

# DURANGO FIRE PROTECTION DISTRICT

## IMPACT FEE SUPPORT STUDY

JANUARY 2017

Prepared for the Durango Fire Protection District

RPI Consulting LLC

Durango, Colorado



# TABLE OF CONTENTS

Summary of Findings	3
Introduction	3
Methodology	5
Residential and Non-Residential Demand Units	5
Demonstration of Need	8
Proportionate Share	9
Capital Improvement Plan	11
Fee Structure	13
Durango Fire Protection District Impact Fee Schedule	15
Capital Planning and Cash Flow	16
Fee Maintenance and Administration	16

## List of Figures

Figure 1. DFPD Boundaries and City of Durango	4
Figure 2. Residential Demand Units	6
Figure 3. Non-Residential Demand (1,000s of Square Feet)	6
Figure 4. Existing Residential and Non-Residential Demand Units	7
Figure 5. Average Residential Units and Non-Residential Floor Area Built per Year	7
Figure 6. Residential and Non-Residential Growth Projections	8
Figure 7. 2015 Call Data by Land Use Type	9
Figure 8. Call Data and Proportionate Share	10
Figure 9. Proportionate Share	10
Figure 10. CIP Summary	13

## List of Tables

Table 1. Call Volume and Growth - DFPD, Colorado Department of Local Affairs	8
Table 2. Station Plan - Insured Value and Planned Costs - DFPD Capital Plan	12
Table 3. Vehicle Plan – Agreed Value and Replacement Costs – DFPD Capital Plan	12
Table 4. Existing Capital Need Project Adjustment	14
Table 5. Fee Structure	14
Table 6. Durango Fire Protection District Impact Fee Schedule	15
Table 7. Capital Planning Breakdown	16



## 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:** 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.

**Demonstration of Need:** Between 2011 and 2015 DFPD's call volume increased from 3,578 to 4,702. Between 2011 and 2015 call volume increased at an average annual rate of just over 7%. During the same time period, the population in La Plata County as a whole increased by 5% while employment increased by 6%. 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 improvements into three tiers based on priority. 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 total CIP includes \$53 million in planned capital improvements and asset replacement.

**Fee Structure:** The district wide impact fee for a new residential unit is \$1,183 and \$1.72 per non-residential square foot of floor area or \$1,720 per 1,000 square feet of non-residential floor area.

