



# Capital Improvement Plan and Development Impact Fee Study

Submitted to:  
Nampa Fire Protection District

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## EXECUTIVE SUMMARY

The Nampa Fire Protection District (“Fire District”) retained TischlerBise to update its 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 updating of the current 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 (Idaho Code 67-8202(1-4)), it is the intent of the Fire District to:

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.

TischlerBise 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. The service area for the analysis and fee collection is districtwide. Lastly, the fees are calculated for both residential and nonresidential development.

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

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The Enabling Legislation governs how development fees are calculated for jurisdictions in Idaho. All requirements of the Idaho Development Impact Fee Act have been met in the supporting documentation prepared by TischlerBise. 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.

TischlerBise 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.

Importantly, stated in [67-8204A], “Governmental entities . . . that are jointly affected by development are authorized to enter into intergovernmental agreements with each other or with . . . fire districts, ambulance districts . . . for the purpose of developing joint plans for capital improvements or for the purpose of agreeing to collect and expend development impact fees for system improvements, or both, provided that such agreement complies with any applicable state laws.” Thus, the impact fees for the Nampa Fire Protection District will be collected by the City of Nampa and Canyon County. To ensure that the Fire District captures the full potential revenue of the impact fees an intergovernmental agreement (IGA) is necessary for the City and County to collect the impact fees on the District’s behalf. Those revenues would be remitted to the Fire District periodically.

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

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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.

**Cost Recovery.** 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.** 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 park land acres per 1,000 residents). 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. 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.

**Plan-Based.** 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).

**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 facility fee is imposed. This type of credit is addressed in the administration and implementation of a facility fee program.

Figure 1 lists impact fee service area, the components to the impact fee, and the methodologies used in the analysis.

**Figure 1. Summary of Impact Fee Methodologies**

Fee Category	Service Area	Cost Recovery	Incremental Expansion	Plan-Based	Cost Allocation
Fire	Districtwide	Impact Fee Study	Fire Stations, Fire Admin, Fire Land, Fire Apparatus, and Fire Equipment		Person & Vehicle Trips

**CAPITAL IMPROVEMENT PLAN**

Below in Figure 2 is the ten-year capital improvement plan the Fire District is anticipating to accommodate future demand. In the Plan, there are facility, fleet, and equipment expansion that is consistent with the projected need to serve growth at the current level of service. The capital improvement plan is to be updated annually and will be revised to reflect any shift in demand, market, and costs.

Figure 2. Capital Improvement Plan

Type of Capital Infrastructure	Estimated Year	Total Cost	Growth Share	Growth Related Cost	Total Square Feet	Growth Square Feet	Growth Acres	Growth Units
<b>Facilities</b>								
Storage/Logistics Facility	2025	\$2,000,000	0%	\$0	-	-	-	-
Land for Station 8 & 9	2025/2027	\$1,500,000	100%	\$1,500,000	-	-	5	-
Administration Building	2026	\$4,350,000	52%	\$2,262,000	15,000	7,800	-	-
Addition at Station #2 for squad vehicle capability	2027	\$4,330,000	50%	\$2,165,000	5,000	2,500	-	-
Remodel Station #4 for squad vehicle capability	2028	\$5,629,000	50%	\$2,814,500	6,500	3,250	-	-
West Training Site	2028	\$4,000,000	37%	\$1,495,200	4,000	1,495	-	-
Fire Station #7 - location TBD	2029	\$10,392,000	100%	\$10,392,000	12,000	12,000	-	-
East Classroom & Training Facility	2030	\$2,500,000	100%	\$2,500,000	7,000	7,000	-	-
Station #8	2032	\$10,392,000	100%	\$10,392,000	12,000	12,000	-	-
Fleet Facility Expansion for growth	-	\$674,650	100%	\$674,650	2,575	2,575	-	-
<b>Apparatus &amp; Vehicles</b>								
1 Engine for Fire Station #6	2025	\$1,300,000	100%	\$1,300,000	-	-	-	1
2 Squad vehicles	2026/2028	\$500,000	50%	\$250,000	-	-	-	2
1 Engine for Fire Station #7	2027	\$1,300,000	100%	\$1,300,000	-	-	-	1
1 Engine for Fire Station #8	2030	\$1,300,000	100%	\$1,300,000	-	-	-	1
Growth related support vehicles	-	\$400,000	100%	\$400,000	-	-	-	2
Scheduled apparatus/vehicle replacement	-	\$5,052,000	0%	\$0	-	-	-	-
Battalion 2 Command vehicle	2030	\$100,000	100%	\$100,000	-	-	-	2
<b>Equipment</b>								
SCBA for 3 additional stations	-	\$187,500	100%	\$187,500	-	-	-	27
SCBA Compressor/Filling Station	-	\$70,000	100%	\$70,000	-	-	-	1
3 additional Cardiac Monitors	-	\$120,000	100%	\$120,000	-	-	-	3
PPE for additional firefighters	-	\$150,000	100%	\$150,000	-	-	-	19
SCBA Replacement	-	\$700,000	0%	\$0	-	-	-	-
Cardiac Monitor Replacement	-	\$252,500	0%	\$0	-	-	-	-
Standards of Cover update	-	\$50,000	100%	\$50,000	-	-	-	-
<b>Total</b>		<b>\$57,249,650</b>		<b>\$39,422,850</b>	<b>64,075</b>	<b>48,620</b>	<b>5</b>	<b>59</b>

**MAXIMUM SUPPORTABLE DEVELOPMENT IMPACT FEES**

Figure 3 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 Board 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 based on the person per housing unit factors for single family and multifamily development. For nonresidential development, the fees are assessed per square foot of floor area based on vehicle trip rates. 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 3. Summary of Maximum Supportable Development Impact Fee**

