

# DURANGO FIRE PROTECTION DISTRICT

## IMPACT FEE SUPPORT STUDY

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Prepared for the Durango Fire Protection District

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Durango, Colorado



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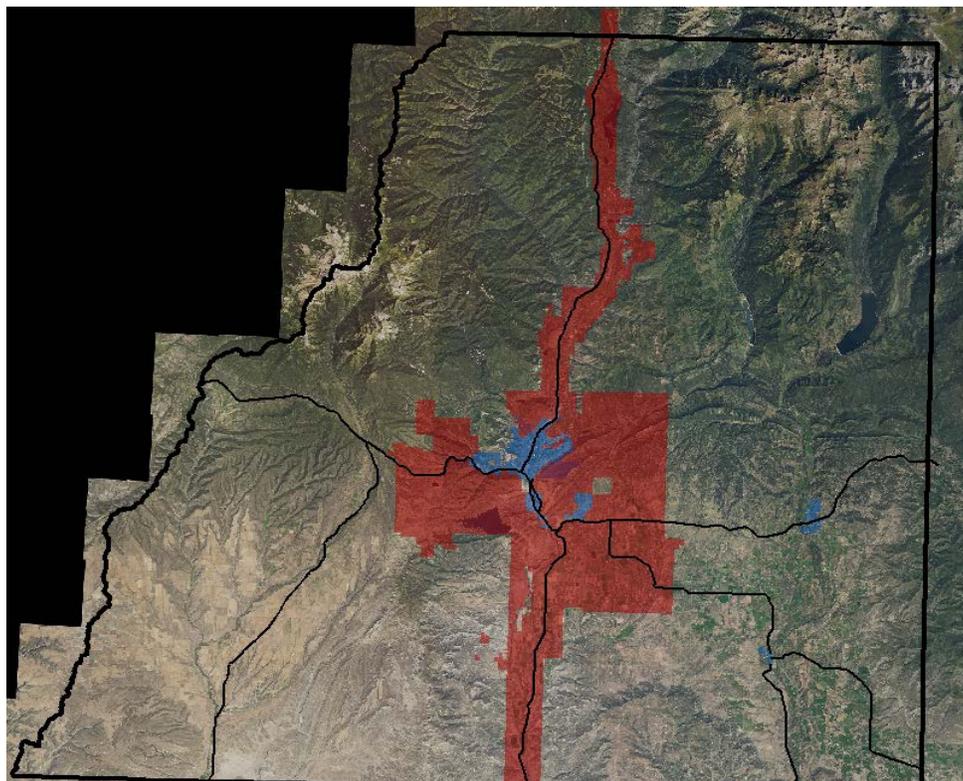


## INTRODUCTION

The Durango Fire Protection District (DFPD) provides fire protection, emergency medical service (EMS), hazardous material mitigation, prevention, and public education. The DFPD boundaries encompass the City of Durango and the surrounding unincorporated lands and extends along US Highway 550 and the Animas Valley from the New Mexico State line northward to the southern portion of San Juan County. Operational funding for the district comes from an annual 5.7 mill levy charged to property owners in the unincorporated portions of the district and from a contract with the City of Durango for the dollar equivalent of a 5.7 mill levy on property within the city boundaries. Currently, the only revenues that are dedicated or ‘earmarked’ for district capital outlay are those collected via impact fees negotiated in development agreements with Three Springs, Edgemont Ranch, Purgatory Metro District, and Twin Buttes.

As development in DFPD boundaries occurs, demand for fire protection services increases, ultimately necessitating a proportionate capital investment in district stations, support facilities and rolling stock. This report summarizes the steps for calculating the district-wide impact fee schedule that represents future development’s fair share of the cost of capital facilities needed to provide fire protection district services that will accommodate future growth. The impact fees are not calculated to remedy any deficiency in capital facilities that currently exists.

**Figure 1. DFPD Boundaries and City of Durango**



## METHODOLOGY

**Demand Units** – Demand for DFPD services is generated by housing units, businesses and institutions. Demand units are expressed as existing and projected residential units and non-residential square footage (summarized as 1,000s of square feet of floor area). The need for a fire district impact fee on development arises from an increase in demand for services (measured in service calls) that is roughly proportionate to the growth in additional housing units and non-residential floor area.

**Proportionate Share** – Capital costs are assigned proportionately to the demand generated by the residential and non-residential development sectors. The proportionate share calculation apportions demand according to DFPD call data sorted by the type of land use from which the call originated. Calls for traffic accidents and other traffic related incidents were assigned to the residential and non-residential sectors according to the traffic generated by each sector within the district boundaries.

**Capital Improvement Plan** – A district prepared capital improvement plan (CIP) provides the cost basis for the impact fee. The CIP is composed of future station and support facility improvements and future rolling stock purchases. CIP components are divided into three tiers based on the type of capital investment and on when the capital improvements will be needed. To calculate the impact fee, the “Entire CIP” is reduced to the “Impact Fee CIP” which is composed of future capital costs that are solely attributable to future residential and non-residential development.

