

# Capital Improvement Plan and Development Impact Fee Study

Final Report Submitted to:  
Sand Hollow Fire Protection District

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**2022 Capital Improvement Plan and Development Impact Fee Study**  
**Sand Hollow Fire Protection District**

Executive Summary.....	3
Idaho Development Impact Fee Enabling Legislation.....	4
Summary of Capital Improvement Plan and Development Impact Fees.....	5
Methodologies and Credits.....	5
Fee Methodology.....	6
Capital Improvement Plan .....	6
Maximum Supportable Development Impact Fees by Type of Land Use.....	6
Development Impact Fee Analysis.....	8
Methodology.....	8
Proportionate Share.....	8
Service Units.....	9
Sand Hollow Fire District Level of Service Analysis.....	10
Station Space .....	10
Vehicles/Apparatus.....	11
Equipment.....	11
Planned Growth-Related Infrastructure Improvements.....	12
Planned Fire Stations .....	12
Planned Vehicles/Apparatus.....	13
Planned Equipment.....	14
Cost to Prepare Development Impact Fee Report.....	15
Input Variables and Development Impact Fees .....	15
Capital Improvement Plan .....	17
Capital Improvement Plan .....	17
Funding Sources for Capital Improvements .....	18
Proportionate Share Analysis.....	20
Implementation and Administration .....	21
Appendix A. Land Use Definitions.....	23
Residential Development.....	23
Nonresidential Development Categories.....	23
Appendix B. Demographic Assumptions.....	25
Population and Housing Characteristics .....	25
Base Year Population and Housing Units.....	26
Population and Housing Unit Projections.....	27
Current Employment and Nonresidential Floor Area .....	28
Nonresidential Floor Area Projections.....	30

## EXECUTIVE SUMMARY

The Sand Hollow Fire Protection District (“Fire District”) retained TischlerBiseGalena to prepare a Capital Improvement Plan and Development Impact Fee Study in order to meet the new demands generated by new development within the Fire District. This report presents the methodology and calculation used to generate current levels of service and updated maximum supportable impact fees. It is intended to serve as supporting documentation for the evaluation and establishment of impact fees in the Fire District.

The purpose of this study is to demonstrate the Fire District’s compliance with Idaho Statutes as authorized by the Idaho Legislature. Consistent with the authorization, it is the intent of the Fire District to: (Idaho Code 67-8202(1-4))

1. Collect impact fees to ensure that adequate public facilities are available to serve new growth and development;
2. Promote orderly growth and development by establishing uniform standards by which local governments may require that those who benefit from new growth and development pay a proportionate share of the cost of new public facilities needed to serve new growth and development;
3. Establish minimum standards for the adoption of development impact fee ordinances by government entities;
4. Ensure that those who benefit from new growth and development are required to pay no more than their proportionate share of the cost of public facilities needed to serve new growth and development and to prevent duplicate and ad hoc development requirements;

Impact fees are one-time payments used to construct system improvements needed to accommodate new development. An impact fee represents new growth’s fair share of capital facility needs. By law, impact fees can only be used for capital improvements, not operating or maintenance costs. Impact fees are subject to legal standards, which require fulfillment of three key elements: need, benefit and proportionality.

- First, to justify a fee for public facilities, it must be demonstrated that new development will create a need for capital improvements.
- Second, new development must derive a benefit from the payment of the fees (i.e., in the form of public facilities constructed within a reasonable timeframe).
- Third, the fee paid by a particular type of development should not exceed its proportional share of the capital cost for system improvements.

TischlerBiseGalena evaluated possible methodologies and documented appropriate demand indicators by type of development for the levels of service and fees. Local demographic data and improvement costs were used to identify specific capital costs attributable to growth. This report includes summary tables indicating the specific factors, referred to as level of service standards, used to derive the impact fees.

## **IDAHO DEVELOPMENT IMPACT FEE ENABLING LEGISLATION**

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The Enabling Legislation governs how development fees are calculated for municipalities in Idaho. All requirements of the Idaho Development Impact Fee Act have been met in the supporting documentation prepared by TischlerBiseGalena. There are four requirements of the Idaho Act that are not common in the development impact fee enabling legislation of other states. This overview offers further clarification of these unique requirements.

First, as specified in 67-8204(2) of the Idaho Act, “development impact fees shall be calculated on the basis of levels of service for public facilities . . . applicable to existing development as well as new growth and development.”

Second, Idaho requires a Capital Improvements Plan (CIP) [see 67-8208]. The CIP requirements are summarized in this report, with detailed documentation provided in the discussion on infrastructure.

Third, the Idaho Act also requires documentation of any existing deficiencies in the types of infrastructure to be funded by development impact fees [see 67-8208(1)(a)]. The intent of this requirement is to prevent charging new development to cure existing deficiencies. In the context of development impact fees for the Fire District, the term “deficiencies” means a shortage or inadequacy of current system improvements when measured against the levels of service to be applied to new development. It does not mean a shortage or inadequacy when measured against some “hoped for” level of service.

TischlerBiseGalena used the current infrastructure cost per service unit (i.e., existing standards), or future levels of service where appropriate, multiplied by the projected increase in service units over an appropriate planning timeframe, to yield the cost of growth-related system improvements. The relationship between these three variables can be reduced to a mathematical formula, expressed as  $A \times B = C$ . In section 67-8204(16), the Idaho Act simply reorganizes this formula, stating the cost per service unit (i.e., development impact fee) may not exceed the cost of growth-related system improvements divided by the number of projected service units attributable to new development (i.e.,  $A = C \div B$ ). By using existing infrastructure standards to determine the need for growth-related capital improvements, the Fire District ensures the same level-of-service standards are applicable to existing and new development. Using existing infrastructure standards also means there are no existing deficiencies in the current system that must be corrected from non-development impact fee funding.

Fourth, Idaho requires a proportionate share determination [see 67-8207]. Basically, local government must consider various types of applicable credits and/or other revenues that may reduce the capital costs attributable to new development. The development impact fee methodologies and the cash flow analysis have addressed the need for credits to avoid potential double payment for growth-related infrastructure.

## **SUMMARY OF CAPITAL IMPROVEMENT PLAN AND DEVELOPMENT IMPACT FEES**

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### **METHODOLOGIES AND CREDITS**

Development impact fees can be calculated by any one of several legitimate methods. The choice of a particular method depends primarily on the service characteristics and planning requirements for each facility type. Each method has advantages and disadvantages in a particular situation, and to some extent can be interchangeable, because each allocates facility costs in proportion to the needs created by development.

Reduced to its simplest terms, the process of calculating development impact fees involves two main steps: (1) determining the cost of development-related capital improvements and (2) allocating those costs equitably to various types of development. In practice, though, the calculation of impact fees can become quite complicated because of the many variables involved in defining the relationship between development and the need for facilities. The following paragraphs discuss three basic methods for calculating development impact fees, and how each method can be applied.