<b>Residential</b>				
<b>Housing Type</b>	<b>Persons per Housing Unit</b>	<b>Maximum Supportable Fee</b>	<b>Current Fee</b>	<b>Increase/ (Decrease)</b>
<b>Residential (per housing unit)</b>				
Single Family	2.83	\$1,267	\$1,621	(\$354)
Multifamily	1.98	\$886	\$1,621	(\$735)

  

<b>Nonresidential</b>				
<b>Development Type</b>	<b>Vehicle Trips per KSF</b>	<b>Maximum Supportable Fee</b>	<b>Current Fee</b>	<b>Increase/ (Decrease)</b>
<b>Nonresidential (per 1,000 square feet)</b>				
Retail	14.06	\$2,311	\$650	\$1,661
Office	5.42	\$891	\$650	\$241
Institutional	5.39	\$885	\$650	\$235
Industrial	2.44	\$400	\$650	(\$250)
Manufacturing	2.38	\$391	\$650	(\$259)
Warehouse/Distribution	0.86	\$141	\$650	(\$509)
Self-Storage	0.73	\$120	\$650	(\$530)

## CAPITAL IMPROVEMENT PLAN

The following section provides a summary of the Capital Improvement Plan depicting growth-related capital demands. First, Figure 4 lists the projected growth over the next ten years in the Fire District. Overall, there is an estimated 35 percent increase in residential development (45,162 new residents and 17,581 new housing units) and a 40 percent increase in nonresidential development (18,490 new jobs and 9.9 million square feet of development). Further details on the growth projections can be found in Appendix B. Demographic Assumptions

**Figure 4. Ten-Year Growth Projections**

Nampa Fire Protection District	Base Year 2023	1 2024	2 2025	3 2026	4 2027	5 2028	10 2033	Total Increase
<b>Population [1]</b>	127,834	132,173	136,512	141,053	145,594	150,136	172,997	<b>45,162</b>
<b>Housing Units by Type [1]</b>								
Single Family	39,968	41,132	42,296	43,523	44,750	45,977	52,161	<b>12,192</b>
Multifamily	7,554	8,082	8,611	9,151	9,691	10,232	12,942	<b>5,389</b>
<b>Total Housing Units</b>	<b>47,522</b>	<b>49,214</b>	<b>50,906</b>	<b>52,674</b>	<b>54,441</b>	<b>56,209</b>	<b>65,103</b>	<b>17,581</b>
<b>Jobs [2]</b>								
Retail	11,764	11,964	12,165	12,340	12,515	12,690	13,641	<b>1,877</b>
Office	7,507	7,824	8,140	8,441	8,741	9,041	10,592	<b>3,085</b>
Industrial	15,461	16,642	17,822	18,970	20,117	21,264	27,101	<b>11,640</b>
Institutional	11,406	11,607	11,809	11,985	12,162	12,339	13,296	<b>1,889</b>
<b>Total Jobs</b>	<b>46,139</b>	<b>48,037</b>	<b>49,936</b>	<b>51,735</b>	<b>53,535</b>	<b>55,334</b>	<b>64,629</b>	<b>18,490</b>
<b>Nonresidential Floor Area (1,000 sq. ft.) [2]</b>								
Retail	5,541	5,635	5,730	5,812	5,894	5,977	6,425	<b>884</b>
Office	2,305	2,402	2,499	2,591	2,684	2,776	3,252	<b>947</b>
Industrial	15,901	16,653	17,405	18,136	18,867	19,598	23,315	<b>7,414</b>
Institutional	3,992	4,063	4,133	4,195	4,257	4,319	4,653	<b>661</b>
<b>Total Floor Area</b>	<b>27,739</b>	<b>28,753</b>	<b>29,767</b>	<b>30,734</b>	<b>31,701</b>	<b>32,669</b>	<b>37,645</b>	<b>9,906</b>
<b>Vehicle Trips [2]</b>								
Single Family Trips	264,043	271,729	279,418	287,524	295,631	303,737	344,589	<b>80,546</b>
Multifamily Trips	25,112	26,870	28,626	30,423	32,219	34,015	43,027	<b>17,915</b>
<i>Residential Subtotal</i>	<i>289,155</i>	<i>298,598</i>	<i>308,044</i>	<i>317,947</i>	<i>327,850</i>	<i>337,753</i>	<i>387,616</i>	<i><b>98,461</b></i>
<i>Nonresidential Subtotal</i>	<i>141,846</i>	<i>144,998</i>	<i>148,149</i>	<i>150,258</i>	<i>152,367</i>	<i>154,476</i>	<i>168,148</i>	<i><b>26,302</b></i>
<b>Total Vehicle Trips</b>	<b>431,001</b>	<b>443,596</b>	<b>456,193</b>	<b>468,205</b>	<b>480,217</b>	<b>492,228</b>	<b>555,765</b>	<b>124,763</b>

[1] COMPASS (Community Planning Association of Southwest Idaho) Traffic Analysis Zone Model; City of Nampa Impact Fee Study; TischlerBise analysis

[1] Five-year average of building permit trend is assumed to continue over the next ten years

[2] Source: COMPASS Traffic Analysis Zone Model; City of Nampa Impact Fee Study; 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 ten-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 all Capital Improvement Plans included in this study will occur within five years.

The development impact fee is based on the existing level of service provided for fire facilities. To serve projected growth at current levels of service, the following infrastructure is projected over the next ten years:

- 16,247 square feet of new station space
- 8,146 square feet of new administrative and training facility space
- 3.57 acres of land
- 5.8 new fleet units
- 89.3 new equipment units
- \$26.6 million growth-related costs

Below in Figure 5 is the ten-year capital improvement plan the Fire District is anticipating to accommodate future demand. In the plan, there are facility, fleet, and equipment expansion that is consistent with the projected need to serve growth at the current level of service.

