

*The Economics of Land Use*



## **Public Review Draft Report**

# **Fire Impact Fee Program Nexus Study Update**

Prepared for:

City of Fresno

Prepared by:

Economic & Planning Systems, Inc. (EPS)

May 2019

*Economic & Planning Systems, Inc.  
400 Capitol Mall, 28th Floor  
Sacramento, CA 95814  
916 649 8010 tel  
916 649 2070 fax*

*Oakland  
Sacramento  
Denver  
Los Angeles*

**[www.epsys.com](http://www.epsys.com)**

EPS #182126

# Table of Contents

---

|    |  |    |
|----|--|----|
| 1. | EXECUTIVE SUMMARY .....  | 1  |
|    | Overview .....   | 1  |
|    | Purpose .....  | 1  |
|    | Proposed Update to the Fire Fees.....                              | 2  |
|    | Report Organization .....  | 5  |
| 2. | SERVICE POPULATION AND EMPLOYEES AND DEVELOPMENT ASSUMPTIONS ..... | 6  |
|    | Existing and Future Population and Employment.....                 | 6  |
|    | Development Assumptions .....                                      | 9  |
| 3. | CAPITAL IMPROVEMENT PROGRAM .....                                  | 12 |
|    | Overview .....   | 12 |
|    | Fire CIP .....   | 12 |
| 4. | COST ALLOCATION.....   | 20 |
|    | Introduction .....   | 20 |
|    | FFD Capital Costs Allocation .....                                 | 20 |
|    | Administration .....   | 23 |
| 5. | IMPLEMENTATION .....   | 24 |
|    | Applicability of Fee Program .....                                 | 24 |
|    | Fee Exemptions .....   | 24 |
|    | Fee Credits or Adjustments .....                                   | 25 |
|    | Reimbursement to Developers.....                                   | 25 |
|    | Periodic Inflation Adjustment and Fee Review.....                  | 26 |
|    | Fee Administration .....   | 26 |
|    | Five-Year Review .....   | 26 |
| 6. | AB 1600 NEXUS FINDINGS.....  | 27 |
|    | Authority .....  | 27 |
|    | Summary of Nexus Findings.....                                     | 27 |

Appendices:

Appendix A: Fire Facilities and Apparatus Bond Financing

Appendix B: Fresno Fire Department Service Call Activity

## List of Tables and Map

---

|          |  |    |
|----------|--|----|
| Table 1  | Summary of Proposed Fire Fees.....                   | 3  |
| Table 2  | Comparison of Existing and Proposed Fire Fees.....   | 4  |
| Table 3  | Summary of Growth Projections .....                  | 7  |
| Table 4  | Detailed Population and Employment Projections ..... | 10 |
| Table 5  | Key Demographic Assumptions.....                     | 11 |
| Table 6  | Summary of Fire Capital Improvement Program .....    | 13 |
| Table 7  | Existing Fire Facilities .....                       | 15 |
| Table 8  | Existing Fire Apparatus and Equipment.....           | 16 |
| Table 9  | Planned Fire Facilities .....                        | 17 |
| Table 10 | Planned Fire Apparatus and Equipment.....            | 19 |
| Table 11 | Fire Improvements Cost per Resident/Employee .....   | 21 |
| Table 12 | Fire Improvements Cost Allocation .....              | 22 |
| Map 1    | Fresno Planning Area.....                            | 8  |

# 1. EXECUTIVE SUMMARY

---

## Overview

Economic & Planning Systems, Inc. (EPS) has been retained by the City of Fresno (City) to prepare this 2019 Fire Impact Fee Program Nexus Study Update (2019 Nexus Study Update). This report provides an update to the Fire Facilities Development Impact Fees (Fire Fees) established in the 2016 Fire and Police Impact Fee Programs Nexus Study Update (2016 Study). The 2016 Study included both Fire Fees and Police Facilities Development Impact Fees (Police Fees) that were based on the City General Plan growth projections through 2035 as well as on the Fire and Police Capital Improvement Plans (CIPs) provided by the Fresno Fire Department (FFD) and Fresno Police Department (FPD) that detailed the planned capital costs through 2035.

Since the approval of the 2016 Study, the City has reviewed the Fire CIP costs used to derive the Fire Fees in that study and found that the fire station construction cost estimates are substantially lower than recent bids for similar facilities. In addition, to facilitate the timely construction of fire stations to serve new development, the City determined that additional bond funding would be needed over the level included in the 2016 Study, resulting in increased associated bond financing costs included in the Fire Fee Program. Without increasing both construction and bond financing costs, adequate funding will not be available to construct stations when needed to serve new development. The City has therefore retained EPS to prepare this 2019 Nexus Study Update to serve as the basis for updating the existing Fire Fees to reflect updated cost estimates.

While the 2016 Study included both the Fire Fees and Police Fees, this 2019 Nexus Study Update updates only the Fire Fees. Additionally, there have been no changes to the analyzed land use and population assumptions detailed in the 2016 Study. This report details the calculation of the new Fire Fees and provides the legal justification for updating the Fire Fees.

## Purpose

The purpose of this 2019 Nexus Study Update is to update the Fire Fees and establish the legally required nexus (or reasonable relationship) between the City's projected population and employment (service population) in 2035 and the fire facilities that will be required to serve those residents and employees.

The nexus requirements for imposing development impact fees were established under Assembly Bill 1600 (AB 1600) legislation, as codified by the Mitigation Fee Act (California Government Code section 66000 et. seq.). This section of the Mitigation Fee Act sets forth the procedural requirements for establishing and collecting development impact fees. These procedures require that "a reasonable relationship, or nexus, must exist between a governmental exaction and the purpose of the condition."

Specifically, each local agency imposing a fee must perform the following tasks:

- Identify the purpose of the fee.
- Identify how the fee is to be used.
- Determine how a reasonable relationship exists between the fee's use and the type of development project on which the fee is imposed.
- Determine how a reasonable relationship exists between the need for the public facility and the type of development project on which the fee is imposed.
- Demonstrate a reasonable relationship between the amount of the fee and the cost of the public facilities or portion of the public facilities attributable to development on which the fee is imposed.

## Proposed Update to the Fire Fees

The proposed update to the Fire Fees is based on the allocation of the updated Fire CIP costs to the projected City population and employment in the General Plan Horizon year of 2035. The CIP costs include both the value of existing facilities and the estimated costs of new facilities. The total facilities costs are allocated to the total projected residents and employees in 2035. This cost allocation serves as the basis for updating the estimated Fire Fees charged to new development. The Fire Fee to be collected for each residential and commercial land use is calculated based on each land use's relative demand for fire services. The Fire Fees will not fund construction of capital facility improvements required to cure existing level-of-service deficiencies.

**Table 1** summarizes the proposed fees by land use. The fees are collected per dwelling unit for residential uses and per 1,000 building square feet for nonresidential uses. The fees include a base amount and a 2-percent administrative component for the City to administer the fee program.

**Table 2** compares the existing and proposed Fire Fees. The proposed Fire Fees reflect an increase for all land uses. The increase in the Fire Fee rates is primarily due to increased fire station construction costs and increased bond financing costs included in the Fire Fee Program.

**Table 1**  
**Fresno Fire Impact Fee Program Update**  
**Summary of Proposed Fire Fees**

| Item                  | Fire Fee                       |             | Total          |
|-----------------------|--------------------------------|-------------|----------------|
|                       | Base Fee                       | Admin.      |                |
| <i>Source</i>         | <i>Table 12</i>                | <i>2.0%</i> |                |
| <b>Residential</b>    | <i>per dwelling unit</i>       |             |                |
| Single-Family         | \$1,856                        | \$37        | <b>\$1,893</b> |
| Multifamily           | \$1,401                        | \$28        | <b>\$1,429</b> |
| <b>Nonresidential</b> | <i>per 1,000 bldg. sq. ft.</i> |             |                |
| Retail                | \$649                          | \$13        | <b>\$662</b>   |
| Office                | \$742                          | \$15        | <b>\$757</b>   |
| Industrial            | \$371                          | \$7         | <b>\$379</b>   |

*summ\_fee*

Source: City of Fresno and EPS

**Table 2**  
**Fresno Fire Impact Fee Program Update**  
**Comparison of Existing and Proposed Fire Fees**

|                       | <b>Proposed<br/>Fee [1]</b>    | <b>Existing<br/>Fee [1]</b> | <b>Difference</b> | <b>Percentage<br/>Difference</b> |
|-----------------------|--------------------------------|-----------------------------|-------------------|----------------------------------|
| <b>Residential</b>    | <i>per dwelling unit</i>       |                             |                   |                                  |
| Single-Family         | \$1,893                        | \$779                       | \$1,114           | 143%                             |
| Multifamily           | \$1,429                        | \$588                       | \$841             | 143%                             |
| <b>Nonresidential</b> | <i>per 1,000 bldg. sq. ft.</i> |                             |                   |                                  |
| Retail                | \$662                          | \$272                       | \$390             | 144%                             |
| Office                | \$757                          | \$311                       | \$446             | 143%                             |
| Industrial            | \$379                          | \$156                       | \$223             | 143%                             |

*fee comp*

Source: City of Fresno and EPS

[1] Includes 2% administration fee.

## **Report Organization**

This report is divided into six chapters and two appendices:

- **Chapter 1** includes this introduction and executive summary.
- **Chapter 2** details the estimated population and employment projections.
- **Chapter 3** describes the FFD CIP, capital needs, and costs to be funded by the Fire Fee Program.
- **Chapter 4** provides the cost allocation methodology and calculates the Fire Fees.
- **Chapter 5** describes how the Fire Fee Program will be implemented and updated.
- **Chapter 6** provides the nexus findings for the Fire Fee Program.
- **Appendix A** details the estimated financing costs for fire facilities construction.
- **Appendix B** contains the detailed FFD service call activity data.



## 2. SERVICE POPULATION AND EMPLOYEES AND DEVELOPMENT ASSUMPTIONS

---

Population and employment projections are a significant variable used in this 2019 Nexus Study Update. The base Fire Fees are established by allocating the costs of the facilities and equipment needed to serve the City in 2035 to the total projected residents and employees in 2035, estimating cost factors per resident and per employee, and then using these factors to estimate fees to charge to new development.

This chapter presents population and employment estimates for 2014 and 2035, as well as population and employment density factors used to establish the fees for the various land uses. All estimates and factors in this chapter are unchanged from the 2016 Study.<sup>1</sup>

### Existing and Future Population and Employment

**Table 3** summarizes the population and employment estimates for 2014 and 2035 and estimates the growth between 2014 and 2035. The FFD serves the incorporated City and unincorporated areas fully enclosed in the City, which are referred to as "County Islands."

Projected growth in the FFD service area through 2035 will occur in the following three areas:

1. Existing incorporated areas.
2. County Islands.
3. Unincorporated areas located beyond the City limits in the Sphere of Influence (SOI).

**Map 1** is from the current Fresno General Plan and shows the entire Fresno Planning Area, including the City, County Island, and SOI boundaries. A key growth assumption in this report is that all development that occurs in the County Islands and other unincorporated areas within the boundaries of the Fresno SOI will annex into the City by 2035. In 2035, the FFD is projected to serve 771,000 residents and 266,000 employees.

---

<sup>1</sup> The 2014 population and employment estimates are used only to estimate the annual service calls per resident and employee, an important component of the cost allocation methodology (detailed in **Chapter 4**). It is assumed that the calls per resident and employee have not substantially changed in the last 5 years, so it was unnecessary to update the population, employee, and service call estimates to 2019 values.

**Table 3**  
**Fresno Fire Impact Fee Program Update**  
**Summary of Growth Projections (2014-2035) [1]**

| Item                 | Fresno<br>SOI<br>[2] | Fire<br>Service Area<br>[3] |
|----------------------|----------------------|-----------------------------|
| <b>Population</b>    |                      |                             |
| Existing (2014)      | 562,819              | 555,609                     |
| Projected (2035) [4] | 771,000              | 771,000                     |
| Projected Growth     | <b>208,181</b>       | <b>215,391</b>              |
| <b>Employment</b>    |                      |                             |
| Existing (2014)      | 179,963              | 177,590                     |
| Projected (2035) [4] | 266,363              | 266,363                     |
| Projected Growth     | <b>86,400</b>        | <b>88,773</b>               |

*in sum*

Source: City of Fresno and EPS

[1] See Table 4 for detail.

[2] Fresno SOI includes incorporated City, County Islands, and other unincorporated areas outside the City boundaries.

[3] Fire Service Area includes incorporated City and County Islands.

[4] It is assumed that all unincorporated areas with new growth will annex by 2035.

