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GOODWIN CONSULTING GROUP

**NORTH TAHOE FIRE
PROTECTION DISTRICT (NTFPD)
UPDATE OF THE FIRE FACILITIES
IMPACT FEE STUDY**



FINAL REPORT

AUGUST 22, 2013

**NORTH TAHOE FIRE PROTECTION DISTRICT (NTFPD)
UPDATE OF THE FIRE FACILITIES IMPACT FEE STUDY**

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EXECUTIVE SUMMARY

BACKGROUND

As development continues within the North Tahoe Fire Protection District (“NTFPD” or “District”), additional fire protection facilities will be needed to meet the service demands of future development. The NTFPD has recently updated its fire protection facilities and costs, as summarized in this report, needed to serve development in the District through the year 2035. A fair share portion of the cost of these facilities will be funded by future growth in the NTFPD. Consequently, the proposed fire facilities impact fee (“NTFPD Fire Fee”) included in this *North Tahoe Fire Protection District Update of the Fire Facilities Impact Fee Study* (“Fee Study”) will apply to all future development within the NTFPD boundary. The NTFPD Fire Fee complies with Mitigation Fee Act nexus requirements because the fees are set at the amount needed to mitigate the specific impacts that will result from new development in the District.

The District’s current fire fee is based on the *Fire Facilities Impact Fee Study*, prepared in 2007 (“2007 Study”) as well as a subsequent addendum that was prepared in 2010 (“2010 Addendum”). The NTFPD Fire Fees proposed in this Fee Study have been revised from the 2010 Addendum to reflect the completion of the District’s Tahoe City Station 51, the proposed re-construction of the District’s stations located in Kings Beach and Homewood, and new vehicles and equipment that have been placed into service since the 2007 Study was completed.

FIRE PROTECTION FACILITIES AND COSTS

The Fee Study identifies fire protection facilities needed to serve new development in the District through 2035. The required fire facilities and costs were determined by the NTFPD based on its long range needs. Facility costs included in the Fee Study have been updated to reflect current and anticipated facility needs, construction costs, and other revised assumptions.

A summary of the facilities and cost estimates, which total approximately \$29.5 million, is shown in Table A. Detailed fire facilities and cost estimates incorporated in the Fee Study are described in Section III.

**TABLE A
FACILITIES COST SUMMARY**

Description	Estimated Cost
Net Existing Facilities	\$20,432,743
Planned Facilities	\$9,052,560
Total	\$29,485,303

NTFPD FIRE FEES

A summary of the proposed NTFPD Fire Fee is presented below in Table B; the NTFPD Fire Fee includes a 2.0% administration fee mark-up that will be used to fund costs associated with administering the NTFPD Fire Fee program. This fee will fund fee study updates, accounting, and annual reporting required by the Mitigation Fee Act.

**TABLE B
NTFPD FIRE FEE SUMMARY**

Land Use	Fee per SF
<i>Residential</i>	\$1.01
<i>Nonresidential</i>	
Commercial	\$0.69
Office	\$0.87
Industrial	\$0.58

I. INTRODUCTION

The North Tahoe Fire Protection District (“NTFPD” or “District”) is an independent special district that provides fire, rescue, and pre-hospital emergency medical services to residents and employees within an approximate 30-square mile area on the north and west shores of Lake Tahoe in the County of Placer. A map identifying the District’s boundaries is shown on the following page.

The NTFPD currently operates five fire stations within its boundary. These stations are located in Tahoe City, Kings Beach, Homewood, Dollar Point, and Carnelian Bay and currently serve approximately 11,200 residents.