**Fee Schedule** – The final fee schedule incorporates the CIP, proportionate share, and demand unit projections to calculate the per residential unit and per non-residential square foot impact fee. The fee schedule reflects only those fees necessary to defray the cost of capital projects required to facilitate service for new growth. The fees do not reflect any capital costs to compensate for existing capital needs. Capital projects associated with existing demand are funded through revenue streams separate from the impact fee program.



## SUMMARY OF FINDINGS

**Historic Growth:** Between 1996 and 2015 the Durango Fire Protection District (DFPD) boundaries gained an average of 243 residential units per year and 133,000 square feet of non-residential development per year.

**Projected Growth and Demand for DFPD Services:** A linear projection of these past growth trends shows that over a 20 year planning period the DFPD can expect to gain an additional 4,860 residential units and 2,660,000 square feet of non-residential development. Over a 30 year planning period the DFPD can expect to gain an additional 7,290 residential units and 3,990,000 square feet of non-residential development. Between 2011 and 2015 DFPD's call volume increased from 3,578 to 4,702. Call volumes are increasing at roughly the same rate the district is growing because a growing population and increased commercial activity drives demand for DFPD services.

**Proportionate Share:** DFPD call data shows that residential development generates 54% of demand for DFPD service and non-residential development generates 46% of demand for DFPD service.

**Capital Improvement Plan:** DFPD's capital improvements plan categorizes station improvements and vehicle purchases into three tiers based on type and timing. Tier 1 (occurring in 0-5 years) is composed of \$19.9 million in capital projects, tier 2 (occurring in 5-10 years) includes \$10.1 million in capital improvements and tier 3 (timeframe greater than 10 years) includes \$22.9 million in replacement of aging capital assets. The Entire CIP includes \$53 million in planned capital improvements and asset replacement. The \$53 million Entire CIP is reduced to the \$9.7 million Impact Fee CIP that isolates future capital costs solely attributable to demand from future residential and non-residential development.

**Authority:** Impact fees for fire protection and emergency services are authorized by statute. As required by C.R.S. 29-20-104.5, this study quantifies the reasonable impacts of future development on existing capital facilities and established an impact fee at a level which is not more than required to defray the impacts attributable to future development.

**Impact Fee:** The district wide impact fee for a new residential unit is \$988 and \$1.44 per non-residential square foot of floor area or \$1,440 per 1,000 square feet of non-residential floor area..



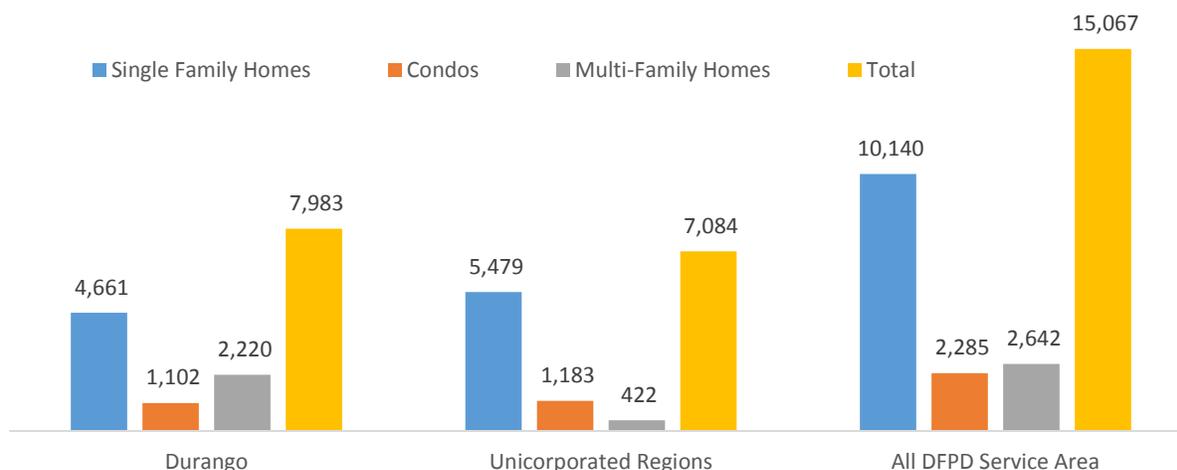
## RESIDENTIAL AND NON-RESIDENTIAL DEMAND UNITS

The district encompasses three jurisdictions: City of Durango, and portions of La Plata County and San Juan County. The La Plata County and San Juan County Assessor’s databases are the most complete and accurate data sources for establishing a current inventory and growth rate for residential units and non-residential square footage in the district. The county assessor databases detail the number of residential units and the size and type of commercial structures located on each parcel or lot throughout the district. Additionally, the assessor databases contain the ‘year built’ of each structure for calculating growth rates for each development type.