#### **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 other 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 for facilities. Evidence is given in in the specific chapters of this report 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.

Figure 5. Capital Improvement Plan

Type of Capital Infrastructure	Estimated Year	Estimated Total Cost	Growth Share	Growth Related Cost	Total Square Feet	Growth Square Feet	Growth Acres	Growth Units
<b>Facilities</b>								
Storage/Logistics Facility	2025	\$2,000,000	0%	\$0	-	-	-	-
Land for Station 8 & 9	2025/2027	\$1,500,000	100%	\$1,500,000	-	-	5	-
Administration Building	2026	\$4,350,000	52%	\$2,262,000	15,000	7,800	-	-
Addition at Station #2 for squad vehicle capability	2027	\$4,330,000	50%	\$2,165,000	5,000	2,500	-	-
Remodel Station #4 for squad vehicle capability	2028	\$5,629,000	50%	\$2,814,500	6,500	3,250	-	-
West Training Site	2028	\$4,000,000	37%	\$1,495,200	4,000	1,495	-	-
Fire Station #7 - location TBD	2029	\$10,392,000	100%	\$10,392,000	12,000	12,000	-	-
East Classroom & Training Facility	2030	\$2,500,000	100%	\$2,500,000	7,000	7,000	-	-
Station #8	2032	\$10,392,000	100%	\$10,392,000	12,000	12,000	-	-
Fleet Facility Expansion for growth	-	\$674,650	100%	\$674,650	2,575	2,575	-	-
<b>Apparatus &amp; Vehicles</b>								
1 Engine for Fire Station #6	2025	\$1,300,000	100%	\$1,300,000	-	-	-	1
2 Squad vehicles	2026/2028	\$500,000	50%	\$250,000	-	-	-	2
1 Engine for Fire Station #7	2027	\$1,300,000	100%	\$1,300,000	-	-	-	1
1 Engine for Fire Station #8	2030	\$1,300,000	100%	\$1,300,000	-	-	-	1
Growth related support vehicles	-	\$400,000	100%	\$400,000	-	-	-	2
Scheduled apparatus/vehicle replacement	-	\$5,052,000	0%	\$0	-	-	-	-
Battalion 2 Command vehicle	2030	\$100,000	100%	\$100,000	-	-	-	2
<b>Equipment</b>								
SCBA for 3 additional stations	-	\$187,500	100%	\$187,500	-	-	-	27
SCBA Compressor/Filling Station	-	\$70,000	100%	\$70,000	-	-	-	1
3 additional Cardiac Monitors	-	\$120,000	100%	\$120,000	-	-	-	3
PPE for additional firefighters	-	\$150,000	100%	\$150,000	-	-	-	19
SCBA Replacement	-	\$700,000	0%	\$0	-	-	-	-
Cardiac Monitor Replacement	-	\$252,500	0%	\$0	-	-	-	-
Standards of Cover update	-	\$50,000	100%	\$50,000	-	-	-	-
<b>Total</b>		<b>\$57,249,650</b>		<b>\$39,422,850</b>	<b>64,075</b>	<b>48,620</b>	<b>5</b>	<b>59</b>

## FIRE DEVELOPMENT IMPACT FEES

The Fire Development Impact Fee is based on the cost per service unit method specified in Idaho Code 67-8204(16), also referred to as the incremental expansion method elsewhere in this report. The Fire infrastructure components included in the impact fee analysis are:

- Fire stations
- Fire administrative and training facilities
- Fire land
- Fire apparatus
- Fire equipment
- Cost of development impact fee study

The residential portion of the fee is derived from the product of persons per housing unit by type of dwelling unit multiplied by the net capital cost per person. To calculate nonresidential development impact fees, nonresidential vehicle trips are used as the demand indicator. Trip generation rates are highest for commercial developments, such as shopping centers, and lowest for industrial development. The trip rates for office and institutional land uses fall between the other two categories. This ranking of trip rates is consistent with the relative demand for fire services from nonresidential development and thus are the best demand indicators. Other possible nonresidential demand indicators, such as employment or floor area, do not accurately reflect the demand for service. If employees per thousand square feet were used as the demand indicator, the Fire Development Impact Fees would be too high for office and institutional development. If floor area were used as the demand indicator, the development impact fees would be too high for industrial development. (See the Appendix for further discussion on trip rates and calculations.)

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 other dedicated revenues being collected by the Fire District to fund growth-related projects for fire facilities. Furthermore, the maximum supportable impact fees are constructed to offset all growth-related capital costs for 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.

**COST ALLOCATION FOR FIRE PROTECTION INFRASTRUCTURE**

Both residential and nonresidential developments increase the demand for fire services and facilities. To calculate the proportional share between residential and nonresidential demand on service and facilities, calls for service data is analyzed. Shown at the top of Figure 6, 64 percent of calls are to residential locations, 27 percent to nonresidential locations, and 9 percent are classified as traffic calls.

Base year vehicle trips are used to assign traffic calls to residential and nonresidential land uses. This results in 663 additional residential calls (66 percent of vehicle trips x 1,008 traffic calls for service = 663 additional residential calls) and 345 additional nonresidential calls.

After this adjustment 70 percent of calls are attributed to residential development and 30 percent are attributed to nonresidential development. These percentages are used to attribute facilities to respective demand units.

**Figure 6. Calls for Service**

Land Use	Annual Calls for Service	% of Total
Residential	7,260	64%
Nonresidential	3,082	27%
Traffic/Other	1,008	9%
<b>Total</b>	<b>11,350</b>	<b>100%</b>

Land Use	Base Year Vehicle	% of Total
Residential	289,155	66%
Nonresidential	150,635	34%
<b>Total</b>	<b>439,790</b>	<b>100%</b>

Land Use	Adj. Calls for Service	% of Total
Residential	7,923	70%
Nonresidential	3,427	30%
<b>Total</b>	<b>11,350</b>	<b>100%</b>

Source: Nampa Fire Protection District

**FIRE PROTECTION LEVEL OF SERVICE AND COST ANALYSIS**

The following section details the level of service calculations and capital cost for each infrastructure category.