## INTRODUCTION

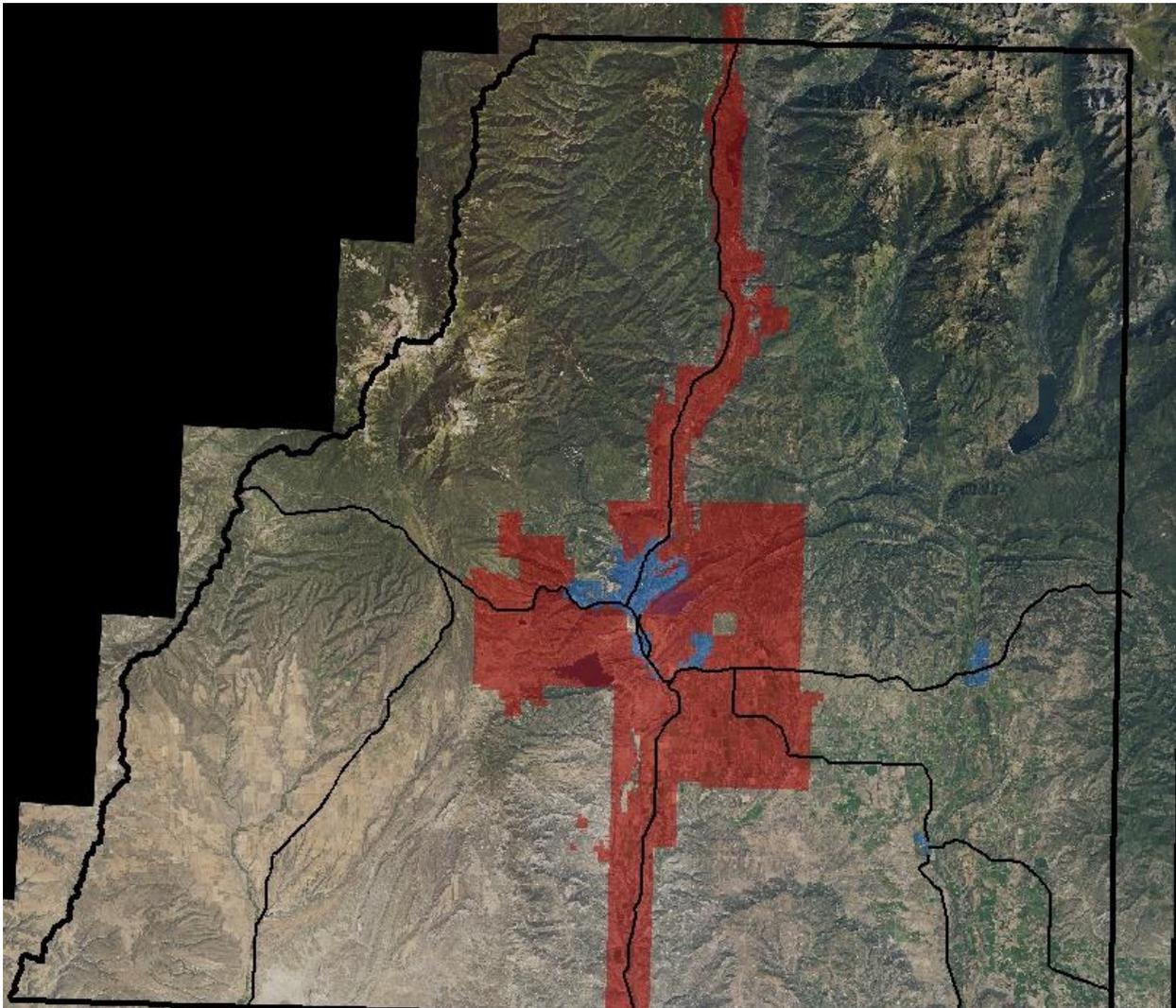
The Durango Fire Protection District (DFPD) provides fire protection, emergency medical service (EMS), hazardous material mitigation, prevention, and public education. The DFPD boundaries encompass the City of Durango and the surrounding unincorporated lands and extends along US Highway 550 and the Animas 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.

**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).

**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 calls 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.

**Demonstration of Need** – The need for a fire district impact fee on development is demonstrated by an increase in demand for services that is proportionate to the growth in additional population, housing units and non-residential floor area. In the DFPD, call volumes are increasing at roughly the same rate the district is growing because a growing population and increased commercial and institutional activity drives demand for DFPD services.

**Capital Improvement Plan** – A district prepared capital improvement plan (CIP) provides the cost basis for the impact fee. The CIP is composed of station and support facility improvements and rolling stock purchases. CIP components are divided into three tiers based on the timeframe of when the capital improvements will be needed.