### Residential Demand Units

Single family homes account for 10,140 or 67% of total residential demand units, making them the most common residential type in the district followed by multi-family residential units (18%) and condominiums (15%). Fifty-three percent (53%) of the district’s total residential demand units are concentrated in the City of Durango, while the remaining 47% are dispersed throughout the unincorporated areas of the district. Condominiums units are almost evenly split with 48% located in Durango and 52% located in the unincorporated areas of the district, while the majority of multi-family units (84%) are located within the city. Many of the condominiums in the unincorporated part of the district are clustered in the Purgatory Resort area.

**Figure 2. Residential Demand Units - La Plata and San Juan County Assessors**

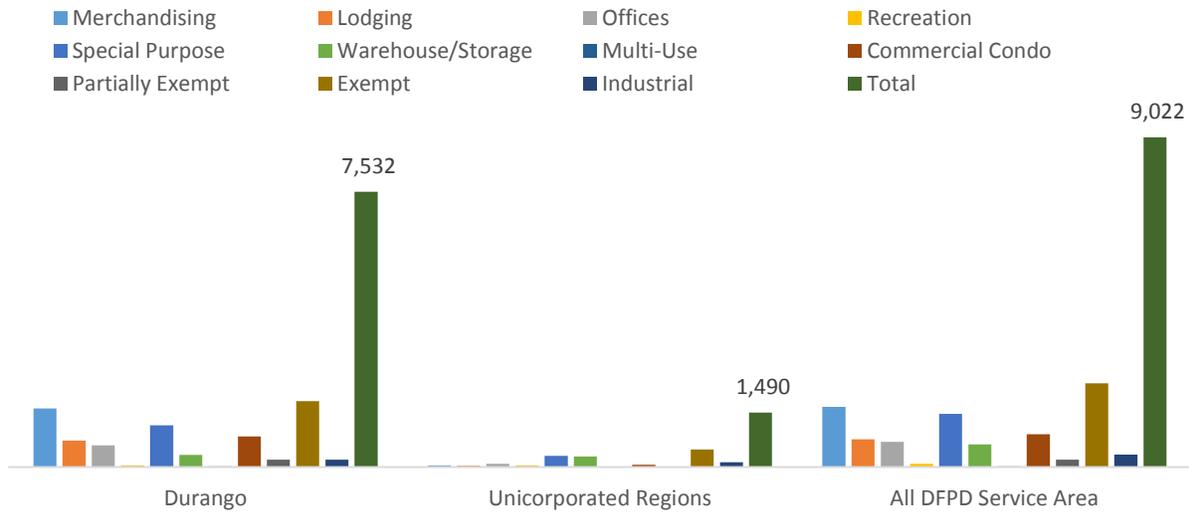


### Non-Residential Demand Units

The district includes a significant inventory of non-residential development. Eighty-three percent (83%) or 7,532,000 sq. ft. of non-residential floor area is located in the City of Durango. The remaining 17% of non-residential floor area (1,490,000 sq. ft.) is in the unincorporated areas of the district with the highest concentration at Purgatory Resort.

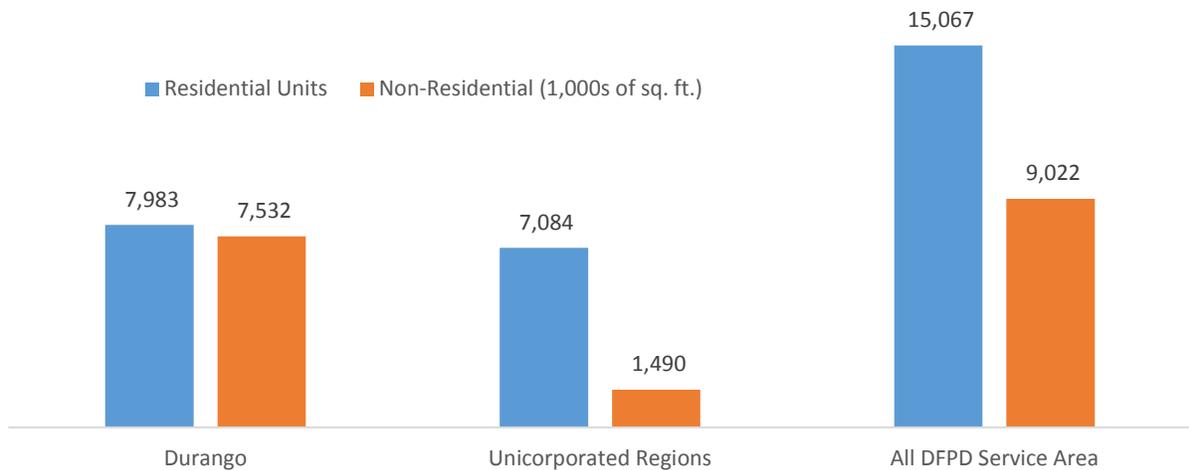


**Figure 3. Non-Residential Demand (1,000s of Square Feet) - La Plata and San Juan County Assessors**



In total, there are 15,067 residential units and 9,022,000 sq. ft. of non-residential floor areas in the Durango Fire Protection District.