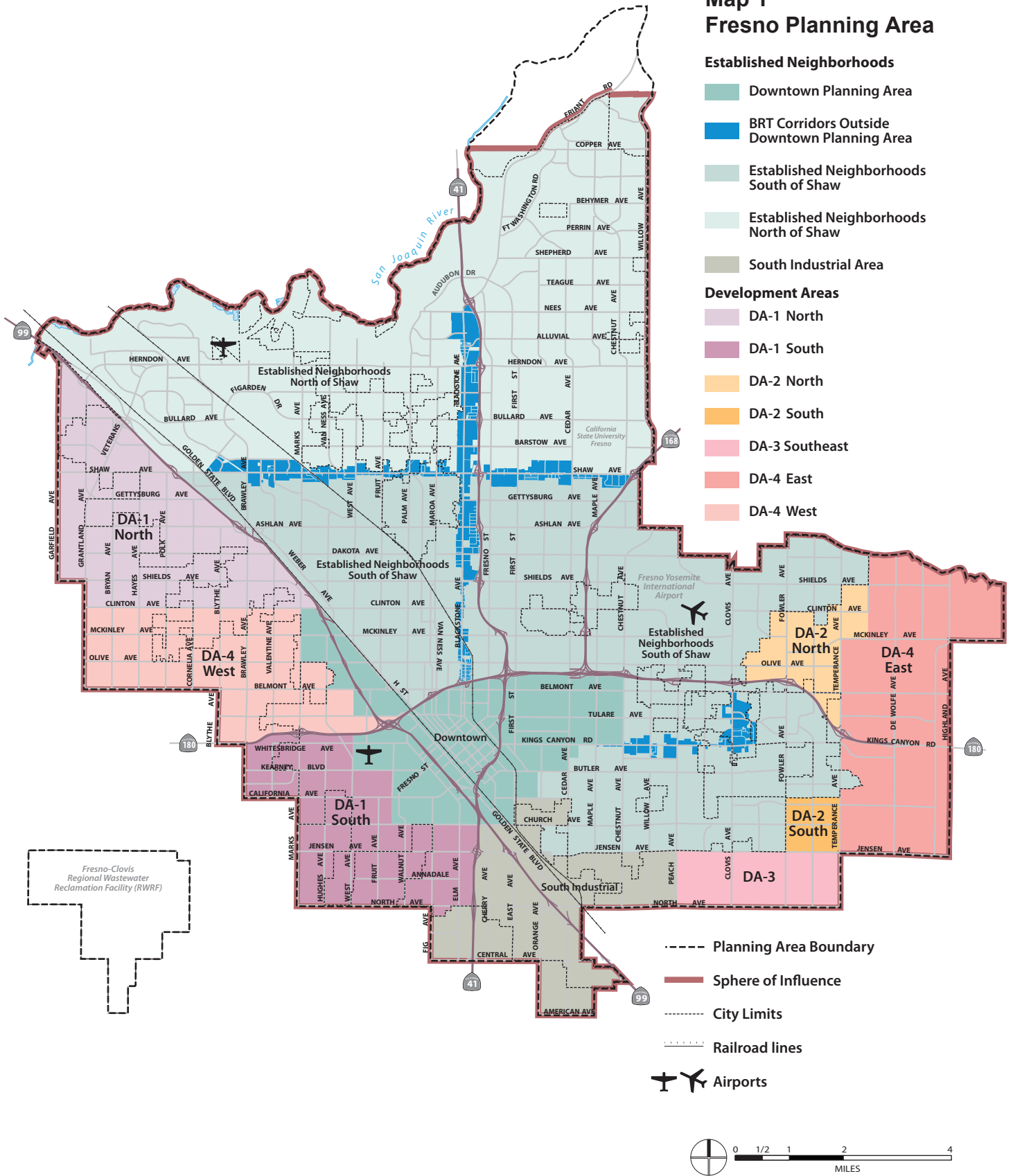
# Map 1 Fresno Planning Area

## Established Neighborhoods

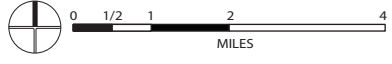
- Downtown Planning Area
- BRT Corridors Outside Downtown Planning Area
- Established Neighborhoods South of Shaw
- Established Neighborhoods North of Shaw
- South Industrial Area

## Development Areas

- DA-1 North
- DA-1 South
- DA-2 North
- DA-2 South
- DA-3 Southeast
- DA-4 East
- DA-4 West



- Planning Area Boundary
- Sphere of Influence
- City Limits
- Railroad lines
- Airports



Source: City of Fresno  
 Note: The Corridor along Shaw Avenue is to be supported by enhanced bus service.

**Table 4** provides the details of the estimated 2014 and projected 2035 population and employment for the Fire service area. This table includes a detailed accounting of the sources of the population and employment data, which are summarized below:

- Fresno General Plan Fiscal Impact Analysis (January 3, 2014).
- Map Atlas Fresno Existing Conditions Report (August 2011).
- Population data from the California Department of Finance (DOF).
- Employment data from the California Employment Development Department (EDD).
- City General Plan.

Note that the government and education employment estimates are deducted from the total employment estimates because public uses will not pay development impact fees.

## **Development Assumptions**

The Fire Fee is assessed on several subcategories of new residential and nonresidential development. The fee rates are established by allocating costs to residents and employees, establishing a cost per resident and a cost per employee, and then using density factors to convert those costs to fees per dwelling unit or 1,000 nonresidential building square feet.

**Table 5** shows the population and employment density assumptions used to establish the proposed Fire Fee for each residential and nonresidential development category. For the residential land uses, persons-per-dwelling-unit factors are used in the fee calculations. For the nonresidential land uses, building-square-feet-per-employee factors are used in the fee calculations.

**Table 4**  
**Fresno Fire Impact Fee Program Update**  
**Detailed Population and Employment Projections (2014-2035)**

| Item   | Fresno SOI     |                |                | Fire Service Area |                |                |
|--|----------------|----------------|----------------|-------------------|----------------|----------------|
|  | Existing       | 2035           | Growth         | Existing          | 2035           | Growth         |
| <b>Population</b>                            |                |                |                |                   |                |                |
| Incorporated City                            | 515,609        | 771,000        | 255,391        | 515,609           | 771,000        | 255,391        |
| County "Islands" Located In City             | 40,000         | 0              | (40,000)       | 40,000            | 0              | (40,000)       |
| Other Unincorporated Areas Outside City      | 7,210          | 0              | (7,210)        | 0                 | 0              | 0              |
| <b>TOTAL</b>                                 | <b>562,819</b> | <b>771,000</b> | <b>208,181</b> | <b>555,609</b>    | <b>771,000</b> | <b>215,391</b> |
| <b>Employment</b>                            |                |                |                |                   |                |                |
| Incorporated City                            | 206,000        | 332,954        | 126,954        | 206,000           | 332,954        | 126,954        |
| County "Islands" Located In City             | 15,988         | 0              | (15,988)       | 15,988            | 0              | (15,988)       |
| Other Unincorporated Areas Outside City      | 2,966          | 0              | (2,966)        | 0                 | 0              | 0              |
| <b>Subtotal</b>                              | <b>224,954</b> | <b>332,954</b> | <b>108,000</b> | <b>221,988</b>    | <b>332,954</b> | <b>110,966</b> |
| Less: Government and Education (approx. 20%) | (44,991)       | (66,591)       | (21,600)       | (44,398)          | (66,591)       | (22,193)       |
| <b>TOTAL</b>                                 | <b>179,963</b> | <b>266,363</b> | <b>86,400</b>  | <b>177,590</b>    | <b>266,363</b> | <b>88,773</b>  |

lu

**Sources of Data:**

**Population**

- City Existing Population: California Department of Finance (1/1/14)
- Total Existing Population: Fresno General Plan Fiscal Impact Analysis (1/3/14)
- 2035 Projected Population: Fresno General Plan (12/18/14)
- County Islands Existing Population: Map Atlas Fresno Existing Conditions Report (August 2011)
- Other Unincorporated Areas Outside City Population: Total planning area population less City and County Islands population.

**Employment**

- Total Existing Employment: Fresno General Plan Fiscal Impact Analysis (1/3/14)
- Growth Employment: Fresno General Plan (108,000: 50,000 retail, 32,500 office, 25,500: other) + uninc. Area employment assumed to incorporate by 2035.
- City Existing Employment: California Employment Development Department (EDD) - 2014 Average
- County Islands Employment: same ratio of employment to population as for whole Fresno planning area.
- Other Unincorporated Areas Outside City Employment: Total planning area employment less City and County Islands employment
- 2035 Employment: Existing plus growth employment.
- Government and Education Employment (existing, growth, and 2035) estimated as follows:
  - 1) County education and government employees as percentage of total County employment obtained from EDD data (Jan. 2015)
  - 2) Percentage from previous step multiplied by total employment

**Assumes all County Islands and other unincorporated areas outside the City will annex by 2035. The General Plan states that all unincorporated area in the planning area is expected to eventually annex (page 1-13).**

**Table 5**  
**Fresno Fire Impact Fee Program Update**  
**Key Demographic Assumptions**

---

| <b>Item</b>                              | <b>Factor</b> |
|--|---------------|
| <b>Persons per Household</b>             |               |
| Single-Family                            | 3.14          |
| Multifamily                              | 2.37          |
| <b>Building Square Feet per Employee</b> |               |
| Retail                                   | 400           |
| Office                                   | 350           |
| Industrial                               | 700           |

---

*assump*

Sources:

Persons per Household: American Community Survey 2013

Sq. Ft. per Employee: 2012 Fresno Fiscal Impact Analysis (EPS)

### 3. CAPITAL IMPROVEMENT PROGRAM

---

#### Overview

The City provides fire services through an existing portfolio of stations, vehicles, and equipment. Anticipated citywide development occurring through 2035 requires construction of new stations and procurement of additional vehicles and equipment so that the FFD can continue to provide timely responses to calls for medical, fire, and other emergencies. Planned facility needs are determined by the FFD based on response time requirements. The City General Plan includes an urban growth standard that requires new development to be located within a four-minute response service area of a fire station. This chapter details the costs of all existing and planned improvements included in the Fire CIP provided by the FFD. **Table 6** summarizes the CIP costs.

Replacement costs are estimated for existing facilities, vehicles, and equipment. Some of the existing improvements were funded through bond financing, and the associated remaining financing costs are included in the existing improvements cost estimates.

Inventories of planned facilities, vehicles, and equipment needed to serve development through 2035 were provided by the FFD, and cost estimates were developed for all improvements. It is assumed that all future fire stations, other facilities, and vehicles will be partially funded through bond financing. The associated financing costs are estimated and included in the planned improvements cost estimates.

All costs in this 2019 Nexus Study Update are expressed in 2019 dollars and are based on the best available cost estimates at this time. If costs change significantly, or if other funding sources become available, the cost estimates and fees will be adjusted accordingly. The City periodically will conduct a review of improvement costs and will make necessary adjustments to the fee.

#### Fire CIP

##### Summary

**Table 6** summarizes the existing and planned Fire CIP improvements and associated costs. The total cost estimate of \$524.8 million includes approximately \$176.3 million for existing improvements and \$348.5 million for future improvements. These costs include the costs of existing and planned facilities, apparatus, and equipment, as well as the associated financing costs for bond-funded facilities and apparatus. The financing costs for both existing and future bond debt service are detailed in **Appendix A** and summarized below

Currently, bonds have been issued to fund \$17.6 million of existing facilities. The Fire Fee Program revenues will be used to pay 49 percent of the associated debt service, and the City General Fund will be used to pay the remaining 51 percent. This percentage split is based on a deficiency analysis conducted as part of the 2005 Fire & Police Facilities Impact Fees Nexus Study. Consistent with the percentage split identified above, 49 percent of the remaining financing costs for existing debt service are included in the Fire Fee Program costs.

**Table 6**  
**Fresno Fire Impact Fee Program Update**  
**Summary of Fire Capital Improvement Program (2019 \$)**

| Item                         | Source    | Fire Facilities      |
|------------------------------|-----------|----------------------|
| <b>Existing Improvements</b> |           |                      |
| Facilities                   | Table 7   | \$135,916,725        |
| Apparatus and Equipment      | Table 8   | \$36,851,400         |
| Financing Cost               | Table A-1 | \$3,570,000          |
| <b>Total</b>                 |           | <b>\$176,338,125</b> |
| <b>Planned Improvements</b>  |           |                      |
| Facilities                   | Table 9   | \$231,693,175        |
| Apparatus and Equipment      | Table 10  | \$25,073,600         |
| Financing Cost               | Table A-2 | \$91,700,000         |
| <b>Total</b>                 |           | <b>\$348,466,775</b> |
| <b>Total Improvements</b>    |           |                      |
| Facilities                   |           | \$367,609,900        |
| Apparatus and Equipment      |           | \$61,925,000         |
| Financing Cost               |           | \$95,270,000         |
| <b>Total</b>                 |           | <b>\$524,804,900</b> |

*sum cost*

Source: Fresno Fire Department and EPS



For all future facility construction and apparatus, excluding Station 18, it is assumed that 70 percent of the costs will be bond funded and that all of the associated financing costs will be funded by the Fire Fees. The bond funded construction costs include site improvement and parking, building construction, and soft costs. Future facility land acquisition costs are not assumed to be bond funded.

Construction of Station 18 is being fund through City sources. Half of the construction costs are being funded by an internal loan and the other half are being funded through the General Fund. The internal loan will be approximately \$3.5 million and will be repaid with interest using future impact fee revenue. The financing costs (interest payments) associated with the internal loan are included in the Fire Fee Program costs.

## Existing Improvements

### *Facilities*

**Table 7** details the existing FFD facilities and associated costs. The FFD currently operates out of the headquarters facility, 20 existing fire stations, a maintenance facility, and a training facility. However, the maintenance (shop) facility, training facility, and four stations are planned for replacement with new buildings by 2035. The costs of these facilities slated for replacement are excluded from **Table 7** because the estimated costs of the new replacement facilities are included in the total planned facilities cost (see **Table 9**). It is assumed that the existing facilities to be replaced will be sold and that the revenue generated will be used to offset the cost of existing deficiencies and to help fund the portion of facilities needed by the existing population.

The existing facility cost estimates include both land acquisition and construction costs. The land acquisition costs are estimated at \$200,000 per acre for all fire stations and \$300,000 per acre for the Headquarters facility. The construction cost estimate includes the following components:

- Site improvement and parking cost of \$300,000 per acre.
- Building construction cost of \$630 per building square foot based on recent bids received by the City and a review of fire station construction costs in areas comparable to Fresno.
- Allowance of 25 percent for soft costs.

### *Apparatus and Equipment*

**Table 8** details the existing FFD apparatus and equipment and associated costs. As shown on this table, the FFD has a number of different types of vehicles, including fire engines, trucks and sports utility vehicles, water tenders, and other specialized vehicles. Additionally, the FFD provides sets of personal protective equipment for all firefighters. The number of equipment sets shown on **Table 8** is based on the number of FFD sworn officers in 2018. All unit costs in this table were provided by the FFD.