**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.

## 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.

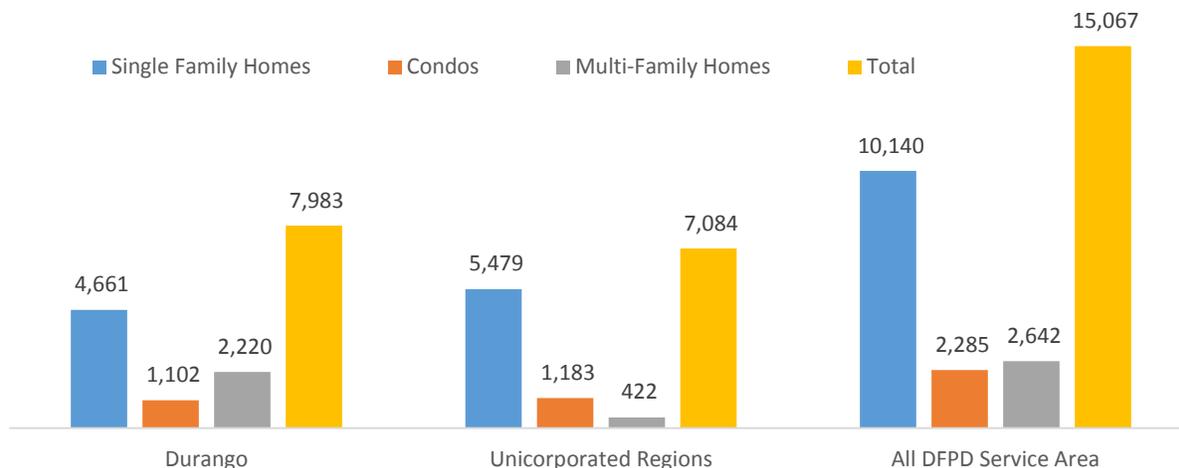
### Residential Demand Units

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.

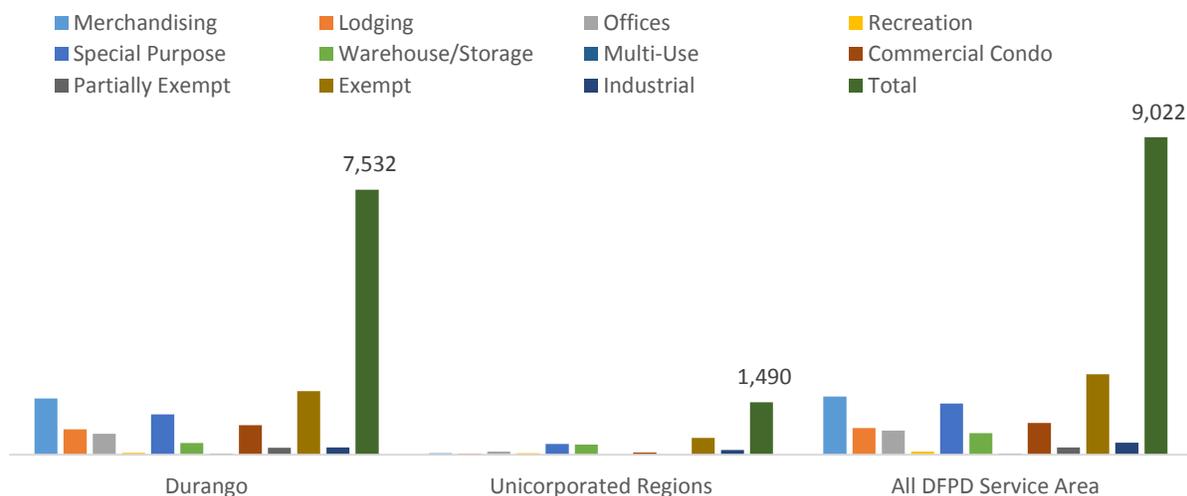
**Figure 2. Residential Demand Units - La Plata and San Juan County Assessors**



### 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.

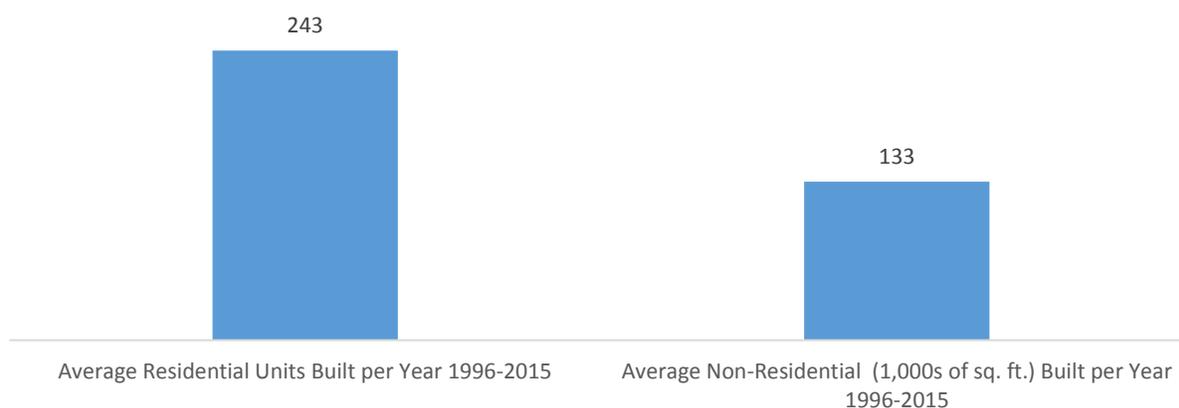
**Figure 4. Existing Residential and Non-Residential Demand Units - La Plata and San Juan County Assessors**