**Figure 4. Existing Residential and Non-Residential Demand Units - La Plata and San Juan County Assessors**

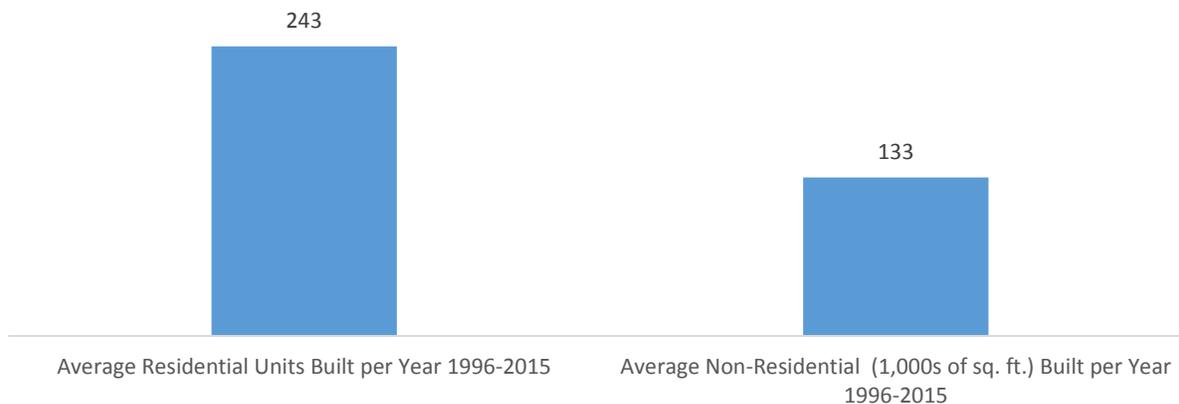


**Growth Trends**

According to analysis of county assessor data, 133,000 sq. ft. of non-residential floor area and 243 residential units were constructed on average per year over a 20 year period from 1996 through 2015. The past twenty years have included multiple economic cycles including growth periods and recessions.

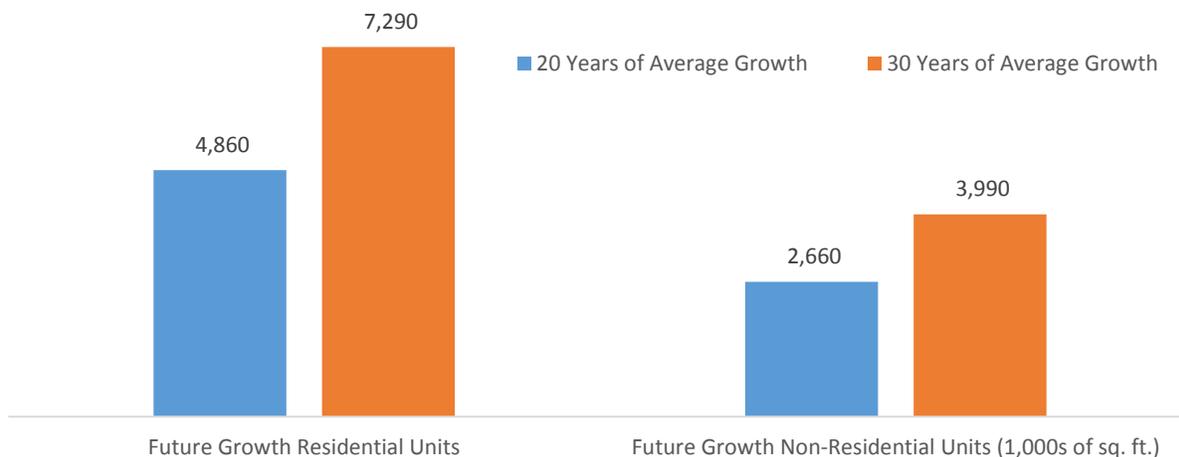


**Figure 5. Average Residential Units and Non-Residential Floor Area Built per Year in DFPD - La Plata and San Juan County Assessors**



Assuming that historic growth rates will continue, there will be an additional 4,860 residential units built and 2,660,000 sq. ft. of non-residential floor area built during the next 20 years in the fire district. Over a 30 year period, growth projections call for an additional 7,290 residential units and 3,990,000 sq. ft. of non-residential floor area.

**Figure 6. Residential and Non-Residential Growth Projections**



**Fire District Service Call Volume and Growth Trends**

Demand for district services is largely driven by residential and non-residential structures and the activity that structures and their occupants generate. The district experienced an increase in the total number of calls received as population and employment grew in La Plata County. Population growth is accommodated in new residential units and employment growth is accommodated in new non-residential structures. This observable relationship between growth, development and the increasing demand for fire protection district services demonstrates the need for an impact fee that assigns future growth its fair



share of the district’s capital costs. The portion of capital costs to be funded with impact fees represents the growth-related capital costs not the costs needed to remedy any existing deficiencies.