Existing  
Fire Facilities

**Table 7**  
**Fresno Fire Impact Fee Program Update**  
**Existing Fire Facilities (2019 \$)**

| Item                              | Location               | LAND ACQUISITION |                  |                     | Site Imp. & Parking |                    | CONSTRUCTION   |                         |                      | Subtotal<br>Structure<br>Value | Soft<br>Costs       | Total<br>Structure<br>Value | TOTAL<br>REPLACEMENT<br>VALUE |
|-----------------------------------|------------------------|------------------|------------------|---------------------|---------------------|--------------------|----------------|-------------------------|----------------------|--------------------------------|---------------------|-----------------------------|-------------------------------|
|                                   |                        | Acres            | Cost<br>per Acre | Total Land<br>Value | Cost<br>per Acre    | Value              | Sq. Ft.        | Cost per<br>Sq. Ft. [1] | Value                |                                |                     |                             |                               |
| <i>Formula</i>                    |                        | <i>A</i>         | <i>B</i>         | <i>C=A*B</i>        | <i>D</i>            | <i>E=A*D</i>       | <i>F</i>       | <i>G</i>                | <i>H=F*G</i>         | <i>I=E+H</i>                   | <i>J=I*25%</i>      | <i>K=I+J</i>                | <i>C+K</i>                    |
| <b>Planned to Remain</b>          |                        |                  |                  |                     |                     |                    |                |                         |                      |                                |                     |                             |                               |
| Headquarters                      | Tulare & H Street      | 2.43             | \$300,000        | <b>\$729,000</b>    | \$300,000           | \$729,000          | 22,000         | \$630                   | \$13,860,000         | <b>\$14,589,000</b>            | \$3,647,250         | <b>\$18,236,250</b>         | <b>\$18,965,250</b>           |
| Station 1                         | Jackson & Hammond      | 0.83             | \$200,000        | <b>\$166,000</b>    | \$300,000           | \$249,000          | 7,625          | \$630                   | \$4,803,750          | <b>\$5,052,750</b>             | \$1,263,188         | <b>\$6,315,938</b>          | <b>\$6,481,938</b>            |
| Station 2                         | West & Fir             | 0.44             | \$200,000        | <b>\$88,000</b>     | \$300,000           | \$132,000          | 5,700          | \$630                   | \$3,591,000          | <b>\$3,723,000</b>             | \$930,750           | <b>\$4,653,750</b>          | <b>\$4,741,750</b>            |
| Station 3                         | Fresno & E Street      | 0.34             | \$300,000        | <b>\$102,000</b>    | \$300,000           | \$102,000          | 12,550         | \$630                   | \$7,906,500          | <b>\$8,008,500</b>             | \$2,002,125         | <b>\$10,010,625</b>         | <b>\$10,112,625</b>           |
| Station 4                         | First & Tulare         | 0.47             | \$200,000        | <b>\$94,000</b>     | \$300,000           | \$141,000          | 14,360         | \$630                   | \$9,046,800          | <b>\$9,187,800</b>             | \$2,296,950         | <b>\$11,484,750</b>         | <b>\$11,578,750</b>           |
| Station 5                         | Fresno & Shields       | 0.61             | \$200,000        | <b>\$122,000</b>    | \$300,000           | \$183,000          | 5,280          | \$630                   | \$3,326,400          | <b>\$3,509,400</b>             | \$877,350           | <b>\$4,386,750</b>          | <b>\$4,508,750</b>            |
| Station 7                         | Cherry & Jensen        | 1.10             | \$200,000        | <b>\$220,000</b>    | \$300,000           | \$330,000          | 5,915          | \$630                   | \$3,726,450          | <b>\$4,056,450</b>             | \$1,014,113         | <b>\$5,070,563</b>          | <b>\$5,290,563</b>            |
| Station 8                         | Cedar & Butler         | 0.40             | \$200,000        | <b>\$80,000</b>     | \$300,000           | \$120,000          | 6,956          | \$630                   | \$4,382,280          | <b>\$4,502,280</b>             | \$1,125,570         | <b>\$5,627,850</b>          | <b>\$5,707,850</b>            |
| Station 9                         | Clinton & Fruit        | 0.73             | \$200,000        | <b>\$146,000</b>    | \$300,000           | \$219,000          | 7,625          | \$630                   | \$4,803,750          | <b>\$5,022,750</b>             | \$1,255,688         | <b>\$6,278,438</b>          | <b>\$6,424,438</b>            |
| Station 11                        | Fresno & Wrenwood      | 0.67             | \$200,000        | <b>\$134,000</b>    | \$300,000           | \$201,000          | 12,400         | \$630                   | \$7,812,000          | <b>\$8,013,000</b>             | \$2,003,250         | <b>\$10,016,250</b>         | <b>\$10,150,250</b>           |
| Station 13                        | Millbrook & Nees       | 0.70             | \$200,000        | <b>\$140,000</b>    | \$300,000           | \$210,000          | 7,300          | \$630                   | \$4,599,000          | <b>\$4,809,000</b>             | \$1,202,250         | <b>\$6,011,250</b>          | <b>\$6,151,250</b>            |
| Station 14                        | Polk & Escalon         | 0.92             | \$200,000        | <b>\$184,000</b>    | \$300,000           | \$276,000          | 9,263          | \$630                   | \$5,835,690          | <b>\$6,111,690</b>             | \$1,527,923         | <b>\$7,639,613</b>          | <b>\$7,823,613</b>            |
| Station 15                        | Clovis & Park Cir Dr.  | 1.00             | \$200,000        | <b>\$200,000</b>    | \$300,000           | \$300,000          | 9,698          | \$630                   | \$6,109,740          | <b>\$6,409,740</b>             | \$1,602,435         | <b>\$8,012,175</b>          | <b>\$8,212,175</b>            |
| Station 16                        | Clinton & Polk         | 0.92             | \$200,000        | <b>\$184,000</b>    | \$300,000           | \$276,000          | 9,698          | \$630                   | \$6,109,740          | <b>\$6,385,740</b>             | \$1,596,435         | <b>\$7,982,175</b>          | <b>\$8,166,175</b>            |
| Station 17                        | Maple & International  | 1.10             | \$200,000        | <b>\$220,000</b>    | \$300,000           | \$330,000          | 9,698          | \$630                   | \$6,109,740          | <b>\$6,439,740</b>             | \$1,609,935         | <b>\$8,049,675</b>          | <b>\$8,269,675</b>            |
| Station 19                        | Belmont & Marks        | 0.83             | \$200,000        | <b>\$166,000</b>    | \$300,000           | \$249,000          | 9,698          | \$630                   | \$6,109,740          | <b>\$6,358,740</b>             | \$1,589,685         | <b>\$7,948,425</b>          | <b>\$8,114,425</b>            |
| Station 20                        | Gettysburg & Wishon    | 0.50             | \$200,000        | <b>\$100,000</b>    | \$300,000           | \$150,000          | 6,260          | \$630                   | \$3,943,800          | <b>\$4,093,800</b>             | \$1,023,450         | <b>\$5,117,250</b>          | <b>\$5,217,250</b>            |
| <b>Total</b>                      |                        | <b>11.56</b>     |                  | <b>\$3,075,000</b>  |                     | <b>\$4,197,000</b> | <b>162,026</b> |                         | <b>\$102,076,380</b> | <b>\$106,273,380</b>           | <b>\$26,568,345</b> | <b>\$132,841,725</b>        | <b>\$135,916,725</b>          |
| <b>Planned to Be Replaced [2]</b> |                        |                  |                  |                     |                     |                    |                |                         |                      |                                |                     |                             |                               |
| Shop Facility                     | Fresno & E Street      | 1.04             |                  |                     |                     |                    |                |                         |                      |                                |                     |                             |                               |
| Training Facility                 | Fresno & E Street      | 0.70             |                  |                     |                     |                    |                |                         |                      |                                |                     |                             |                               |
| Station 6                         | Gettysburg & Rowell    | 0.39             |                  |                     |                     |                    |                |                         |                      |                                |                     |                             |                               |
| Station 10                        | Westover & Aircorp Way | 1.00             |                  |                     |                     |                    |                |                         |                      |                                |                     |                             |                               |
| Station 12                        | Marks & Acacia         | 0.34             |                  |                     |                     |                    |                |                         |                      |                                |                     |                             |                               |
| Station 18                        | Bullard & Grantland    | 0.41             |                  |                     |                     |                    |                |                         |                      |                                |                     |                             |                               |
| <b>Total</b>                      |                        | <b>3.88</b>      |                  |                     |                     |                    |                |                         |                      |                                |                     |                             | <b>\$0</b>                    |
| <b>TOTAL</b>                      |                        |                  |                  |                     |                     |                    |                |                         |                      |                                |                     |                             | <b>\$135,916,725</b>          |

Source: Fresno Fire Department

[1] Cost per building square foot based on costs for recently constructed public safety buildings.

[2] These facilities are planned for replacement by 2035 with permanent buildings. Therefore, they are excluded from the list of existing facilities.

CIP\_fire1

**Table 8  
Fresno Fire Impact Fee Program Update  
Existing Fire Apparatus and Equipment (2019 \$)**

|  |
|--|
| <b>Existing Fire<br/>Apparatus and<br/>Equipment</b> |
|--|

| Item                        | Number | Replacement<br>Cost | Total<br>Cost       |
|-----------------------------|--------|---------------------|---------------------|
| Engines                     | 24     | \$800,000           | \$19,200,000        |
| Fire Trucks                 | 7      | \$1,400,000         | \$9,800,000         |
| Patrol Rigs                 | 2      | \$175,000           | \$350,000           |
| Breathing Support Super Vac | 1      | \$250,000           | \$250,000           |
| Brush Rigs                  | 2      | \$350,000           | \$700,000           |
| Decon Hazmat Trailer        | 1      | \$500,000           | \$500,000           |
| Water Tenders               | 2      | \$425,000           | \$850,000           |
| Super Vacs                  | 2      | \$525,000           | \$1,050,000         |
| SUVs/Trucks                 | 15     | \$90,000            | \$1,350,000         |
| COMM/Command Unit           | 1      | \$500,000           | \$500,000           |
| Personal Equipment          | 311    | \$7,400             | \$2,301,400         |
| <b>TOTAL</b>                |        |                     | <b>\$36,851,400</b> |