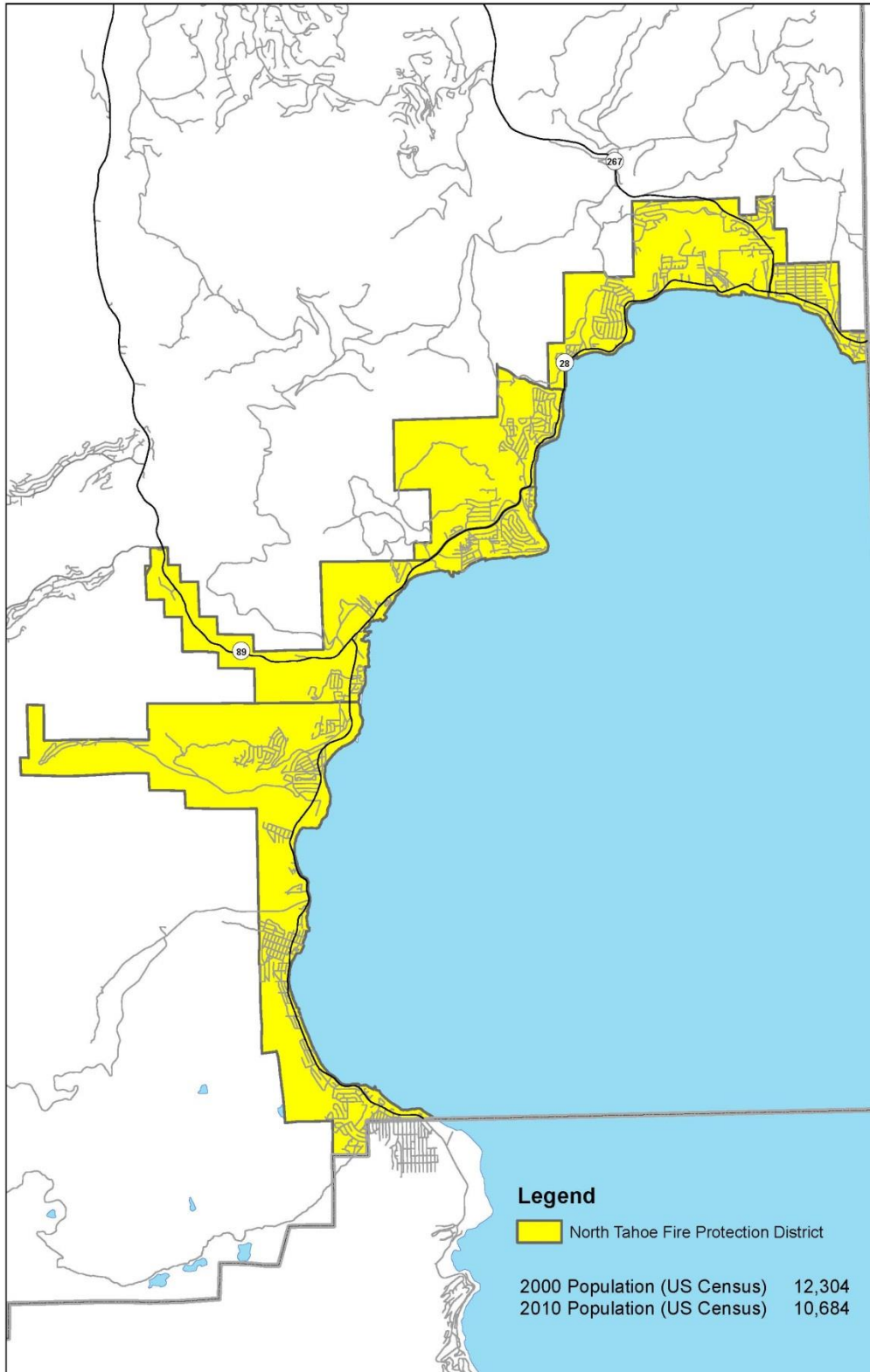
The NTFPD also provides fire protection and related services to residents and employees within the Alpine Springs County Water District (“Water District”) through a sixth station located in Alpine Meadows. Costs associated with fire protection facilities and equipment required to serve residents and employees within the Water District are included in the *Alpine Springs County Water District Fire Facilities Mitigation Fee Study*, which is in the process of being updated. The Alpine Meadows station and the corresponding service population within the Water District are not included in this analysis.

PURPOSE OF STUDY

As development occurs within the NTFPD, new or expanded fire facilities will be required to meet the service demands of future development. If adopted, the fire fee (“NTFPD Fire Fee”) presented in this report will apply to all future development within the District boundary. The NTFPD Fire Fee complies with the Mitigation Fee Act nexus requirements because the NTFPD Fire Fee is calculated to mitigate only the specific impacts that will result from new development in the District.

The NTFPD retained Goodwin Consulting Group, Inc. (“Goodwin”) to prepare this *North Tahoe Fire Protection District Update of the Fire Facilities Impact Fee Study* (“Fee Study”). The NTFPD Fire Fee will be implemented by the NTFPD Board of Directors and Placer County Board of Supervisors through the adoption of a resolution or ordinance. In doing so, the NTFPD Fire Fee will replace the District’s current fire fee that is based on the *Fire Facilities Impact Fee Study* that was prepared in 2007 (“2007 Study”).