**Table 1. Call Volume and Growth - DFPD, Colorado Department of Local Affairs**

	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Call Volume	3,578	3,836	4,134	4,409	4,702
Durango Population	17,011	17,246	17,676	17,818	18,087*
Unincorporated Population	31,783	32,056	32,529	32,947	33,335*
La Plata County Employment	31,335	31,856	32,616	33,052	33,624*

\*2015 demographic indicators based on estimates

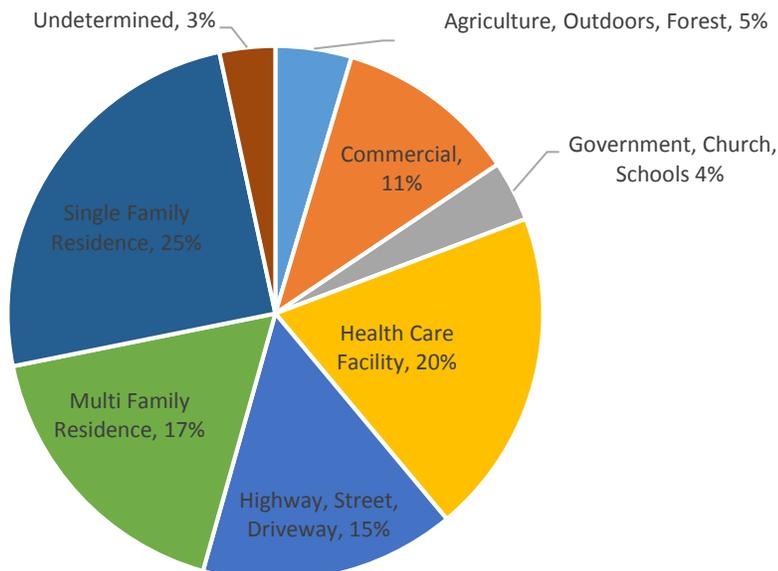


## PROPORTIONATE SHARE

Residential and non-residential land uses each generate a quantifiable share of the demand for district services. The proportionate share calculation apportions the demand for service to the residential and non-residential sectors.

Calls data for 2015 shows that calls for service at single family residences were the most common type of call and accounted for 25% of total calls. Calls for service at health care facilities accounted for 20% of total calls making it the second most common type of call followed by multi-family residences (17%) and calls to highways, streets, and driveways (15%).

**Figure 7. 2015 Call Data by Land Use Type - DFPD Call Data**



The type of call determines whether it gets assigned to the residential or non-residential land uses. Calls assigned to residential land uses include calls to single family and multi-family residences and a portion of calls to highways, streets, and driveways. Calls assigned to non-residential land uses include calls to commercial, health care facilities, government, churches, schools, and a portion of calls to highways, streets and driveways. Calls for service on highways, streets, and driveways were split between the residential and non-residential land uses according to the total volume of traffic generated by each in the district. External influences such as calls for service on agricultural or public land, and undetermined calls are not directly attributable to development and are not included in the impact fee. The proportionate share analysis shows that residential units generate 54% of demand for district service and non-residential land uses generate 46% of demand for district service.