- **Plan-Based Fee Calculation.** The plan-based method allocates costs for a specified set of improvements to a specified amount of development. Facility plans identify needed improvements, and land use plans identify development. In this method, the total cost of relevant facilities is divided by total demand to calculate a cost per unit of demand. Then, the cost per unit of demand is multiplied by the amount of demand per unit of development (e.g., housing units or square feet of building area) in each category to arrive at a cost per specific unit of development (e.g., single family detached unit).
- **Cost Recovery or Buy-In Fee Calculation.** The rationale for the cost recovery approach is that new development is paying for its share of the useful life and remaining capacity of facilities already built or land already purchased from which new growth will benefit. This methodology is often used for systems that were oversized such as sewer and water facilities.
- **Incremental Expansion Fee Calculation.** The incremental expansion method documents the current level of service (LOS) for each type of public facility in both quantitative and qualitative measures, based on an existing service standard (such as square feet per student). This approach ensures that there are no existing infrastructure deficiencies or surplus capacity in infrastructure. New development is only paying its proportionate share for growth-related infrastructure. The level of service standards are determined in a manner similar to the current replacement cost approach used by property insurance companies. However, in contrast to insurance practices, the fee revenues would not be for renewal and/or replacement of existing facilities. Rather, revenue will be used to expand or provide additional facilities, as needed, to accommodate new development. An incremental expansion cost method is best suited for public facilities that will be expanded in regular increments, with LOS standards based on current conditions in the community.

- **Credits.** Regardless of the methodology, a consideration of “credits” is integral to the development of a legally valid impact fee methodology. There are two types of “credits,” each with specific and distinct characteristics, but both of which should be addressed in the calculation of development impact fees. The first is a credit due to possible double payment situations. This could occur when contributions are made by the property owner toward the capital costs of the public facility covered by the impact fee. This type of credit is integrated into the impact fee calculation. The second is a credit toward the payment of a fee for dedication of public sites or improvements provided by the developer and for which the impact fee is imposed. This type of credit is addressed in the administration and implementation of a facility fee program.

**FEE METHODOLOGY**

Of the fee methodologies discussed above, the *plan-based* methodology is used to calculate impact fees for the Fire District. A summary of impact fee components is provided below:

**Figure 1: Summary of Impact Fee Methodology**

Fee Category	Service Area	Incremental Expansion	Plan-Based	Cost Recovery	Cost Allocation
Fire	Districtwide	n/a	Station Facilities, Vehicles and Apparatus, Equipment	n/a	Population, Nonresidential Vehicle Trips

**CAPITAL IMPROVEMENT PLAN**

The Fire District impact fee contains components for additional station space and vehicles and apparatus. Functional population is used to determine residential and nonresidential proportionate share factors (i.e., how much of the current infrastructure serves residential or nonresidential land uses).

To serve projected growth over the next ten years, the following infrastructure investment is planned:

- 1,250 square feet of station space
- 3 new pieces of apparatus
- 10 new pieces of equipment
- Cost recovery for Impact Fee Study

**MAXIMUM SUPPORTABLE DEVELOPMENT IMPACT FEES BY TYPE OF LAND USE**

Figure 2 provides a schedule of the maximum supportable development impact fees by type of land use for the Fire District. The fees represent the highest supportable amount for each type of applicable land use, and represents new growth’s fair share of the cost for capital facilities. The Fire District may adopt fees that are less than the amounts shown. However, a reduction in impact fee revenue will necessitate an increase in other revenues, a decrease in planned capital expenditures, and/or a decrease in levels of service.

The fees for residential development are to be assessed per housing unit. For nonresidential development, the fees are assessed per square foot of floor area. Nonresidential development categories are consistent with the terminology and definitions contained in the reference book, Trip Generation 11<sup>th</sup> Edition, published by the Institute of Transportation Engineers. These definitions are provided in the Appendix A. Land Use Definitions.

**Figure 2: Summary of Maximum Supportable Development Impact Fees by Land Use**

<b>Residential</b>		
<b>Housing Type</b>	<b>Persons per Housing Unit</b>	<b>Maximum Supportable Fee per Unit</b>
Single Family	2.60	\$2,402
Multifamily	1.53	\$1,413

  

<b>Nonresidential</b>		
<b>Development Type</b>	<b>Trips per 1,000 Sq. Ft.</b>	<b>Maximum Supportable Fee per 1,000 Sq. Ft.</b>
Retail	14.06	\$13,748
Office	5.42	\$5,298
Industrial	2.44	\$2,380
Institutional	11.30	\$11,042

Calculations throughout this technical memo are based on an analysis conducted using Excel software. Results are discussed in the memo using one-and two-digit places (in most cases), which represent rounded figures. However, the analysis itself uses figures carried to their ultimate decimal places; therefore, the sums and products generated in the analysis may not equal the sum or product if the reader replicates the calculation with the factors shown in the report (due to the rounding of figures shown, not in the analysis).

## DEVELOPMENT IMPACT FEE ANALYSIS

### METHODOLOGY

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The Fire District development impact fee includes three components: station expansion, vehicles/apparatus, and equipment. TischlerBiseGalena recommends a *plan-based* approach, based on current capital expansion plans. Per the Idaho Act, capital improvements are limited to those improvements that have a certain lifespan. As specified in 67-8203(3) of the Idaho Act, “Capital improvements’ means improvements with a useful life of ten (10) years or more, by new construction or other action, which increase the service capacity of a public facility.”

The residential portion of the fee is derived from the product of persons per housing unit (by type of unit) multiplied by the net capital cost per person. The nonresidential portion is derived from the product of nonresidential vehicle trips per 1,000 square feet of nonresidential space multiplied by the net capital cost per vehicle trip.

Specified in Idaho Code 67-8209(2), local governments must consider historical, available, and alternative sources of funding for system improvements. Currently, there are no dedicated revenues being collected by the Fire District to fund growth-related projects for Fire District facilities. Furthermore, the maximum supportable impact fees are constructed to offset all growth-related capital costs for Fire District facilities. Evidence is given in this chapter that the projected capital costs from new development will be entirely offset by the development impact fees. Thus, no general tax dollars are assumed to be used to fund growth-related capital costs, requiring no further revenue credits.

### PROPORTIONATE SHARE

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TischlerBiseGalena recommends functional population to allocate the cost of Fire District infrastructure to residential and nonresidential development. Functional population is similar to what the U.S. Census Bureau calls "daytime population," by accounting for people living and working in a jurisdiction, but also considers commuting patterns and time spent at home and at nonresidential locations. OnTheMap is a web-based mapping and reporting application that shows where workers are employed and where they live. It describes geographic patterns of jobs by their employment locations and residential locations as well as the connections between the two locations. OnTheMap was developed through a unique partnership between the U.S. Census Bureau and its Local Employment Dynamics (LED) partner states. OnTheMap data is used, as shown in Figure 3, to derive Functional Population shares for Fire District.

