

# **FIRE FACILITIES IMPACT FEE STUDY**

## **NEWCASTLE FIRE PROTECTION DISTRICT**

**ADMINISTRATIVE DRAFT**

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# Newcastle Fire Protection District Fire Facilities Impact Fee Study

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## Introduction

This report summarizes an analysis of the need for fire facilities by the Newcastle Fire Protection District (District) to accommodate new development. The report documents a reasonable relationship between new development and an impact fee for funding these new facilities to serve that development.

The District is a rural fire protection district located in Placer County. The District provides a comprehensive range of services including fire suppression, emergency medical services, and fire prevention services.

As with most local agencies, the District's property tax revenue stream has diminished in terms of real dollars over time since the imposition of Proposition 13 in 1978. Consequently, the District must manage its resources carefully to properly serve the projected influx of new residents and businesses to the region.

The District currently has a fire facility impact fee in place, which has not been updated for changes in facility needs and demographic changes in quite some time. The fee needs to be updated to take into account recent growth projections and the facilities needed to serve the future population.

As new development increases the demand for fire protection services, the District will continue to transition from what was a primarily volunteer district towards an increasingly career staffed district. Although this report specifically addresses the need for fire facilities and not staffing (or other on-going operational costs), it is important to consider the need for additional fire facilities in the context of the need for space for career personnel (e.g., sleeping quarters). The District's other funding sources will increasingly be needed to address operational needs.

The District's boundaries encompass only unincorporated areas. Per the *Mitigation Fee Act* contained in *Government Code* Section 66000 *et. seq.*, the County rather than the District has legal authority to impose impact fees in the District's unincorporated area. This report provides the necessary documentation for both the Placer County Board of Supervisors and Newcastle FPD to adopt a fire facilities impact fee for imposition within the District boundaries. It also provides a list of statutory findings pertaining to the imposition of the District fees.

## Fire Facilities Service Population

The District serves homes, businesses and rural agricultural regions in its service area. Demand for the District's services and associated facilities is measured by its service population, or the number of residents and workers within its service area. Service population reasonably represents the need for fire facilities because people requesting medical assistance generate the most calls for service. Structural fire suppression is the second most important mission of the fire department after the protection of life.

**Table 1** provides estimates of the District's total service population in 2014 and 2040. 2014 is the most recent year for which demographic data for the District was available at the time of this study. Total service population is comprised of residents and employees working within the District.

**Table 1: Fire Facilities Service Population**

	A	B	C	$D = A + (B \times C)$
	Residents	Workers	Worker Demand Factor <sup>1</sup>	Service Population <sup>2</sup>
Existing (2014)	4,107	371	0.69	4,400
New Development (2014-2040) <sup>3</sup>	<u>627</u>	<u>57</u>	<u>0.69</u>	<u>600</u>
Total (2040)	4,734	428	0.69	5,000

<sup>1</sup> Workers are weighted at 0.69 of residents based on an survey of worker demand on fire services conducted in the City of Phoenix.

<sup>2</sup> Figures have been rounded.

<sup>3</sup> Future residents based on interpolating historical trends in new housing units. Future workers based on maintaining existing jobs-housing ratio.

Sources: Newcastle Fire Department; Willdan Financial Services.

The estimates of existing residents within the District are based on an analysis of building permit records and an analysis of occupancy density in the region. Average occupancy factors (described below in the occupancy density section) aggregated by type of unit, are multiplied by the number of each type of dwelling unit to estimate the number of existing residents in the District. Future residents are estimated based on an increase of 11 dwelling units per year, the historical average from 2008.

Estimates of existing workers were provided by the California Employment Development Department (EDD) based on a GIS shapefile of the District's boundaries. Future workers are estimated based on maintaining the existing jobs-housing ratio through 2040.

The specific 0.69 per worker weighting used here is derived from an extensive study carried out by planning staff in the County of Phoenix. Data from that study is used to calculate a per capita factor that is independent of land use patterns. It is reasonable to assume that relative demand for fire service between residents and workers does not vary substantially on a per capita basis across communities, enabling the use of this data in other communities in the documentation of a fire facilities impact fee.

The ratio of the worker per capita factor to the resident per capita factor is the worker demand factor shown in **Table 1**.

Using this weighting factor, the total existing service population for the District is estimated at about 4,400 as shown in Table 1. The projected 2040 service population is larger at 5,000. The increase in service population due to new development is approximately 600.