Figure 8. Call Data and Proportionate Share - DFPD Call Data

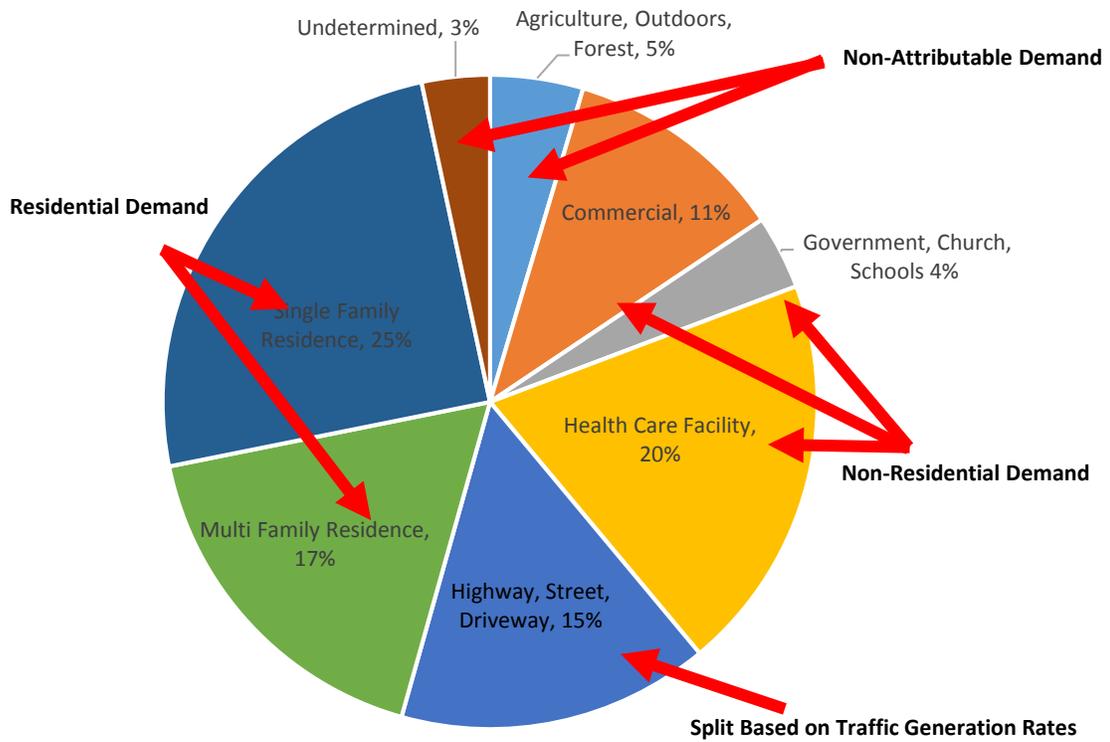
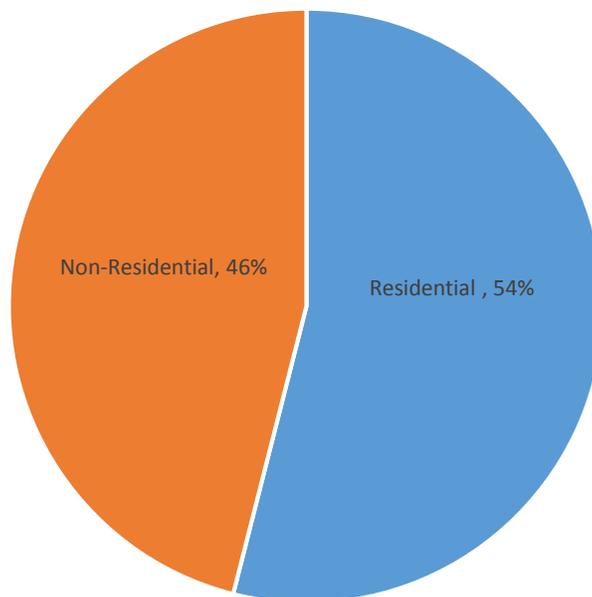


Figure 9. Proportionate Share - DFPD Call Data



## ENTIRE CAPITAL IMPROVEMENT PLAN

In order to maintain its level of service, the district conducts careful capital improvements planning. The district uses a three-tiered classification system for capital needs. The Entire Capital Improvement Plan (CIP) is composed of station improvements and rolling stock purchases. This section displays the entire CIP for the district, the next section of the report (Impact Fee CIP) calculates the portion of the capital improvements plan that is attributable to future residential and non-residential development in the district.

### TIER 1

Tier 1 is composed of near-term station improvements, station expansion, new stations, support facility construction and rolling stock replacement. Tier 1 capital projects are expected to occur within the next 5 years and are expected to last for 20 years. Station costs for this tier are based on construction costs prepared by the district. Tier 1 station projects include construction and relocation of Station 2, rebuild and expansion of Station 3, reconstruction/relocation of Station 7 and the construction of a new training facility. Tier 1 rolling stock costs are based on district estimates of current prices for engines, structural engines, water tenders, ambulance and rescue vehicles, ladder trucks, brush trucks, staff vehicles, and trailers.

### TIER 2

Tier 2 is composed of projects expected to occur in the next 5 to 10 years. Tier 2 relies on a 30-year planning horizon because the projects are expected to occur in the next 5 to 10 years, meaning their useful life will likely end 30 years from implementation of the impact fee. Station costs and rolling stock costs are estimates developed by the district. As with capital projects in tier 1, tier 2 capital projects have an assumed useful life of 20 years once implemented. Tier 2 station projects include expansion and redevelopment of Stations 4 and 8, and the consolidation of stations 12 and 14 to a new location near the Glacier Club. The combination of stations 12 and 14 and relocation to the Glacier Club area will provide better overall service coverage of that portion of the Animas Valley.

### TIER 3

Tier 3 includes long-term capital needs and are tied to a 20-year planning horizon. Tier 3 station values are based on the current insured value and rolling stock costs are based on values determined by DFPD and DFPD's insurance company.



