,478.78	\$ 245,670.30	\$ 903,731.39	5%	7 Years	(\$13,639.73)	(\$156,182.69)
	2021		\$ 638,119.85	\$ 684,383.54	\$ 182,497.94	\$ 255,497.11	\$ 939,880.65	5%	7 Years	(\$14,185.32)	(\$162,430.00)
	2022		\$ 663,644.64	\$ 711,758.88	\$ 189,797.85	\$ 265,716.99	\$ 977,475.87	5%	7 Years	(\$14,752.73)	(\$168,927.20)
	2023		\$ 690,190.43	\$ 740,229.23	\$ 197,389.77	\$ 276,345.67	\$ 1,016,574.91	5%	7 Years	(\$15,342.84)	(\$175,684.29)
Apparatus Type	Year	Cost Range	Median Cost	Cost With Taxes	BLS (Outfitting Cost)	ALS (Outfitting Cost)	Total Cost	Interest Rate	Lease Term	Monthly Payment	Yearly payment
Type 3 Commerical Cab 4 x 4	2016	350,000-400000	\$ 375,000.00	\$ 402,187.50	\$ 110,000.00		\$ 512,187.50	5%	7 Years	(\$7,730.28)	(\$88,516.15)
	2017		\$ 390,000.00	\$ 418,275.00	\$ 114,400.00		\$ 532,675.00	5%	7 Years	(\$8,039.49)	(\$92,056.80)
	2018		\$ 405,600.00	\$ 435,006.00	\$ 118,976.00		\$ 553,982.00	5%	7 Years	(\$8,361.07)	(\$95,739.07)
	2019		\$ 421,824.00	\$ 452,406.24	\$ 123,735.04		\$ 576,141.28	5%	7 years	(\$8,695.52)	(\$99,568.63)
	2020		\$ 438,696.96	\$ 470,502.49	\$ 128,684.44		\$ 599,186.93	5%	7 years	(\$9,043.34)	(\$103,551.38)
	2021		\$ 456,244.84	\$ 489,322.59	\$ 133,831.82		\$ 623,154.41	5%	7 years	(\$9,405.07)	(\$107,693.43)
	2022		\$ 474,494.63	\$ 508,895.49	\$ 139,185.09		\$ 648,080.58	5%	7 years	(\$9,781.27)	(\$112,001.17)
	2023		\$ 493,474.42	\$ 529,251.31	\$ 144,752.50		\$ 674,003.81	5%	7 years	(\$10,172.52)	(\$116,481.22)
Apparatus Type	Year	Cost Range	Median Cost	Cost With Taxes	BLS (Outfitting Cost)	ALS (Outfitting Cost)	Total Cost	Interest Rate	Lease Term	Monthly Payment	Yearly payment
3000 Gallon Tanker Commerical Cab	2016		\$ 340,000.00	\$ 364,650.00	\$ 75,000.00		\$ 439,650.00	5%	7 Years	(\$6,635.50)	(\$75,980.23)
	2017		\$ 353,600.00	\$ 379,236.00	\$ 78,000.00		\$ 457,236.00	5%	7 Years	(\$6,900.92)	(\$79,019.44)
	2018		\$ 367,744.00	\$ 394,405.44	\$ 81,120.00		\$ 475,525.44	5%	7 Years	(\$7,176.95)	(\$82,180.22)
	2019		\$ 382,453.76	\$ 410,181.66	\$ 84,364.80		\$ 494,546.46	5%	7 years	(\$7,464.03)	(\$85,467.43)
	2020		\$ 397,751.91	\$ 426,588.92	\$ 87,739.39		\$ 514,328.32	5%	7 years	(\$7,762.59)	(\$88,886.13)
	2021		\$ 413,661.99	\$ 443,652.48	\$ 91,248.97		\$ 534,901.45	5%	7 years	(\$8,073.10)	(\$92,441.57)
	2022		\$ 430,208.47	\$ 461,398.58	\$ 94,898.93		\$ 556,297.51	5%	7 years	(\$8,396.02)	(\$96,139.23)
	2023		\$ 447,416.80	\$ 479,854.52	\$ 98,694.88		\$ 578,549.41	5%	7 years	(\$8,731.86)	(\$99,984.80)
Apparatus Type	Year	Cost Range	Median Cost	Cost With Taxes	BLS (Outfitting Cost)	ALS (Outfitting Cost)	Total Cost	Interest Rate	Lease Term	Monthly Payment	Yearly payment
105' Rear Mount Ladder (Similar to Placer County Current 105 Aeria)	2016		\$ 845,000.00	\$ 906,262.50	\$ 200,000.00	\$ 260,000.00	\$ 1,166,262.50	5%	7 Years	(\$17,602.03)	(\$201,553.27)
	2017		\$ 878,800.00	\$ 942,513.00	\$ 208,000.00	\$ 270,400.00	\$ 1,212,913.00	5%	7 Years	(\$18,306.11)	(\$209,615.40)
	2018		\$ 913,952.00	\$ 980,213.52	\$ 216,320.00	\$ 281,216.00	\$ 1,261,429.52	5%	7 Years	(\$19,038.35)	(\$218,000.02)
	2019		\$ 950,510.08	\$ 1,019,422.06	\$ 224,972.80	\$ 292,464.64	\$ 1,311,886.70	5%	7 years	(\$19,799.89)	(\$226,720.02)
	2020		\$ 988,530.48	\$ 1,060,198.94	\$ 233,971.71	\$ 304,163.23	\$ 1,364,362.17	5%	7 years	(\$20,591.88)	(\$235,788.82)
	2021		\$ 1,028,071.70	\$ 1,102,606.90	\$ 243,330.58	\$ 316,329.75	\$ 1,418,936.66	5%	7 Years	(\$21,415.56)	(\$245,220.38)
	2022		\$ 1,069,194.57	\$ 1,146,711.18	\$ 253,063.80	\$ 328,982.94	\$ 1,475,694.12	5%	7 Years	(\$22,272.18)	(\$255,029.19)
	2023		\$ 1,111,962.35	\$ 1,192,579.62	\$ 263,186.36	\$ 342,142.26	\$ 1,534,721.89	5%	7 Years	(\$23,163.07)	(\$265,230.36)
Apparatus Type	Year	Cost Range	Median Cost	Cost With Taxes	BLS (Outfitting Cost)	ALS (Outfitting Cost)	Total Cost	Not Applicable for Leasing			
Command Vehicle	2017		\$ 35,000.00	\$ 37,537.50	\$ 25,000.00		\$ 62,537.50				
	2018		\$ 36,400.00	\$ 39,039.00	\$ 26,000.00		\$ 65,039.00				
	2019		\$ 37,856.00	\$ 40,600.56	\$ 27,040.00		\$ 67,640.56				
	2020		\$ 39,370.24	\$ 42,224.58	\$ 28,121.60		\$ 70,346.18				
	2021		\$ 40,945.05	\$ 43,913.57	\$ 29,246.46		\$ 73,160.03				
	2022		\$ 42,582.85	\$ 45,670.11	\$ 30,416.32		\$ 76,086.43				
	2023		\$ 44,286.17	\$ 47,496.91	\$ 31,632.98		\$ 79,129.89				
	2024		\$ 46,057.61	\$ 49,396.79	\$ 32,898.29		\$ 82,295.08				