Residents that do not work are assigned 20 hours per day to residential development and 4 hours per day to nonresidential development (annualized averages). Residents that work in the Fire District boundary are assigned 14 hours to residential development and 10 hours to nonresidential development. Residents that work outside the area are assigned 14 hours to residential development. Inflow commuters are assigned 10 hours to nonresidential development. Based on 2019 functional population data for the Fire

District, the cost allocation for residential development is 82 percent while nonresidential development accounts for 18 percent of the demand for Fire District facilities, apparatus and equipment.

**Figure 3: Proportionate Share Factors**

Sand Hollow Fire District, ID (2020)			
<i><b>Residential</b></i>		<i>Demand Hours/Day</i>	<i>Person Hours</i>
Population*	603		
Residents Not Working	357	20	7,130
Employed Residents	246		
Employed in Sand Hollow Fire	3	14	42
Employed outside Sand Hollow Fire	243	14	3,402
		<b>Residential Subtotal</b>	<b>10,574</b>
		<b>Residential Share =&gt;</b>	<b>82%</b>
<i><b>Nonresidential</b></i>			
Non-working Residents	357	4	1,426
Jobs Located in Sand Hollow Fire	91		
Residents Employed in Sand Hollow Fire	88	10	880
Non-Resident Workers (inflow commuters)	3	10	30
		<b>Nonresidential Subtotal</b>	<b>2,336</b>
		<b>Nonresidential Share =&gt;</b>	<b>18%</b>
		<b>TOTAL</b>	<b>12,910</b>

Source: U.S. Census Bureau, OnTheMap 6.1.1 Application and LEHD Origin-Destination Employment Statistics.

\* Source: U.S. Census Bureau, 2020 American Community Survey 5-Year Estimates

## SERVICE UNITS

Figure 4 displays the service units for residential and nonresidential land uses. For residential development, the service units are persons per housing unit by type of unit. For nonresidential development, the service units are average day nonresidential vehicle trips.

**Figure 4: Sand Hollow Fire District Service Units**

*Residential (per housing unit)*

Type of Housing Unit	Persons per Housing Unit*
Single-Family	2.60
Multi-Family	1.53

*Nonresidential Development (per 1,000 square feet)*

Type	Trips per 1,000 Sq. Ft.**	Trip Rate Adjustment	Adjusted Trips per 1,000 Sq. Ft.
Retail	37.01	38%	14.06
Office	10.84	50%	5.42
Industrial	4.87	50%	2.44
Institutional	22.59	50%	11.30

\*Derived from the U.S. Census Bureau American Community

\*\*ITE Trip Generation Rates, 11th Edition (2021)

**SAND HOLLOW FIRE DISTRICT LEVEL OF SERVICE ANALYSIS**

The following section details the level of service calculations for the Fire District.

**STATION SPACE**

As shown in Figure 5, the Fire District currently operates one station, which totals 4,000 square feet of which 1,755 is owned by the Fire District. The existing level of service for residential development is 2.15 square feet per person, and the nonresidential level of service is 1.01 square feet per nonresidential vehicle trip. This is determined by multiplying the total square footage by the proportionate share factors (82% for residential development and 18% for nonresidential development), and then dividing the respective totals by the current service units (668 persons for residential and 312 nonresidential vehicle trips).

**Figure 5: Existing Level of Service for Station Space**

Facility	Square Feet
Station	1,755
<b>Total</b>	<b>1,755</b>

<i>Level-of-Service Standards</i>	Residential	Nonresidential
Proportionate Share	82%	18%
Share of Facility Square Feet	1,439	316
Population/Nonres. Vehicle Trips	668	312
<b>Square Feet per Person/Nonres. Trips</b>	<b>2.15</b>	<b>1.01</b>

**VEHICLES/APPARATUS**

As shown in Figure 6, the Fire District currently has 10 pieces of apparatus. The existing level of service for residential development is 12.28 pieces of apparatus for every 1,000 persons, and the nonresidential level of service is 5.78 pieces of apparatus per 1,000 nonresidential vehicle trips. This is determined by multiplying the total apparatus inventory by the proportionate share factors (82% for residential development and 18% for nonresidential development), and then dividing the respective totals by the current service units (668 persons for residential and 312 nonresidential vehicle trips) and multiplying by 1,000.

**Figure 6: Existing Level of Service for Vehicles and Apparatus**

Vehicles & Apparatus	Total Units
Engines	2
Water Tenders	2
Brush Rigs	4
Command Trucks	2
<b>Total</b>	<b>10</b>

<i>Level-of-Service Standards</i>	<b>Residential</b>	<b>Nonresidential</b>
Proportionate Share	82%	18%
Share of Vehicles & Apparatus	8.20	1.80
Population/Nonres. Vehicle Trips	668	312
<b>Vehicles &amp; Apparatus per 1,000 Persons/Nonres. Trips</b>	<b>12.28</b>	<b>5.78</b>

**EQUIPMENT**

As shown in Figure 7, the Fire District currently has 30 pieces of equipment. The existing level of service for residential development is 36.83 pieces of equipment for every 1,000 persons, and the nonresidential level of service is 17.33 pieces of equipment per 1,000 nonresidential vehicle trips. This is determined by multiplying the total equipment inventory by the proportionate share factors (82% for residential development and 18% for nonresidential development), and then dividing the respective totals by the current service units (668 persons for residential and 312 nonresidential vehicle trips) and multiplying by 1,000.

**Figure 7: Existing Level of Service for Equipment**

Equipment	Total Units
Structure FF Bunker Gear	10
Wildland Gear	20
<b>Total</b>	<b>30</b>

<i>Level-of-Service Standards</i>	Residential	Nonresidential
Proportionate Share	82%	18%
Share of Equipment	24.60	5.40
Population/Nonres.Vehicle Trips	668	312
<b>Equipment per 1,000 Persons/Nonres. Trips</b>	<b>36.83</b>	<b>17.33</b>

**PLANNED GROWTH-RELATED INFRASTRUCTURE IMPROVEMENTS**

**PLANNED FIRE STATIONS**

The Fire District plans on expanding the current fire station by adding living and dorm space to allow for full-time employees. As shown in Figure 8, the Fire District estimates adding approximately 1,250 square feet, with an estimated cost of \$500,000 would be sufficient through the year 2031. To ensure new development is not paying to elevate the level of service in the Fire District, we compared the square footage of the planned station expansion (1,250 square feet) to the increase in residential and nonresidential service units through 2031. As shown in Figure 8, new development is being charged for a level of service that is below what currently exists in the Fire District. For example, as shown previously in Figure 5, the existing level of service per person is 2.15 square feet, compared to 1.12 square feet per person for the impact fee calculation.