**Table 2. Entire Station Capital Improvements Plan**

	CIP Tier	Current Insured Value	Planned Costs
Station 1	3	\$4,883,345	
Station 2	1		\$7,200,000
Station 3	1		\$3,500,000
Station 4	2		\$1,800,000
Station 5	3	\$349,107	
Station 6	3	\$1,508,553	
Station 7	1		\$3,500,000
Station 8	2		\$1,800,000
Station 9	3	\$349,107	
Station 10	3	\$220,511	
Station 11	3	\$848,485	
Station 12			
Station 13	3	\$349,107	
Station 14			
Station 15	3	\$2,327,063	
Station 16	3	\$754,344	
Administrative Building	3	\$1,539,366	
Training Facility	1		\$1,500,000
Station 12 & 14 Consolidation	2		\$1,800,000

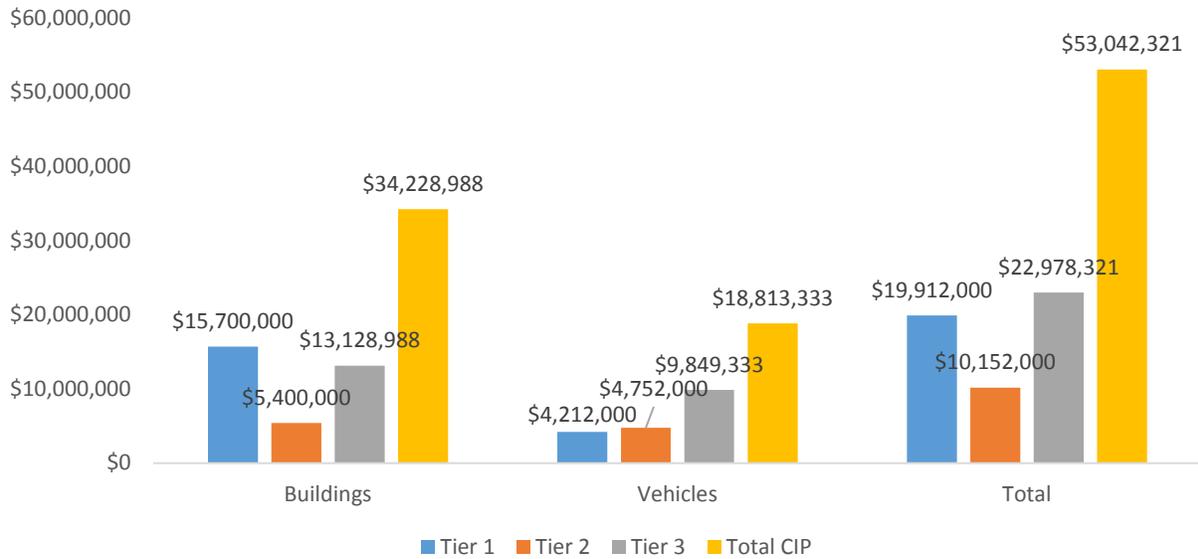
**Table 3. Entire Capital Improvements Rolling Stock Plan**

	Tier 1	Tier 2	Tier 3	Total
Structural Engines	\$1,500,000	\$1,500,000	\$4,900,000	\$7,900,000
Water Tenders	\$600,000	\$900,000	\$1,100,000	\$2,600,000
Ambulance and Rescues	\$660,000	\$660,000	\$577,670	\$1,897,670
Ladder Trucks	\$1,100,000	\$1,100,000	\$1,400,000	\$3,600,000
Brush Trucks	\$120,000	\$360,000	\$1,320,000	\$1,800,000
Staff Vehicles and Trailers	\$232,000	\$232,000	\$551,662.64	\$1,015,663
Total	\$4,212,000	\$4,752,000	\$9,849,333	\$18,813,333

Tier 1 includes \$19.9 million of capital costs, Tier 2 includes \$10.1 million of capital costs and Tier 3 includes \$22.9 million in capital costs. In total, the CIP contains \$53 million worth of capital costs.



**Figure 10. Entire CIP Summary**



## IMPACT FEE CAPITAL IMPROVEMENTS PLAN

The Entire CIP listed above includes more costs than those that are attributable to future growth. This section of the analysis isolates the portion of the district’s capital improvements plan costs that are necessary to defray the impacts caused by new development.

### Tier 1 Adjusted CIP

DFPD determined that \$15.5 million of Tier 1 \$19.9 million costs are projects that will meet existing capital need and will be paid for entirely by non-impact fee revenues and are therefore not included in impact fee calculations.

**Table 4. Tier 1 Adjusted CIP**

Full Tier 1 CIP	\$19,912,000
Tier 1 CIP Meeting Current Need	<u>\$15,464,624</u>
Adjusted Tier 1 CIP	\$4,447,376

### Impact Fee Capital Improvements Plan

The Impact Fee Capital Improvements Plan represents the cost of capital improvements attributed to demand generated by future residential and non-residential development in the district. To determine the Impact Fee CIP, the cost of capital improvements generated



by future residential and non-residential development must be isolated out of the Entire CIP.

The first step of calculating the impact fee CIP is to multiply the proportionate share by the entire CIP to allocate the demand between the residential and non-residential sectors according to service call volumes (see section entitled Proportionate Share). The product is then multiplied by the percent of the entire CIP cost attributable to future growth. The district determined that 24% of entire CIP costs are attributable to future residential growth for tiers 1 and 3 (20-year horizon) and that 23% of the entire costs are attributable to future non-residential growth. Similarly, the district determined that 33% CIP tier 2 costs (30-year horizon) are attributable to future residential growth and 31% are attributable to non-residential growth.