NTFPD BOUNDARY MAP



IMPACT FEE NEXUS REQUIREMENTS

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

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

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

II. LAND USE CATEGORIES AND GROWTH PROJECTIONS

LAND USE CATEGORIES

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

- Residential:** All single family and multi-family residential developments. Single family units include all detached residential dwelling units. Multi-family units include all attached single family dwellings, such as duplexes and condominiums, and mobile homes, apartments, and dormitories.
- Commercial:** All commercial, retail, educational, and hotel/motel development.
- Office:** All general, professional, and medical office development.
- Industrial:** All manufacturing development.

Some developments may include more than one land use type, such as industrial warehouse with living quarters (e.g., a live-work designation). In these cases, the NTFPD Fire Fee would be calculated separately for each land use type included in the proposed development. The NTFPD should have the discretion to impose the NTFPD Fire Fee based on the specific aspects of a proposed development regardless of zoning.

The NTFPD will make the final determination as to which land use category a particular development will be assigned; however, a general guideline to use is the likely occupancy associated with the development, whether it be residents or workers. The NTFPD Fire Fee imposed should be based on the land use type that most closely represents the likely occupancy associated with the proposed development. The Fire Chief is authorized to determine the land use category that corresponds most directly to the land use to determine an applicable fee rate.

GROWTH PROJECTIONS

Estimates of the existing service population and projections of growth are critical assumptions used in the calculation of the NTFPD Fire Fee. Table 1 summarizes the estimated service population within the District in 2013 as well as the amount of new growth anticipated through 2035. The total service population is comprised of all residents plus a certain percentage of employees. The exact relationship of service demands between residents and employees is difficult to measure, but a service population comprised of all residents plus 24% of employees is utilized in the NTFPD Fire Fee calculation. The 24% ratio suggests that an employee generally has one quarter the impact of a resident (e.g., an employee is at work 40 hours per week out of a possible 168 hours in a week).

TABLE 1
EXISTING AND FUTURE PERSONS SERVED WITHIN THE DISTRICT

	Existing ¹ (2013) <i>A</i>	New Growth (2013-35) <i>B</i>	Existing & Future Growth ² (2035) <i>C = A + B</i>
Residents	11,172	4,330	15,502
Employees	5,804	2,250	8,054
Employee Demand Factor ³	0.24	0.24	0.24
Net Employees	1,393	540	1,933
Total Persons Served	12,565	4,870	17,435

¹ Existing resident and employee estimates reflect 2010 Census data that have been adjusted to 2013 by applying a 1.5% average annual growth rate.

² Assumes an average annual growth rate of 1.5% for residents and employees based on the 2007 Fire Facilities Impact Fee Study.

³ Assumes employees are at work 8 hours per day out of a possible 24 hours per day; this translates to 1.0 employee equaling approximately 0.24 (40/168 = 0.24) residents.

Sources: County of Placer; North Tahoe Fire Protection District; Census; Goodwin Consulting Group, Inc.

The estimated residents and employees in the District by 2035 are used to determine fire facilities and equipment required to serve growth. Base year residential and employment estimates totaling approximately 11,200 and 5,800, respectively, reflect 2013 estimates and are based on data from the Placer County Planning Department and the 2010 Census. Growth estimates through 2035 assume an average annual growth rate in the NTFPD of 1.5%.

III. FIRE PROTECTION FACILITIES AND COST ESTIMATES

The NTFPD Fire Fee program will provide funding for fire protection facilities, including fire stations, vehicles, and equipment. A summary of existing and planned facilities required to serve development through 2035 is provided below.

EXISTING FIRE FACILITIES

Existing fire protection facilities within the District include (i) five fire stations, which are located in Tahoe City, Kings Beach, Homewood, Dollar Point, and Carnelian Bay; (ii) vehicles and equipment; and (iii) special equipment. The total estimated cost of the District's fire stations, land, vehicles, and equipment, based on current replacement costs, equals approximately \$25.3 million, as shown below in Table 2.