As shown in Figure 8, the cost per residential and nonresidential service unit is determined by multiplying the planned square footage (1,250) by the proportionate share factors (82% for residential and 18% for nonresidential), and then dividing the respective totals by the projected increase in service units through the year 2031 (912 persons and 189 nonresidential vehicle trips). When the resulting residential and nonresidential levels of service (1.12 square feet per person and 1.19 square feet per nonresidential trip) are compared to the cost per square foot (\$400), the resulting cost per service units are \$448 per person and \$476 per nonresidential vehicle trip.

**Figure 8: Planned Fire Station Infrastructure and Cost per Service Unit**

Facility	Square Feet	Cost per Square Foot	Estimated Cost
Station	1,250	\$400	\$500,000
<b>Total</b>	<b>1,250</b>	<b>\$400</b>	<b>\$500,000</b>

<i>Level-of-Service Standards</i>	Residential	Nonresidential
Proportionate Share	82%	18%
Share of Facility Square Feet	1,025	225
Projected Population/Nonres. Vehicle Trips	912	189
<b>Square Feet per Person/Nonres. Trips</b>	<b>1.12</b>	<b>1.19</b>

<i>Cost Analysis</i>	Residential	Nonresidential
Square Feet per Person/Nonres. Trips	1.12	1.19
Average Cost per Square Foot	\$400	\$400
<b>Capital Cost Per Person/Nonres. Trip</b>	<b>\$448</b>	<b>\$476</b>

**PLANNED VEHICLES/APPARATUS**

To compliment the planned expansion, the Fire District plans on purchasing 3 additional pieces of apparatus. As shown in Figure 9, the estimated cost of the apparatus is \$425,000. Similar to the planned station expansion, the Fire District estimates the apparatus will be sufficient through the year 2031. To ensure new development is not paying to elevate the level of service in the Fire District, we compared the number of planned apparatus (3 pieces) to the increase in residential and nonresidential service units through 2031. As shown in Figure 9, similar to station space new development is actually being charged for a lower level of service than what currently exists in the Fire District. For example, as shown previously in Figure 6, the existing level of service per 1,000 persons is 12.28 vehicles/apparatus, compared to 2.70 vehicles/apparatus per 1,000 persons for the impact fee calculation.

As shown in Figure 9, the cost per residential and nonresidential service unit is determined by multiplying the planned vehicle/apparatus (3) by the proportionate share factors (82% for residential and 18% for nonresidential), and then dividing the respective totals by the projected increase in service units through the year 2031 (912 persons and 189 nonresidential vehicle trips). When the resulting residential and nonresidential levels of service (2.70 vehicles/apparatus per 1,000 persons and 2.86 vehicles/apparatus per 1,000 nonresidential trips) are compared to the weighted average cost per vehicle/apparatus (\$141,667), the resulting cost per service units are \$383 per person and \$405 per nonresidential vehicle trip.

**Figure 9: Planned Vehicles/Apparatus and Cost per Service Unit**

Vehicles & Apparatus	Total Units	Cost per Vehicle	Estimated Cost
Extrication Equipment	1	\$50,000	\$50,000
Heavy Rescue	1	\$300,000	\$300,000
Air Trailer	1	\$75,000	\$75,000
<b>Total</b>	<b>3</b>	<b>\$141,667</b>	<b>\$425,000</b>

<i>Level-of-Service Standards</i>	Residential	Nonresidential
Proportionate Share	82%	18%
Share of Vehicles & Apparatus	2.46	0.54
Projected Population/Nonres. Vehicle Trips	912	189
<b>Vehicles &amp; Apparatus per 1,000 Persons/Nonres. Trips</b>	<b>2.70</b>	<b>2.86</b>

<i>Cost Analysis</i>	Residential	Nonresidential
Vehicles & Apparatus per 1,000 Persons/Nonres. Trips	2.70	2.86
Average Cost per Unit	\$141,667	\$141,667
<b>Capital Cost Per Person/Nonres. Trip</b>	<b>\$383</b>	<b>\$405</b>

**PLANNED EQUIPMENT**

To facilitate the addition of growth-related personnel, the Fire District plans on purchasing 10 self-contained breathing apparatus (SCBA). As shown in Figure 9, the estimated cost of the equipment is \$80,000. Similar to the planned station expansion, the Fire District estimates the equipment will be sufficient through the year 2031. To ensure new development is not paying to elevate the level of service in the Fire District, we compared the number of planned equipment (10 pieces) to the increase in residential and nonresidential service units through 2031. As shown in Figure 9, similar to station space new development is actually being charged for a lower level of service than what currently exists in the Fire District. For example, as shown previously in Figure 7, the existing level of service per 1,000 persons is 36.83 equipment units, compared to 8.99 equipment units per 1,000 persons for the impact fee calculation.

As shown in Figure 9, the cost per residential and nonresidential service unit is determined by multiplying the planned equipment (10) by the proportionate share factors (82% for residential and 18% for nonresidential), and then dividing the respective totals by the projected increase in service units through the year 2031 (912 persons and 189 nonresidential vehicle trips). When the resulting residential and nonresidential levels of service (8.99 equipment units per 1,000 persons and 9.52 equipment units per 1,000 nonresidential trip) are compared to the weighted average cost per vehicle/equipment (\$8,000), the resulting cost per service units are \$72 per person and \$76 per nonresidential vehicle trip.

**Figure 10: Planned Equipment and Cost per Service Unit**

Equipment	Total Units	Cost per Unit	Estimated Cost
SCBA	10	\$8,000	\$80,000
<b>Total</b>	<b>10</b>	<b>\$8,000</b>	<b>\$80,000</b>

<i>Level-of-Service Standards</i>	Residential	Nonresidential
Proportionate Share	82%	18%
Share of Equipment	8.20	1.80
Projected Population/Nonres. Vehicle Trips	912	189
<b>Equipment per 1,000 Persons/Nonres. Trips</b>	<b>8.99</b>	<b>9.52</b>

<i>Cost Analysis</i>	Residential	Nonresidential
Equipment per 1,000 Persons/Nonres. Trips	8.99	9.52
Average Cost per Unit	\$8,000	\$8,000
<b>Capital Cost Per Person/Nonres. Trip</b>	<b>\$72</b>	<b>\$76</b>

**COST TO PREPARE DEVELOPMENT IMPACT FEE REPORT**

The cost to prepare the Capital Improvement Plan and Development Impact Fee Report totals \$10,000. The Fire District will need to update its report every five years. Based on this cost, proportionate share, and five-year projections of new residential and nonresidential development from the Appendix B (Demographic Assumptions), the cost is \$21 per person and \$21 per nonresidential vehicle trip.