### 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.

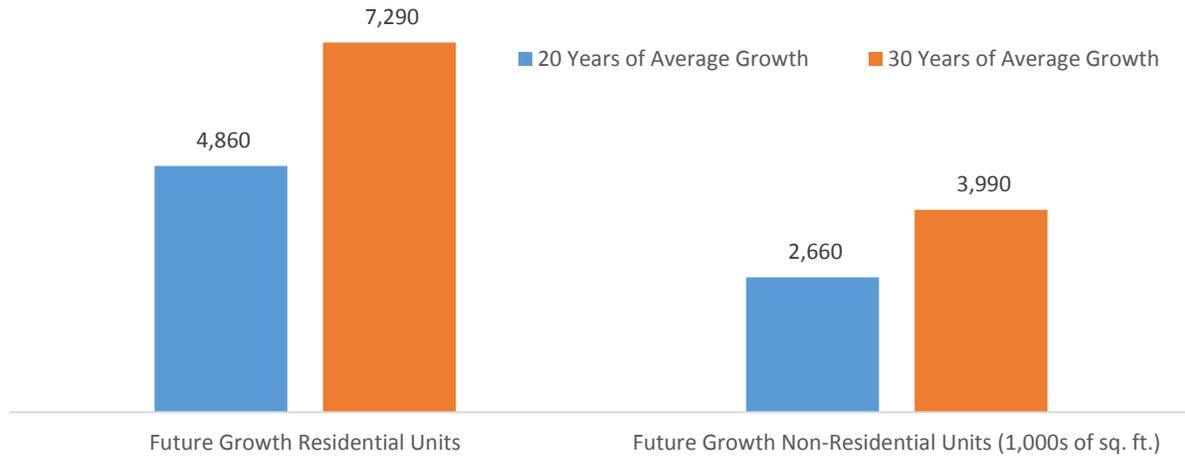
**Figure 5. Average Residential Units and Non-Residential Floor Area Built per Year in DFPD - La Plata and San Juan County Assessors**



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**



## DEMONSTRATION OF NEED

This section examines the positive relationship between increases in demand units and a corresponding increase in service demand. Demand for district services is largely driven by residential and non-residential structures and the activity that structures and their occupants generate.

Demand for district services is measured by the volume of calls to which the district must respond. Between 2011 and 2015 DFPD’s call volume increased from 3,578 to 4,702, growing at average annual rate of just over 7%. During the same time period, population in La Plata County as a whole increased by 5% while employment increased by 6%.

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 nexus 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.

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

	2011	2012	2013	2014	2015
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

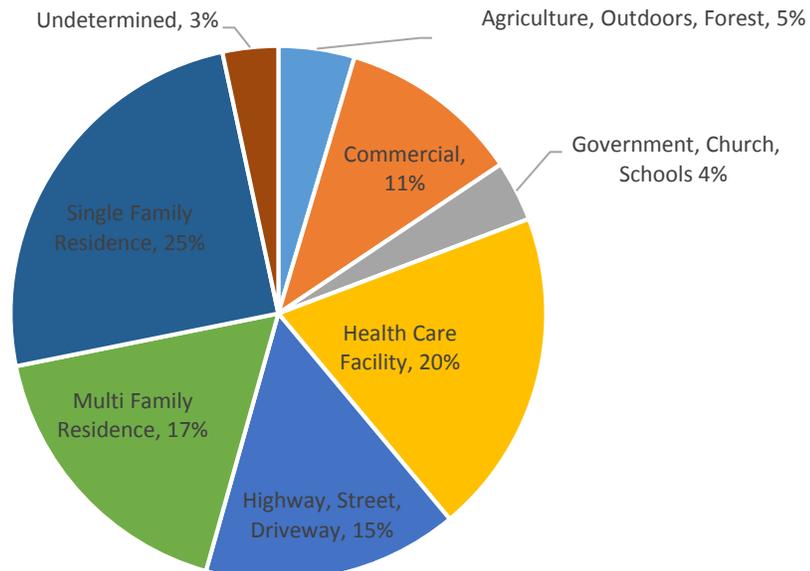


## PROPORTIONATE SHARE

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 includes 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, and 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 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