**TABLE 2
SUMMARY OF EXISTING FACILITIES COSTS**

Description	Estimated Cost
Stations	\$20,138,000
Vehicles & Equipment	\$3,706,537
Special Equipment	\$1,448,206
Total	\$25,292,743

Source: North Tahoe Fire Protection District

The estimated replacement cost for the Tahoe City station, which was completed in 2012, is based on actual construction costs, including financing costs. Estimated replacement costs for the remaining existing fire stations are based on the construction cost for the Tahoe City station, but do not include a financing cost. Estimated replacement costs for all five stations, including buildings and land, total approximately \$20.1 million and are summarized below in Table 3. An estimated land cost of \$1.3 million per acre is assumed in the Fee Study. Although the per-acre cost is based on an estimate provided by the NTFPD, additional market research on recent land sales within the District was conducted by Goodwin to corroborate land values.

TABLE 3
EXISTING LAND & BUILDING FACILITIES

	Quantity <i>A</i>		Unit Cost <i>B</i>	Replacement Cost <i>C = A x B</i>
<u><i>Station 51 - Tahoe City</i></u>				
Land ¹	0.99	acres	--	--
Building ²	20,027	SF	\$525	\$10,514,000
Subtotal				\$10,514,000
<u><i>Station 52 - Kings Beach</i></u>				
Land	0.29	acres	\$1,300,000	\$377,000
Building ³	7,410	SF	\$500	\$3,705,000
Subtotal				\$4,082,000
<u><i>Station 53 - Homewood</i></u>				
Land	0.35	acres	\$1,300,000	\$455,000
Building ³	2,310	SF	\$500	\$1,155,000
Subtotal				\$1,610,000
<u><i>Station 54 - Dollar Point</i></u>				
Land	0.29	acres	\$1,300,000	\$377,000
Building ³	3,016	SF	\$500	\$1,508,000
Subtotal				\$1,885,000
<u><i>Station 55 - Carnelian Bay</i></u>				
Land	0.09	acres	\$1,300,000	\$117,000
Building ³	3,860	SF	\$500	\$1,930,000
Subtotal				\$2,047,000
<u><i>Storage - Truckee Airport</i></u> ⁴				
Building	517	SF	--	--
Subtotal				--
Total Existing Stations Cost				\$20,138,000

¹ Land value is excluded because the land was donated.

² Based on actual costs, including financing costs.

³ The per-square foot replacement cost for buildings is based on the average construction cost, excluding financing costs, for Station 51, which was constructed in 2012.

⁴ Value is excluded because facility is leased by the NTFPD.

Sources: North Tahoe Fire Protection District; Goodwin Consulting Group, Inc.

TABLE 4
EXISTING VEHICLES & EQUIPMENT INVENTORY & COST

Vehicle Type & Make	Estimated Cost	Vehicle Type & Make	Estimated Cost
<u>Type I Engines</u>		<u>Other</u>	
1986 Grumman Pumper	\$220,000	2004 Arrow Trailer	\$4,700
1985 Seagrave Pumper	\$280,000	2006 Bauer	\$100,000
1990 Seagrave Pumper	\$280,000	2007 Carson DT122	\$9,000
1995 Seagrave Pumper	\$300,000	2005 Caterpillar DCA70	\$33,000
2003 Spartan Pumper	\$380,000	2006 Caterpillar Generator	\$33,000
Subtotal	\$1,460,000	2001 Chevy Flat Bed	\$20,000
<u>Type III Engines</u>		2003 Chevy	\$80,000
2007 International Brush Vehicle	\$150,000	2003 Chevy (506) Tahoe	\$20,000
2007 International Brush Vehicle	\$343,000	1995 Chevy (P-5) Tahoe	\$20,000
Subtotal	\$493,000	1998 Ford F-150	\$20,000
		1998 Ford F-150	\$20,000
		2001 Ford Expedition	\$20,000
		2004 Ford F-350	\$110,000
		2004 Ford F-350	\$110,000
		2004 Ford F-350	\$80,000
		2006 Ford F-450	\$4,000
		2008 Ford F-450	\$41,000
		2011 Ford F-350	\$98,500
		1986 Ford F-350	\$1,500
		1998 Ford F-150	\$2,000
		1999 Ford F-250	\$20,000
		2008 Ford F-350	\$110,000
		2008 Ford F-150	\$25,500
		2008 Ford F-150	\$25,500
		2010 Ford F-350	\$97,000
		2008 Ford (B-5) Expedition	\$31,000
		2009 Ford (500) Expedition	\$33,000
		2008 Ford (502) F-250	\$30,000
		2012 Ford (Mech Vehicle) F-550	\$108,000
		2004 Kenworth	\$355,000
		1922 Seagrave Antique Pumper	\$30,000
		2011 Skido Snowmobile	\$12,000
		2012 Skido Snowmobile	\$12,000
		2009 Snake River Trailer	\$13,150
		2010 Snowmobile Trailer	\$7,349
		2011 Wells Cargo - PIO Trailer	\$8,669
		2011 Wells Cargo - PIO Trailer	\$8,669
		Subtotal	\$1,753,537
Total Existing Vehicles & Equipment Cost			\$3,706,537