**FIRE STATIONS**

Listed in Figure 7, the Fire District occupies 50,059 square feet of fire station space and based on current construction cost estimates, average cost is \$866 per square foot. The proportionate share between residential and nonresidential demand of the facilities is found by applying the calls for service percentages. As a result, 34,943 square feet is attributed to residential demand and 15,116 square feet is attributed to nonresidential demand. The current level of service is found by comparing the attributed square footage to the current population and nonresidential vehicles trips. As a result, there is 273 square feet per 1,000 residents and 100 square feet per 1,000 vehicles trips.

The average cost per square foot is combined with the current levels of service to find the capital cost per demand unit. This results in a cost of \$236 per person and \$87 per vehicle trip (273 square feet per 1,000 persons x \$866 per square foot = \$236 per person, rounded).

**Figure 7. Fire Station Level of Service & Cost Analysis**

Facility	Square Feet	Replacement Cost
Fire Station #1	15,000	\$12,990,000
Fire Station #2	5,000	\$4,330,000
Fire Station #3	5,000	\$4,330,000
Fire Station #4	6,500	\$5,629,000
Fire Station #5	8,761	\$7,587,026
Fire Station #6	9,798	\$8,485,068
<b>Total</b>	<b>50,059</b>	<b>\$43,351,094</b>

  

<i>Level-of-Service Standards</i>	Residential	Nonres
Proportionate Share	70%	30%
Share of Square Feet	34,943	15,116
2023 Population/Nonres. Vehicle Trips	127,834	150,635
<b>Square Feet per 1,000 Persons/Vehicle Trips</b>	<b>273</b>	<b>100</b>

  

<i>Cost Analysis</i>	Residential	Nonres
Square Feet per 1,000 Persons/Vehicle Trips	273	100
Average Cost per Square Foot [1]	\$866	\$866
<b>Capital Cost per Person/Vehicle Trip</b>	<b>\$236</b>	<b>\$87</b>

Source: Nampa Fire Protection District

[1] Estimated construction cost from construction plans for Station #6

**FIRE ADMINISTRATIVE & TRAINING FACILITIES**

Listed in Figure 8, the Fire District occupies 25,131 square feet of fire admin facility space and based on current construction cost estimates, average cost is \$548 per square foot. The proportionate share between residential and nonresidential demand of the facilities is found by applying the calls for service percentages. As a result, 17,542 square feet is attributed to residential demand and 7,589 square feet is attributed to nonresidential demand. The current level of service is found by comparing the attributed square footage to the current population and nonresidential vehicles trips. As a result, there is 137 square feet per 1,000 residents and 50 square feet per 1,000 vehicles trips.

The average cost per square foot is combined with the current levels of service to find the capital cost per demand unit. This results in a cost of \$75 per person and \$27 per vehicle trip (137 square feet per 1,000 persons x \$548 per square foot = \$75 per person, rounded).

**Figure 8. Fire Administrative & Training Facility Level of Service & Cost Analysis**

Facility	Square Feet	Replacement Cost
Fire Administration	7,200	\$2,088,000
Fire Safe House	1,250	\$362,500
Training Facilities	16,681	\$11,319,250
<b>Total</b>	<b>25,131</b>	<b>\$13,769,750</b>

  

<i>Level-of-Service Standards</i>	Residential	Nonres
Proportionate Share	70%	30%
Share of Square Feet	17,542	7,589
2023 Population/Nonres. Vehicle Trips	127,834	150,635
<b>Square Feet per 1,000 Persons/Vehicle Trips</b>	<b>137</b>	<b>50</b>

  

<i>Cost Analysis</i>	Residential	Nonres
Square Feet per 1,000 Persons/Vehicle Trips	137	50
Average Cost per Square Foot	\$548	\$548
<b>Capital Cost per Person/Vehicle Trip</b>	<b>\$75</b>	<b>\$27</b>

Source: Nampa Fire Protection District

**FIRE LAND**

Listed in Figure 9, there is a total of 10.97 acres owned by the Nampa Fire Protection District. The proportionate share between residential and nonresidential demand of the facilities is found by applying the calls for service data percentages. As a result, 7.66 acres are attributed to residential demand and 3.31 acres are attributed to nonresidential demand. The current level of service is found by comparing the attributed acreage to the base year population and nonresidential vehicles trips. As a result, there is 0.060 acres per 1,000 residents and 0.022 acres per 1,000 vehicles trips.

The anticipated cost to purchase more land is combined with the current levels of service to find the capital cost per demand unit. This results in a cost of \$23 per person and \$9 per vehicle trip (0.060 acres per 1,000 persons x \$388,588 per acre = \$23 per person, rounded).

**Figure 9. Fire Land Level of Service & Cost Analysis**

Facility	Acres	Current Value
Fire Station #1	0.48	\$186,522
Fire Station #2	1.50	\$582,881
Fire Station #3	0.74	\$287,555
Fire Station #4	2.00	\$777,175
Fire Station #6	2.00	\$777,175
Future Station/Facility Land	4.25	\$1,651,497
<b>Total</b>	<b>10.97</b>	<b>\$4,262,806</b>

  

<i>Level-of-Service Standards</i>	Residential	Nonres
Proportionate Share	70%	30%
Share of Acres	7.66	3.31
2023 Population/Nonres. Vehicle Trips	127,834	150,635
<b>Acres per 1,000 Persons/Vehicle Trips</b>	<b>0.060</b>	<b>0.022</b>

  

<i>Cost Analysis</i>	Residential	Nonres
Acres per 1,000 Persons/Vehicle Trips	0.060	0.022
Average Cost per Acre [1]	\$388,588	\$388,588
<b>Capital Cost per Person/Vehicle Trip</b>	<b>\$23</b>	<b>\$9</b>

Source: Nampa Fire Protection District

[1] Estimated acreage cost comes from a survey of current listings provided by the City of Nampa

**FIRE APPARATUS**

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.” Listed in Figure 10 are fire apparatus that have a useful life of ten or more years qualifying to be impact fee-eligible.