CIP\_fire2

Source: Fresno Fire Department

**Table 9  
Fresno Fire Impact Fee Program Update  
Planned Fire Facilities (2019 \$)**

| Item                       | Location              | Improvement Type | Acres    | LAND ACQUISITION |                    |                     | CONSTRUCTION       |                |                      |                      |                          |                     |                       | TOTAL VALUE          |
|----------------------------|-----------------------|------------------|----------|------------------|--------------------|---------------------|--------------------|----------------|----------------------|----------------------|--------------------------|---------------------|-----------------------|----------------------|
|                            |                       |                  |          | Cost per Acre    | Total Land Value   | Site Imp. & Parking |                    | Building       |                      |                      | Subtotal Structure Value | Soft Costs          | Total Structure Value |                      |
|                            |                       |                  |          |                  |                    | Cost per Acre       | Value              | Sq. Ft.        | Cost per Sq. Ft. [1] | Value                |                          |                     |                       |                      |
| <i>Formula</i>             |                       |                  | <i>A</i> | <i>B</i>         | <i>C=A*B</i>       | <i>D</i>            | <i>E=A*D</i>       | <i>F</i>       | <i>G</i>             | <i>H=F*G</i>         | <i>I=E+H</i>             | <i>J=I*25%</i>      | <i>K=I+J</i>          | <i>C+K</i>           |
| <b>New and Replacement</b> |                       |                  |          |                  |                    |                     |                    |                |                      |                      |                          |                     |                       |                      |
| Shop Facility              | Undetermined          | Replacement      | 5.00     | \$200,000        | <b>\$1,000,000</b> | \$300,000           | \$1,500,000        | 40,000         | \$630                | \$25,200,000         | <b>\$26,700,000</b>      | \$6,675,000         | <b>\$33,375,000</b>   | \$34,375,000         |
| Training Facility          | Undetermined          | Replacement      | 5.00     | \$200,000        | <b>\$1,000,000</b> | \$300,000           | \$1,500,000        | 40,000         | \$630                | \$25,200,000         | <b>\$26,700,000</b>      | \$6,675,000         | <b>\$33,375,000</b>   | \$34,375,000         |
| Station 2                  | West & Fir            | Expansion        | -        | \$200,000        | <b>\$0</b>         | \$300,000           | \$0                | 3,450          | \$690                | \$2,380,500          | <b>\$2,380,500</b>       | \$595,125           | <b>\$2,975,625</b>    | \$2,975,625          |
| Station 5                  | Fresno & Shields      | Expansion        | -        | \$200,000        | <b>\$0</b>         | \$300,000           | \$0                | 3,450          | \$690                | \$2,380,500          | <b>\$2,380,500</b>       | \$595,125           | <b>\$2,975,625</b>    | \$2,975,625          |
| Station 6                  | Gettysburg & Rowell   | Replacement      | 1.50     | \$200,000        | <b>\$300,000</b>   | \$300,000           | \$450,000          | 9,600          | \$630                | \$6,048,000          | <b>\$6,498,000</b>       | \$1,624,500         | <b>\$8,122,500</b>    | \$8,422,500          |
| Station 7                  | Cherry & Jensen       | Expansion        | -        | \$200,000        | <b>\$0</b>         | \$300,000           | \$0                | 4,000          | \$690                | \$2,760,000          | <b>\$2,760,000</b>       | \$690,000           | <b>\$3,450,000</b>    | \$3,450,000          |
| Station 8                  | Cedar & Butler        | Expansion        | -        | \$200,000        | <b>\$0</b>         | \$300,000           | \$0                | 4,000          | \$690                | \$2,760,000          | <b>\$2,760,000</b>       | \$690,000           | <b>\$3,450,000</b>    | \$3,450,000          |
| Station 9                  | Clinton & Fruit       | Expansion        | -        | \$200,000        | <b>\$0</b>         | \$300,000           | \$0                | 3,450          | \$690                | \$2,380,500          | <b>\$2,380,500</b>       | \$595,125           | <b>\$2,975,625</b>    | \$2,975,625          |
| Station 10                 | Clinton & Armstrong   | Replacement      | 1.50     | \$200,000        | <b>\$300,000</b>   | \$300,000           | \$450,000          | 10,900         | \$630                | \$6,867,000          | <b>\$7,317,000</b>       | \$1,829,250         | <b>\$9,146,250</b>    | \$9,446,250          |
| Station 12                 | Marks & Acacia        | Replacement      | 1.50     | \$200,000        | <b>\$300,000</b>   | \$300,000           | \$450,000          | 10,900         | \$630                | \$6,867,000          | <b>\$7,317,000</b>       | \$1,829,250         | <b>\$9,146,250</b>    | \$9,446,250          |
| Station 15                 | Clovis & Park Cir Dr. | Expansion        | -        | \$200,000        | <b>\$0</b>         | \$300,000           | \$0                | 3,450          | \$690                | \$2,380,500          | <b>\$2,380,500</b>       | \$595,125           | <b>\$2,975,625</b>    | \$2,975,625          |
| Station 18                 | Shaw & Bryan          | Replacement      | 1.84     | \$200,000        | <b>\$368,000</b>   | \$300,000           | \$552,000          | 10,678         | \$630                | \$6,727,140          | <b>\$7,279,140</b>       | \$1,819,785         | <b>\$9,098,925</b>    | \$9,466,925          |
| Station 19                 | Belmont & Marks       | Expansion        | -        | \$200,000        | <b>\$0</b>         | \$300,000           | \$0                | 4,000          | \$690                | \$2,760,000          | <b>\$2,760,000</b>       | \$690,000           | <b>\$3,450,000</b>    | \$3,450,000          |
| Station 21                 | Belmont & Van Ness    | New              | 1.50     | \$200,000        | <b>\$300,000</b>   | \$300,000           | \$450,000          | 10,900         | \$630                | \$6,867,000          | <b>\$7,317,000</b>       | \$1,829,250         | <b>\$9,146,250</b>    | \$9,446,250          |
| Station 22                 | North & Chestnut      | New              | 1.50     | \$200,000        | <b>\$300,000</b>   | \$300,000           | \$450,000          | 10,900         | \$630                | \$6,867,000          | <b>\$7,317,000</b>       | \$1,829,250         | <b>\$9,146,250</b>    | \$9,446,250          |
| Station 23                 | Church & Fruit        | New              | 1.50     | \$200,000        | <b>\$300,000</b>   | \$300,000           | \$450,000          | 10,900         | \$630                | \$6,867,000          | <b>\$7,317,000</b>       | \$1,829,250         | <b>\$9,146,250</b>    | \$9,446,250          |
| Station 24                 | Herndon & Brawley     | New              | 1.50     | \$200,000        | <b>\$300,000</b>   | \$300,000           | \$450,000          | 10,900         | \$630                | \$6,867,000          | <b>\$7,317,000</b>       | \$1,829,250         | <b>\$9,146,250</b>    | \$9,446,250          |
| Station 25                 | McKinley & DeWolf     | New              | 1.50     | \$200,000        | <b>\$300,000</b>   | \$300,000           | \$450,000          | 10,900         | \$630                | \$6,867,000          | <b>\$7,317,000</b>       | \$1,829,250         | <b>\$9,146,250</b>    | \$9,446,250          |
| Station 26                 | Calif. & Temperance   | New              | 1.50     | \$200,000        | <b>\$300,000</b>   | \$300,000           | \$450,000          | 10,900         | \$630                | \$6,867,000          | <b>\$7,317,000</b>       | \$1,829,250         | <b>\$9,146,250</b>    | \$9,446,250          |
| Station 27                 | Teague & Chestnut     | New              | 1.50     | \$200,000        | <b>\$300,000</b>   | \$300,000           | \$450,000          | 10,900         | \$630                | \$6,867,000          | <b>\$7,317,000</b>       | \$1,829,250         | <b>\$9,146,250</b>    | \$9,446,250          |
| Station 28                 | Champlain & Friant    | New              | 1.50     | \$200,000        | <b>\$300,000</b>   | \$300,000           | \$450,000          | 10,900         | \$630                | \$6,867,000          | <b>\$7,317,000</b>       | \$1,829,250         | <b>\$9,146,250</b>    | \$9,446,250          |
| Station 29                 | Barstow & Brawley     | New              | 1.50     | \$200,000        | <b>\$300,000</b>   | \$300,000           | \$450,000          | 10,900         | \$630                | \$6,867,000          | <b>\$7,317,000</b>       | \$1,829,250         | <b>\$9,146,250</b>    | \$9,446,250          |
| Station 30                 | Dakota & Brawley      | New              | 1.50     | \$200,000        | <b>\$300,000</b>   | \$300,000           | \$450,000          | 10,900         | \$630                | \$6,867,000          | <b>\$7,317,000</b>       | \$1,829,250         | <b>\$9,146,250</b>    | \$9,446,250          |
| Station 31                 | Central & Cherry      | New              | 1.50     | \$200,000        | <b>\$300,000</b>   | \$300,000           | \$450,000          | 10,900         | \$630                | \$6,867,000          | <b>\$7,317,000</b>       | \$1,829,250         | <b>\$9,146,250</b>    | \$9,446,250          |
| <b>TOTAL</b>               |                       |                  |          |                  | <b>\$6,568,000</b> |                     | <b>\$9,852,000</b> | <b>267,778</b> |                      | <b>\$170,248,140</b> | <b>\$180,100,140</b>     | <b>\$45,025,035</b> | <b>\$225,125,175</b>  | <b>\$231,693,175</b> |

Source: Fresno Fire Department and EPS.

CIP\_fire3

[1] Cost per building square foot based on costs for recently constructed public safety buildings.

## Planned Improvements

### *Facilities*

**Table 9** details the future planned FFD facilities and associated costs needed to provide adequate service to the City's residents and employees through the General Plan buildout horizon year of 2035. The planned facilities include eleven new fire stations, the replacement of four existing stations, the replacement of the shop and training facilities, and the expansion of seven existing fire stations.

The estimated facilities costs include both land acquisition and construction costs. The land acquisition cost per acre is estimated at \$200,000 per acre for all new and replacement facilities. Expanded facilities do not require land acquisition. The construction cost estimates for new and replacement facilities are the same as those detailed above for existing facilities. For expanded facilities, a slightly higher building construction cost of \$690 per square foot is assumed.

### *Apparatus and Equipment*

**Table 10** details the additional FFD apparatus and equipment, and associated costs, needed to provide adequate service to the City's residents and employees through the General Plan buildout horizon year of 2035. This apparatus and equipment include eleven fire engines, 6 fire trucks, 15 trucks and sports utility vehicles, several other specialized vehicles, and 314 personal equipment sets. The number of additional personal equipment sets needed is based on the General Plan standard of 0.81 firefighters per 1,000 residents. The planned apparatus and equipment unit costs were provided by the FFD.

**Table 10  
Fresno Fire Impact Fee Program Update  
Planned Fire Apparatus and Equipment (2019 \$)**

|   |
|---|
| <b>Planned Fire<br/>Apparatus and<br/>Equipment</b> |
|---|

| Item                        | Number | Unit<br>Cost | Total<br>Cost       |
|-----------------------------|--------|--------------|---------------------|
| Engines                     | 11     | \$800,000    | \$8,800,000         |
| Fire Trucks                 | 6      | \$1,400,000  | \$8,400,000         |
| Patrol Rigs                 | 2      | \$175,000    | \$350,000           |
| Breathing Support Super Vac | 1      | \$250,000    | \$250,000           |
| Brush Rigs                  | 2      | \$350,000    | \$700,000           |
| Decon Hazmat Trailer        | 1      | \$500,000    | \$500,000           |
| Water Tenders               | 2      | \$425,000    | \$850,000           |
| Super Vacs                  | 2      | \$525,000    | \$1,050,000         |
| SUVs/Trucks                 | 15     | \$90,000     | \$1,350,000         |
| COMM/Command Unit           | 1      | \$500,000    | \$500,000           |
| Personal Equipment [1]      | 314    | \$7,400      | \$2,323,600         |
| <b>TOTAL</b>                |        |              | <b>\$25,073,600</b> |

*CIP\_fire4*

Source: Fresno Fire Department

[1] Equipment for future sworn safety members (total in 2035-current, assuming 0.81 firefighters per 1,000 residents). See Table 8 for number of current officers.

## 4. COST ALLOCATION

---

### Introduction

The Fire Fees are estimated by allocating the FFD capital costs (detailed in the previous chapter) to the various land uses based on each land use's relative demand for fire services. The general process outlined below is used to allocate costs:

- Emergency call activity is used to estimate the relative demand for FFD services and to allocate capital costs to residents and employees. This allocation is used to establish a cost per resident and a cost per employee.
- For each residential land use, the cost per resident is converted to a cost per dwelling unit using average persons per household assumptions.
- For each nonresidential land use, the cost per employee is converted to a cost per thousand building square feet using average square feet per employee assumptions.
- The costs per dwelling unit and per thousand building square feet are equivalent to the base fees by land use. In addition, the City charges an administration fee to administer the fee program.

This methodology provides an appropriate estimate of the relative impact each land use has on the public safety system. The resulting fees are summarized in **Table 1** in **Chapter 1** of this 2019 Nexus Study Update.

### FFD Capital Costs Allocation

**Table 11** details the allocation of FFD service calls to residents and employees and the resulting estimated FFD cost per resident and cost per employee. **Table 12** details the methodology used to convert the FFD cost per resident and cost per employee to costs per dwelling unit and thousand building square feet by land use.

As summarized in the introduction of this chapter, emergency call activity was used to estimate each land use's relative demand for fire services. FFD capital costs were allocated to the various land uses based on this relative demand. The specific steps in allocating the FFD capital costs are outlined below:

*Please refer to **Appendix B** for call activity detail referenced in Step 3.*

*Please refer to **Table 11** for Steps 3 through 7.*

*Please refer to **Tables 12** for Step 8.*

**Table 11**  
**Fresno Fire Impact Fee Program Update**  
**Fire Improvements Cost per Resident/Employee (2019 \$)**

| Item   | Formula                         | Residential    | Nonresidential | Total                |
|--|---------------------------------|----------------|----------------|----------------------|
| <b>Annual Calls for Service [1]</b>                  | <i>A</i>                        | 29,651         | 4,166          | <b>33,817</b>        |
| <b>2014 Service Area Residents and Employees [2]</b> | <i>B</i>                        | 555,609        | 177,590        | <b>733,199</b>       |
| Calls per Resident or Employee                       | $C = A / B / 1,000$             | 0.05           | 0.02           |                      |
| <b>Allocation Factor [3]</b>                         | $D = C / \text{Residential } C$ | <b>1.00</b>    | <b>0.44</b>    |                      |
| <b>2035 Residents/Employees [2]</b>                  | <i>E</i>                        | 771,000        | 266,363        | <b>1,037,363</b>     |
| <b>2035 Persons Served</b>                           | $F = D * E$                     | <b>771,000</b> | <b>117,090</b> | <b>888,090</b>       |
| <b>Percentage Distribution of Persons Served</b>     | <i>G</i>                        | 87%            | 13%            | <b>100%</b>          |
| <b>Total Costs [4]</b>                               | $H = G * \text{Total Cost}$     | \$455,611,894  | \$69,193,006   | <b>\$524,804,900</b> |
| <b>Cost per Resident/Employee</b>                    | $H / E$                         | <b>\$591</b>   | <b>\$260</b>   |                      |

Source: City of Fresno and EPS

*firepol*

[1] See Table B-1.

[2] See Table 3.

[3] The allocation factor accounts for the relative impact of an employee as compared to that of a resident.

[4] See Table 6 for total costs.



**Table 12**  
**Fresno Fire Impact Fee Program Update**  
**Fire Improvements Cost Allocation (2019 \$)**

| Item                           | Cost per Person<br>[1] | Persons per Unit<br>[2] | Bldg. Sq. Ft. per Employee<br>[2] | Employees per 1,000 Bldg. Sq. Ft. | Cost per Unit/<br>1,000 Bldg. Sq. Ft. |
|--------------------------------|------------------------|-------------------------|-----------------------------------|-----------------------------------|---------------------------------------|
| <i>Formula</i>                 | $F = E / A$            | $G$                     | $H$                               | $I = 1000 / H$                    | $F * G$ or<br>$F * I$                 |
| <b>Residential</b>             |                        |                         |                                   |                                   |                                       |
| Single-Family                  | \$591                  | 3.14                    | -                                 | -                                 | \$1,856                               |
| Multifamily                    | \$591                  | 2.37                    | -                                 | -                                 | \$1,401                               |
| <b>Subtotal Residential</b>    |                        |                         |                                   |                                   |                                       |
| <b>Nonresidential</b>          |                        |                         |                                   |                                   |                                       |
| Retail                         | \$260                  | -                       | 400                               | 2.50                              | \$649                                 |
| Office                         | \$260                  | -                       | 350                               | 2.86                              | \$742                                 |
| Industrial                     | \$260                  | -                       | 700                               | 1.43                              | \$371                                 |
| <b>Subtotal Nonresidential</b> |                        |                         |                                   |                                   |                                       |

*fire\_alloc*

Source: EPS

[1] See Table 11.

[2] See Table 5.

