



Berthoud Fire Protection District Impact Fee Study

Final REPORT

Final Report

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Prepared for

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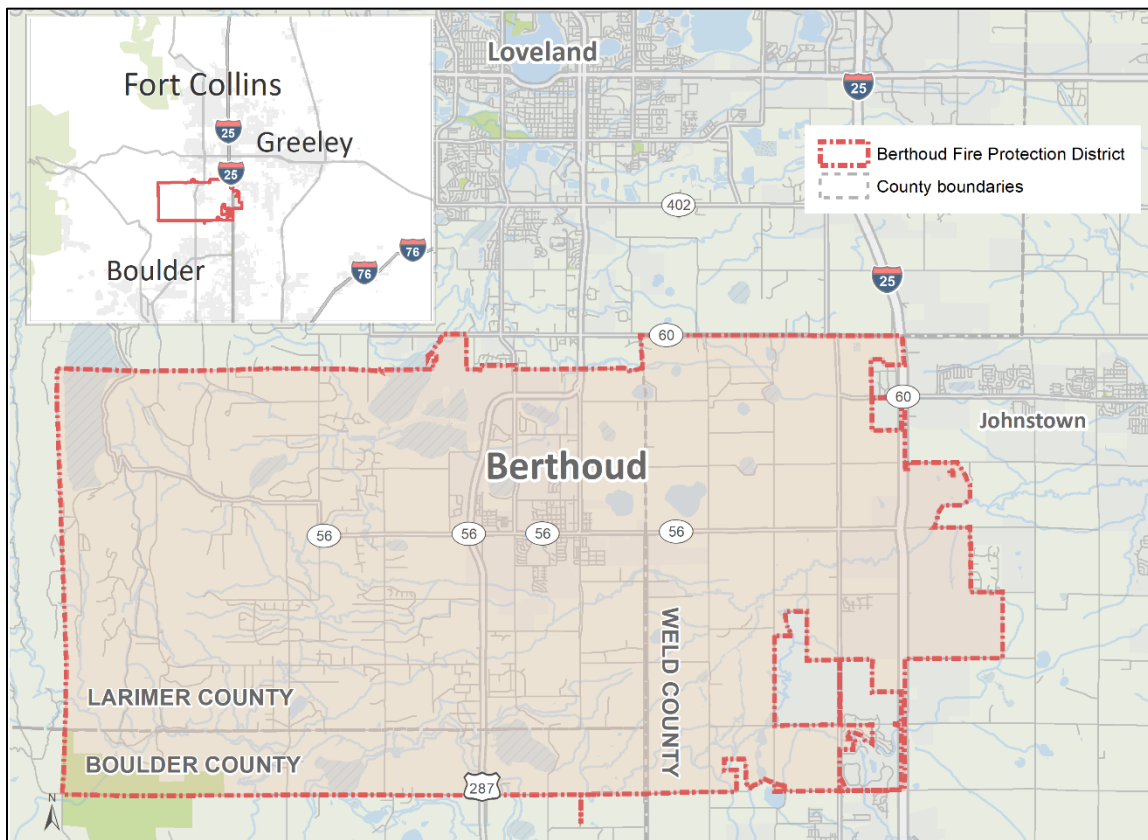
SECTION I.

Introduction

This report presents the analysis underlying the calculation of proportional development impact fees for Berthoud Fire Protection District (BFPD or the District). This section describes fee design requirements and various implementation considerations.

BFPD provides fire rescue and emergency medical services to parts of Boulder, Larimer, and Weld Counties. The District serves a population of approximately 21,000 residents across a coverage area of 103 square miles.¹

Figure I-1.
Berthoud Fire Protection District Service Area



Source: BBC Research & Consulting from ArcGIS shapefiles, 2025.

¹ Berthoud Fire Protection District 2023 Annual Report

Objectives

Many fire districts in Colorado impose development impact fees for expansion of public infrastructure. Colorado statute and a series of United States Supreme Court decisions dictate the amounts that districts can charge in impact fees and how they can devise, impose, and spend them. Because of those requirements, BFPD retained BBC Research & Consulting (BBC) to prepare a report documenting the calculation of proportional and defensible impact fees to ensure it can maintain its existing service standards as development occurs in its service area.

This report documents BBC's analysis and recommendations for an impact fee that recovers the proportional capital costs associated with new development and in a manner consistent with the Colorado Revised Statutes.

Colorado Impact Fee Requirements

Development impact fees have been used in Colorado going as far back as the 1920s, when cities began charging developers for the water rights required to serve new development.² Other states also charged impact fees to new development, and in 1947 one of the first legal challenges to impact fees was filed in Illinois. In that case, the Illinois Home Builders Association sued the Hinsdale Sanitary District over its tap fee. The case was appealed all the way to the Illinois Supreme Court, which ruled that the District's fee was legal so long as the revenues were used for capital expenditures and not operating expenses.³

In Colorado, impact fee requirements were heavily influenced by a 1999 lawsuit between Krupp and the Breckenridge Sanitation District. The case, known as *Krupp v. Breckenridge Sanitation District*, was heard by the Colorado Supreme Court, which ruled that impact fees are legal so long as they meet certain requirements. The requirements defined in the ruling on *Krupp v. Breckenridge Sanitation District* were formally codified by the Colorado Legislature with the passage of Senate Bill 01S2-015, "An Act Concerning Land Development Charges That May Be Imposed by Local Governments."

The Bill, which modified Section 29-20-104.5 of Title 29 of Colorado Revised Statutes, allowed local governments to impose impact fees on new development to fund expenditures on capital facilities needed to maintain existing service standards.⁴ The impact fees are applicable to a broad set of land uses and can be calculated based on development characteristics of local land uses that roughly approximate each land use's burden on capital facilities. This enabling legislation allowed municipalities to charge a single impact fee to each type of development (e.g., residential, commercial, and industrial) rather than calculating fees on a case-by-case basis.