## Land Use Types

To ensure a reasonable relationship between each fee and the type of development paying the fee, the fee schedule distinguishes between different land use types. The land use types that impact fees have been calculated for are defined below.

- ◆ **Single family:** Detached and attached one-unit dwellings.
- ◆ **Multi-family:** All attached multi-family dwellings including duplexes and condominiums.
- ◆ **Commercial:** All commercial, retail, educational, and hotel/motel development.
- ◆ **Office:** All general, professional, and medical office development.
- ◆ **Industrial:** All manufacturing and warehouse development.

- ◆ **Agricultural** – All agricultural building development.

Some developments may include more than one land use type, such as a mixed-use development with both multi-family and commercial uses. In those cases the facilities fee would be calculated separately for each land use type.

The District has the discretion to determine which land use type best reflects a development project's characteristics for purposes of imposing an impact fee and may adjust fees for special or unique uses to reflect the impact characteristics of the use.

## Occupant Densities

All fees in this report are calculated based on dwelling units or building square feet. Occupant density assumptions ensure a reasonable relationship between the size of a development project, the increase in service population associated with the project, and the amount of the fee.

Occupant densities (residents per dwelling unit or workers per building square foot) are the most appropriate characteristics to use for most impact fees. The fee imposed should be based on the land use type that most closely represents the probable occupant density of the development.

The average occupant density factors used in this report are shown in **Table 2**. The residential density factors are based on data for the Newcastle Census Designated Place (CPD) from the US Census' 2008-2012 American Community Survey, Tables B25033 and B25024.

The nonresidential occupancy factors for are based on occupancy factors found in the *Employment Density Study Summary Report*, prepared for the Southern California Association of Governments by The Natelson Company. Though not specific to Newcastle, the Natelson study covered employment density over a wide array of land use and development types, making it reasonable to apply these factors to other areas.

**Table 2: Occupant Density**

<u>Residential</u>		
Dwelling Unit	1.89	Residents per dwelling unit
<u>Nonresidential</u>		
Retail	1.69	Employees per 1,000 square feet
Office	1.61	Employees per 1,000 square feet
Industrial	0.88	Employees per 1,000 square feet
Agricultural	0.75	Employees per 1,000 square feet

Sources: US Census, 2011 American Community Survey, Tables B25033 and B25024; The Natelson Company, Inc., Employment Density Study Summary Report, October 31, 2001; Willdan Financial Services.

## Existing Fire Facilities

The District's inventory of existing and planned fire facilities was used as the basis for calculating the District's facility standard. This standard is used to determine new development's fair share obligation for expanded facilities as growth occurs. The District's existing fire protection facilities described in this section currently serve the entire District.

Tables 3 through 5 provide a detailed inventory of the District's stations, existing apparatus and special equipment. The estimated value of the District's inventory is based on unit cost assumptions. Unit costs reflected in Tables 3, 4 and 5 include the following:

- ◆ **Land cost per acre.** Estimated cost per acre based on data provided by the Newcastle FPD.
- ◆ **Buildings.** Estimated replacement costs provided by the District.
- ◆ **Apparatus/Vehicles.** Estimated replacement cost of apparatus, vehicles and equipment carried on apparatus provided by the District.
- ◆ **Special/Equipment.** Estimated replacement costs provided by the District.

Table 3 highlights the District's existing inventory of land and buildings. The District currently serves the entire service area from one fire station located in Newcastle. No value is shown for the existing station, because it will be replaced with a larger facility. The estimated replacement cost of the facilities is approximately \$120,000.

**Table 3: Existing Fire Station**

	Amount	Unit Cost	Total Cost
<u>Newcastle Fire Station</u>			
Building <sup>1</sup>	5,000 sq. ft.	\$ -	\$ -
Land <sup>1</sup>	0.11 acres	1,091,000	<u>120,000</u>
Total Value - Existing Station			\$ 120,000

<sup>1</sup> No value is shown for the existing station because of the upgrading needed. The station will be replaced by a future station in another location. The costs for the future station are listed in Table 7.

Sources: Newcastle Fire Protection District; Willdan Financial Services.

Table 4 displays the inventory and estimated value of existing apparatus and vehicle cost estimates including the fire fighting, emergency medical, and communications equipment needed to stock each vehicle. In total the District owns approximately \$1.9 million worth of fire protection vehicles and apparatus.