Shown in Figure 10, the Fire District has 18 units in its fleet with a total replacement of \$17.5 million. The proportionate share between residential and nonresidential demand of the facilities is found by applying the calls for service percentages. As a result, 12.56 units are attributed to residential demand and 5.44 units are attributed to nonresidential demand. The current level of service is found by comparing the attributed units to the current population and nonresidential vehicles trips. As a result, there is 0.098 units per 1,000 residents and 0.036 units per 1,000 vehicles trips.

The average cost per unit is combined with the current levels of service to find the capital cost per demand unit. This results in a cost of \$96 per person and \$35 per vehicle trip (0.098 units per 1,000 persons x \$975,000 per unit = \$96 per person, rounded).

**Figure 10. Fire Apparatus Level of Service & Cost Analysis**

Apparatus	Units	Cost per Unit	Replacement Cost
Fire Engine	10	\$1,300,000	\$13,000,000
Ladder Truck	1	\$2,300,000	\$2,300,000
Quint	1	\$900,000	\$900,000
Water Tender	1	\$400,000	\$400,000
Squad Truck	1	\$250,000	\$250,000
Brush Truck	1	\$100,000	\$100,000
Support Vehicles	3	\$200,000	\$600,000
<b>Total</b>	<b>18</b>		<b>\$17,550,000</b>

<b>Level-of-Service Standards</b>	<b>Residential</b>	<b>Nonres</b>
Proportionate Share	70%	30%
Share of Fleet	12.56	5.44
2023 Population/Nonres. Vehicle Trips	127,834	150,635
<b>Units per 1,000 Persons/Vehicle Trips</b>	<b>0.098</b>	<b>0.036</b>

<b>Cost Analysis</b>	<b>Residential</b>	<b>Nonres</b>
Units per 1,000 Persons/Vehicle Trips	0.098	0.036
Average Cost per Unit	\$975,000	\$975,000
<b>Capital Cost per Person/Vehicle Trip</b>	<b>\$96</b>	<b>\$35</b>

Source: Nampa Fire Protection District

**FIRE EQUIPMENT**

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.” Listed in Figure 11 are fire equipment that have a useful life of ten or more years qualifying to be impact fee-eligible.

Shown in Figure 11, the Fire District has 275 equipment units with a total replacement of \$3.0 million. The proportionate share between residential and nonresidential demand of the facilities is found by applying the calls for service percentages. As a result, 191.96 units are attributed to residential demand and 83.04 units are attributed to nonresidential demand. The current level of service is found by comparing the attributed units to the current population and nonresidential vehicles trips. As a result, there is 1.50 units per 1,000 residents and 0.55 units per 1,000 vehicles trips.

The average cost per unit is combined with the current levels of service to find the capital cost per demand unit. This results in a cost of \$17 per person and \$6 per vehicle trip (1.50 units per 1,000 persons x \$11,043 per unit = \$17 per person, rounded).

**Figure 11. Fire Equipment Level of Service & Cost Analysis**

Equipment	Units	Replacement Cost
SCBAs	50	\$612,000
Cardiac Monitors	9	\$450,000
Turnout Gear	212	\$1,674,800
SCBA Fill Station	3	\$210,000
SCBA Fill Trailer	1	\$90,000
<b>Total</b>	<b>275</b>	<b>\$3,036,800</b>

  

<b>Level-of-Service Standards</b>	<b>Residential</b>	<b>Nonres</b>
Proportionate Share	70%	30%
Share of Equipment	191.96	83.04
2023 Population/Nonres. Vehicle Trips	127,834	150,635
<b>Units per 1,000 Persons/Vehicles Trips</b>	<b>1.50</b>	<b>0.55</b>

  

<b>Cost Analysis</b>	<b>Residential</b>	<b>Nonres</b>
Units per 1,000 Persons/Vehicle Trips	1.50	0.55
Average Cost per Unit	\$11,043	\$11,043
<b>Capital Cost per Person/Vehicle Trip</b>	<b>\$17</b>	<b>\$6</b>

Source: Nampa Fire Protection District

**SHARE OF THE DEVELOPMENT IMPACT FEE STUDY**

Under the Idaho enabling legislation, the Fire District is able to recover the cost of the study through the collection of future fees. An impact fee study must be completed every five years, so the study cost is compared to the five-year projected increase in population and nonresidential vehicle trips. As a result, the cost per person is \$0.66 and the cost per vehicle trip is \$0.33.

**Figure 12. Share of the Development Impact Fee Study**

<b>Share of Study Cost</b>	<b>Residential Share</b>	<b>Nonresidential Share</b>
\$21,240	70%	30%

  

<b>Residential Growth Cost</b>	<b>Five-Year Population Increase</b>	<b>Capital Cost per Person</b>
\$14,826	22,301	\$0.66

  

<b>Nonresidential Growth Cost</b>	<b>Five-Year Vehicle Trip Increase</b>	<b>Capital Cost per Vehicle Trip</b>
\$6,414	19,443	\$0.33

**CAPITAL IMPROVEMENTS NEEDED TO SERVE GROWTH**

Needs due to future growth were calculated using the levels of service and cost factors for the infrastructure components. Growth-related needs are a projection of the amount of infrastructure and estimated costs over the next ten years needed to maintain levels of service.