In 2016, the Colorado Legislature passed House Bill 16-1088, known as the "Public Service Fairness Act," which authorized fire protection districts organized under Article 1 of Title 32,

² Lillydahl, J.H, 1987. *Impact Fees in Colorado: Economic, Political, and Legal Overview*. Presented at A Symposium on Impact Fees, 1987 Conference of the American Planning Association. New York City. Cited in White and Dahl, 2001.

³ Carswell, A.T, 2012. *The Encyclopedia of Housing, Second Edition*. SAGE Publications. p. 385. ISBN 978-1-4129-8958-9. Retrieved 2023-04-03. Cited in Wikipedia, "Impact Fee;" accessed 2023-11-08 at https://en.wikipedia.org/wiki/Impact_fee.

⁴ Local governments were defined as counties; home rule municipalities; and statutory cities, towns, territorial charter cities.

C.R.S., or a fire authority established pursuant to Section 29-1-203.5, to levy impact fees on new development. The bill amended C.R.S. 29-20-104.5 to allow fire protection districts to charge development impact fees as a condition of issuance of a development permit and to use the funds for expenditures on capital facilities that provide fire protection, rescue, and emergency services related to the new development.

In May 2024, the Colorado Legislature passed SB24-194, known as the “Special District Emergency Services Funding Act,” allowing special districts to impose and directly collect impact fees on new development without the requirement of an intergovernmental agreement between the district and the local government body.

To meet the requirements of current Colorado legislation, development impact fees charged by a fire protection district must:

- Be a one-time charge imposed on new development;
- Quantify the reasonable impacts of proposed development on existing capital facilities and establish the impact fee or development charge at a level no greater than necessary to defray such impacts which are directly related to proposed development;
- Be reasonably related to the overall cost of the capital. Fees must be fairly calculated and rationally based. Mathematical exactitude is not required, however, and the particular mode adopted by the district in assessing the fee is generally a matter of that district’s discretion;
- Ensure no impact fee or other similar development charge shall be imposed to remedy any deficiency in capital facilities that exists without regard to the proposed development; and
- Ensure that impact fees adopted by a local government do not require individual landowners to provide any site-specific dedication or improvements that meet the same need for capital facilities for which the district’s impact fee is imposed.

Because the setting of rates and fees involves many questions of judgment and discretion, districts have the flexibility to choose the most appropriate rate-setting method so long as it uses reasonable assumptions and logic in the basis of calculating the development impact fee schedule.

U.S. Supreme Court Decisions

In *Sheetz v. County of El Dorado* (2024), the U.S. Supreme Court unanimously ruled that impact fees are subject to the Takings Clause of the Fifth Amendment of the U.S. Constitution. The two most notable court decisions that are used to analyze takings clause cases are often referred to as *Nollan* and *Dolan*⁵.

Guidance from these decisions requires that there be an "essential nexus" between the exaction/fee and the state interest being advanced by that exaction. In the more recent *Dolan v. City of Tigard* (1994) decision, the U.S. Supreme Court held that in addition to an essential nexus, there must be a "rough proportionality" between the proposed exactions and the project impacts that the exactions are intended to mitigate. In *Dolan*, the court further states that rough proportionality need not be derived with mathematical exactitude but must demonstrate some relationship to the specific impact of the subject project:

*"We think a term such as 'rough proportionality' best encapsulates what we hold to be the requirements of the Fifth Amendment. No precise mathematical calculation is required, but the city must make some sort of individualized determination that the required dedication is related both in nature and extent to the impact of the proposed development."*⁶

Over the past two decades since *Dolan*, many fire districts have imposed impact fees; thus, there now is a broad set of common practices when considering how best to reflect these judicial and statutory requirements in fee design efforts.

Fee Applicability

As noted above, fire districts can only use impact fee revenue to cover the costs of any necessary expansion of capital facilities that are required to serve new development. In addition, fee amounts can only be set in a manner that is proportional to the cost of capital facility expansion needed to maintain—but not improve—existing standards of service.

Capital facilities. *Capital facilities* are the physical component of public services. Under Colorado statute, the definition of *capital* can include all equipment that has at least a five-year lifetime. It does not include personnel or any operational elements of service costs, even in circumstances where new staff are required to operate new facilities. Capital facilities generally include buildings, apparatus, vehicles, office furniture, or other support facilities.

⁵ *Nollan v. California Coastal Commission*, 483 U.S. 82; 1987 and *Dolan v. City of Tigard* (1994) 114S.Ct. 2309.

⁶ *Dolan v. City of Tigard* (1994) 114S.Ct. 2309.

Nature of capital investments. Not all capital facility costs are associated with community growth or with the expansion of capacity. Most fire districts make investments in capital facilities not because of growth pressures but for the repair and replacement of existing capital. For example, fire districts often make capital investments related to:

- *Repair and replacement of existing facilities*, such as annual building maintenance or replacing a roof;
- *Betterment of existing facilities*, such as introducing new services or improving existing capital facilities without increasing service capacity; and
- *Facilities expansions*, such as expanding an existing building to accommodate growing personnel requirements.

Fire districts are not allowed to account for such investments as part of impact fee calculations nor are they allowed to expend impact fee funds on such investments.

Capital Standards

In designing impact fees, fire districts must determine the appropriate capital standards applicable to each category of infrastructure. Facility standards can vary widely between districts. Whereas some states have legislation that describes such criteria with great specificity, other states—like Colorado—use more general standards. There are two primary approaches for calculating capital standards.