**Table 4: Existing Apparatus and Vehicle Inventory**

Unit	Description	Year	Replacement Cost
<i>Apparatus and Vehicles</i>			
Type III Engine	Westates	1988	\$ 361,000
Type III Engine	Westates	1988	423,000
Type I Engine	Sutphen	1983	150,000
Type I Engine	Seagrave	2004	812,000
Command Vehicle	Ford Expedition	2003	62,000
Utility Vehicle	Dodge 2500 4x4	1999	46,000
Total Value - Apparatus and Vehicles			\$ 1,854,000

<sup>1</sup> Based on estimated replacement cost. Value of older apparatus has been discounted to reflect age and secondary market for fire apparatus.

Sources: Newcastle Fire Protection District; Willdan Financial Services.

**Table 5** provides the inventory of special protective gear, communications equipment, training equipment, and other miscellaneous equipment shared by all stations. Replacement cost estimates were provided by the District for these items.

**Table 5: Newcastle Fire Protection District Equipment Inventory**

Assigned	Description	Total Replacement Value
All	Breathing Apparatus System	\$ 91,000
E-41	Rescue Tools (Rescue Squad)	42,000
St-41	SCBA Air Compressor	54,000
St-41	Extractor	16,000
E-41	Thermal Imaging Cameras	10,000
E-41	Air Bag(s) Rescue System (Rescue Squad)	45,000
All	Structure Protective Gear/Helmets <sup>1</sup>	84,000
All	VHF Digital Trunking Radios (Portable/Mobile)	46,000
All	Automatic Electronic Defibrillator <sup>2</sup>	8,500
E-41	Combustible Gas Detector	2,500
Total - Equipment		\$ 399,000

Note: All values based on current replacement value. Figures have been rounded.

<sup>1</sup> Two per firefighter. Assumes 14 existing firefighters.

<sup>2</sup> Three units.

Sources: Newcastle Fire Protection District, November 2009; Willdan Financial Services.

**Table 6** summarizes the estimated value of the District’s existing inventory of fire facilities, as shown in Tables 3, 4 and 5. The District currently owns the equivalent of approximately \$2.4 million in fire protection facilities, apparatus and equipment to meet the needs of its existing service population.

**Table 6: Estimated Total Value of Existing Inventory**

Category	Value
Station	\$ 120,000
Apparatus	1,854,000
Other Equipment	399,000
Total Value - Existing Inventory	\$ 2,373,000

Sources: Tables 3, 4 and 5; Willdan Financial Services.

## Fire Facilities to Accommodate New Development

Preliminary planning for future fire facilities was also included in the analysis. The purpose of the preliminary facilities planning conducted for this study was to estimate the cost of future facility needs and to estimate if the projected fire impact fee revenues would adequately fund those needs. Presently, the District does not have a master facilities plan, but recognizes that an additional station will be needed in the near future. Should the District, at some time, create a master plan that identifies needed facilities and estimates costs that differ significantly from those estimated here, the impact fee documentation should be updated to reflect the facilities and estimated costs contained in the master plan.

**Table 7** identifies the District's preliminary planned facilities. The District identified fire protection facilities that would be needed to accommodate the magnitude of new residential and commercial development represented by the development projections shown above in Table 1.

Currently the District anticipates needing an expansion to the existing fire station adequately serve new development. The cost assumptions for this are shown in Table 7. The building construction cost estimate was provided by the District.

**Table 7: Planned Fire Facilities**

	Amount	Unit Cost	Total Cost
<u>Newcastle Drive Station</u>			
Building	7,000 sq. ft.	\$ 236	\$ 1,650,000

Sources: Newcastle Fire Protection District; Willdan Financial Services.

## Fire Facility Standards

The fire facilities impact fees calculated in this report are based on an existing facilities standard approach. The existing standard approach calculates the level of investment in facilities needed to maintain the existing level of facilities within the District, as new development adds increases in demand for fire protection facilities. This per capita facility standard is calculated by dividing the total investment in exiting facilities, by the existing service population, and is displayed in **Table 8**.

**Table 8: Fire Protection Facilities Existing Standard**

Value of Existing Facilities	[A]	\$	2,373,000
Existing Service Population	[B]		<u>4,400</u>
Facility Standard per Resident	[C = A / B]	\$	539
Facility Standard per Worker <sup>1</sup>	[D = C x 0.69]		372

<sup>1</sup> Based on a per capita demand factor of 0.69 per worker relative to a resident.

Sources: Tables 1 and 6; Willdan Financial Services.