**Figure 11: Cost to Prepare Development Impact Fee Report**

Component	Cost	Demand Indicator	Proportionate Share	Cost Allocation			Cost per Demand	
				Units	2022	2027	Increase	Unit Increase
Fire	\$10,000	Residential	82%	Population	733	1,127	394	\$21
		Nonresidential	18%	Vehicle Trips	327	414	87	\$21

**INPUT VARIABLES AND DEVELOPMENT IMPACT FEES**

Cost factors for fire facilities, apparatus, and professional services are summarized at the top of Figure 12. The residential impact fees are calculated by multiplying the \$924 cost per person by the service unit ratios (persons per housing unit) for each housing type. Nonresidential development fees are calculated by multiplying the \$978 per nonresidential vehicle trip by the average weekday vehicle trips per 1,000 square feet ratios and the trip adjustment factors for each development type.

**Figure 12: Sand Hollow Fire District Maximum Supportable Impact Fees**

Fee Component	Proposed Fees	
	Cost per Person	Cost per Nonres. Vehicle Trips
Fire Stations	\$448	\$476
Fire Vehicles and Apparatus	\$383	\$405
Fire Equipment	\$72	\$76
Impact Fee Study	\$21	\$21
<b>Gross Total</b>	<b>\$924</b>	<b>\$978</b>
<b>Net Total</b>	<b>\$924</b>	<b>\$978</b>

**Residential**

Housing Type	Persons per Housing Unit	Maximum Supportable Fee per Unit
Single Family	2.60	\$2,402
Multifamily	1.53	\$1,413

**Nonresidential**

Development Type	Trips per 1,000 Sq. Ft.	Maximum Supportable Fee per 1,000 Sq. Ft.
Retail	14.06	\$13,748
Office	5.42	\$5,298
Industrial	2.44	\$2,380
Institutional	11.30	\$11,042

## CAPITAL IMPROVEMENT PLAN

The following section provides a summary of the Capital Improvement Plans depicting growth-related capital demands and costs on which the Fire District impact fees are based.

First, Figure 13 lists the projected growth over the next ten years in the Fire District. Overall, there is about a 136 percent increase in residential development (912 new residents and 365 new housing units) and a 60 percent increase in nonresidential development (62 new jobs and 34,000 square feet of development).

**Figure 13: Ten-Year Projected Residential and Nonresidential Growth**

Sand Hollow Fire District, ID	Base Year 2021	1 2022	2 2023	3 2024	4 2025	5 2026	6 2027	7 2028	8 2029	9 2030	10 2031	Total Increase
Population [1]	668	733	798	862	927	1,027	1,127	1,226	1,326	1,426	1,580	912
<b>Housing Units by Type [2]</b>												
Single Family	240	263	286	309	332	368	404	440	476	512	567	327
Multifamily	28	31	34	37	40	44	48	52	56	60	66	38
Total Housing Units	268	294	320	346	372	412	452	492	532	572	633	365
<b>Jobs [3]</b>												
Retail	24	25	26	27	29	30	31	33	35	36	38	14
Office	2	2	2	3	3	3	3	3	3	3	4	1
Industrial	62	65	68	72	75	79	82	86	91	95	100	38
Institutional	15	15	16	17	18	19	19	20	21	22	24	9
Total Jobs	103	108	113	118	124	130	136	143	150	157	165	62
<b>Nonresidential Floor Area (1,000 sq. ft.) [4]</b>												
Retail	11	12	12	13	13	14	15	16	16	17	18	7
Office	1	1	1	1	1	1	1	1	1	1	1	0
Industrial	40	41	43	46	48	50	53	55	58	61	64	24
Institutional	5	5	5	6	6	6	6	7	7	7	8	3
Total Floor Area	56	59	62	65	68	71	75	78	82	86	90	34

[1] Population growth is based on housing development and persons per housing unit factors

[2] Five-year average of building permits is assumed to continue over the next ten years

[3] Source: American Census Bureau OnTheMap

[4] Source: TischlerBise analysis; Institute of Transportation Engineers, [Trip Generation](#), 2021

The Idaho Development Fee Act requires Capital Improvement Plans to be updated regularly, at least once every five years (Idaho Code 67-8208(2)). This report projects revenue and fees based on 10-year forecast in an effort to provide the public and elected officials with illustrative guidance of probable growth demands based on current trends however, per Idaho Code, it is expected that an update to the Capital Improvement Plan included in this study will occur within five years.

## CAPITAL IMPROVEMENT PLAN

A summary of the Fire District is shown below in Figure 14. As shown, the following additional infrastructure is needed to maintain current levels of service over the next ten years: 1,250 square feet of station space with an estimated cost of \$500,000, 3 pieces of apparatus with an estimated cost of \$425,000, 10 pieces of equipment with an estimated cost of \$80,000 and the cost of the first of two required Impact Fee Studies.

**Figure 14: Sand Hollow Fire District Capital Improvement Plan**

Type of Capital Infrastructure	Description	Units #/Sq.Ft	Cost \$/Unit	Total Cost	Growth Allocation	Subject to Impact Fees	Funding from Other Sources
<b>Facilities</b>							
Station	Expansion for Growth Bay and Dorms	1,250	400	500,000	100%	500,000	0
Total Facilities	Growth Adjusted Number of Units	1,250		500,000		500,000	0
<b>Vehicles</b>							
Extrication Equipment	Add	1	50,000	50,000	100%	50,000	0
Heavy Rescue	Add	1	300,000	300,000	100%	300,000	0
Engine	Replace	1	600,000	600,000	0%	0	600,000
Air Trailer	Add	1	75,000	75,000	100%	75,000	0
Total Vehicles	Growth Adjusted Number of Units	3.0		1,025,000		425,000	600,000
<b>Equipment</b>							
SCBA	Add	10	8,000	80,000	100%	80,000	0
Total Equipment	Growth Adjusted Number of Units	10.0		80,000		80,000	0
Total Capital Needs		1,263		1,605,000		1,005,000	600,000
Plus Impact Fee Study				10,000	100%	10,000	0
Total Capital Improvement Plan				1,615,000		1,015,000	600,000

### FUNDING SOURCES FOR CAPITAL IMPROVEMENTS

In determining the proportionate share of capital costs attributable to new development, the Idaho Development Fee Act states that local governments must consider historical, available, and alternative sources of funding for system improvements (Idaho Code 67-8209(2)). Currently, there are no dedicated revenues being collected by the Fire District to fund growth-related projects.

Furthermore, the maximum supportable impact fees are constructed to offset all growth-related capital costs to the Fire District for Fire facilities. Evidence is given in Figure 15 in the specific chapters of this report that the projected capital costs from new development will be nearly offset by the development impact fees. Actual results will vary from projections so no general tax dollars are assumed to be used to fund growth-related capital costs, requiring no revenue credits.