Capital buy-in approach. Capital standards can be estimated using the replacement value of specific capital facilities and the qualified equipment necessary for each category of capital facilities. For example, a city of 2,500 homes with a 20,000 square foot recreation center that has a replacement value of \$5 million would have a recreation center standard of 8 square feet per housing unit (i.e., 20,000 square feet/2,500 homes = 8 square feet per home) and a replacement value of \$250 per square foot (i.e., \$5 million/20,000 square feet = \$250 per square foot). Thus, each existing residence would have an embedded recreational investment of \$2,000 per home (i.e., \$250 x 8 square feet = \$2,000 per home), representing the community's recreational facility standard, which is what a developer could be charged for recreational facilities for each new unit.

One important dimension of the capital buy-in approach is the use of the replacement value of each asset. As mentioned earlier, the purpose of impact fees is to maintain the current level of service. Therefore, the value of each asset should be assessed by its current functionality, not its dollar value. For example, even if a dump truck were purchased in 1980 and its present resale value is less than \$10,000, the replacement value for that dump truck would be equal to the market rate of a new unit that performs the same function as the original vehicle.

If capital standards are defined using a capital buy-in approach, then calculations of those standards must account for any debt that applies against the relevant capital facilities. Because current residents are already responsible for that debt, it would be duplicative and inappropriate to charge developers impact fees that also include that debt.

Plan-based approach. Fire districts can also use a *plan-based approach* to set capital standards, which relies on capital improvement or other specific plans to estimate the value of capital required to serve future development. A plan-based approach requires forecasts of residential and commercial growth and detailed data on capital expansion plans and costs. Plan-based approaches must focus on expansion-related projects or the expansion portion of projects rather than betterment or replacement projects.

Other Considerations

Over time, some consensus has emerged on how best to ensure that impact fees comply with state statutes and court rulings. Many of the factors that fire districts must consider in designing fees appropriately are described above, but BBC also presents other considerations to be made:

- **Land use allocation.** Courts have indicated that all forms of development that have facility impacts—that is, residential, industrial, and commercial developments—must pay their fair share of expansion costs. If one type of development is exempted from fees, then fees may not be sufficient to cover expansion costs that result from new development.
- **Use specificity.** Impact fee calculations vary between different forms of land use. When compelling evidence is available that the forms, sizes, or uses of particular types of development will result in substantially different demands for fire protection services, then a district's impact fees should reflect that information.
- **Fund balance.** A fire district's impact fee fund balance represents cash investments the existing community has made in capital expansion. When utilizing the capital buy-in approach for calculating development impact fees, these cash investments are combined with capital facilities valuations to arrive at the total capital investment that the community has made.
- **Redevelopment.** The application of impact fees raises questions about how to deal with the redevelopment of existing properties. The redevelopment of a residence—even if it involves full scraping—does not lead to an increase in service demands, because it is still one residential unit with no implications for service delivery costs or capital needs. In contrast, the redevelopment of a larger lot into multiple homes would be assessed an impact fee based on the net number of new residential units, because there would be clear implications for service delivery and capital needs. Commercial redevelopment would be subject to the same considerations.
- **Waivers.** Fire districts should not waive fees unless the funds are reimbursed from other sources such as the general fund or other contributions by the developer to system expansion that meets or exceeds the calculated fees.
- **Timing.** Fees should be assessed at the time that building permits are issued.
- **Updates.** Impact fee calculations should be updated periodically to account for changes in costs and asset values. Most fire districts update their fees every year using an inflation multiplier and conduct updates to their impact fee studies every three to five years.

SECTION II.

Impact Fee Derivation

As described in Section I, there are several types of information that fire protection districts must consider to appropriately set their development impact fees, including determining capital standards. BBC used data from various sources to make appropriate considerations in developing development impact fees for Berthoud Fire Protection District.

- **Capital standards.** BBC used BFPD's current investment in capital facilities as the basis for determining capital standards for the fee update – known as the capital buy-in approach. We obtained the information directly from the District. The valuation included estimates of investments in furniture, fixtures, and durable equipment. Calculations of capital standards must account for any debt that exists in connection with relevant infrastructure. At the time of this study, BFPD has a \$972,000 debt against five specialist and fleet vehicles.
- **Land use allocation.** It is important for fire districts to determine how impact fees should be allocated according to land use so that all forms of development pay their fair share of expansion costs. Although BFPD does not maintain a database of relevant land use, data from the Boulder, Larimer, and Weld Counties' Assessor's Offices indicate that 84.9 percent of current development in BFPD's service area is for residential purposes while 15.1 percent is for non-residential.¹ BBC allocated the value of BFPD's capital facilities following the above land use distribution, as future development in the region is not expected to differ substantially from existing land use patterns.
- **Use specificity.** To the extent possible, impact fees should reflect the degree to which different forms, sizes, and uses of particular types of development will result in different demand for fire protection services.
- **Fund balance.** When using the capital buy-in approach, the balance of a fire district's impact fee fund must be combined with capital facilities valuations to arrive at the total capital investment. The District's impact fee fund ending balance for fiscal year 2024 is \$1,439,158.²
- **Proportionality.** By using BFPD's current investment in capital facilities to derive capital standards and then setting fee rates to replace the current standards of facility investment, BBC has ensured that proportionality has been reasonably and fairly derived. New growth is simply replicating its proportional share of an existing facility standard. Existing standards will be the standards to which new growth will be held accountable.

¹ Non-residential development includes commercial, retail, office, institutional, industrial, and warehouse space.

² Berthoud Fire Protection District 2025 Budget Report

BFPD Budget Overview

Property tax revenues for BFPD are collected through the District's combined total 13.878 property tax mill of properties that are within the District's service area. A millage rate is the tax rate used to calculate local property taxes and represents the amount per every \$1,000 of a property's assessed value that a district would charge.