1. Identify the capital costs to be funded by the Fire Fee Program, as detailed in **Chapter 3**.
2. Identify the service population and employees for residential and nonresidential uses, respectively in the buildout horizon year of 2035, as detailed in **Chapter 2**.
3. Using the calls for service data provided by the FFD, determine the distribution of service calls between residential and nonresidential uses (see **Table B-1** through **Table B-3**). Then estimate the number of calls per resident or employee.
4. Divide the number of calls per employee by the number of calls per resident (both from Step 3) to determine the resident equivalent factor (shown in **Tables 11** as "Allocation Factor") for nonresidential uses. This factor is used to estimate the relative impact of an employee as compared to a resident.
5. Estimate residential and nonresidential persons served in 2035. For residential uses, the number of persons served equals the estimated 2035 population. For nonresidential uses, the number of persons served equals the estimated 2035 employees multiplied by the Allocation Factor from Step 4.
6. Allocate the capital costs from Step 1 to residential and nonresidential uses based on the percentage distribution of the estimated persons served from Step 5.
7. Divide the residential costs from step 6 by the estimated 2035 population from Step 2 to determine a cost per resident. Divide the nonresidential costs from Step 6 by the estimated 2035 employees from Step 2 to determine a cost per employee.
8. Multiply the cost per person from Step 7 by persons per household for each residential use and by employees per 1,000 building square feet for each nonresidential use. The result will be the base fee per residential dwelling unit and per thousand nonresidential building square feet.

## Administration

In addition to the base Fire Fee for each developable land use, the City charges a fee to administer the Fire Fee Program. The administration fee charged per residential dwelling unit and thousand nonresidential building square feet is 2 percent of the base fee.

## 5. IMPLEMENTATION

---

The Fire Fees presented in this 2019 Nexus Study Update are based on the best cost estimates and land use information available at this time. If costs, development projections, or funding sources other than development impact fees change significantly, the fees should be adjusted accordingly.

The proposed updated Fire Fee schedule must be adopted by the City Council. The updated fees will be effective 60 days following final action on the adoption of this 2019 Nexus Study Update, the ordinance authorizing collection of the updated Fire Fees, and the fee resolution establishing the updated fees.

The City should conduct periodic reviews of the estimated development, costs, and associated funding sources. Based on these reviews, the City should make necessary adjustments to the fee. Each year the City should apply an appropriate inflation adjustment factor to the fee to reflect changes in construction costs.

### **Applicability of Fee Program**

Once the updated Fire Fee Program takes effect, the updated Fire Fees will be collected from all new residential and nonresidential development within the boundary of the City prior to building permit issuance. The fee is based on the covered square footage of the structure(s), which would include living/habitable area, garages, covered patios, carports, etc.

The term “new development” as used in this 2019 Nexus Study Update includes the covered building square footage of additions and/or modifications to existing development as long as the addition/modifications increase the existing structure by more than 500 square feet.

### **Fee Exemptions**

The following types of development are specifically exempt from the Fire Fee Program:

- All public agencies, including federal and state agencies, public school districts, and the City, unless other arrangements or agreements are established with the City.
- Any internal or external alteration or modification to existing residential and nonresidential buildings when no change in use occurs and the square footage increase is 500 square feet or less.
- Any replacement or reconstruction of any structure that is damaged or destroyed as a result of fire, flood, explosion, wind, earthquake, riot, or other calamity, or act of God. If the building replaced or reconstructed exceeds the documented total floor area of the damaged/destroyed building, the excess square footage is subject to the fire protection fee.

If a structure has been vacant for more than one year, no exemption or credit shall apply.  
If a structure is replaced with an alternative land use, such as replacing a single family home with a commercial building, no exemption shall apply.

- Residential accessory structures that do not increase covered building square footage such as open decks and pools.

With written approval from the FFD, any or all of the Fire Fees may be waived if the City determines that a proposed project will not impact the need for fire improvements for which the fee is being collected. Written fee waivers may be available on a case-by-case basis for certain agricultural facilities, temporary structures (including temporary mobile homes), or other facilities that are determined to have no impact on the need for fire improvements identified in the Fire Fee Program.

## **Fee Credits or Adjustments**

The purpose of the Fire Fee Program is to provide funds to construct/acquire new fire protection improvements. Although it is not currently anticipated that developers will construct/acquire fire protection improvements included in the fee program (other than Station 18), should this occur, the developers may enter into a fee credit and reimbursement agreement with the City.

## **Reimbursement to Developers**

In the event a developer or developers do construct/acquire any fire protection improvements included in the Fire Fee Program, fee credits and reimbursements will be provided under the following conditions.

- Developer-installed/acquired improvements shall be considered for credits and/or reimbursements. Only funds collected from the Fire Fee Program shall be used to reimburse a developer who installed eligible facility improvements or acquired eligible equipment identified in the CIP.
- The value of any developer-installed/acquired improvement for fee credit or reimbursement purposes shall be based upon the lesser of the actual costs or the cost estimates (as updated) used to establish the amount of the Fire Fees.
- The use of accumulated fee revenues shall be used in the following priority order: (1) critical projects, (2) repayment of inter-fund loans, and (3) repayment of accrued reimbursement to private developers.

A project is deemed to be a "critical project" when failure to complete the project prohibits further development within the City.

## Periodic Inflation Adjustment and Fee Review

The Fire Fee schedule should be adjusted annually to account for the inflation of construction and land acquisition costs. It is recommended that the Fire Fees be adjusted on July 1 of each year beginning on July 1, 2020. The adjustment will be based on the percentage change in the 20-City Construction Cost Index (CCI) as reported in the Engineering News Record (ENR) for the 12-month period ending in May of the year of the adjustment.

In addition, the Fire Fees are subject to periodic adjustment based on changes in developable land, cost estimates, or other funding sources. The City should review the Fire Fees periodically to determine if any of the following adjustments to the fees are warranted:

- Changes to the required facilities or equipment listed in the CIPs.
- Changes in the cost to update or administer the fee.
- Changes in costs because of inflation.
- Changes in assumed development.
- Changes in other funding sources.

Any proposed changes to the Fire Fees based on the periodic review must be presented to City Council prior to any adjustment of the fee.

## Fee Administration

Consistent with the current programs, the Fire Fees will be collected from new development within the City at the time of building permit issuance; however, use of these funds may need to wait until a sufficient fund balance can be accrued. Per Government Code Section 66006, the City is required to deposit, invest, account for, and expend the fee in a prescribed manner.

## Five-Year Review

By the fifth fiscal year following the first deposit into the Fire Fee account or fund, and every five years thereafter, the City is required to make all of the following findings with respect to that portion of the account or fund remaining unexpended:

- Identify the purpose of the fee.
- Demonstrate a reasonable relationship between the fee and the purpose for which it is charged.
- Identify all sources and amounts of funding anticipated to complete financing for incomplete fire protection improvements.
- Designate the approximate dates that the funding referred to above is expected to be deposited in the appropriate account or fund.

The City must refund the unexpended or uncommitted revenue portion for which a need could not be demonstrated in the above findings, unless the administrative costs exceed the amount of the refund.

## 6. AB 1600 NEXUS FINDINGS

---

### **Authority**

This report has been prepared to update the Fire Fees in accordance with the procedural guidelines established in AB 1600, which is codified in California Government Section 66000 et. seq. This code section sets forth the procedural requirements for establishing and collecting development impact fees. The procedures require that a "reasonable relationship or nexus must exist between a governmental exaction and the purpose of the condition."<sup>2</sup> Specifically, each local agency imposing a fee must:

- Identify the purpose of the fee.
- Identify how the fee is to be used.
- Determine how a reasonable relationship exists between the fee's use and the type of development project on which the fee is imposed.
- Determine how a reasonable relationship exists between the need for the public facility and the type of development project on which the fee is imposed.
- Demonstrate a reasonable relationship between 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.

### **Summary of Nexus Findings**

The development impact fees to be collected for each land use are calculated based on the proportionate share of the total facility use that each land use represents. With this approach, the following findings are made concerning the City's Fire Fee Program.

#### **Purpose of Fee**

The Fire Fee Program updated through this 2019 Nexus Study Update will fund the new fire facilities, vehicles, and equipment necessary to serve new residential and nonresidential development in the City. New development in the City will increase the service population and, therefore, the need for new fire capital improvements to adequately serve the new residents and employees.

#### **Use of Fees**

Fire Fee revenue will be used to construct new development's proportionate share of fire buildings and equipment, as well as to acquire fire vehicles and equipment necessitated by new development. It also will be used to plan for and design fire facilities and fund the studies and administration needed to support the programs.

---

<sup>2</sup> *Public Needs & Private Dollars*; William Abbott, Marian E. Moe, and Marilee Hanson, page 109.

### **Relationship between Use of Fees and Type of Development**

The development of new residential and nonresidential land uses in the City will generate the need for additional fire personnel, facilities, vehicles, and equipment. The Fire Fee revenue will be used to construct and expand facilities and to acquire vehicles and equipment needed to serve new residents and employees.

### **Relationship between Need for Facility and Type of Project**

Each new residential and nonresidential development project will generate additional demand for fire services and personnel. Additional personnel will be housed in future fire stations and require support vehicles and equipment to serve additional demand generated by new residents and employees.

### **Relationship between Amount of Fees and Cost of or Portion of Facility Attributed to Development on which Fee is Imposed**

The costs of fire facilities, vehicles, and equipment needed to serve new development were split between residential and nonresidential uses based on service call activity. Using this split, fire costs per resident and costs per employee were estimated. These costs were converted to costs per dwelling unit and thousand nonresidential building square feet by land use using an appropriate common use factor for each land use. The common use factor for each residential land use is the number of persons per household. The common use factor for each nonresidential land use is the number of employees per thousand building square feet. For each land use, the base Fire Fee is equal to the allocated cost per dwelling unit or thousand nonresidential building square feet.



## APPENDICES:

Appendix A: Fire Facilities and Apparatus  
Bond Financing

Appendix B: Fresno Fire Department  
Service Call Activity





**APPENDIX A:**  
**Fire Facilities and Apparatus Bond Financing**

Table A-1      Debt Service and Financing Costs–Existing Fire Facilities .....A-1

Table A-2      Debt Service and Financing Cost Summary—  
Planned Fire Facilities and Apparatus .....A-2

Table A-3      Station 18 Debt Service and Financing Cost Detail .....A-3

Table A-4      Debt Service and Financing Cost Detail—  
Planned Fire Facilities and Apparatus (2 pages) .....A-4

Table A-5      Future Facilities and Apparatus Schedule .....A-6

**Table A-1  
Fresno Fire Impact Fee Program Update  
Debt Service and Financing Costs - Existing Fire Facilities**

**Existing Facilities**

| Item  | Formula     | Facilities          |
|---|-------------|---------------------|
| Total Existing Bond Size  |             | \$19,895,000        |
| Land Acquisition and Construction Proceeds  |             | \$17,560,000        |
| <i>Facility Cost Percent of Total Bond Size</i>                                   | A           | 88.26%              |
| <b>Present Value of Remaining Debt Service (2020-2039) at 3.00%</b>               | B           | <b>\$21,678,933</b> |
| <b>Less Remaining Construction and Land Acquisition Proceeds</b>                  |             |                     |
| Land Acquisition and Construction Proceeds  | C           | \$17,560,000        |
| Less Const. & Land Acq. Proceeds Already Paid (88.26% of principal payments made) | D=A*\$3.59M | (\$3,164,242)       |
| <b>Subtotal</b>   | E=C+D       | <b>\$14,395,758</b> |
| <b>Financing Costs</b>  | B-E         | <b>\$7,283,176</b>  |
| <b>Financing Costs Funded by Development Impact Fee (Rounded) [1]</b>             | F*49%       | <b>\$3,570,000</b>  |

| PAYMENT SCHEDULE               | Year  | Annual Debt Service      | Principal Payment             | Interest Payment    |
|--------------------------------|-------|--------------------------|-------------------------------|---------------------|
| <b>Assumption</b>              |       | <b>Debt Service Paid</b> |                               |                     |
| Estimated Inflation Factor [2] | 3.00% | 2010                     | \$1,459,951                   | \$330,000           |
| Bond Term (Years)              | 30    | 2011                     | \$1,457,381                   | \$310,000           |
|                                |       | 2012                     | \$1,458,081                   | \$320,000           |
|                                |       | 2013                     | \$1,458,481                   | \$330,000           |
|                                |       | 2014                     | \$1,455,281                   | \$340,000           |
|                                |       | 2015                     | \$1,456,681                   | \$355,000           |
|                                |       | 2016                     | \$1,457,481                   | \$370,000           |
|                                |       | 2017                     | \$1,458,981                   | \$390,000           |
|                                |       | 2018                     | \$1,459,481                   | \$410,000           |
|                                |       | 2019                     | \$1,458,981                   | \$430,000           |
|                                |       | <b>Subtotal</b>          | <b>\$14,580,782</b>           | <b>\$3,585,000</b>  |
|                                |       |                          | <b>Remaining Debt Service</b> |                     |
|                                |       | 2020                     | \$1,457,481                   | \$450,000           |
|                                |       | 2021                     | \$1,454,981                   | \$470,000           |
|                                |       | 2022                     | \$1,455,894                   | \$495,000           |
|                                |       | 2023                     | \$1,459,906                   | \$525,000           |
|                                |       | 2024                     | \$1,456,031                   | \$550,000           |
|                                |       | 2025                     | \$1,455,094                   | \$580,000           |
|                                |       | 2026                     | \$1,456,744                   | \$615,000           |
|                                |       | 2027                     | \$1,454,844                   | \$650,000           |
|                                |       | 2028                     | \$1,458,406                   | \$695,000           |
|                                |       | 2029                     | \$1,459,100                   | \$740,000           |
|                                |       | 2030                     | \$1,456,925                   | \$785,000           |
|                                |       | 2031                     | \$1,456,881                   | \$835,000           |
|                                |       | 2032                     | \$1,458,650                   | \$890,000           |
|                                |       | 2033                     | \$1,456,913                   | \$945,000           |
|                                |       | 2034                     | \$1,456,669                   | \$1,005,000         |
|                                |       | 2035                     | \$1,457,600                   | \$1,070,000         |
|                                |       | 2036                     | \$1,459,388                   | \$1,140,000         |
|                                |       | 2037                     | \$1,456,713                   | \$1,210,000         |
|                                |       | 2038                     | \$1,459,575                   | \$1,290,000         |
|                                |       | 2039                     | \$1,457,338                   | \$1,370,000         |
|                                |       | <b>Subtotal</b>          | <b>\$29,145,131</b>           | <b>\$16,310,000</b> |
|                                |       | <b>Total</b>             | <b>\$43,725,913</b>           | <b>\$19,895,000</b> |
|                                |       |                          |                               | <b>\$23,830,913</b> |

*ex bond1*

Source: Fresno Lease Revenue Bonds 2006 Debt Service Schedule for Fire Projects

[1] Percentage of financing costs funded by the development impact fee based on a deficiency analysis conducted as part of the 2005 Fire & Police Facilities Impact Fee Nexus Study.