Potential development impact fee revenues are summarized in Figure 15, assuming implementation of the fees at the maximum supportable level as indicated in this report. Based on the land use assumptions detailed in the Appendix, over the next ten years the Fire development impact fees are projected to generate approximately \$1.0 million. At the bottom of the figure, the estimated revenues are compared to the estimated growth-related capital costs. The impact fee revenues are projected to nearly offset the capital costs.

**Figure 15: Projected Development Impact Fee Revenue**

		Single Family \$2,402 per unit	Multifamily \$1,413 per unit	Retail \$13,748 per KSF	Office \$5,298 per KSF	Industrial \$2,380 per KSF	Institutional \$11,042 per KSF
Year		Housing Units	Housing Units	KSF	KSF	KSF	KSF
Base	2021	240	28	11	1	40	5
Year 1	2022	263	31	12	1	41	5
Year 2	2023	286	34	12	1	43	5
Year 3	2024	309	37	13	1	46	6
Year 4	2025	332	40	13	1	48	6
Year 5	2026	368	44	14	1	50	6
Year 6	2027	404	48	15	1	53	6
Year 7	2028	440	52	16	1	55	7
Year 8	2029	476	56	16	1	58	7
Year 9	2030	512	60	17	1	61	7
Year 10	2031	567	66	18	1	64	8
Ten-Year Increase		327	38	7	0	24	3
Projected Revenue =>		\$785,454	\$53,649	\$93,124	\$2,228	\$57,103	\$32,441
							<b>Projected Revenue =&gt; \$1,024,000</b>
							<b>Total Expenditures =&gt; \$1,015,000</b>
							<b>Non-Impact Fee Funding =&gt; \$0</b>

## PROPORTIONATE SHARE ANALYSIS

Development impact fees for the Fire District are based on reasonable and fair formulas or methods. The fees do not exceed a proportionate share of the costs incurred or to be incurred by the Fire District in the provision of system improvements to serve new development. The Fire District will fund non-growth-related improvements with non-development impact fee funds as it has in the past. Specified in the Idaho Development Impact Fee Act (Idaho Code 67-8207), several factors must be evaluated in the development impact fee study and are discussed below.

- 1) The development impact fees for the Fire District are based on new growth's share of the costs of previously built projects along with planned public facilities as provided by the Fire District. Projects are included in the Fire District's capital improvements plan and will be included in annual capital budgets.
- 2) Estimated development impact fee revenue was based on the maximum supportable development impact fees for the one, districtwide service area; results are shown in the cash flow analyses in this report. Development impact fee revenue will entirely fund growth-related improvements.
- 3) TischlerBiseGalena has evaluated the extent to which new development may contribute to the cost of public facilities. The development impact fees will replace the current dedicated revenues for applicable public facilities. Also, the report has shown that all applicable growth-related public facility costs will be entirely funded by impact fees, thus no credit is necessary for general tax dollar funding.
- 4) The relative extent to which properties will make future contributions to the cost of existing public facilities has also been evaluated in regards to existing debt. Outstanding debt for growth's portion of already constructed facilities will be paid from development impact fee revenue, therefore a future revenue credit is not necessary.
- 5) The Fire District will evaluate the extent to which newly developed properties are entitled to a credit for system improvements that have been provided by property owners or developers. These "site-specific" credits will be available for system improvements identified in the annual capital budget and long-term Capital Improvements Plans. Administrative procedures for site-specific credits should be addressed in the development impact fee ordinance.
- 6) Extraordinary costs, if any, in servicing newly developed properties should be addressed through administrative procedures that allow independent studies to be submitted to the Fire District. These procedures should be addressed in the development impact fee ordinance. One service area represented by the Fire District's geographic boundary is appropriate for the fees herein.
- 7) The time-price differential inherent in fair comparisons of amounts paid at different times has been addressed. All costs in the development impact fee calculations are given in current dollars with no assumed inflation rate over time. Necessary cost adjustments can be made as part of the annual evaluation and update of development impact fees.

## IMPLEMENTATION AND ADMINISTRATION

The Idaho Development Impact Fee Act (hereafter referred to as the Idaho Act) requires jurisdictions to form a Development Impact Fee Advisory Committee. The committee must have at least five members with a minimum of two members active in the business of real estate, building, or development. The committee acts in an advisory capacity and is tasked to do the following:

- Assist the governmental entity in adopting land use assumptions;
- Review the capital improvements plan, and proposed amendments, and file written comments;
- Monitor and evaluate implementation of the capital improvements plan;
- File periodic reports, at least annually, with respect to the capital improvements plan and report to the governmental entity any perceived inequities in implementing the plan or imposing the development impact fees; and
- Advise the governmental entity of the need to update or revise land use assumptions, the capital improvements plan, and development impact fees.

Per the above, the Fire District formed a Development Impact Fee Advisory Committee (“DIFAC”). TischlerBiseGalena and Fire District staff met with the DIFAC during the process and provided information on land use assumptions, level of service and cost assumptions, and draft development impact fee schedules. This report reflects comments and feedback received from the DIFAC.

The Fire District must develop and adopt a capital improvements plan (“CIP”) that includes those improvements for which fees were developed. The Idaho Act defines a capital improvement as an “improvement with a useful life of ten years or more, by new construction or other action, which increases the service capacity of a public facility.” Requirements for the CIP are outlined in Idaho Code 67-8208. Certain procedural requirements must be followed for adoption of the CIP and the development impact fee ordinance. Requirements are described in detail in Idaho Code 67-8206. The Fire District has a CIP that meets the above requirements.

TischlerBiseGalena recommends that development impact fees be updated annually to reflect recent data. One approach is to adjust for inflation in construction costs by means of an index like the RSMean or Engineering News Record (ENR). This index can be applied against the calculated development impact fee. If cost estimates change significantly, the Fire District should evaluate an adjustment to the CIP and development impact fees.

Idaho’s enabling legislation requires an annual development impact fees report that accounts for fees collected and spent during the preceding year (Idaho Code 67-8210). Development impact fees must be deposited in interest-bearing accounts earmarked for the associated capital facilities as outlined in capital improvements plans. Also, fees must be spent within eight years of when they are collected (on a first in, first out basis) unless the local governmental entity identifies in writing (a) a reasonable cause why the fees should be held longer than eight years; and (b) an anticipated date by which the fees will be expended but in no event greater than eleven years from the date they were collected.

Credits must be provided for in accordance with Idaho Code Section 67-8209 regarding site-specific credits or developer reimbursements for system improvements that have been included in the development impact fee calculations. Project improvements normally required as part of the development approval process are not eligible for credits against development impact fees. Specific policies and procedures related to site-specific credits or developer reimbursements for system improvements should be addressed in the ordinance that establishes the Fire District's fees.