The Berthoud Fire Protection District 2025 Budget Report shows the District anticipates general fund revenues of \$7.3 million in fiscal year 2025, the majority of which is tax-related revenue from general property taxes (\$6.5 million). Additionally, the District anticipates \$642,000 in property tax revenues to its capital improvement fund and \$225,000 in impact fee revenues.

The District's general fund expenditure for 2025 is budgeted at \$7.3 million, and is allocated to personnel costs—including salaries, benefits, and administration—as well as supplies, maintenance, and normal operational costs. Additionally, the District has \$269,000 in budgeted expenditure from the capital fund in 2025 and \$108,000 from the impact fee fund. As discussed in Section I, capital investments are generally used for repair and replacement, betterment of facilities and service standards, and facilities expansion.

Property tax revenue that funds BFPD's operating budget will continue to be dedicated to the District's ongoing operational expenses and are not sufficient to fund the District's growth-related capital facilities needs. With impact fees, new development pays for an equitable share of new facilities and existing taxpayers will not be responsible for subsidizing growth. In addition, BFPD's capital and operating funds can be reserved for other, non-growth-related uses.

Impact Fee Calculations

BBC's methodology for updating BFPD's impact fee includes the following tasks:

1. Quantify the capital facilities investment needed to maintain current level of service;
2. Develop estimates of BFPD's current land use pattern; and
3. Calculate the fire protection capital costs per unit of development (per residential dwelling unit or per square foot of non-residential development).

Capital facilities investment. A conservative method of establishing BFPD's current level of service for fire protection is to quantify its financial investment in capital facilities. Specifically, the District has four types of capital facility-related assets that should be included in a calculation of current infrastructure investment:

- Buildings and structures, including fire stations;
- Major vehicles and apparatus, such as fire engines and specialized vehicles;
- A variety of lifesaving and fire-fighting portable equipment and other property; and
- The District's impact fee fund balance.

Figure II-1 presents BFPD's current capital facilities and the replacement value included in impact fee calculations. BFPD has a \$972,000 debt against five vehicles, which is subtracted from

the asset replacement values to capture only the District's equity in its capital facilities. As shown in the last row of Figure II-1, the total replacement value of BFPD's current capital facilities is approximately \$28.0 million.

Figure II-1.
Berthoud Fire Protection District Current Assets, 2025

Type of Capital Facilities	Replacement Value	Debt Against Asset	Equity Position for Fee Calculation
Buildings and Land			
Station, 275 Mountain Avenue	\$13,755,600	- \$0 =	\$13,755,600
Station, 4014 W County Road 8	\$7,248,600	- \$0 =	\$7,248,600
Vehicles and Apparatus			
2001 International Pumper/Service	\$560,000	- \$0 =	\$560,000
2002 International Tender	\$300,000	- \$0 =	\$300,000
2002 HME Quint	\$700,000	- \$0 =	\$700,000
2007 Pierce Pumper Type 3	\$345,000	- \$0 =	\$345,000
2008 Rosenbauer Pumper	\$560,000	- \$0 =	\$560,000
2010 Ford F150 Pickup	\$20,000	- \$0 =	\$20,000
1900 Antique Hose Cart Trailer	\$20,000	- \$0 =	\$20,000
2016 Rosenbauer Pumper	\$875,500	- \$0 =	\$875,500
2018 GMC Terrain	\$30,191	- \$0 =	\$30,191
2019 Ford F150 Responder	\$53,298	- \$0 =	\$53,298
2019 Ford F150 Responder	\$53,298	- \$0 =	\$53,298
2019 Ford Transit Van	\$57,679	- \$0 =	\$57,679
2019 Ford F550 Wildland Brush	\$67,584	- \$0 =	\$67,584
2020 Ford Expedition	\$40,414	- \$0 =	\$40,414
2021 Ford F150	\$54,523	- \$0 =	\$54,523
2022 International HV507 HV507 SFA Tender	\$430,540	- \$266,731 *	\$163,809
2022 Haulmark Trailer	\$10,000	- \$0 =	\$10,000
2022 Ram 1500 Pickup	\$111,617	- \$69,150 *	\$42,467
2022 International HV507 Fire Truck	\$367,755	- \$0 =	\$367,755
2022 Dodge Ram 1500	\$52,735	- \$32,671 *	\$20,064
2023 Ford F550	\$225,000	- \$139,394 *	\$85,606
2024 GMC Sierra	\$51,605	- \$0 =	\$51,605
2024 Rosenbauer Pumper	\$748,627	- \$463,795 *	\$284,832
Miscellaneous Equipment			
Equipment including medical, extraction, portable, communications, and IT	\$805,862	- \$0 =	\$805,862
Impact Fee Balance			
Fund Balance	\$1,439,158	- \$0 =	\$1,439,158
Total Value of Fire Capital Facilities for Fee Calculation			\$28,012,845

Notes: *The District has a current debt principal of \$971,741 for the purchase of five vehicles noted in Figure II-1. This debt has been apportioned to each vehicle in proportion to its value. The debt has been subtracted from the full replacement value of each asset to reflect only the District's equity.

Source: Berthoud Fire Protection District; BBC Research & Consulting, 2025.

Current land use. BBC used the current pattern of development in BFPD’s service area as a basis for allocating capital expansion costs between different types of land uses. Figure II-2 presents the breakdown of units and square footage for residential and non-residential development, based on current data from the Boulder, Larimer, and Weld County Assessors. As shown in Figure II-2, the majority of the development in the service area is residential (76.0 percent single family residential and 8.9 percent multi-family residential) while 15.1 percent is non-residential.

**Figure II-2.
Residential and Non-residential Square Footage in the BFPD Service Area, 2025**

Source:
Boulder County Assessor;
Larimer County Assessor; Weld
County Assessor; BBC Research
& Consulting, 2025.