Source: North Tahoe Fire Protection District

Existing fire protection facilities also include vehicles and equipment. An inventory and estimated replacement value for existing vehicles and equipment are presented in Table 4. Based on information provided by the NTFPD, the replacement cost of existing vehicles and equipment totals approximately \$3.7 million.

Existing fire protection equipment also includes special protective gear, general station equipment, and other miscellaneous equipment. The estimated replacement value for special equipment is itemized by fire station, as presented in Table 5. The District reports the existing replacement value for special equipment totals approximately \$1.4 million.

TABLE 5
NTFPD SPECIAL EQUIPMENT INVENTORY

Description	Replacement Cost
<i>Station 51 - Tahoe City</i>	
Type 1 Special Equipment	\$243,551
Type 3 Special Equipment	\$93,508
Ambulance Special Equipment (2)	\$149,414
Subtotal	<u>\$486,473</u>
<i>Station 52 - Kings Beach</i>	
Type 1 Special Equipment	\$243,551
Type 3 Special Equipment	\$93,508
Ambulance Special Equipment	\$74,707
Subtotal	<u>\$411,766</u>
<i>Station 53 - Homewood</i>	
Type 1 Special Equipment	\$243,551
Water Tender Special Equipment	\$53,494
Ambulance Special Equipment	\$74,707
Subtotal	<u>\$371,752</u>
<i>Station 55 - Carnelian Bay</i>	
Type 3 Special Equipment	\$93,508
Ambulance Special Equipment	\$74,707
Subtotal	<u>\$168,215</u>
<i>Storage - Truckee Airport</i>	
Type 1 Special Equipment	\$10,000
Subtotal	<u>\$10,000</u>
Total Special Equipment Cost	<u>\$1,448,206</u>

Source: North Tahoe Fire Protection District

PLANNED FIRE FACILITIES TO ACCOMMODATE NEW GROWTH

NTPFD analyzed the fire facilities needed to serve development within the District through 2035. Based on that analysis, NTPFD determined that the Kings Beach and Homewood stations need to be expanded to serve future growth anticipated through 2035 in those areas. The Dollar Point and Carnelian Bay stations, as well as the newly reconstructed Tahoe City station, will be able to adequately serve the incremental development expected in those areas through 2035.

**TABLE 6
PLANNED NTPFD FACILITIES**

Description	Estimated Units <i>A</i>	Cost per Unit <i>B</i>	Total Cost ¹ <i>C = A x B</i>
<i><u>New Fire Stations</u></i>			
Station 52 - Kings Beach	9,813 SF	\$500	\$4,906,500
Station 53 - Homewood	7,165 SF	\$500	\$3,582,500
Subtotal			\$8,489,000
<i><u>New Vehicles & Equipment</u></i>			
Type I Engine	1	\$550,000	\$550,000
Piercing Nozzles			\$4,500
Salvage Covers			\$2,800
3" Hose Clamps			\$700
Additional Hooks			\$500
14' Combination Ladders			\$200
Portable Floodlights			\$60
Honda 3000 Watt Generators			\$4,800
Subtotal			\$563,560
Total New Facilities			\$9,052,560

¹ The per-square foot replacement cost for buildings is based on the average construction cost, excluding financing costs, for Station 51, which was constructed in 2012.

Sources: North Tahoe Fire Protection District; Goodwin Consulting Group, Inc.

Due to the type of construction of the Kings Beach and Homewood stations, the District determined that a modular expansion of either station is impractical because the existing stations do not meet current seismic requirements. Consequently, a new station will be constructed on the existing Kings Beach and Homewood sites. Table 6 shows a breakdown of costs for the two stations, which total approximately \$8.5 million. Both stations are anticipated to be constructed on their current locations. Estimated construction costs for the new Kings Beach and Homewood stations are based on the Tahoe City station construction cost, excluding the financing cost. In addition, the District determined that a new Type I engine and miscellaneous equipment will be needed to serve future growth. The estimated cost associated with the Type I engine and equipment totals approximately \$0.6 million. Overall, approximately \$9.1 million in planned facilities will be needed to serve future growth anticipated through 2035.