**FIRE STATIONS**

The current levels of service are combined with the population and vehicle trip projections to illustrate the need for new fire stations. Shown in Figure 13, over the next ten years, there is a need for 16,247 square feet. The average cost per square foot is multiplied by the need to find the projected capital need from growth (\$14,069,983).

**Figure 13. Projected Demand for Fire Stations**

Infrastructure		Level of Service		Cost/Unit
Fire Stations	273.0	square feet	per 1,000 persons	\$866
	100.0		per 1,000 vehicle trips	

  

Growth-Related Need for Fire Stations						
Year		Population	Nonres. Vehicle Trips	Residential Square Feet	Nonresidential Square Feet	Total Square Feet
Base	2023	127,834	150,635	34,899	15,064	49,962
Year 1	2024	132,173	154,699	36,083	15,470	51,553
Year 2	2025	136,512	158,762	37,268	15,876	53,144
Year 3	2026	141,053	162,534	38,507	16,253	54,761
Year 4	2027	145,594	166,306	39,747	16,631	56,378
Year 5	2028	150,136	170,078	40,987	17,008	57,995
Year 6	2029	154,677	173,850	42,227	17,385	59,612
Year 7	2030	159,218	177,622	43,467	17,762	61,229
Year 8	2031	163,811	181,686	44,720	18,169	62,889
Year 9	2032	168,404	185,750	45,974	18,575	64,549
Year 10	2033	172,997	189,813	47,228	18,981	66,209
Ten-Year Increase		45,162	39,178	12,329	3,918	16,247
		<b>Projected Expenditure</b>		<b>\$10,677,166</b>	<b>\$3,392,816</b>	<b>\$14,069,983</b>

  

<b>Growth-Related Expenditures for Fire Stations</b>	<b>\$14,069,983</b>
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**FIRE ADMINISTRATIVE & TRAINING FACILITIES**

The current levels of service are combined with the population and vehicle trip projections to illustrate the need for new fire admin facilities. Shown in Figure 14, over the next ten years, there is a need for 8,146 square feet. The average cost per square foot is multiplied by the need to find the projected capital need from growth (\$4,464,078).

**Figure 14. Projected Demand for Fire Administrative & Training Facilities**

Infrastructure	Level of Service		Cost/Unit
Fire Admin Facilities	137.0	square feet	per 1,000 persons
	50.0		per 1,000 vehicle trips
			<b>\$548</b>

Growth-Related Need for Fire Admin Facilities						
Year		Population	Nonres. Vehicle Trips	Residential Square Feet	Nonresidential Square Feet	Total Square Feet
Base	2023	127,834	150,635	17,513	7,532	25,045
Year 1	2024	132,173	154,699	18,108	7,735	25,843
Year 2	2025	136,512	158,762	18,702	7,938	26,640
Year 3	2026	141,053	162,534	19,324	8,127	27,451
Year 4	2027	145,594	166,306	19,946	8,315	28,262
Year 5	2028	150,136	170,078	20,569	8,504	29,073
Year 6	2029	154,677	173,850	21,191	8,693	29,883
Year 7	2030	159,218	177,622	21,813	8,881	30,694
Year 8	2031	163,811	181,686	22,442	9,084	31,526
Year 9	2032	168,404	185,750	23,071	9,287	32,359
Year 10	2033	172,997	189,813	23,701	9,491	33,191
Ten-Year Increase		45,162	39,178	6,187	1,959	8,146
		<b>Projected Expenditure</b>		<b>\$3,390,600</b>	<b>\$1,073,478</b>	<b>\$4,464,078</b>

<b>Growth-Related Expenditures for Fire Admin Facilities</b>	<b>\$4,464,078</b>
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**FIRE LAND**

The current levels of service are combined with the population and vehicle trip projections to illustrate the need for new fire land acres. Shown in Figure 15, over the next ten years, there is a need for 3.57 acres. The average cost per acre is multiplied by the need to find the projected capital need from growth (\$1,387,901).

**Figure 15. Projected Demand for Fire Land Acres**

Infrastructure		Level of Service			Cost/Unit
Fire Land	0.060	acres	per 1,000 persons		\$388,588
	0.022		per 1,000 vehicle trips		

  

Growth-Related Need for Fire Land						
Year		Population	Nonres. Vehicle	Residential Acres	Nonresidential Acres	Total Acres
Base	2023	127,834	150,635	7.67	3.31	10.98
Year 1	2024	132,173	154,699	7.93	3.40	11.33
Year 2	2025	136,512	158,762	8.19	3.49	11.68
Year 3	2026	141,053	162,534	8.46	3.58	12.04
Year 4	2027	145,594	166,306	8.74	3.66	12.39
Year 5	2028	150,136	170,078	9.01	3.74	12.75
Year 6	2029	154,677	173,850	9.28	3.82	13.11
Year 7	2030	159,218	177,622	9.55	3.91	13.46
Year 8	2031	163,811	181,686	9.83	4.00	13.83
Year 9	2032	168,404	185,750	10.10	4.09	14.19
Year 10	2033	172,997	189,813	10.38	4.18	14.56
Ten-Year Increase		45,162	39,178	2.71	0.86	3.57
		<b>Projected Expenditure</b>		<b>\$1,052,970</b>	<b>\$334,930</b>	<b>\$1,387,901</b>

  

<b>Growth-Related Expenditures for Fire Land</b>	<b>\$1,387,901</b>
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**FIRE APPARATUS**

The current levels of service are combined with the population and vehicle trip projections to illustrate the need for new fleet units. Shown in Figure 16, over the next ten years, there is a need for 5.8 units. The average cost per unit is multiplied by the need to find the projected capital need from growth (\$5,690,400).