Development Type	Unit Count	Total Square Footage	Percent of Total Square Footage
Residential	6,049	10,704,957	84.9%
Single family residential	5,176	9,586,390	76.0%
Dwellings up to 1,200 SF	751	739,962	5.9%
Dwellings 1,200 to 2,399 SF	3,534	6,239,332	49.5%
Dwellings 2,400 to 3,599 SF	805	2,202,469	17.5%
Dwellings 3,600 to 4,799 SF	63	259,560	2.1%
Dwellings 4,800+ SF	23	145,067	1.2%
Multifamily residential	873	1,118,567	8.9%
Non-residential	294	1,902,463	15.1%
Retail & Commercial	81	294,357	2.3%
Office	23	129,801	1.0%
Public & Institutional	32	534,801	4.2%
Industrial & Manufacturing	53	394,552	3.1%
Warehouse	105	548,952	4.4%

The \$28.0 million value of fire capital facilities net of existing debt (Figure II-1) is allocated across residential and non-residential development based on the relative share of total square footage in the District (Figure II-2). Allocating costs between residential and non-residential development based on existing square footage provides a rational and proportional framework for distributing the costs of firefighting facilities and equipment. Building square footage serves as a measurable indicator of the built environment’s potential demand for fire protection services. Larger structures typically present greater fire risk, all else equal, in addition to requiring more time and personnel to inspect or suppress fires, and may involve more complex response protocols. As such, square footage offers a reliable and consistent proxy for estimating system demand,

Within the District’s service area, residential uses comprise approximately 84.9 percent and non-residential uses comprise 15.1 percent of the built environment. Of the \$28.0 million in fire capital facilities value, \$23.8 million is allocated to residential development and \$4.2 million is allocated to non-residential development.

Residential impact fee calculation. The methodology for calculating residential impact fees is based on square footage of dwelling units. This approach is appropriate because fire protection service demand from residential uses generally scales with the size and complexity of the structure. Residential buildings also tend to exhibit relatively consistent patterns in construction type, layout, and use, making square footage a reasonable and reliable proxy for the level of service required.

The residential share of the fire capital facilities value—\$23.8 million—is allocated across categories of residential development based on each category’s share of total residential square footage. This allows the calculation of tiered residential fees, where smaller units pay lower fees and larger homes pay higher fees to reflect relative demand. Figure II-3 presents the maximum impact fees for residential development within the District.

Figure II-3.
Maximum Allowable Residential Impact Fees for BFPD

Calculation of Residential Impact Fees					
	Residential Share of Fire Capital Value [A]	Residential Land Use Distribution [B]	Costs by Land Use Category [C] = [A] x [B]	Existing Development [D]	Impact Fee (Costs by Land Use Category / Existing Development) [C] / [D]
Single family residential		89.6%	\$21,323,130	5,176	
Dwellings up to 1,200 SF		6.9%	\$1,645,907	751	\$2,192 per dwelling
Dwellings 1,200 to 2,399 SF		58.3%	\$13,878,226	3,534	\$3,927 per dwelling
Dwellings 2,400 to 3,599 SF	\$23.8 million	20.6%	\$4,898,980	805	\$6,086 per dwelling
Dwellings 3,600 to 4,799 SF		2.4%	\$577,343	63	\$9,164 per dwelling
Dwellings 4,800+ SF		1.4%	\$322,674	23	\$14,029 per dwelling
Multifamily residential		10.4%	\$2,488,043	873	\$2,850 per dwelling unit

Source: Berthoud Fire Protection District; Boulder County Assessor; Larimer County Assessor; Weld County Assessor; BBC Research & Consulting, 2025.

As Figure II-3 shows, proposed fees range from \$2,192 to \$14,029 per single family dwelling. As an example, a 3,000-square-foot house has an impact fee of \$6,086 and a multifamily dwelling unit has a fee of \$2,850.

Non-residential impact fee calculation. Non-residential fire impact fees are calculated using the \$4.2 million allocated to non-residential development in conjunction with employment generation rates to reflect use intensity amongst different categories of non-residential land use. While building size remains an important factor in determining the impacts new development has on BFPD’s capital facilities, the intensity and variability of use across non-residential land uses plays a large role in influencing service demand. For example, a 10,000-square-foot storage warehouse would typically generate fewer emergency calls than a similarly sized commercial kitchen, school, or office building.

The non-residential fee model uses employment generation rates per 1,000 square feet from the *Institute of Transportation Engineers (ITE) Trip Generation Manual* to account for this variability.³ The *ITE Trip Generation Manual*, published by the Institute of Transportation Engineers, provides empirically derived estimates of the number of employees generated by different land uses. Employment generation measures the number of people employed per 1,000 square feet of development. These rates are based on extensive observational studies conducted at thousands of sites across North America and are widely used in transportation planning, traffic impact studies, and land use analysis.

While square footage provides a baseline measure of physical scale, it does not capture differences in activity intensity or occupancy patterns that influence fire risk and service needs. ITE employment rates serve as a practical proxy for these factors, reflecting how intensively a property is used. Land uses with higher employment generation rates generally correspond to higher levels of human activity, increasing the probability of fire incidents, medical calls, and other emergency responses. Incorporating employment rates therefore enhances the model’s ability to allocate costs in proportion to actual service demand.

As shown in Figure II-4, different non-residential land uses generate differing levels of activity. For example, office development generates 3.3 jobs per 1,000 square feet compared to 2.1 for retail and commercial. The non-residential portion of the fire capital facilities value—\$4.2 million—is distributed across development types in proportion to their share of total weighted employment. This produces a cost per square foot that reflects the relative service demands associated with each use and distributes the cost burden in proportion to the demand generated by different types of economic activity and land use.