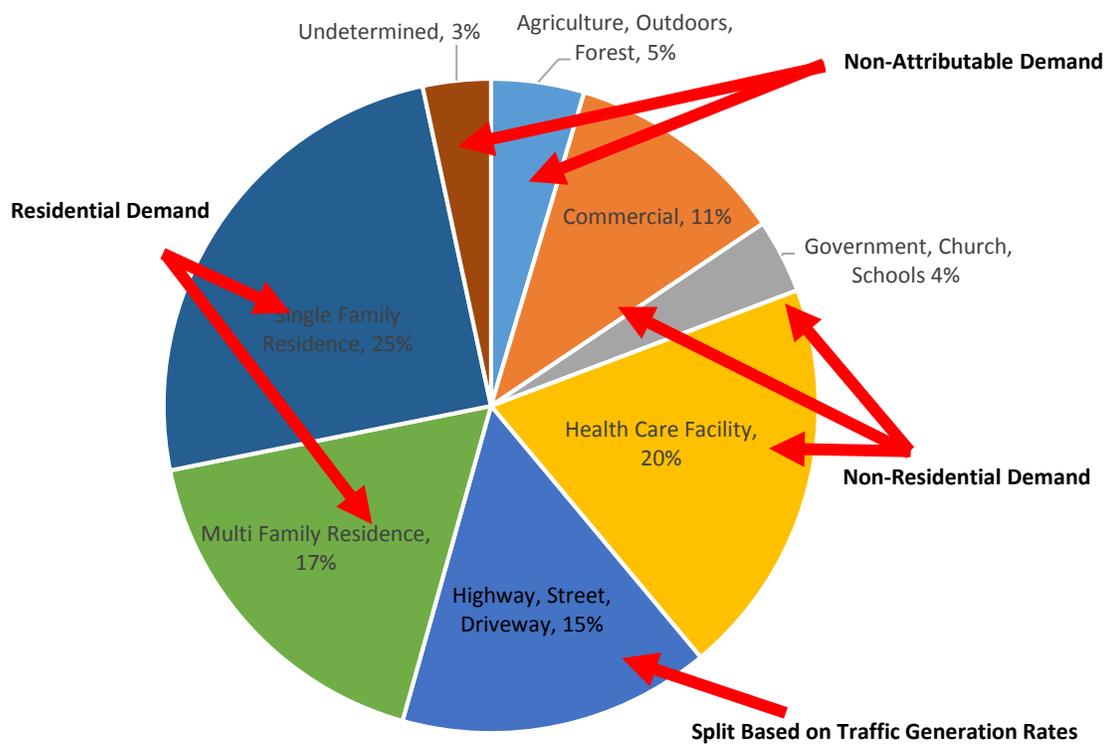
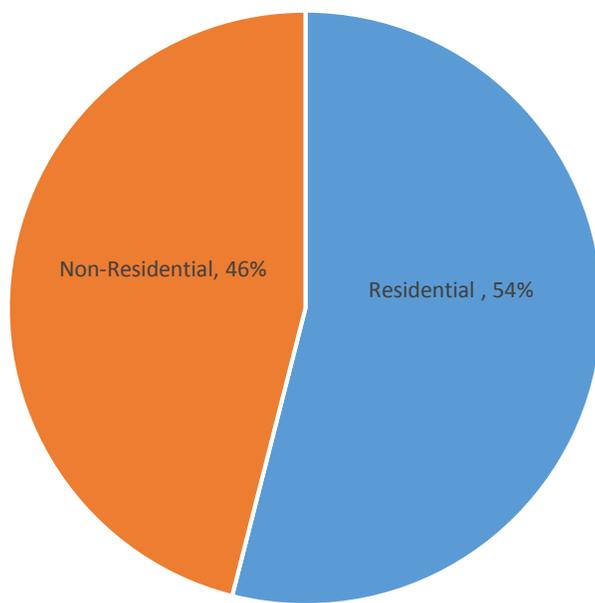


Figure 9. Proportionate Share - DFPD Call Data



## 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 Capital Improvement Plan (CIP) is composed of station improvements and rolling stock purchases.