[2] Annual fee program inflation is recommended to be based on the annual change in ENR-CCI. This analysis assumes 3.00%.

**Table A-2  
Fresno Fire Impact Fee Program Update  
Debt Service and Financing Cost Summary  
Planned Fire Facilities and Apparatus**

**Planned Facilities**

| Item                             | Year | Debt Service           |  | Total               |
|----------------------------------|------|------------------------|--|---------------------|
|                                  |      | Station 18<br>Loan     | Bond Financing<br>for Other Facilities |                     |
| <i>Source:</i>                   |      |                        |  |                     |
|                                  |      | <i>Table A-3</i>       | <i>Table A-4</i>                       |                     |
|                                  |      | <b>Financing Costs</b> |  |                     |
| Present Value of Debt Service    |      | \$3,614,047            | \$260,342,661                          | \$263,956,708       |
| Less Principal                   |      | (\$3,500,000)          | (\$168,718,375)                        | (\$172,218,375)     |
| Financing Costs                  |      | \$114,047              | \$91,624,286                           | \$91,738,333        |
| <b>Financing Costs (Rounded)</b> |      | <b>\$100,000</b>       | <b>\$91,600,000</b>                    | <b>\$91,700,000</b> |

**Debt Service Schedule**

|              |                    |                      |                      |
|--------------|--------------------|----------------------|----------------------|
| 2019         | \$0                | \$0                  | \$0                  |
| 2020         | \$0                | \$0                  | \$0                  |
| 2021         | \$184,386          | \$917,343            | \$1,101,729          |
| 2022         | \$184,386          | \$1,514,705          | \$1,699,091          |
| 2023         | \$184,386          | \$2,018,738          | \$2,203,124          |
| 2024         | \$184,386          | \$2,244,065          | \$2,428,451          |
| 2025         | \$184,386          | \$2,438,410          | \$2,622,796          |
| 2026         | \$184,386          | \$3,035,773          | \$3,220,159          |
| 2027         | \$184,386          | \$3,633,136          | \$3,817,522          |
| 2028         | \$184,386          | \$4,230,499          | \$4,414,885          |
| 2029         | \$184,386          | \$4,827,861          | \$5,012,248          |
| 2030         | \$184,386          | \$5,650,552          | \$5,834,938          |
| 2031         | \$184,386          | \$6,442,260          | \$6,626,646          |
| 2032         | \$184,386          | \$7,039,623          | \$7,224,009          |
| 2033         | \$184,386          | \$7,636,985          | \$7,821,371          |
| 2034         | \$184,386          | \$9,186,900          | \$9,371,286          |
| 2035         | \$184,386          | \$9,784,263          | \$9,968,649          |
| 2036         | \$184,386          | \$11,623,494         | \$11,807,880         |
| 2037         | \$184,386          | \$12,071,109         | \$12,255,495         |
| 2038         | \$184,386          | \$12,490,782         | \$12,675,168         |
| 2039         | \$184,386          | \$13,282,490         | \$13,466,876         |
| 2040         | \$184,386          | \$13,282,490         | \$13,466,876         |
| 2041         | \$184,386          | \$13,282,490         | \$13,466,876         |
| 2042         | \$184,386          | \$13,282,490         | \$13,466,876         |
| 2043         | \$184,386          | \$13,282,490         | \$13,466,876         |
| 2044         | \$184,386          | \$13,282,490         | \$13,466,876         |
| 2045         | \$184,386          | \$13,282,490         | \$13,466,876         |
| 2046         | \$184,386          | \$13,282,490         | \$13,466,876         |
| 2047         | \$184,386          | \$13,282,490         | \$13,466,876         |
| 2048         | \$184,386          | \$13,282,490         | \$13,466,876         |
| 2049         | \$184,386          | \$13,282,490         | \$13,466,876         |
| 2050         | \$184,386          | \$13,282,490         | \$13,466,876         |
| 2051         | \$0                | \$12,365,147         | \$12,365,147         |
| 2052         | \$0                | \$11,767,784         | \$11,767,784         |
| 2053         | \$0                | \$11,263,752         | \$11,263,752         |
| 2054         | \$0                | \$11,038,425         | \$11,038,425         |
| 2055         | \$0                | \$10,844,080         | \$10,844,080         |
| 2056         | \$0                | \$10,246,717         | \$10,246,717         |
| 2057         | \$0                | \$9,649,354          | \$9,649,354          |
| 2058         | \$0                | \$9,051,991          | \$9,051,991          |
| 2059         | \$0                | \$8,454,628          | \$8,454,628          |
| 2060         | \$0                | \$7,631,938          | \$7,631,938          |
| 2061         | \$0                | \$6,840,230          | \$6,840,230          |
| 2062         | \$0                | \$6,242,867          | \$6,242,867          |
| 2063         | \$0                | \$5,645,504          | \$5,645,504          |
| 2064         | \$0                | \$4,095,590          | \$4,095,590          |
| 2065         | \$0                | \$3,498,227          | \$3,498,227          |
| 2066         | \$0                | \$1,658,996          | \$1,658,996          |
| 2067         | \$0                | \$1,211,380          | \$1,211,380          |
| 2068         | \$0                | \$791,708            | \$791,708            |
| <b>Total</b> | <b>\$5,531,580</b> | <b>\$398,474,692</b> | <b>\$404,006,273</b> |

*bond1*

Source: City of Fresno, Fresno Fire Department, and EPS.

**Table A-3  
Fresno Fire Impact Fee Program Update  
Station 18 Debt Service and Financing Cost Detail**

| <b>Item</b>                   | <b>Station 18</b>  |
|-------------------------------|--------------------|
| Loan Interest Rate            | 3.25%              |
| Loan Term (Years)             | 30                 |
| Estimated Inflation Factor    | 3.00%              |
| Loan Amount                   | \$3,500,000        |
| Annual Debt Service           | \$184,386          |
| First Year                    | 2021               |
| Last Year                     | 2050               |
| Present Value of Debt Service | \$3,614,047        |
| Less Principal                | (\$3,500,000)      |
| <b>Financing Costs</b>        | <b>\$114,047</b>   |
| <b>Year</b>                   | <b>Annual Debt</b> |
| 2019                          | \$0                |
| 2020                          | \$0                |
| 2021                          | \$184,386          |
| 2022                          | \$184,386          |
| 2023                          | \$184,386          |
| 2024                          | \$184,386          |
| 2025                          | \$184,386          |
| 2026                          | \$184,386          |
| 2027                          | \$184,386          |
| 2028                          | \$184,386          |
| 2029                          | \$184,386          |
| 2030                          | \$184,386          |
| 2031                          | \$184,386          |
| 2032                          | \$184,386          |
| 2033                          | \$184,386          |
| 2034                          | \$184,386          |
| 2035                          | \$184,386          |
| 2036                          | \$184,386          |
| 2037                          | \$184,386          |
| 2038                          | \$184,386          |
| 2039                          | \$184,386          |
| 2040                          | \$184,386          |
| 2041                          | \$184,386          |
| 2042                          | \$184,386          |
| 2043                          | \$184,386          |
| 2044                          | \$184,386          |
| 2045                          | \$184,386          |
| 2046                          | \$184,386          |
| 2047                          | \$184,386          |
| 2048                          | \$184,386          |
| 2049                          | \$184,386          |
| 2050                          | \$184,386          |
| <b>TOTAL</b>                  | <b>\$5,531,580</b> |

*st 18*

Source: City of Fresno, Fresno Fire Department, and EPS.



**Table A-4**  
**Fresno Fire Impact Fee Program Update**  
**Debt Service and Financing Cost Detail**  
**Planned Fire Facilities and Apparatus**