Figure II-4.
Maximum Allowable Non-residential Impact Fees for BFPD

Calculation of Non-residential Impact Fees						
	Non-residential Share of Fire Capital Value [A]	Employees per 1,000 SF [B]	Existing Development (SF) [C]	Weighted Employment [D] = [B] x [C/1,000]	Share of Total Employment [E] = [D] / Σ[D]	Impact Fee (Total Value x Share of Emp/ Existing Development) [A] x [E] / [C]
Non-residential			1,902,463	3,240		
Retail & Commercial	\$4.2 million	2.1	294,357	625	19.3%	\$2.77 per square foot
Office		3.3	129,801	426	13.2%	\$4.29 per square foot
Public & Institutional		2.6	534,801	1,394	43.0%	\$3.40 per square foot
Industrial & Manufacturing		1.5	394,552	608	18.8%	\$2.01 per square foot
Warehouse		0.3	548,952	186	5.7%	\$0.44 per square foot

³ ITE Trip Generation Manual 11th Edition, 2021.

The result of allocating the non-residential capital burden in the manner described above resulted in full recovery of costs associated with the fees shown in the rightmost column of Figure II-4. Maximum recommended fees are \$2.77 per square foot for retail and commercial development; \$4.29 per square foot for office space; \$3.40 per square foot for public and institutional development; \$2.01 per square foot for industrial and manufacturing development; and \$0.44 per square foot for warehouse space.

Summary of impact fee results. The results of the residential and non-residential fee calculations for BFPD are summarized in Figure II-5, which presents the maximum allowable impact fees by development type and unit of measurement (per dwelling unit or per square foot). BFPD can choose to charge less than the amounts shown in Figure II-5 in order to meet other strategic objectives of the District.

**Figure II-5.
Summary of Maximum Allowable
Impact Fees for BFPD**

Source:
Berthoud Fire Protection District; Boulder County Assessor;
Larimer County Assessor; Weld County Assessor; ITE Trip
Generation Manual 11th Edition, 2021; BBC Research &
Consulting, 2025.

Development Type	Impact Fee
Residential	
Single family residential	
Dwellings up to 1,200 SF	\$2,189 per dwelling unit
Dwellings 1,200 to 2,399 SF	\$3,923 per dwelling unit
Dwellings 2,400 to 3,599 SF	\$6,079 per dwelling unit
Dwellings 3,600 to 4,799 SF	\$9,154 per dwelling unit
Dwellings 4,800+ SF	\$14,014 per dwelling unit
Multifamily residential	\$2,847 per dwelling unit
Non-residential	
Retail & Commercial	\$2.77 per square foot
Office	\$4.29 per square foot
Public & Institutional	\$3.40 per square foot
Industrial & Manufacturing	\$2.01 per square foot
Warehouse	\$0.44 per square foot

The impact fees presented in Figure II-5 are designed to ensure that new development contributes fairly and proportionately to the cost of BFPD’s fire protection capital facilities. The total capital valuation is \$28.0 million and represents the District’s current investment in stations, vehicles, apparatus, and response equipment.

This total cost has been allocated across residential and non-residential development based on the share of existing square footage in the District. Within residential development, impact fees are calculated by unit size, using a tiered approach that reflects the proportional service needs associated with different home sizes. For non-residential development, fees are based on employment-weighted demand, using employment rates as a proxy for occupancy intensity and associated land use intensity. The resulting fee structure is equitable and tailored to the unique characteristics of land use in the District.

Impact fee comparison. This study updates the fee recommendations for BFPD, which were last evaluated in 2018. Although both studies are designed to allocate fire capital costs fairly to new development, they rely on different methodologies and data inputs.

The 2018 study used an “incremental expansion” approach, estimating the cost of expanding facilities to meet future growth. This method focuses on forecasting additional needs and assigning costs based on those projected expansions. In contrast, BBC’s study uses a capital buy-in approach, which calculates the total value of existing fire facilities and divides that value across all existing development in the service area. This yields a per-unit capital investment for residential and non-residential development. That per-unit value is then applied to future development, ensuring that new growth pays its fair share to buy into to the existing level of service.

The fee results also reflect updated cost assumptions. The 2018 study assumed fire station construction costs of \$300 per square foot, while this study uses a current estimate of \$900 per square foot based on recent construction cost data from fire districts in Colorado.

Finally, the studies differ in how they allocate costs between land uses. The previous study relied on population and employment projections, while this study uses county assessors building data and employment generation rates to estimate the relative demand placed on fire services by different types of development.

**Figure II-6.
Comparison of Maximum Allowable
Impact Fees for BFPD, 2025 and 2018**

Source:
Berthoud Fire Protection District; TischlerBise Fire/Rescue
Impact Fee Study; Berthoud Fire Protection District; BBC
Research & Consulting, 2025.

Development Type	2025	2018
Residential		
Single family residential		
Dwellings up to 1,200 SF	\$2,189	\$1,960
Dwellings 1,200 to 2,399 SF	\$3,923	\$1,960
Dwellings 2,400 to 3,599 SF	\$6,079	\$1,960
Dwellings 3,600 to 4,799 SF	\$9,154	\$1,960
Dwellings 4,800+ SF	\$14,014	\$1,960
Multifamily residential	\$2,847	\$1,488
Non-residential		
Retail & Commercial	\$2.77	\$2.00
Office	\$4.29	\$2.54
Public & Institutional	\$3.40	\$2.54
Industrial & Manufacturing	\$2.01	\$1.36
Warehouse	\$0.44	-

The fee recommendations in this study are based on current, localized inputs that reflect current conditions in the BFPD service area. Key updates include the use of recent construction cost estimates for fire stations, updated asset inventories, and detailed assessor data to quantify existing development. In addition, this study applies employment generation data to allocate costs between different types of non-residential land uses. These updated inputs provide a clear and defensible basis for setting impact fees that ensure new development contributes adequately to the District’s costs in providing service to all development within its boundary.