The allocation of costs for planned facilities to new development within the District is shown in **Table 9**. The bottom line of Table 9 shows that to complete future facilities as currently planned there is a need for \$1.3 million in revenue from non-fee funding sources. To complete the planned facilities that represent an increase in facility standards, the District will need to identify an additional \$1.3 million by the planning horizon.

**Table 9: Projected Impact Fee Revenue - Existing Standard**

Total Cost of Planned Facilities	[A]	\$	1,650,000
Facilities Value per Capita	[B]	\$	539
Service Population Growth (2014 - 2040)	[C]		<u>600</u>
Total Projected Fire Facilities Impact Fee Revenue	[D = B x C]	\$	323,400
Non-Impact Fee Revenue Needed	[E = A - D]	\$	1,326,600

Sources: Tables 1, 7 and 8; Willdan Financial Services.

## Alternative Funding Sources

The District does not anticipate developing any other on-going sources of revenue for capital facilities besides impact fees and existing General Fund revenue. General Fund revenue is derived from the District's share of the constitutionally imposed one percent property tax rate. Any new or increased special tax would require two-thirds voter approval. Any new or increased assessment would require a majority property owner approval. Any new or increased property-related charge or fee would require a majority voter approval.

The District recognizes that non-fee revenues will be needed to fund a portion of the planned facility costs. The District has already begun taking steps to designate alternative funds from other sources in its annual budgeting process.

## Fee Schedule

**Table 10** shows the maximum justified fire protection facilities fee schedule. The cost per capita is

converted to a fee per unit of new development based on dwelling unit and employment densities (persons per dwelling unit or employees per 1,000 square feet of nonresidential building space) from Table 2. The total fee includes a two percent (2%) percent administrative charge to fund costs that include: a standard overhead charge applied for legal, accounting, and administrative support, and fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification analyses.

In Willdan’s experience with impact fee programs, two percent of the base fee adequately covers the cost of fee program administration. The administrative charge is not an impact fee; rather, it is a user fee. It should be reviewed and adjusted during comprehensive impact fee updates to ensure that revenue generated from the charge sufficiently covers, but does not exceed, the administrative costs associated with the fee program.

**Table 10: Fire Protection Facilities Fee - Existing Standard**

Land Use	A	B	C = A x B		D = C x 0.02	E = C + D	F = E / 1,620 or F = E / 1,000
	Cost Per Capita	Density	Base Fee <sup>1</sup>	Admin Charge <sup>1,2</sup>	Total Fee <sup>1</sup>	Fee per Sq. Ft. <sup>3</sup>	
<i>Residential</i>							
Dwelling Unit	\$ 539	1.89	\$ 1,019	\$ 20	\$ 1,039	\$ 0.64	
<i>Nonresidential</i>							
Commercial	\$ 372	1.69	\$ 629	\$ 13	\$ 642	\$ 0.64	
Office	372	1.61	599	12	611	0.61	
Industrial	372	0.88	327	7	334	0.33	
Agricultural	372	0.75	279	6	285	0.29	

<sup>1</sup> Persons per dwelling unit or per 1,000 square feet of nonresidential.

<sup>2</sup> Administrative charge of 2.0 percent for (1) legal, accounting, and other administrative support and (2) impact fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification analyses.

<sup>3</sup> Assumes average of 1,620 square feet per dwelling unit.

Sources: Tables 2 and 8; Newcastle FPD; Willdan Financial Services.

## Program Implementation

The fire facilities impact fee would be collected at time of building permit issuance. Because the District does not have the statutory authority to adopt a fee, it must rely on the County Board of Supervisors and the Newcastle City Council for the authority. In addition, to implement the fee the District, in cooperation with the City and the County, should:

- Seek to acquire the necessary property for new stations through purchase or dedication and maintain an updated master plan indicating fire facility standards and the types of facilities anticipated to accommodate growth;
- Identify funding sources to complement impact fee revenues to fully fund planned facilities;
- Maintain an annual Capital Improvement Program budget or another accounting mechanism to indicate where fees are being expended to accommodate growth;
- Maintain records on use of the administrative charge to justify the amount;
- Comply with the annual and five-year reporting requirements of *Government Code* Section

66001 and 66006; and

- Identify appropriate inflation indexes in the fee ordinance and allow an automatic inflation adjustment to the fee annually.

For inflation indexes, the District may wish to rely on the cost of living index used by the City of Newcastle for fee inflation. Typically, an inflation index can be based on the District's recent capital project experience or from any reputable published source, such as the Consumer Price Index or the Engineering News Record.