### 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 replacement 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. Station costs and rolling stock costs are based on construction and replacement 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 2 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 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.

### TIER 3

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



**Table 2. Station Plan - Insured Value and Planned Costs - DFPD Capital 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		Demo	
Station 13	3	\$349,107	
Station 14		Demo	
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. Vehicle Plan – Agreed Value and Replacement Costs – DFPD Capital Plan**

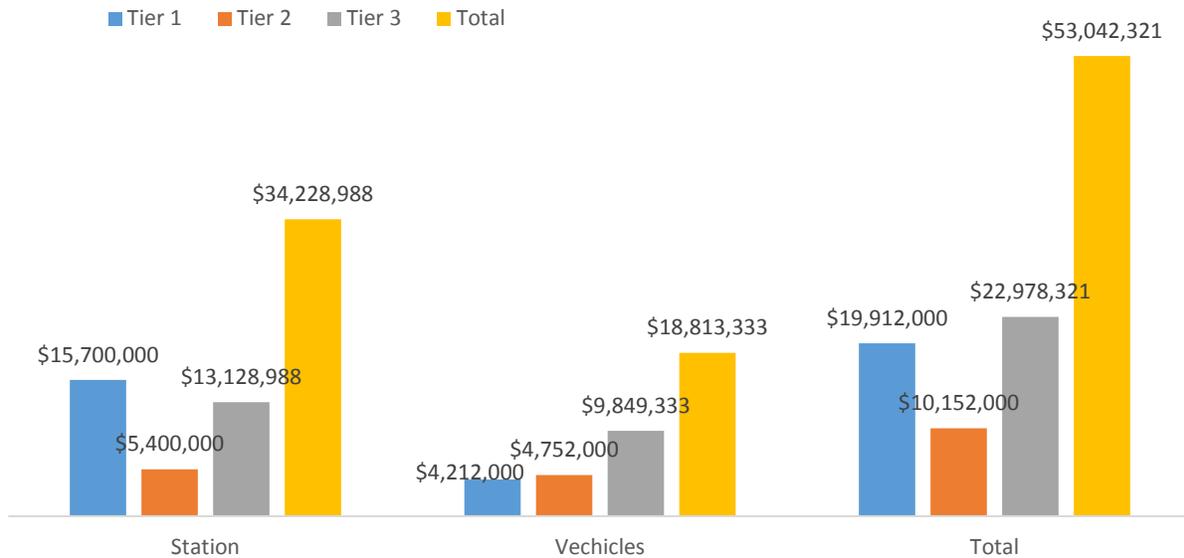
	Tier 1	Tier 2	Tier 3	Total
Structural Engines	\$1,500,000	\$1,500,000	\$4,900,000	\$7,900,000
Water Tenders	\$600,000	\$900,000	\$1,100,000	\$2,600,000
Ambulance and Rescues	\$660,000	\$660,000	\$577,670	\$1,897,670
Ladder Trucks	\$1,100,000	\$1,100,000	\$1,400,000	\$3,600,000
Brush Trucks	\$120,000	\$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

## COMBINED CIP SUMMARY

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



**Figure 10. CIP Summary - DFPD Capital Plan**



## FEE STRUCTURE

The impact fee is calculated by multiplying the residential and non-residential proportionate share by the total CIP costs for each tier and dividing by the total number of residential and non-residential demand units projected to be in the district at each tier’s planning horizon (20 or 30 years).