| Item                          | Source    | Total                  | Station 28                 | Training Fac. Phase 2 | Station 29          | Shop Facility       | Station 6           | Station 8          | Station 15         | Station 2          | Station 27          |
|-------------------------------|-----------|------------------------|----------------------------|-----------------------|---------------------|---------------------|---------------------|--------------------|--------------------|--------------------|---------------------|
| Bond Interest Rate            |           | 5.25%                  |                            |                       |                     |                     |                     |                    |                    |                    |                     |
| Bond Term (years)             |           | 30                     |                            |                       |                     |                     |                     |                    |                    |                    |                     |
| Const. Proceeds Pct.          |           | 85%                    |                            |                       |                     |                     |                     |                    |                    |                    |                     |
| Estimated Inflation Factor    |           | 3.00%                  |                            |                       |                     |                     |                     |                    |                    |                    |                     |
| Construction Proceeds         | Table A-5 | <b>\$168,718,375</b>   | \$7,587,891                | \$19,687,500          | \$7,587,891         | \$23,362,500        | \$5,685,750         | \$2,862,181        | \$2,468,631        | \$2,468,631        | \$7,587,891         |
| Total Bond Size               |           | <b>\$198,492,206</b>   | \$8,926,931                | \$23,161,765          | \$8,926,931         | \$27,485,294        | \$6,689,118         | \$3,367,272        | \$2,904,272        | \$2,904,272        | \$8,926,931         |
| Annual Debt Service           |           |                        | \$597,363                  | \$1,549,914           | \$597,363           | \$1,839,232         | \$447,615           | \$225,328          | \$194,345          | \$194,345          | \$597,363           |
| First Year                    | Table A-5 |                        | 2033                       | 2034                  | 2035                | 2036                | 2037                | 2038               | 2038               | 2039               | 2039                |
| Last Year                     |           |                        | 2062                       | 2063                  | 2064                | 2065                | 2066                | 2067               | 2067               | 2068               | 2068                |
| Present Value of Debt Service |           | <b>\$260,342,661</b>   | \$11,708,576               | \$30,379,004          | \$11,708,576        | \$36,049,751        | \$8,773,456         | \$4,416,519        | \$3,809,248        | \$3,809,248        | \$11,708,576        |
| Less Bond Proceeds            |           | <b>(\$168,718,375)</b> | (\$7,587,891)              | (\$19,687,500)        | (\$7,587,891)       | (\$23,362,500)      | (\$5,685,750)       | (\$2,862,181)      | (\$2,468,631)      | (\$2,468,631)      | (\$7,587,891)       |
| <b>Financing Costs</b>        |           | <b>\$91,624,286</b>    | <b>\$4,120,684</b>         | <b>\$10,691,504</b>   | <b>\$4,120,684</b>  | <b>\$12,687,251</b> | <b>\$3,087,706</b>  | <b>\$1,554,338</b> | <b>\$1,340,616</b> | <b>\$1,340,616</b> | <b>\$4,120,684</b>  |
| <b>Year</b>                   |           |                        | <b>Annual Debt Service</b> |                       |                     |                     |                     |                    |                    |                    |                     |
| 2019                          |           | \$0                    | \$0                        | \$0                   | \$0                 | \$0                 | \$0                 | \$0                | \$0                | \$0                | \$0                 |
| 2020                          |           | \$0                    | \$0                        | \$0                   | \$0                 | \$0                 | \$0                 | \$0                | \$0                | \$0                | \$0                 |
| 2021                          |           | \$917,343              | \$0                        | \$0                   | \$0                 | \$0                 | \$0                 | \$0                | \$0                | \$0                | \$0                 |
| 2022                          |           | \$1,514,705            | \$0                        | \$0                   | \$0                 | \$0                 | \$0                 | \$0                | \$0                | \$0                | \$0                 |
| 2023                          |           | \$2,018,738            | \$0                        | \$0                   | \$0                 | \$0                 | \$0                 | \$0                | \$0                | \$0                | \$0                 |
| 2024                          |           | \$2,244,065            | \$0                        | \$0                   | \$0                 | \$0                 | \$0                 | \$0                | \$0                | \$0                | \$0                 |
| 2025                          |           | \$2,438,410            | \$0                        | \$0                   | \$0                 | \$0                 | \$0                 | \$0                | \$0                | \$0                | \$0                 |
| 2026                          |           | \$3,035,773            | \$0                        | \$0                   | \$0                 | \$0                 | \$0                 | \$0                | \$0                | \$0                | \$0                 |
| 2027                          |           | \$3,633,136            | \$0                        | \$0                   | \$0                 | \$0                 | \$0                 | \$0                | \$0                | \$0                | \$0                 |
| 2028                          |           | \$4,230,499            | \$0                        | \$0                   | \$0                 | \$0                 | \$0                 | \$0                | \$0                | \$0                | \$0                 |
| 2029                          |           | \$4,827,861            | \$0                        | \$0                   | \$0                 | \$0                 | \$0                 | \$0                | \$0                | \$0                | \$0                 |
| 2030                          |           | \$5,650,552            | \$0                        | \$0                   | \$0                 | \$0                 | \$0                 | \$0                | \$0                | \$0                | \$0                 |
| 2031                          |           | \$6,442,260            | \$0                        | \$0                   | \$0                 | \$0                 | \$0                 | \$0                | \$0                | \$0                | \$0                 |
| 2032                          |           | \$7,039,623            | \$0                        | \$0                   | \$0                 | \$0                 | \$0                 | \$0                | \$0                | \$0                | \$0                 |
| 2033                          |           | \$7,636,985            | \$597,363                  | \$0                   | \$0                 | \$0                 | \$0                 | \$0                | \$0                | \$0                | \$0                 |
| 2034                          |           | \$9,186,900            | \$597,363                  | \$1,549,914           | \$0                 | \$0                 | \$0                 | \$0                | \$0                | \$0                | \$0                 |
| 2035                          |           | \$9,784,263            | \$597,363                  | \$1,549,914           | \$597,363           | \$0                 | \$0                 | \$0                | \$0                | \$0                | \$0                 |
| 2036                          |           | \$11,623,494           | \$597,363                  | \$1,549,914           | \$597,363           | \$1,839,232         | \$0                 | \$0                | \$0                | \$0                | \$0                 |
| 2037                          |           | \$12,071,109           | \$597,363                  | \$1,549,914           | \$597,363           | \$1,839,232         | \$447,615           | \$0                | \$0                | \$0                | \$0                 |
| 2038                          |           | \$12,490,782           | \$597,363                  | \$1,549,914           | \$597,363           | \$1,839,232         | \$447,615           | \$225,328          | \$194,345          | \$0                | \$0                 |
| 2039                          |           | \$13,282,490           | \$597,363                  | \$1,549,914           | \$597,363           | \$1,839,232         | \$447,615           | \$225,328          | \$194,345          | \$194,345          | \$597,363           |
| 2040                          |           | \$13,282,490           | \$597,363                  | \$1,549,914           | \$597,363           | \$1,839,232         | \$447,615           | \$225,328          | \$194,345          | \$194,345          | \$597,363           |
| 2041                          |           | \$13,282,490           | \$597,363                  | \$1,549,914           | \$597,363           | \$1,839,232         | \$447,615           | \$225,328          | \$194,345          | \$194,345          | \$597,363           |
| 2042                          |           | \$13,282,490           | \$597,363                  | \$1,549,914           | \$597,363           | \$1,839,232         | \$447,615           | \$225,328          | \$194,345          | \$194,345          | \$597,363           |
| 2043                          |           | \$13,282,490           | \$597,363                  | \$1,549,914           | \$597,363           | \$1,839,232         | \$447,615           | \$225,328          | \$194,345          | \$194,345          | \$597,363           |
| 2044                          |           | \$13,282,490           | \$597,363                  | \$1,549,914           | \$597,363           | \$1,839,232         | \$447,615           | \$225,328          | \$194,345          | \$194,345          | \$597,363           |
| 2045                          |           | \$13,282,490           | \$597,363                  | \$1,549,914           | \$597,363           | \$1,839,232         | \$447,615           | \$225,328          | \$194,345          | \$194,345          | \$597,363           |
| 2046                          |           | \$13,282,490           | \$597,363                  | \$1,549,914           | \$597,363           | \$1,839,232         | \$447,615           | \$225,328          | \$194,345          | \$194,345          | \$597,363           |
| 2047                          |           | \$13,282,490           | \$597,363                  | \$1,549,914           | \$597,363           | \$1,839,232         | \$447,615           | \$225,328          | \$194,345          | \$194,345          | \$597,363           |
| 2048                          |           | \$13,282,490           | \$597,363                  | \$1,549,914           | \$597,363           | \$1,839,232         | \$447,615           | \$225,328          | \$194,345          | \$194,345          | \$597,363           |
| 2049                          |           | \$13,282,490           | \$597,363                  | \$1,549,914           | \$597,363           | \$1,839,232         | \$447,615           | \$225,328          | \$194,345          | \$194,345          | \$597,363           |
| 2050                          |           | \$13,282,490           | \$597,363                  | \$1,549,914           | \$597,363           | \$1,839,232         | \$447,615           | \$225,328          | \$194,345          | \$194,345          | \$597,363           |
| 2051                          |           | \$12,365,147           | \$597,363                  | \$1,549,914           | \$597,363           | \$1,839,232         | \$447,615           | \$225,328          | \$194,345          | \$194,345          | \$597,363           |
| 2052                          |           | \$11,767,784           | \$597,363                  | \$1,549,914           | \$597,363           | \$1,839,232         | \$447,615           | \$225,328          | \$194,345          | \$194,345          | \$597,363           |
| 2053                          |           | \$11,263,752           | \$597,363                  | \$1,549,914           | \$597,363           | \$1,839,232         | \$447,615           | \$225,328          | \$194,345          | \$194,345          | \$597,363           |
| 2054                          |           | \$11,038,425           | \$597,363                  | \$1,549,914           | \$597,363           | \$1,839,232         | \$447,615           | \$225,328          | \$194,345          | \$194,345          | \$597,363           |
| 2055                          |           | \$10,844,080           | \$597,363                  | \$1,549,914           | \$597,363           | \$1,839,232         | \$447,615           | \$225,328          | \$194,345          | \$194,345          | \$597,363           |
| 2056                          |           | \$10,246,717           | \$597,363                  | \$1,549,914           | \$597,363           | \$1,839,232         | \$447,615           | \$225,328          | \$194,345          | \$194,345          | \$597,363           |
| 2057                          |           | \$9,649,354            | \$597,363                  | \$1,549,914           | \$597,363           | \$1,839,232         | \$447,615           | \$225,328          | \$194,345          | \$194,345          | \$597,363           |
| 2058                          |           | \$9,051,991            | \$597,363                  | \$1,549,914           | \$597,363           | \$1,839,232         | \$447,615           | \$225,328          | \$194,345          | \$194,345          | \$597,363           |
| 2059                          |           | \$8,454,628            | \$597,363                  | \$1,549,914           | \$597,363           | \$1,839,232         | \$447,615           | \$225,328          | \$194,345          | \$194,345          | \$597,363           |
| 2060                          |           | \$7,631,938            | \$597,363                  | \$1,549,914           | \$597,363           | \$1,839,232         | \$447,615           | \$225,328          | \$194,345          | \$194,345          | \$597,363           |
| 2061                          |           | \$6,840,230            | \$597,363                  | \$1,549,914           | \$597,363           | \$1,839,232         | \$447,615           | \$225,328          | \$194,345          | \$194,345          | \$597,363           |
| 2062                          |           | \$6,242,867            | \$597,363                  | \$1,549,914           | \$597,363           | \$1,839,232         | \$447,615           | \$225,328          | \$194,345          | \$194,345          | \$597,363           |
| 2063                          |           | \$5,645,504            | \$0                        | \$1,549,914           | \$597,363           | \$1,839,232         | \$447,615           | \$225,328          | \$194,345          | \$194,345          | \$597,363           |
| 2064                          |           | \$4,095,590            | \$0                        | \$0                   | \$597,363           | \$1,839,232         | \$447,615           | \$225,328          | \$194,345          | \$194,345          | \$597,363           |
| 2065                          |           | \$3,498,227            | \$0                        | \$0                   | \$0                 | \$1,839,232         | \$447,615           | \$225,328          | \$194,345          | \$194,345          | \$597,363           |
| 2066                          |           | \$1,658,996            | \$0                        | \$0                   | \$0                 | \$0                 | \$447,615           | \$225,328          | \$194,345          | \$194,345          | \$597,363           |
| 2067                          |           | \$1,211,380            | \$0                        | \$0                   | \$0                 | \$0                 | \$0                 | \$225,328          | \$194,345          | \$194,345          | \$597,363           |
| 2068                          |           | \$791,708              | \$0                        | \$0                   | \$0                 | \$0                 | \$0                 | \$0                | \$194,345          | \$194,345          | \$597,363           |
| <b>TOTAL</b>                  |           | <b>\$398,474,692</b>   | <b>\$17,920,886</b>        | <b>\$46,497,428</b>   | <b>\$17,920,886</b> | <b>\$55,176,948</b> | <b>\$13,428,457</b> | <b>\$6,759,826</b> | <b>\$5,830,350</b> | <b>\$5,830,350</b> | <b>\$17,920,886</b> |

bond detail

Source: City of Fresno, Fresno Fire Department, and EPS.

# DRAFT

**Table A-5  
Fresno Fire Impact Fee Program Update  
Future Facilities and Apparatus Schedule**

| Planned Facility                                 | Location              | Improvement Type | Const. Year | Land Costs | Construction Costs  |                      |                     |                       | Total Costs          | Apparatus Cost |                     | Total Bond/Loan Funded Cost [2] |
|--|-----------------------|------------------|-------------|------------|---------------------|----------------------|---------------------|-----------------------|----------------------|----------------|---------------------|---------------------------------|
|  |                       |                  |             |            | Site Imp. & Parking | Building             | Soft excl land      | Construction Subtotal |                      | Pct. [1]       | Cost                |                                 |
| <i>Percentage Bond Funded Formula</i>            |                       |                  |             | 0%         | 70%                 | 70%                  | 70%                 |                       |                      |                | 70%                 |                                 |
|  |                       |                  |             | A          | B                   | C                    | D                   | E=B+C+D               | F=A+E                | G              | H=G*Total H         | F+H                             |
| Station 18                                       | Shaw & Bryan          | Replacement      | 2021        | \$0        | \$386,400           | \$4,708,998          | \$1,273,850         | \$6,369,248           | \$6,369,248          | 0.0%           | \$0                 | \$3,500,000                     |
| Station 10                                       | Clinton & Armstrong   | Replacement      | 2021        | \$0        | \$315,000           | \$4,806,900          | \$1,280,475         | \$6,402,375           | \$6,402,375          | 0.0%           | \$0                 | \$6,402,375                     |
| Training Facility – Burn Tower/Modular Bldg only | Undetermined          | Replacement      | 2021        | \$0        | \$1,050,000         | \$4,200,000          | \$0                 | \$5,250,000           | \$5,250,000          | 0.0%           | \$0                 | \$5,250,000                     |
| Station 22                                       | North & Chestnut      | New              | 2022        | \$0        | \$315,000           | \$4,806,900          | \$1,280,475         | \$6,402,375           | \$6,402,375          | 7.4%           | \$1,185,516         | \$7,587,891                     |
| Station 12                                       | Marks & Acacia        | Replacement      | 2023        | \$0        | \$315,000           | \$4,806,900          | \$1,280,475         | \$6,402,375           | \$6,402,375          | 0.0%           | \$0                 | \$6,402,375                     |
| Station 7  | Cherry & Jensen       | Expansion        | 2024        | \$0        | \$0                 | \$1,932,000          | \$483,000           | \$2,415,000           | \$2,415,000          | 2.8%           | \$447,181           | \$2,862,181                     |
| Station 9  | Clinton & Fruit       | Expansion        | 2025        | \$0        | \$0                 | \$1,666,350          | \$416,588           | \$2,082,938           | \$2,082,938          | 2.4%           | \$385,694           | \$2,468,631                     |
| Station 25                                       | McKinley & DeWolf     | New              | 2026        | \$0        | \$315,000           | \$4,806,900          | \$1,280,475         | \$6,402,375           | \$6,402,375          | 7.4%           | \$1,185,516         | \$7,587,891                     |
| Station 31                                       | Central & Cherry      | New              | 2027        | \$0        | \$315,000           | \$4,806,900          | \$1,280,475         | \$6,402,375           | \$6,402,375          | 7.4%           | \$1,185,516         | \$7,587,891                     |
| Station 21                                       | Belmont & Van Ness    | New              | 2028        | \$0        | \$315,000           | \$4,806,900          | \$1,280,475         | \$6,402,375           | \$6,402,375          | 7.4%           | \$1,185,516         | \$7,587,891                     |
| Station 23                                       | Church & Fruit        | New              | 2029        | \$0        | \$315,000           | \$4,806,900          | \$1,280,475         | \$6,402,375           | \$6,402,375          | 7.4%           | \$1,185,516         | \$7,587,891                     |
| Station 26                                       | Calif. & Temperance   | New              | 2030        | \$0        | \$315,000           | \$4,806,900          | \$1,280,475         | \$6,402,375           | \$6,402,375          | 7.4%           | \$1,185,516         | \$7,587,891                     |
| Station 19                                       | Belmont & Marks       | Expansion        | 2030        | \$0        | \$0                 | \$1,932,000          | \$483,000           | \$2,415,000           | \$2,415,000          | 2.8%           | \$447,181           | \$2,862,181                     |
| Station 5  | Fresno & Shields      | Expansion        | 2031        | \$0        | \$0                 | \$1,666,350          | \$416,588           | \$2,082,938           | \$2,082,938          | 2.4%           | \$385,694           | \$2,468,631                     |
| Station 30                                       | Dakota & Brawley      | New              | 2031        | \$0        | \$315,000           | \$4,806,900          | \$1,280,475         | \$6,402,375           | \$6,402,375          | 7.4%           | \$1,185,516         | \$7,587,891                     |
| Station 24                                       | Herndon & Brawley     | New              | 2032        | \$0        | \$315,000           | \$4,806,900          | \$1,280,475         | \$6,402,375           | \$6,402,375          | 7.4%           | \$1,185,516         | \$7,587,891                     |
| Station 28                                       | Champlain & Friant    | New              | 2033        | \$0        | \$315,000           | \$4,806,900          | \$1,280,475         | \$6,402,375           | \$6,402,375          | 7.4%           | \$1,185,516         | \$7,587,891                     |
| Completion of Training Facility                  | Undetermined          | Replacement      | 2034        | \$0        | \$315,000           | \$14,700,000         | \$4,672,500         | \$19,687,500          | \$19,687,500         | 0.0%           | \$0                 | \$19,687,500                    |
| Station 29                                       | Barstow & Brawley     | New              | 2035        | \$0        | \$315,000           | \$4,806,900          | \$1,280,475         | \$6,402,375           | \$6,402,375          | 7.4%           | \$1,185,516         | \$7,587,891                     |
| Shop Facility                                    | Undetermined          | Replacement      | 2036        | \$0        | \$1,050,000         | \$17,640,000         | \$4,672,500         | \$23,362,500          | \$23,362,500         | 0.0%           | \$0                 | \$23,362,500                    |
| Station 6  | Gettysburg & Rowell   | Replacement      | 2037        | \$0        | \$315,000           | \$4,233,600          | \$1,137,150         | \$5,685,750           | \$5,685,750          | 0.0%           | \$0                 | \$5,685,750                     |
| Station 8  | Cedar & Butler        | Expansion        | 2038        | \$0        | \$0                 | \$1,932,000          | \$483,000           | \$2,415,000           | \$2,415,000          | 2.8%           | \$447,181           | \$2,862,181                     |
| Station 15                                       | Clovis & Park Cir Dr. | Expansion        | 2038        | \$0        | \$0                 | \$1,666,350          | \$416,588           | \$2,082,938           | \$2,082,938          | 2.4%           | \$385,694           | \$2,468,631                     |
| Station 2  | West & Fir            | Expansion        | 2039        | \$0        | \$0                 | \$1,666,350          | \$416,588           | \$2,082,938           | \$2,082,938          | 2.4%           | \$385,694           | \$2,468,631                     |
| Station 27                                       | Teague & Chestnut     | New              | 2039        | \$0        | \$315,000           | \$4,806,900          | \$1,280,475         | \$6,402,375           | \$6,402,375          | 7.4%           | \$1,185,516         | \$7,587,891                     |
| <b>Total</b>                                     |                       |                  |             | <b>\$0</b> | <b>\$7,211,400</b>  | <b>\$120,433,698</b> | <b>\$31,517,525</b> | <b>\$159,162,623</b>  | <b>\$159,162,623</b> | <b>100.0%</b>  | <b>\$15,925,000</b> | <b>\$172,218,375</b>            |
| <b>Total New and Expansion Stations</b>          |                       |                  |             | <b>\$0</b> | <b>\$3,465,000</b>  | <b>\$65,337,300</b>  | <b>\$17,200,575</b> | <b>\$86,002,875</b>   | <b>\$86,002,875</b>  | <b>100.0%</b>  |                     |                                 |