NET FIRE FACILITIES COST

As discussed above, planned facilities include the re-construction of the existing Kings Beach and Homewood stations as well as a new Type I engine and miscellaneous equipment. In order to ensure that existing and planned facilities are not double counted, the estimated replacement costs associated with the existing buildings at the Kings Beach and Homewood stations are subtracted from the total fire facilities cost. The net fire facilities cost included in the NTFPD Fire Fee calculation totals approximately \$29.5 million, as shown in Table 7.

**TABLE 7
NET FIRE FACILITIES COST**

Description	Estimated Cost
Existing Fire Facilities	\$25,292,743
Less Station 52 - Kings Beach Building (to be replaced)	(\$3,705,000)
Less Station 53 - Homewood Building (to be replaced)	(\$1,155,000)
Planned Fire Facilities	\$9,052,560
Net Fire Facilities Cost	\$29,485,303

Source: North Tahoe Fire Protection District

IV. NTFPD FIRE FEE CALCULATION METHODOLOGY

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

FEE METHODOLOGY

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

- 1) Determine the number of existing and future persons served expected through 2035 within the NTFPD. The number of person served equals the sum of residents and 24% of employees (i.e., employee-equivalents).
- 2) Determine the existing and new fire facilities needed to serve development through 2035 within the NTFPD.
- 3) Estimate the net cost of the fire facilities needed to serve development in the District through 2035. Existing deficiencies or that portion of an improvement cost allocated to existing development cannot be funded with NTFPD Fire Fees from future development; the NTFPD will need to find alternate sources to fund existing deficiencies or existing development's share of the cost.
- 4) Based on the projected 2035 service population, calculate the cost per person served by dividing the cost from Step 3 by the total service population from Step 1. The cost per resident is equal to the cost person served; while the cost per employee is equal to the cost per person served multiplied by 0.24 (i.e., employee weighting factor).
- 5) Estimate the cost per residential dwelling unit or cost per 1,000 nonresidential building square feet by multiplying the applicable occupancy factor (i.e., average persons per

residential dwelling unit or employees per 1,000 building square feet) by the cost per resident or employee from Step 4.

- 6) Determine the cost per residential dwelling unit or per 1,000 nonresidential building square feet by adding a 2.0% administration fee to fund the cost of administering the NTFPD Fire Fee program.
- 7) For residential uses, divide the gross cost per residential dwelling unit by 1,700 square feet, which is the estimated average size of a residential unit in NTFPD, to determine the NTFPD Fire Fee per square foot of residential building space. For nonresidential uses, divide the gross cost per 1,000 building square feet by 1,000 square feet to determine the NTFPD Fire Fee per square foot of nonresidential building space.

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

OCCUPANCY ASSUMPTIONS

New development in the NTFPD will create demand for fire protection facilities. For purposes of the NTFPD Fire Fee program, demand is measured by the service population anticipated within the NTFPD by 2035.

Occupancy factors incorporated in the Fee Study are presented in Table 8. Residential occupancy factors are based on data from the American Community Survey for the region and industry standards. Nonresidential occupancy factors are based on industry standards related to average square feet per employee. By allocating facilities costs to each land use category based on its demand for fire protection facilities (i.e., service population based on occupancy factors), this Fee Study ensures that each land use category will fund its fair-share of the required facilities.

TABLE 8
OCCUPANCY ASSUMPTIONS

Land Use	Assumption
<i>Residential</i>	1.00 Persons per Dwelling Unit
<i>Nonresidential</i>	
Commercial	1.67 Employees per 1,000 SF
Office	2.11 Employees per 1,000 SF
Industrial	1.43 Employees per 1,000 SF

Sources: American Community Survey; Goodwin Consulting Group, Inc.

V. NEXUS FINDINGS AND NTFPD FIRE FEE

Future development within the NTFPD will create demand for various fire protection facilities to serve future residents and employees. The NTFPD Fire Fee program will fund future development's fair share of costs to construct two fire stations located in the Kings Beach and Homewood areas of the District as well as a new Type I engine and miscellaneous new equipment. The NTFPD Fire Fee, as calculated in this Nexus Study meets the Mitigation Fee Act nexus requirements, as outlined below.