The general concept is that developers may be eligible for site-specific credits or reimbursements only if they provide system improvements that have been included in CIP and development impact fee calculations. If a developer constructs a system improvement that was included in the fee calculations, it is necessary to either reimburse the developer or provide a credit against the fees in the area that benefits from the system improvement. The latter option is more difficult to administer because it creates unique fees for specific geographic areas. Based on TischlerBiseGalena's experience, it is better for a reimbursement agreement to be established with the developer that constructs a system improvement. For example, if a developer elects to construct a system improvement, then a reimbursement agreement can be established to payback the developer from future development impact fee revenue. The reimbursement agreement should be based on the actual documented cost of the system improvement, if less than the amount shown in the CIP. However, the reimbursement should not exceed the CIP amount that has been used in the development impact fee calculations.

## APPENDIX A. LAND USE DEFINITIONS

### RESIDENTIAL DEVELOPMENT

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As discussed below, residential development categories are based on data from the U.S. Census Bureau, American Community Survey. The Fire District will collect impact fees from all new residential units. One-time impact fees are determined by site capacity (i.e., number of residential units).

#### Single Family Units:

1. Single family detached is a one-unit structure detached from any other house, that is, with open space on all four sides. Such structures are considered detached even if they have an adjoining shed or garage. A one-family house that contains a business is considered detached as long as the building has open space on all four sides.
2. Single family attached (townhouse) is a one-unit structure that has one or more walls extending from ground to roof separating it from adjoining structures. In row houses (sometimes called townhouses), double houses, or houses attached to nonresidential structures, each house is a separate, attached structure if the dividing or common wall goes from ground to roof.
3. Mobile home includes both occupied and vacant mobile homes, to which no permanent rooms have been added. Mobile homes used only for business purposes or for extra sleeping space and mobile homes for sale on a dealer's lot, at the factory, or in storage are not counted in the housing inventory.

#### Multifamily Units:

1. 2+ units (duplexes and apartments) are units in structures containing two or more housing units, further categorized as units in structures with “2, 3 or 4, 5 to 9, 10 to 19, 20 to 49, and 50 or more apartments.”
2. Boat, RV, Van, etc. includes any living quarters occupied as a housing unit that does not fit the other categories (e.g., houseboats, railroad cars, campers, and vans). Recreational vehicles, boats, vans, railroad cars, and the like are included only if they are occupied as a current place of residence.

### NONRESIDENTIAL DEVELOPMENT CATEGORIES

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Nonresidential development categories used throughout this study are based on land use classifications from the book *Trip Generation* (ITE, 2021). A summary description of each development category is provided below.

**Retail:** Establishments primarily selling merchandise, eating/drinking places, and entertainment uses. By way of example, *Retail* includes shopping centers, supermarkets, pharmacies, restaurants, bars, nightclubs, automobile dealerships, movie theaters, and lodging (hotel/motel).

**Office:** Establishments providing management, administrative, professional, or business services. By way of example, *Office* includes banks, business offices, medical offices, and veterinarian clinics.

**Industrial:** Establishments primarily engaged in the production and transportation of goods. By way of example, *Industrial* includes manufacturing plants, trucking companies, warehousing facilities, utility substations, power generation facilities, and telecommunications buildings.

**Institutional:** Public and quasi-public buildings providing educational, social assistance, or religious services. By way of example, *Institutional* includes schools, universities, churches, daycare facilities, hospitals, health care facilities, and government buildings.

## APPENDIX B. DEMOGRAPHIC ASSUMPTIONS

### POPULATION AND HOUSING CHARACTERISTICS

Impact fees often use per capita standards and persons per housing unit or persons per household to derive proportionate share fee amounts. Housing types have varying household sizes and, consequently, a varying demand on City infrastructure and services. Thus, it is important to differentiate between housing types and size.

When persons per housing unit (PPHU) is used in the development impact fee calculations, infrastructure standards are derived using year-round population. In contrast, when persons per household (PPHH) is used in the development impact fee calculations, the fee methodology assumes all housing units will be occupied, thus requiring seasonal or peak population to be used when deriving infrastructure standards. Thus, TischlerBiseGalena recommends that fees for residential development in the Fire District be imposed according to persons per housing unit.

Based on housing characteristics, TischlerBiseGalena recommends using two housing unit categories for the Impact Fee study: (1) Single Family and (2) Multifamily. Each housing type has different characteristics which results in a different demand on Fire District facilities and services. Figure 16 shows TischlerBiseGalena estimates for the Fire District using persons per housing unit from the US Census American Community Survey 2020 5-Year Estimates data for Payette County. Housing units were provided by the Payette County Assessor data and population was then calculated. Single family units have a person per housing unit factor of 2.60 persons and multifamily units have an average of 1.53 persons per unit.

**Figure 16: Persons per Housing Unit**

Housing Type	Persons	Housing Units	Persons per Housing Unit	Households	Persons per Household	Housing Unit Mix
Single Family [1]	564	217	2.60	208	2.72	90%
Multifamily [2]	38	25	1.53	23	1.64	10%
<b>Total</b>	<b>603</b>	<b>242</b>	<b>2.49</b>	<b>231</b>	<b>2.61</b>	

[1] Includes attached and detached single family homes and mobile homes

[2] Includes structures with 2+ units

Source: U.S. Census Bureau, 2020 American Community Survey 5-Year Estimates

## BASE YEAR POPULATION AND HOUSING UNITS

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Assessor data from Payette County was used to determine the number of housing units in the Fire District for the base year. The proportionate number of persons per housing unit portrayed in Figure 16 derived from the U.S. Census American Community Survey for both single family and multifamily units were then multiplied by the number of housing units to estimate the base year household population of 668 as illustrated in Figure 17 below.

**Figure 17: Base Year Population and Housing Units**

Sand Hollow Fire District, ID	Base Year 2021
Population [1]	668
<b>Housing Units [1]</b>	
Single Family	240
Multifamily	28
Total Housing Units	268

[1] Source: U.S. Census Bureau, 2020 American Community Survey 5-Year Estimates, Payette County Assessor, TischlerBiseGalena Analysis

## POPULATION AND HOUSING UNIT PROJECTIONS

There are currently two subdivisions accounting for nearly 100 housing units in the planning stages in the Community of Sand Hollow. Additionally, there is a proposed 180-unit Recreational Vehicle Park proposed for the area. These units, along with the normal anticipated growth in the remainder of the Fire District have been taken into account when estimating the overall growth for the district. Population growth is based on persons per housing unit factors and housing development.

Estimates based upon the development data show a growth rate of approximately 9 percent annually, 136.5 percent over the next ten years, as shown in Figure 18. Resulting in an increase of 912 residents and a housing unit increase of 365. Single family development accounts for approximately 90 percent of the total housing growth.