The District may also elect use separate indexes for land and construction. Calculating the land index may require use of a property appraiser every several years. To calculate the fee increase, total planned facility costs represented by land or construction, as appropriate, should weight each index.

## Mitigation Fee Act Findings

To guide the widespread imposition of development impact fees, the State Legislature adopted the *Mitigation Fee Act* (the *Act*) with Assembly Bill 1600 in 1988 and subsequent amendments. The *Act* is contained in *California Government Code* Section 66000 *et seq.* and establishes requirements for the imposition and administration of impact fee programs. The *Act* became law in January 1988 and requires local governments to document the five findings explained in the sections below when adopting an impact fee. For the fire facilities impact fee to be adopted by the County of Placer (County) on behalf of the Newcastle Fire Protection District, the findings are summarized here and supported in detail by the report that follows. All statutory references are to the *Act*.

### Purpose of Fee

For the first finding the County must:

*Identify the purpose of the fee. (§66001(a)(1))*

The purpose of the Newcastle Fire Protection District fire facilities impact fee is to provide a funding source from new development for capital improvements to serve that development. The fee advances a legitimate interest of the District and County by assuring that new development within the County is provided with adequate fire protection facilities and services.

### Use of Fee Revenues

For the second finding the County must:

*Identify the use to which the fee is to be put. If the use is financing public facilities, the facilities shall be identified. That identification may, but need not, be made by reference to a capital improvement plan as specified in Section 65403 or 66002, may be made in applicable general or specific plan requirements, or may be made in other public documents that identify the public facilities for which the fee is charged. (§66001(a)(2))*

The fire facilities impact fee will fund expanded facilities to serve new development. All planned facilities will be located within the Newcastle Fire Protection District boundaries:

- Land for fire station and other related structures;
- Fire stations including furniture and other equipment;
- Fire apparatus including equipped engines and other vehicles;
- Medical response, hazardous materials, training, and other specialized fire fighting equipment.
- Potential financing costs associated with the above.

Planned fire facilities are preliminarily identified in this report. Additional planning may be provided in the District's capital improvement plan and annual budgets. This report provides a preliminary description and cost estimate for planned facilities. Other planning documents may provide additional

details and proposed timing for construction/acquisition of the facility.

## Benefit Relationship

For the third finding the County must:

*Determine how there is a reasonable relationship between the fee's use and the type of development project on which the fee is imposed. (§66001(a)(3))*

The District will restrict fee revenues to the acquisition of land, construction of public buildings, and the purchase of related equipment, furnishings, vehicles, and services that will serve new development and the additional residents and workers associated with that new development as part of a district-wide network of fire protection facilities and services. Thus, there is a reasonable relationship between the use of fee revenues and the residential and nonresidential types of new development that will pay the fee.

## Burden Relationship

For the fourth finding the County must:

*Determine how there is a reasonable relationship between the need for the public facility and the type of development project on which the fee is imposed. (§66001(a)(4))*

Service population provides an indicator of the demand for the facilities needed to accommodate growth. Service population is calculated based on residents associated with residential development and employment associated with nonresidential development. To calculate a single per capita standard, one worker is weighted less than one resident based on an analysis of the relative demand for fire facilities by land use type.

The need for the fee is based on the facility standards identified in this report and the growth in district-wide service population projected through 2040. Facilities standards represent the level of service that the District plans to provide its residents and businesses in 2040. Standards are based on the District's total existing and planned facilities allocated across the District's total service population in 2040.

See the *Fire Facilities Service Population* section, for a description of how service population and growth projections are calculated. Facility standards are described in the *Fire Facility Standards* section.

## Proportionality

For the fifth finding the County must:

*Determine how there is 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. (§66001(b))*

This reasonable relationship between the fire facility impact fee for a specific development project and the cost of the facilities attributable to that project is based on the estimated size of the service population that the project will accommodate. The total fee for a specific project is based on its size as measured by dwelling units or building square feet. The fee schedule converts the estimated service population that a development project will accommodate into a fee based on the size of the project. Larger projects of a certain land use type will have a higher service population and pay a higher fee than smaller projects of the same land use type. Thus, the fee schedule ensures a reasonable relationship between the public facility fee for a specific development project and the cost of the facilities attributable to that project.

See the *Fee Schedule* section for a description of how service population is determined for different types of land uses. The *Fee Schedule* section also presents the fire facilities impact fee schedule.