Calculation of the impact fee CIP is described by the following equations for residential and non-residential development:

$$\text{residential impact fee CIP} = (\text{entire CIP cost by tier}) \times (\text{residential proportionate share}) \times (\% \text{ of entire CIP attributable to future residential growth by tier})$$

$$\text{non-residential impact fee CIP} = (\text{entire CIP cost by tier}) \times (\text{non-residential proportionate share}) \times (\% \text{ of entire CIP attributable to future non-residential growth by tier})$$

**Table 5. Impact Fee CIP**

<b>CIP Tier and Plan Horizon</b>	<b>Entire CIP</b>	<b>Residential Proportionate Share</b>	<b>% of CIP Attributable to Future Residential Growth</b>	<b>Impact Fee CIP</b>
Tier 1 (20-year horizon)	\$4,447,376	54%	24%	\$585,337
Tier 2 (30-year horizon)	\$10,152,000	54%	33%	\$1,786,378
Tier 3 (20-year horizon)	\$22,978,321	54%	24%	\$3,024,269
Total Impact Fee CIP	\$37,577,697			\$5,395,984
<b>CIP Tier and Plan Horizon</b>	<b>Entire CIP</b>	<b>Non-Residential Proportionate Share</b>	<b>% of CIP Attributable to Future Non-Residential Growth</b>	<b>Impact Fee CIP</b>
Tier 1 (20-year horizon)	\$4,447,376	46%	23%	\$466,200
Tier 2 (30-year horizon)	\$10,152,000	46%	31%	\$1,433,122
Tier 3 (20-year horizon)	\$22,978,321	46%	23%	\$2,408,722
Total Impact Fee CIP	\$37,577,697			\$4,308,044

Note: Percentages in Table 5 are presented as rounded to nearest percent and do not show all of the decimal points utilized in the impact fee CIP calculations.



## DFPD IMPACT FEE

The impact fee is calculated by dividing the dollar amount of the Impact Fee CIP for each tier by the projected future residential dwelling units or projected non-residential floor area at the respective 20 or 30-year CIP planning horizons—when all CIP investments are projected to reach full capacity.

The Impact Fee Structure (Table 6) shows the per residential dwelling unit and per 1,000 square feet of non-residential floor area costs for each CIP tier and the total impact fee per land use type for all three CIP tiers.

**Table 6. Impact Fee Structure**

<b>CIP Tier and Plan Horizon</b>	<b>Impact Fee CIP</b>	<b>Projected Residential Units</b>	<b>Fee per Residential Unit</b>
Tier 1 (20-year horizon)	\$585,337	4,860	\$120
Tier 2 (30-year horizon)	\$1,786,378	7,290	\$245
Tier 3 (20-year horizon)	\$3,024,269	4,860	\$622
<b>Total</b>	<b>\$5,395,984</b>		<b>\$988</b>
<b>CIP Tier and Plan Horizon</b>	<b>Impact Fee CIP</b>	<b>Projected 1000s Sq.Ft. Non-Residential Floor Area</b>	<b>Fee per 1000 sq. ft. Floor Area</b>
Tier 1 (20-year horizon)	\$466,200	2,660	\$175
Tier 2 (30-year horizon)	\$1,433,122	3,990	\$359
Tier 3 (20-year horizon)	\$2,408,722	2,660	\$906
<b>Total</b>	<b>\$4,308,044</b>		<b>\$1,440</b>

Note: Dollars in Table 6 are presented as rounded to nearest dollar and do not show all of the decimal points utilized in the impact fee calculations. The impact fees are to be collected at the whole dollar amount listed.

The Durango Fire Protection District impact fee is \$988 per residential unit and \$1.44 per square foot of enclosed non-residential floor area or \$1,440 per 1,000 square feet of enclosed non-residential floor area.

**Table 7. Durango Fire Protection District Impact Fee Schedule**

Residential (Residential Units)	\$988
Non-Residential (1000s Sq. Ft. Enclosed Floor Area)	\$1440
Non-Residential (1 Sq. Ft. Enclosed Floor Area)	\$1.44



## FEE MAINTENANCE AND ADMINISTRATION

**Revenue Accounting:** All revenue received from the impact fees should be sequestered in interest bearing accounts and used for projects identified in the CIP contained in this study.

**Fee Updates:** The consulting team recommends periodic updates and revisions to the impact fee. The impact fee should be updated every two years to account for inflation in construction costs and rolling stock purchases. McGraw Hill provides a reliable and industry appropriate construction inflation index and the Denver-Boulder CPI provides a reliable inflation factor for rolling stock. Inflation should be applied as an annual percentage increase to the impact fee to ensure that the impact fee reflects the real dollar capital costs. About every five to seven years, the district should update the CIP and conduct an impact fee support study update to ensure that the impact fee is tied to a current CIP, is based on updated growth trends and projections, and is adequate to cover future development's fair share of capital costs.