**Figure 18. Residential Development Projections**

Sand Hollow Fire District, ID	Base Year 2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total Increase
Population [1]	668	733	798	862	927	1,027	1,127	1,226	1,326	1,426	1,580	<b>912</b>
	<i>Percent Increase</i>	<i>9.7%</i>	<i>8.8%</i>	<i>8.1%</i>	<i>7.5%</i>	<i>10.8%</i>	<i>9.7%</i>	<i>8.9%</i>	<i>8.1%</i>	<i>7.5%</i>	<i>10.8%</i>	<i>136.5%</i>
<b>Housing Units [2]</b>												
Single Family	240	263	286	309	332	368	404	440	476	512	567	<b>327</b>
Multifamily	28	31	34	37	40	44	48	52	56	60	66	<b>38</b>
<b>Total Housing Units</b>	<b>268</b>	<b>294</b>	<b>320</b>	<b>346</b>	<b>372</b>	<b>412</b>	<b>452</b>	<b>492</b>	<b>532</b>	<b>572</b>	<b>633</b>	<b>365</b>

[1] Source: U.S. Census Bureau, 2020 American Community Survey 5-Year Estimates

[2] Housing units are assumed to grow at the same rate as population

## CURRENT EMPLOYMENT AND NONRESIDENTIAL FLOOR AREA

Industry employment totals were determined using the United States Census Bureau’s OnTheMap resource, using a Fire District shapefile provided by the State of Idaho. OnTheMap provides employment breakdowns by industry for the Fire District, most recently in the year 2019. By applying the industry specific employment breakdowns from 2019 to the previously determined growth projections, we are able to provide complete employment estimates by industry. As can be seen in Figure 19, nearly 60 percent of employment is in the Industrial industry predominantly in the agricultural sector, with the office industry featuring the lowest percentage share.

**Figure 19. Base Year Employment by Industry**

Employment Industries	Base Year Jobs [1]	Percent of Total
Retail	24	23%
Office	2	2%
Industrial	62	60%
Institutional	15	14%
Total	103	100%

[1] Source: American Census Bureau  
OnTheMap Sand Hollow Fire Work Area  
Profile Analysis

The base year nonresidential floor area for the industry sectors is calculated with the Institution of Transportation Engineers’ (ITE) square feet per employee averages, Figure 20. For Industrial the Light Industrial factors are used; for Institutional the Government Office factors are used; for Retail the Shopping Center factors are used; for Office the General Office factors are used.

**Figure 20. Institute of Transportation Engineers (ITE) Employment Density Factors**

ITE Code	Land Use Group	Demand Unit	Wkdy Trip Ends Per Dmd Unit	Wkdy Trip Ends Per Employee	Emp Per Dmd Unit	Sq Ft Per Emp
110	Light Industrial	1,000 Sq Ft	4.87	3.10	1.57	637
130	Industrial Park	1,000 Sq Ft	3.37	2.91	1.16	864
140	Manufacturing	1,000 Sq Ft	4.75	2.51	1.89	528
150	Warehousing	1,000 Sq Ft	1.71	5.05	0.34	2,953
254	Assisted Living	1,000 Sq Ft	4.19	4.24	0.99	1,012
520	Elementary School	student	2.27	22.50	0.10	na
610	Hospital	1,000 Sq Ft	10.77	3.77	2.86	350
710	General Office	1,000 Sq Ft	10.84	3.33	3.26	307
730	Government Office	1,000 Sq Ft	22.59	7.45	3.03	330
760	Research & Dev Center	1,000 Sq Ft	11.08	3.37	3.29	304
770	Business Park	1,000 Sq Ft	12.44	4.04	3.08	325
820	Shopping Center	1,000 Sq Ft	37.01	17.42	2.12	471

Source: Trip Generation, Institute of Transportation Engineers, 11th Edition (2021)

By combining the base year job totals and the ITE square feet per employee factors, the nonresidential floor area is calculated in Figure 21. There is an estimated total of 56 thousand square feet of nonresidential floor area in the Fire District. The Industrial industry accounts for the highest amount of the total nonresidential floor area in the Fire District, with approximately 70 percent. Office accounts for 1 percent, Retail accounts for 20 percent, and Institutional accounts for 9 percent of the total.

**Figure 21. Base Year Nonresidential Floor Area**

<b>Employment Industries</b>	<b>Base Year Jobs [1]</b>	<b>Sq. Ft. per job [2]</b>	<b>Floor Area (sq. ft.)</b>
Retail	24	471	11,156
Office	2	307	693
Industrial	62	637	39,515
Institutional	15	330	4,839
<b>Total</b>	<b>103</b>		<b>56,201</b>

[1] Source: American Census Bureau OnTheMap

[2] Source: Trip Generation, Institute of Transportation Engineers, 11th Edition (2021)

## NONRESIDENTIAL FLOOR AREA PROJECTIONS

Based on the growth projections described earlier, over the ten-year projection period, it is estimated that there will be an increase of 62 jobs. The majority of the increase comes from the Industrial industry (61%); however, the Retail (23%) and Institutional industries (15%) have significant impacts as well.

The nonresidential floor area projections are calculated by applying the ITE square feet per employee factors to the job growth. In the next ten years, the nonresidential floor area is projected to increase by 34 thousand square feet, a 60 percent increase from the base year. The Industrial sector has the greatest increase, predominantly driven by agriculture.

**Figure 22. Employment Floor Area and Employment Projections**

Industry	Base Year											Total
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Increase
<b>Jobs [1]</b>												
Retail	24	25	26	27	29	30	31	33	35	36	38	14
Office	2	2	2	3	3	3	3	3	3	3	4	1
Industrial	62	65	68	72	75	79	82	86	91	95	100	38
Institutional	15	15	16	17	18	19	19	20	21	22	24	9
<b>Total</b>	<b>103</b>	<b>108</b>	<b>113</b>	<b>118</b>	<b>124</b>	<b>130</b>	<b>136</b>	<b>143</b>	<b>150</b>	<b>157</b>	<b>165</b>	<b>62</b>
<b>Nonresidential Floor Area (1,000 sq. ft.) [2]</b>												
Retail	11	12	12	13	13	14	15	16	16	17	18	7
Office	1	1	1	1	1	1	1	1	1	1	1	0
Industrial	40	41	43	46	48	50	53	55	58	61	64	24
Institutional	5	5	5	6	6	6	6	7	7	7	8	3
<b>Total</b>	<b>56</b>	<b>59</b>	<b>62</b>	<b>65</b>	<b>68</b>	<b>71</b>	<b>75</b>	<b>78</b>	<b>82</b>	<b>86</b>	<b>90</b>	<b>34</b>

[1] Source: American Census Bureau OnTheMap

[2] Source: TischlerBise analysis; Institute of Transportation Engineers, [Trip Generation](#), 2021