Impact fee revenue projections. Impact fees bring revenue to the District, helping to support necessary facilities expansion as development occurs throughout the service area. The Town of Berthoud, and the surrounding area, is well-connected to urban centers of the Front Range and makes for a highly desirable place to live. Parts of Weld, Larimer, and Boulder Counties—particularly towns and cities near the major roadway corridors—have seen high levels of population growth in recent decades. The Town of Berthoud experienced an explosive 102 percent population increase between 2010 and 2020, from 5,105 to 10,332 residents,⁴ or an annualized average of approximately 10 percent growth per year.

BBC estimated impact fee revenues for the District, assuming an annual growth rate of 5.0 percent for residential development (i.e., population) and 1.0 percent for non-residential development (i.e., employment), using a conservative forecast of growth in the area.

Figure II-7 summarizes BBC’s annual revenue projections based on existing growth trends. The revenue projections assume that new development future development patterns follow existing trends in that dwellings of different sizes increase with population growth while non-residential development increases with local employment growth.

**Figure II-7.
Projected Annual Impact Fee
Revenues for BFPD**

Note:

Estimates of future development are shown in dwelling units for residential development and in square feet for non-residential development.

*The scenario assumes 5.0 percent annual growth in residential development and 1.0 percent annual growth in non-residential development.

Source:

Berthoud Fire Protection District; Boulder County Assessor; Larimer County Assessor; Weld County Assessor; BBC Research & Consulting, 2025.

Development Type	Projected Annual Growth* (dwelling units or sq. ft.)	Projected Annual Revenue
Residential		
Single family residential		
Dwellings up to 1,200 SF	38	\$83,192
Dwellings 1,200 to 2,399 SF	177	\$694,346
Dwellings 2,400 to 3,599 SF	40	\$243,167
Dwellings 3,600 to 4,799 SF	3	\$27,463
Dwellings 4,800+ SF	1	\$14,014
Multifamily residential	44	\$125,265
Non-residential		
Retail & Commercial	2,944	\$8,161
Office	1,298	\$5,563
Public & Institutional	5,348	\$18,194
Industrial & Manufacturing	3,946	\$7,931
Warehouse	5,490	\$2,425
Projected annual revenue		\$1,229,722

As Figure II-7 illustrates, the impact fees proposed in this report could generate approximately \$1.2 million annually to enable the District to build new facilities and purchase equipment

⁴ U.S. Census Bureau Decennial Census, 2010 and 2020.

needed to maintain service levels as the region grows without placing an undue burden on existing development.

SECTION III.

Summary and Recommendations

The residential and non-residential development impact fees that BBC recommends for BFPD's consideration represent maximum allowable amounts. BFPD may choose to adopt fees below these amounts. If doing so, the District must apply discounts uniformly to all land use categories.

BBC offers the following recommendations regarding implementation of impact fees for Berthoud Fire Protection District:

- BFPD should provide the development community with a minimum of three to six months' notice prior to implementing updates to the impact fee schedule. This advance notice ensures developers have sufficient time to adjust project budgets and timelines accordingly.
- BFPD should establish a process to address unique scenarios that may require further individualization of impact fees. This process should include a mechanism allowing property owners to present data if they believe the fee, as applied, does not accurately reflect the specific impacts of their development, ensuring compliance with *Sheetz v. County of El Dorado, Cal., 601 U.S. 267 (2024)*.
- BFPD should maintain its impact fee fund in an interest-bearing account that is separate and apart from its general fund. All fees collected in accordance with the impact fee schedule shall be deposited and accounted for as required in *Colorado Revised Statutes Title 29, Article 1, Part 8, Section 29-1-803*.
- BFPD should adhere to a written policy governing expenditure of monies from its impact fee fund. Withdrawals from the impact fee fund should only be used to pay for growth-related capital facilities with a service life of five or more years. All proceeds shall be used in conformance with *Colorado Revised Statutes Title 29, Article 20, Part 1, Section 29-20-104.5*.
- BFPD should prohibit the payment of operational expenses with impact fees, including the repair and replacement of existing facilities not necessitated by growth. In cases where BFPD expects new capital facilities to partially replace existing capacity and to partially serve new growth, the District and its legal counsel should determine, to the best of its ability, what percentage of repair and replacement is necessary to serve new development and should use that as the basis of allocating funding for repair and replacement needs.
- BFPD should update its impact fee studies periodically (e.g., every three to five years) as it invests in additional equipment and facilities and as future development occurs, to ensure its impact fees reflect its existing service standards.
- Between updates, BFPD should adjust its impact fees annually at the start of each year based on the U.S. Bureau of Labor Statistics' Mountain-Plains Information Office's consumer price index for the Mountain-Plains Region.¹

¹ <https://www.bls.gov/regions/mountain-plains/cpi-summary>

APPENDIX.

Land Use Development Classification

This appendix provides additional detail on how residential and non-residential development types were categorized for the purpose of impact fee calculations. These categories reflect the development pattern of the District and are used to proportionately allocate capital costs in the fee model.

Residential development was classified into two categories: Single Family Residential and Multifamily Residential. Single Family Residential includes detached housing units on individual parcels, and each dwelling is additionally classified by square footage in the fee model. Multifamily Residential includes residential forms with multiple attached units, such as duplexes, townhomes, apartments, and condominiums.

Non-residential development was grouped into five distinct categories: Retail & Commercial, Office, Public & Institutional, Industrial & Manufacturing, and Warehouse. These categories are based on land use characteristics that typically correlate with different levels of service demand, such as building size, activity type, occupancy levels, and public accessibility.