Purpose of Fee

The purpose of the NTFPD Fire Fee is to fund the fire protection facilities identified in this Fee Study that are needed to mitigate the impacts from new development through 2035 within the NTFPD.

Use of Fee

NTFPD Fire Fee revenue will be used to fund the fire protection facilities needed to provide fire protection service. These facilities and their corresponding costs are presented in Tables 3 through 6 of this Fee Study.

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

New development anticipated through 2035 within the NTFPD will generate a need for fire protection services and facilities. The increase in development will create the need for additional fire facilities and personnel to provide emergency services to the developing areas within the NTFPD. Fee revenue will be used to fund a fair-share portion of these fire facilities to serve new residential and nonresidential development in the NTFPD.

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

New residential and nonresidential development in the NTFPD will generate residents and employees as well as residential and nonresidential structures that will require fire protection services. New development will require additional fire facilities to maintain the existing level of service and to provide fire protection and emergency services to the developing areas in the NTFPD. In order to maintain the NTFPD's current level of fire protection service, the NTFPD must re-construct two fire stations in Kings Beach and Homewood as well as purchase a new Type I engine and miscellaneous equipment.

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

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

The number of persons served equals the number of residents and employee-equivalents that will be provided with fire protection services. Based on this demand from residents and employee-equivalents, a proportionate share of the cost of fire facilities is allocated to existing and future residential and nonresidential development types. This cost allocation, shown in Table 9, establishes a fee per resident and per employee. The fee per resident or employee is then converted to a fee per square foot of building space for each land use category to ensure that a reasonable relationship exists between the NTFPD Fire Fee and the portion of the facility attributable to each development type within the NTFPD.

EXISTING AND PLANNED FIRE FACILITIES COST SUMMARY

Table 7 summarizes the net cost of the fire facilities needed to serve the District through 2035. This includes the cost of existing and planned fire stations, vehicles, and equipment. The total cost of these facilities, which has been calculated based on (i) the current estimated replacement value of existing fire stations, vehicles, and equipment; (ii) the estimated construction cost of planned fire stations; and (iii) the estimated cost to purchase a new Type I engine and miscellaneous equipment, equals approximately \$29.5 million.

NTFPD FIRE FEE CALCULATION

Tables 9 and 10 detail the calculation of the NTFPD Fire Fee. Dividing the net fire facilities cost of approximately \$29.5 million cost by the estimated 17,435 persons served in the District by 2035 equals a cost of \$1,691 per person served. The cost per person served is then converted to a cost per resident and cost per employee, as shown in Table 9. The cost per resident and per employee is converted to a fee per square foot for residential and nonresidential building space based on occupancy assumptions and assumed average size of a residential unit in the District. A summary of the proposed NTFPD Fire Fee, and accounting for NTFPD Fire Fee program administration costs, is presented in Table 10.

TABLE 9
NTFPD FIRE FACILITIES COST PER PERSON SERVED

Net Fire Facilities Cost	\$29,485,303
Projected 2035 Persons Served	17,435
Cost per Person Served	\$1,691
<i>Cost per Resident</i>	<i>\$1,691</i>
<i>Cost per Employee ¹</i>	<i>\$406</i>

¹ Assumes one employee is equal to 0.24 residents, as discussed in Table 1.

Source: Goodwin Consulting Group, Inc.

TABLE 10
NTFPD FIRE FEE CALCULATION

Land Use	Cost per Resident/ Employee <i>A</i>	Estimated Density ¹ <i>B</i>	Cost per DU/ 1,000 SF <i>C = A x B</i>	Admin- istration ² (2.0%) <i>D = 0.02 x C</i>	Total Fee <i>E = C + D</i>	Fee per SF ³
<i>Residential</i>	\$1,691	1.00	<i>per Dwelling Unit</i>		\$1,725	\$1.01
<i>Nonresidential</i>			<i>per 1,000 Bldg SF</i>			
Commercial	\$406	1.67	\$676	\$14	\$690	\$0.69
Office	\$406	2.11	\$854	\$17	\$872	\$0.87
Industrial	\$406	1.43	\$580	\$12	\$592	\$0.58

¹ Estimated density shown as persons per dwelling unit for residential uses and employees per 1,000 SF for nonresidential uses.

² Estimated at 2.0% of the total fee to pay for the NTFPD's costs related to fee study updates, accounting, and annual reporting.

³ Residential fee is based on an average residential unit size of 1,700 square feet.