The impact fee calculation must reflect the fact that capital improvements and rolling stock purchases benefit both existing and future development. Mathematically, this means that the CIP costs are divided by the total future demand units that the improvements in the CIP are designed to serve, including existing demand units plus the projected future demand units. For example, tier 1 projects that will occur in the next 0-5 years will be built with enough capacity to accommodate existing development plus 20 years of growth, so the tier 1 costs are divided by the total projected demand units at the 20-year planning horizon. This approach ensures that future development is only assigned its fair share of the costs and is not burdened unfairly with the full cost of capital improvements and purchases that will also benefit existing development.

DFPD determined that \$5 million worth of tier 1 projects are existing capital need projects. Existing capital need projects are projects and improvements which are needed to maintain the existing service level, not accommodate new growth. To account for existing capital need, \$5 million is subtracted from the total tier 1 costs. DFPD has this money in reserves and has directed that it be spent on tier 1 projects. Additionally, Tier 1 projects are discounted by \$3.2 million, as a result of dedicated capital funds coming from the City of



Durango (part of the district consolidation process). The two discounts bring the Tier 1 total down to \$11.6 million from \$19.9 million.

**Table 4. Existing Capital Need Project Adjustment**

Stations	\$15,700,000
Vehicle	\$4,212,000
Total	\$19,912,000
Dedicated Funds for Existing Capital Need	\$5,000,000
Remaining City of Durango Capital Contributions	\$3,264,624
Impact Fee Tier 1 CIP	\$11,647,326

Fee components for residential units and 1,000 square feet of non-residential space are summarized by tier in Table 5. The impact fee schedule (Table 6) is the sum of the per unit costs for each CIP tier.

**Table 5. Fee Structure**

	Proportionate Share	Value	Planning Horizon Demand Units	Planning Horizon Year	Per Unit
<b>Tier 1</b>					
Residential (Residential Units)	54%	\$6,285,443	19,927	20 Year	\$315
Non-Residential (1000s Sq. Ft. Floor Area)	46%	\$5,361,933	11,682	20 Year	\$459
<b>Tier 2</b>					
Residential (Residential Units)	54%	\$5,478,472	22,357	30 Year	\$245
Non-Residential (1000s Sq. Ft. Floor Area)	46%	\$4,673,528	13,012	30 Year	\$359
<b>Tier 3</b>					
Residential (Residential Units)	54%	\$12,400,126	19,927	20 Year	\$622
Non-Residential (1000s Sq. Ft. Floor Area)	46%	\$10,578,195	11,682	20 Year	\$906



## DURANGO FIRE PROTECTION DISTRICT IMPACT FEE SCHEDULE

The Durango Fire Protection District impact fee is \$1,183 per residential unit and \$1.72 per square foot of enclosed non-residential floor area or \$1,720 per 1,000 square feet of enclosed non-residential floor area.

**Table 6. Durango Fire Protection District Impact Fee Schedule**

Residential (Residential Units)	\$1,183
Non-Residential (1000s Sq. Ft. Enclosed Floor Area)	\$1,720
Non-Residential (1 Sq. Ft. Enclosed Floor Area)	\$1.72



## CAPITAL PLANNING AND CASH FLOW

Impact fee revenues accrue only when development occurs, and impact fees alone will not pay for anticipated capital needs of the district. 30 years of impact fee revenues, funds currently dedicated for existing needs, and the remaining capital contributions from the City of Durango (part of the District consolidation process) total \$23.7 million leaving \$29.2 million in unfunded capital projects that the district will need to pay for with other revenues in the next 30 years. The district will have to raise additional revenues and/or restructure existing revenue streams to pay for the full CIP.

**Table 7. Capital Planning Breakdown**

Total CIP	\$53,042,321
Dedicated Funds for Existing Capital Need	\$5,000,000
Remaining City of Durango Capital Contributions (12 years)	\$3,264,624
Impact Fee Revenue (30 Years)	\$15,499,843
Total Anticipated Contributions	\$23,764,467
Portion of CIP Unfunded	\$29,277,853
% of CIP Not Funded	55%

## FEE MAINTENANCE AND ADMINISTRATION

**Revenue Accounting:** All revenue received from the implementation 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. McGraw Hill provides a reliable and industry appropriate construction inflation index and the Denver-Boulder CPI provide 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.