*sched*

Source: City of Fresno, Fresno Fire Department, and EPS.

[1] Percentage of "Total New and Expansion Stations" cost.

[2] The Station 18 amount is the amount to be funded by a loan from the City. The remainder of the Station 18 cost is advance funded by the developer.

A-6



## APPENDIX B:

### Fresno Fire Department Service Call Activity

|           |  |     |
|-----------|--|-----|
| Table B-1 | Distribution of Fire Call Activity .....                       | B-1 |
| Table B-2 | Detailed Fire Call Activity, 2001–2014 .....                   | B-2 |
| Table B-3 | Estimated Allocation of Uncategorized Fire Call Activity ..... | B-3 |



**Table B-1**  
**Fresno Fire Impact Fee Program Update**  
**Distribution of Fire Call Activity (2010-2014 Average)**

| Code [1]                  | Type of Call                                      | Total Est.<br>Annual Calls<br>[2] | Percentage of Calls [3] |           | Estimated Annual Calls |              |
|---------------------------|---|-----------------------------------|-------------------------|-----------|------------------------|--------------|
|                           |   |                                   | Resid.                  | Nonresid. | Resid.                 | Nonresid.    |
| <b>Fire Calls</b>         |   |                                   |                         |           |                        |              |
| r                         | Residential                                       | 6,239                             | 100.0%                  | 0.0%      | 6,239                  | 0            |
| nr                        | Industrial, Utility, Defense, Agriculture, Mining | 67                                | 0.0%                    | 100.0%    | 0                      | 67           |
| nr                        | Manufacturing, Processing                         | 116                               | 0.0%                    | 100.0%    | 0                      | 116          |
| nr                        | Mercantile, Business                              | 1,175                             | 0.0%                    | 100.0%    | 0                      | 1,175        |
| nr                        | Health Care, Detention, Correction                | 588                               | 0.0%                    | 100.0%    | 0                      | 588          |
| sh                        | Assembly  | 520                               | 92.1%                   | 7.9%      | 479                    | 41           |
| sh                        | Educational                                       | 484                               | 92.1%                   | 7.9%      | 446                    | 38           |
| sh                        | Property Type Not Specified                       | 4,654                             | 92.1%                   | 7.9%      | 4,287                  | 367          |
| sh                        | Storage   | 299                               | 92.1%                   | 7.9%      | 276                    | 24           |
|                           | <b>SUBTOTAL</b>                                   | <b>14,142</b>                     |                         |           | <b>11,727</b>          | <b>2,416</b> |
| <b>Medical Aid/Rescue</b> |   |                                   |                         |           |                        |              |
| r                         | Residential                                       | 13,552                            | 100.0%                  | 0.0%      | 13,552                 | 0            |
| nr                        | Industrial, Utility, Defense, Agriculture, Mining | 17                                | 0.0%                    | 100.0%    | 0                      | 17           |
| nr                        | Manufacturing, Processing                         | 29                                | 0.0%                    | 100.0%    | 0                      | 29           |
| nr                        | Mercantile, Business                              | 662                               | 0.0%                    | 100.0%    | 0                      | 662          |
| nr                        | Health Care, Detention, Correction                | 667                               | 0.0%                    | 100.0%    | 0                      | 667          |
| sh                        | Assembly  | 498                               | 92.1%                   | 7.9%      | 459                    | 39           |
| sh                        | Educational                                       | 217                               | 92.1%                   | 7.9%      | 200                    | 17           |
| sh                        | Property Type Not Specified                       | 3,968                             | 92.1%                   | 7.9%      | 3,655                  | 313          |
| sh                        | Storage   | 63                                | 92.1%                   | 7.9%      | 58                     | 5            |
|                           | <b>SUBTOTAL</b>                                   | <b>19,674</b>                     |                         |           | <b>17,924</b>          | <b>1,750</b> |
| <b>Grand Total</b>        |   | <b>33,817</b>                     |                         |           | <b>29,651</b>          | <b>4,166</b> |
| <i>Share of Total</i>     |   |                                   |                         |           | <i>87.7%</i>           | <i>12.3%</i> |

call dist

Source: Fresno Fire Department

[1] Categorization by EPS. Code as follows:

r = Directly Assigned to Residential

nr = Directly Assigned to Nonresidential

sh = Shared Assignment based on Potential Service. See Table B-3 for percentage split between residential and nonresidential.

[2] See Table B-2.

[3] See Table B-3 for pct. allocation of uncategorized calls.

**Table B-2  
Fresno Fire Impact Fee Program Update  
Detailed Fire Call Activity, 2001-2014**

| Code [1]                  | Type of Call                                      | 2001          | 2002          | 2003          | 2004          | 2005          | 2006          | 2007          | 2008          | 2009          | 2010          | 2011          | 2012          | 2013          | 2014          | 2010-2014<br>Average |
|---------------------------|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------------|
| <b>Fire Calls</b>         |   |               |               |               |               |               |               |               |               |               |               |               |               |               |               |                      |
| r                         | Residential                                       | 7,095         | 6,889         | 5,938         | 3,213         | 3,776         | 4,183         | 4,870         | 4,722         | 4876          | 4887          | 5599          | 6534          | 6883          | 7293          | 6,239                |
| nr                        | Industrial, Utility, Defense, Agriculture, Mining | 119           | 109           | 103           | 63            | 77            | 70            | 130           | 103           | 90            | 57            | 69            | 67            | 73            | 68            | 67                   |
| nr                        | Manufacturing, Processing                         | 151           | 132           | 130           | 127           | 93            | 137           | 199           | 171           | 86            | 123           | 121           | 113           | 114           | 111           | 116                  |
| nr                        | Mercantile, Business                              | 1,275         | 1,412         | 1,322         | 924           | 1,133         | 1,246         | 1,264         | 1,006         | 1051          | 1070          | 1219          | 1271          | 1140          | 1174          | 1,175                |
| nr                        | Health Care, Detention, Correction                | 626           | 639           | 636           | 441           | 475           | 558           | 716           | 785           | 803           | 504           | 541           | 640           | 624           | 631           | 588                  |
| sh                        | Assembly  | 356           | 394           | 391           | 237           | 394           | 364           | 467           | 388           | 414           | 473           | 529           | 566           | 527           | 504           | 520                  |
| sh                        | Educational                                       | 396           | 457           | 437           | 416           | 497           | 514           | 589           | 543           | 483           | 494           | 483           | 505           | 462           | 475           | 484                  |
| sh                        | Property Type Not Specified                       | 5,137         | 4,501         | 4,123         | 3,852         | 3,283         | 3,402         | 3,616         | 3,474         | 3372          | 3519          | 4002          | 4771          | 5299          | 5680          | 4,654                |
| sh                        | Storage   | 193           | 164           | 191           | 167           | 231           | 259           | 217           | 170           | 200           | 221           | 238           | 231           | 361           | 446           | 299                  |
|                           | <b>SUBTOTAL</b>                                   | <b>15,348</b> | <b>14,697</b> | <b>13,271</b> | <b>9,440</b>  | <b>9,959</b>  | <b>10,733</b> | <b>12,068</b> | <b>11,362</b> | <b>11,375</b> | <b>11,348</b> | <b>12,801</b> | <b>14,698</b> | <b>15,483</b> | <b>16,382</b> | <b>14,142</b>        |
| <b>Medical Aid/Rescue</b> |   |               |               |               |               |               |               |               |               |               |               |               |               |               |               |                      |
| r                         | Residential                                       | 7,757         | 8,836         | 10,451        | 14,005        | 14,921        | 12,952        | 15,145        | 13,209        | 19010         | 13285         | 13821         | 13092         | 13528         | 14035         | 13,552               |
| nr                        | Industrial, Utility, Defense, Agriculture, Mining | 3             | 12            | 7             | 16            | 17            | 14            | 28            | 35            | 35            | 18            | 17            | 17            | 24            | 11            | 17                   |
| nr                        | Manufacturing, Processing                         | 35            | 28            | 34            | 51            | 46            | 28            | 45            | 44            | 31            | 38            | 26            | 24            | 28            | 29            | 29                   |
| nr                        | Mercantile, Business                              | 579           | 615           | 715           | 756           | 919           | 764           | 750           | 735           | 1008          | 660           | 730           | 660           | 625           | 637           | 662                  |
| nr                        | Health Care, Detention, Correction                | 597           | 630           | 821           | 929           | 1,228         | 972           | 1,987         | 1,730         | 2402          | 741           | 669           | 594           | 610           | 722           | 667                  |
| sh                        | Assembly  | 260           | 269           | 291           | 292           | 501           | 393           | 475           | 442           | 636           | 483           | 533           | 476           | 475           | 524           | 498                  |
| sh                        | Educational                                       | 141           | 118           | 172           | 206           | 233           | 203           | 265           | 259           | 327           | 211           | 232           | 219           | 196           | 225           | 217                  |
| sh                        | Property Type Not Specified                       | 2,221         | 2,305         | 2,290         | 3,639         | 4,029         | 3,784         | 4,568         | 3,683         | 4872          | 4034          | 4346          | 3781          | 3733          | 3945          | 3,968                |
| sh                        | Storage   | 12            | 15            | 12            | 16            | 45            | 49            | 78            | 120           | 65            | 76            | 73            | 65            | 59            | 44            | 63                   |
|                           | <b>SUBTOTAL</b>                                   | <b>11,605</b> | <b>12,828</b> | <b>14,793</b> | <b>19,910</b> | <b>21,939</b> | <b>19,159</b> | <b>23,341</b> | <b>20,257</b> | <b>28,386</b> | <b>19,546</b> | <b>20,447</b> | <b>18,928</b> | <b>19,278</b> | <b>20,172</b> | <b>19,674</b>        |
| <b>Grand Total</b>        |   | <b>26,953</b> | <b>27,525</b> | <b>28,064</b> | <b>29,350</b> | <b>31,898</b> | <b>29,892</b> | <b>35,409</b> | <b>31,619</b> | <b>39,761</b> | <b>30,894</b> | <b>33,248</b> | <b>33,626</b> | <b>34,761</b> | <b>36,554</b> | <b>33,817</b>        |

call\_detail

Source: Fresno Fire Department

[1] Categorization by EPS. Code as follows:

r = Directly Assigned to Residential

nr = Directly Assigned to Nonresidential

sh = Shared Assignment based on Potential Service

**Table B-3**  
**Fresno Fire Impact Fee Program Update**  
**Estimated Allocation of Uncategorized Fire Call Activity**

| Item                                   | Formula                   | Population | Employees | Total          |
|--|---------------------------|------------|-----------|----------------|
| 2014 Fire Service Population           | A                         | 555,609    | 177,590   | <b>733,199</b> |
| Percentage of Total                    |                           | 75.8%      | 24.2%     | <b>100.0%</b>  |
| Potential Service (Hours per Week) [1] | B                         | 168        | 45        |                |
| Equivalent Factor [2]                  | $C = B / 168$             | 100.0%     | 26.8%     |                |
| Equivalent Persons Served              | $D = A \times C$          | 555,609    | 47,569    | <b>603,178</b> |
| Assignment of Uncategorized Calls      | $E = D / \text{Total } D$ | 92.1%      | 7.9%      | <b>100.0%</b>  |

*call\_allocation*

Source: City of Fresno and EPS

[1] Maximum hours at home/work.

Resid. hours = 7 days/week \*24 hrs/day.

Nonres. hours= 5 days/week\*9 hrs/day.

[2] Relates each employee to resident based on potential service hours.