Sources: North Tahoe Fire Protection District; Goodwin Consulting Group, Inc.

NTFPD FIRE FEE SUMMARY

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

TABLE 11
NTFPD FIRE FEE SUMMARY

Land Use	Fee per SF
<i>Residential</i>	\$1.01
<i>Nonresidential</i>	
Commercial	\$0.69
Office	\$0.87
Industrial	\$0.58

FUNDING SHORTFALL

This Fee Study allocates a portion of existing and planned facilities costs to future development to ensure that new development pays its fair-share of those facilities. Comparing the total planned facilities cost of approximately \$9.1 million to future development's fair-share of the total fire facilities cost, approximately \$8.2 million, produces a funding shortfall of approximately \$817,000. The funding shortfall is reduced to approximately \$763,000 after accounting for the existing fire fee fund balance of \$53,958, as shown in Table 12.

The estimated shortfall represents the portion of planned facilities costs that must be funded through revenue sources other than development impact fees. Non-fee revenues are needed because the total cost of planned facilities exceeds future development's fair-share of fire facilities costs. Potential sources of revenue include the District's general fund revenues or the use of new taxes.

TABLE 12
PLANNED FACILITIES FUNDING SHORTFALL

Total Cost of Planned Facilities ¹	\$9,052,560
Cost per Person Served	\$1,691
Service Population Growth within the NTFPD (2013-35)	4,870
Total Projected NTFPD Fire Fee Revenue	\$8,235,761
NTFPD Fire Fee Funding Surplus / (Shortfall)	(\$816,799)
Existing NTFPD Fire Fee Fund Balance	\$53,958
NTFPD Fire Fee Revenue Surplus / (Shortfall)	(\$762,842)

¹ Excludes remaining debt service for Station 51 (Tahoe City).

Sources: North Tahoe Fire Protection District; Goodwin Consulting Group, Inc.

VI. PROGRAM IMPLEMENTATION AND ADMINISTRATION

FEE IMPLEMENTATION

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

The NTFPD Fire Fee will need to be approved by the NTFPD Board of Directors and the Placer County Board of Supervisors through a fee resolution or ordinance to adopt the proposed NTFPD Fire Fee. The resolution or ordinance authorizing and establishing the NTFPD Fire Fee will then be adopted by the Placer County Board of Supervisors. Once the last action associated with adopting the NTFPD Fire Fee is completed, it shall become effective sixty days later.

ANNUAL INFLATION UPDATE

The NTFPD Fire Fees may be adjusted in future years to reflect revised facility costs or receipt of funding from alternative sources. In addition to such adjustments, in January of each calendar year, or another date, as designated by the NTFPD, the cost estimates and the NTFPD Fire Fees will also be adjusted by the average increase in the Construction Cost Index (“CCI”) as reported in the *Engineering News Record* magazine for the 12-month period ending November of the previous year. For example, the adjustment for January 2014 will be determined by calculating the increase from November 2012 to November 2013 in the CCI. The resulting increase will be the adjustment factor that will be applied to the NTFPD Fire Fees in January 2014. The increased fees may be adopted through a resolution or ordinance.

FEE STUDY UPDATES

The Fee Study will be subject to periodic update based on changes in developable land, land uses, facilities and land costs, or economic conditions. The NTFPD should periodically review the costs, fees, and account balances to determine if an update to the NTFPD Fire Fee is warranted. During the periodic reviews, the NTFPD may analyze the following items that would impact the NTFPD Fire Fee program:

- Changes to the required fire facilities included in the NTFPD Fire Fee program
- Changes in land costs
- Changes in zoning or density
- Changes in the cost to administer the NTFPD Fire Fee

ADMINISTRATION FEE COMPONENT OF THE NTFPD FIRE FEE

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

ANNUAL AND FIVE-YEAR REPORTING REQUIREMENTS

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

- 1) A brief description of the type of fee in the account or fund
- 2) The amount of the fee
- 3) The beginning and ending balance in the account or fund
- 4) The amount of the fee collected and the interest earned
- 5) An identification of each public improvement for which fees were expended and the amount of expenditures
- 6) An identification of an approximate date by which time construction on the improvement will commence if it is determined that sufficient funds exist to complete the project
- 7) A description of each interfund transfer or loan made from the account and when it will be repaid
- 8) Identification of any refunds made once it is determined that sufficient monies have been collected to fund all fee-related projects

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

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

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

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