**Figure 16. Projected Demand for Fire Apparatus**

Infrastructure	Level of Service		Cost/Unit
Apparatus	0.098	units	per 1,000 persons
	0.036		per 1,000 vehicle trips
			<b>\$975,000</b>

Growth-Related Need for Apparatus						
Year	Population	Nonres. Vehicle	Residential Units	Nonresidential Units	Total Units	
Base 2023	127,834	150,635	12.5	5.4	18.0	
Year 1 2024	132,173	154,699	13.0	5.6	18.5	
Year 2 2025	136,512	158,762	13.4	5.7	19.1	
Year 3 2026	141,053	162,534	13.8	5.9	19.7	
Year 4 2027	145,594	166,306	14.3	6.0	20.3	
Year 5 2028	150,136	170,078	14.7	6.1	20.8	
Year 6 2029	154,677	173,850	15.2	6.3	21.4	
Year 7 2030	159,218	177,622	15.6	6.4	22.0	
Year 8 2031	163,811	181,686	16.1	6.5	22.6	
Year 9 2032	168,404	185,750	16.5	6.7	23.2	
Year 10 2033	172,997	189,813	17.0	6.8	23.8	
Ten-Year Increase	45,162	39,178	4.4	1.4	5.8	
<b>Projected Expenditure</b>			<b>\$4,315,252</b>	<b>\$1,375,148</b>	<b>\$5,690,400</b>	

**Growth-Related Expenditures for Apparatus \$5,690,400**

**FIRE EQUIPMENT**

The current levels of service are combined with the population and vehicle trip projections to illustrate the need for new equipment units. Shown in Figure 17, over the next ten years, there is a need for 89.3 units. The average cost per unit is multiplied by the need to find the projected capital need from growth (\$986,043).

**Figure 17. Projected Demand for Fire Equipment**

Infrastructure		Level of Service			Cost/Unit
Equipment	1.500	units	per 1,000 persons		\$11,043
	0.550		per 1,000 vehicle trips		

  

Growth-Related Need for Equipment						
Year		Population	Nonres. Vehicle	Residential Units	Nonresidential Units	Total Units
Base	2023	127,834	150,635	191.8	82.8	274.6
Year 1	2024	132,173	154,699	198.3	85.1	283.3
Year 2	2025	136,512	158,762	204.8	87.3	292.1
Year 3	2026	141,053	162,534	211.6	89.4	301.0
Year 4	2027	145,594	166,306	218.4	91.5	309.9
Year 5	2028	150,136	170,078	225.2	93.5	318.7
Year 6	2029	154,677	173,850	232.0	95.6	327.6
Year 7	2030	159,218	177,622	238.8	97.7	336.5
Year 8	2031	163,811	181,686	245.7	99.9	345.6
Year 9	2032	168,404	185,750	252.6	102.2	354.8
Year 10	2033	172,997	189,813	259.5	104.4	363.9
Ten-Year Increase		45,162	39,178	67.7	21.5	89.3
		<b>Projected Expenditure</b>		<b>\$748,090</b>	<b>\$237,954</b>	<b>\$986,043</b>

  

<b>Growth-Related Expenditures for Equipment</b>	<b>\$986,043</b>
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**SUMMARY OF INPUT VARIABLES AND MAXIMUM SUPPORTABLE IMPACT FEES**

Figure 18 provides a summary of the input variables (described in the chapter sections above) used to calculate the net cost per person and vehicle trip. The residential Fire Development Impact Fees are the product of persons per housing unit by type multiplied by the total net capital cost per person. For example, the single family maximum impact fee is \$1,267 per unit (\$447.66 per person x 2.83 persons per housing unit = \$1,267, rounded). The nonresidential fees are the product of vehicle trips per 1,000 square feet multiplied by the net capital cost per nonresidential vehicle trip.

The Fire District Board 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.

**Figure 18. Summary of Input Variables and Maximum Supportable Impact Fees**

Fee Component	Cost per Person	Cost per Vehicle Trip
Fire Stations	\$236.00	\$87.00
Fire Admin Facilities	\$75.00	\$27.00
Fire Land	\$23.00	\$9.00
Fire Apparatus	\$96.00	\$35.00
Fire Equipment	\$17.00	\$6.00
Share of Fee Study	\$0.66	\$0.33
<b>Gross Total</b>	<b>\$447.66</b>	<b>\$164.33</b>
<b>Net Total</b>	<b>\$447.66</b>	<b>\$164.33</b>

**Residential**

Housing Type	Persons per Housing Unit	Maximum Supportable Fee	Current Fee	Increase/ (Decrease)
<b>Residential (per housing unit)</b>				
Single Family	2.83	\$1,267	\$1,621	(\$354)
Multifamily	1.98	\$886	\$1,621	(\$735)

**Nonresidential**

Development Type	Vehicle Trips per KSF	Maximum Supportable Fee	Current Fee	Increase/ (Decrease)
<b>Nonresidential (per 1,000 square feet)</b>				
Retail	14.06	\$2,311	\$650	\$1,661
Office	5.42	\$891	\$650	\$241
Institutional	5.39	\$885	\$650	\$235
Industrial	2.44	\$400	\$650	(\$250)
Manufacturing	2.38	\$391	\$650	(\$259)
Warehouse/Distribution	0.86	\$141	\$650	(\$509)
Self-Storage	0.73	\$120	\$650	(\$530)

**CASH FLOW PROJECTIONS FOR MAXIMUM SUPPORTABLE IMPACT FEE**

This section summarizes the potential cash flow to the Fire District if the development impact fees are implemented at the maximum supportable amounts. The cash flow projections are based on the assumptions detailed in this chapter and the development projections discussed in Appendix B. Demographic Assumptions.

The summary provides an indication of the impact fee revenue generated by new development. Shown at the bottom of the figure, the maximum supportable fire impact fee is estimated to generate \$26.6 million in revenue while there is a growth-related cost of \$26.6 million. Thus, the impact fees offset all growth-related capital costs.