BBC worked with account-level data from the Boulder, Larimer, and Weld County Assessors. Larimer County data, which comprise more than 85 percent of the District's total developed square footage, were used to construct a mapping template shown on the following pages. Several descriptive fields related to property type, occupancy, and built use were used to guide the categorization of the assessor data.

The mapping template included in this appendix provides examples of how typical property descriptions were mapped to the categories utilized in this fee study. These mappings are intended as a reference template to clarify how the categories are commonly applied. They are not intended to serve as a comprehensive or prescriptive guide, but rather to illustrate the approach used in leveraging assessor data to tailor the fee structure.

**Figure A-1.
Development Classification Mapping**

Property Type Field Options	Occupancy Description Field Options	Built-As Description Field Options	BBC Classification Options
Commercial			
	Bank	Bank	Retail & Commercial Public & Institutional
	Car Wash	Car Wash	Retail & Commercial
	Church	2 Story Church	Public & Institutional
		Storage Warehouse	
	Clubhouse	Clubhouse	Retail & Commercial Public & Institutional
	Community Recreation Center	Community Recreation Center	Public & Institutional
	Convenience Store	Convenience Store	
	Day Care Center	Day Care Center	
	Discount Store	Discount Store	Retail & Commercial
	Dispensary	Retail Store	
	Drive-up Mini Banks	Drive-up Mini Banks	
	Equipment Building	Equipment Building	Warehouse
	Equipment Storage	Equipment Storage	Warehouse Public & Institutional
		Storage Garage	Warehouse
	Fast Food Restaurant	Fast Food Restaurant Restaurant	Retail & Commercial
	Fire Station	Fire Station Staffed	
	Golf Cart Storage Bldgs	Equipment Storage Golf Cart Storage Bldgs	Public & Institutional
	Health Club	Health Club	Retail & Commercial
	High School	High School	Public & Institutional
	Indust Heavy Manufacturing	Indust Heavy Manufacturing	
	Indust Light Manufacturing	Indust Light Manufacturing	Industrial & Manufacturing
	Industrial Flex Mall Building	Industrial Flex Mall Building	
	Library - Public	Library - Public	Public & Institutional
	Light Commercial Utility	Light Commercial Utility	Retail & Commercial
		Storage Warehouse	Warehouse
	Loft - Industrial	Loft - Industrial	Industrial & Manufacturing
	Market	Market	Retail & Commercial
	Material Storage Sheds	Material Storage Sheds	Warehouse

Source: Larimer County Assessor; BBC Research & Consulting, 2025.

Figure A-1, continued.
Development Classification Mapping

Property Type Field Options	Occupancy Description Field Options	Built-As Description Field Options	BBC Classification Options
Commercial			
	Medical Offices	Medical Offices	Office
		Office Building	Public & Institutional Office
	Mini Warehouse	Mini Warehouse	Warehouse
	Multiple - Residential	Office Building	Office
		Retail Store	Retail & Commercial
	Neighborhood Shopping Center	Neighborhood Shopping Center	Retail & Commercial
	Office Building	Government Building	Public & Institutional
		Indust Light Manufacturing	Industrial & Manufacturing
		Office Building	Office
		Retail Store	Retail & Commercial
		Storage Warehouse	Warehouse
		Veterinary Office	Office
	Post Office	Post Office	Public & Institutional
	Restaurant	Restaurant	
		Retail Store	Retail & Commercial
		Service Garage	
	Retail Store	Retail Store	
	School - Elementary/Secondary	School - Elementary/Secondary	Public & Institutional
	Service Garage	Service Garage	Retail & Commercial
	Storage Garage	Storage Garage	Warehouse
	Storage Warehouse	Retail Store	Retail & Commercial
		Storage Warehouse	Warehouse
	Veterinary Hospital	Veterinary Hospital	Retail & Commercial
Duplex			
	Additional Residence	Duplex Two Story	
	Duplex -over-under	Duplex One Story	
		Duplex Two Story	Multifamily Residential
	Duplex -side by side	Duplex One Story	
		Duplex Two Story	
Mobile Home			
	MH Comm	Double Wide	
		Single Wide	
	MH In Park	Double Wide	Single Family Residential
		Single Wide	
	MH on Ag	Double Wide	
		Single Wide	

Source: Larimer County Assessor; BBC Research & Consulting, 2025.

Figure A-1, continued.
Development Classification Mapping

Property Type Field Options	Occupancy Description Field Options	Built-As Description Field Options	BBC Classification Options	
Multiple Unit				
	Apartment w/4-8 Units	Apartment <= 3 Stories	Multifamily Residential	
	Multi 1 Story	Apartment <= 3 Stories		
	Multi 2 Story	Apartment <= 3 Stories		
	Multi Bi Level	Apartment <= 3 Stories		
	Multiple - Elderly Assisted Living	Multiple - Elderly Assisted Living		
Residential				
	Additional Residence	1&½ Story Fin 2 Story Cabin Ranch	Single Family Residential	
	Converted House	1&½ Story Fin 2 Story Ranch		
	Group Care Homes	Multiple - Elderly Assisted Living	Multifamily Residential	
	Manufactured Home On Real	Modular		
	Patio Home Single Family Residential	1&½ Story Fin 2 Story Ranch	Single Family Residential	
	Single Family Residential	1&½ Story Fin 2 Story 2&½ Story Bi Level 2 Story Modular Modular 2 Story Ranch Split Level		
	Single Family Residential On Ag	1&½ Story Fin Ranch		
Townhouse				
	Townhouse	Townhouse One Story Townhouse Two Story		Multifamily Residential
	Townhouse - 1/2 Duplex	Townhouse One Story Townhouse Two Story		
	Townhouse/Condo	Townhouse One Story Townhouse Two Story		
Triplex				
	Triplex	Triplex One Story Triplex Split Level	Multifamily Residential	

Source: Larimer County Assessor; BBC Research & Consulting, 2025.