**Figure 19. Cash Flow Summary for Maximum Supportable Impact Fees**

**Infrastructure Costs for Fire Facilities**

	Total Cost	Growth Cost
Fire Stations	\$14,069,983	\$14,069,983
Fire Admin Facilities	\$4,464,078	\$4,464,078
Fire Land	\$1,387,901	\$1,387,901
Apparatus	\$5,690,400	\$5,690,400
Equipment	\$986,043	\$986,043
Share of Fee Study	\$42,480	\$42,480
<b>Total Expenditures</b>	<b>\$26,640,885</b>	<b>\$26,640,885</b>

**Projected Development Impact Fee Revenue**

		Single Family \$1,267 per unit	Multifamily \$886 per unit	Retail \$2,311 per unit	Office \$891 per unit	Industrial \$400 per unit	Institutional \$885 per unit
Year		Housing Units	Housing Units	KSF	KSF	KSF	KSF
Base	2023	39,968	7,554	5,541	2,305	15,901	3,992
1	2024	41,132	8,082	5,635	2,402	16,653	4,063
2	2025	42,296	8,611	5,730	2,499	17,405	4,133
3	2026	43,523	9,151	5,812	2,591	18,136	4,195
4	2027	44,750	9,691	5,894	2,684	18,867	4,257
5	2028	45,977	10,232	5,977	2,776	19,598	4,319
6	2029	47,204	10,772	6,059	2,868	20,329	4,380
7	2030	48,431	11,312	6,142	2,960	21,059	4,442
8	2031	49,674	11,856	6,236	3,057	21,811	4,513
9	2032	50,917	12,399	6,330	3,155	22,563	4,583
10	2033	52,161	12,942	6,425	3,252	23,315	4,653
Ten-Year Increase		12,192	5,389	884	947	7,414	661
Projected Revenue		\$15,447,658	\$4,774,397	\$2,042,669	\$843,733	\$2,965,760	\$585,174
<b>Projected Revenue</b>							<b>\$26,659,000</b>
<b>Total Expenditures</b>							<b>\$26,641,000</b>
<b>Non-Impact Fee Funding</b>							<b>\$0</b>

## PROPORTIONATE SHARE ANALYSIS

Development impact fees for Nampa Fire Protection 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 District in the provision of system improvements to serve new development. The 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 Nampa Fire Protection 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 District's capital improvements plan and will be included in annual capital budgets.
- 2) TischlerBise estimated development impact fee revenue 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. Existing and future development impact fee revenue will entirely fund growth-related improvements.
- 3) TischlerBise has evaluated the extent to which new development may contribute to the cost of public facilities.
- 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.
- 5) The 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 Improvement 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 District. These procedures should be addressed in the development impact fee ordinance.
- 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 (DIFAC). 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.

Furthermore, the Nampa Fire District formed a DIFAC that meets the Idaho Act which has been recognized by the City of Nampa and Canyon County as their DIFAC for fire impact fees in the Nampa Fire District. TischlerBise has 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.

TischlerBise 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 RSMeans 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 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 TischlerBise'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.

#### 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, banks, restaurants, and movie theaters.

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

**Industrial:** Establishments primarily engaged in the production and transportation of goods. By way of example, *Industrial* includes manufacturing plants and distribution facilities.

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

**Manufacturing:** A manufacturing facility is an area where the primary activity is the conversion of raw materials or parts into finished products. Size and type of activity may vary substantially from one facility to another. In addition to the actual production of goods, a manufacturing facility typically has an office and may provide space for warehouse, research, and associated functions.

**Warehousing:** A warehouse is primarily devoted to the storage of materials, but it may also include office and maintenance areas. By way of example, *Warehousing* includes high-cube transload and short-term storage warehouse, high-cube fulfillment center warehouse, high-cube parcel hub warehouse, and high-cube cold storage warehouse.

**Self-storage:** A mini-warehouse is a building in which a number of storage units or vaults are rented for the storage of goods. They are typically referred to as “self-storage” facilities. Each unit is physically separated from other units, and access is usually provided through an overhead door or other common access point

**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 District 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. TischlerBise recommends that fees for residential development in Nampa Fire Protection District be imposed according to persons per housing unit.

Based on housing characteristics, TischlerBise 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 District facilities and services. Figure 20 shows the US Census American Community Survey 2021 5-Year Estimates data for the City of Nampa. The boundaries of only the City of Nampa were used to provide the most accurate geographic representation of the district boundaries using Census data. Single family units have a PPHU of 2.83 persons and multifamily units have a household size of 1.98 persons. Additionally, there is a housing mix of 84 percent single family and 16 percent multifamily.

The estimates in Figure 20 are for PPHU calculations. Base year population and housing units are estimated with another, more recent data source.

**Figure 20. Persons per Housing Unit**

Housing Type	Persons	Housing Units	Persons per Housing Unit	Households	Persons per Household	Housing Unit Mix
Single Family [1]	85,668	30,271	2.83	29,588	2.90	84%
Multifamily [2]	11,312	5,721	1.98	5,312	2.13	16%
<b>Total</b>	96,980	35,992	2.69	34,900	2.78	

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

[2] Includes all other types

Source: U.S. Census Bureau, 2021 American Community Survey 5-Year Estimates

## BASE YEAR HOUSING UNITS AND POPULATION

Base year population is derived from the base year population estimate from the City of Nampa Impact Fee Study and Community Planning Association of Southwest Idaho (COMPASS) traffic analysis zone data from the areas of the District outside of city limits. Based off of this data, the base year population estimate for the Fire District is 127,834. PPHU data shown in Figure 20 is used to convert this total population number to a total housing unit number, which is estimated to be 47,522. Then the housing unit mix percentage is applied to this total housing unit estimate to get a breakdown between single and multifamily units leading to an estimated 39,968 single family units and 7,554 multifamily units.

**Figure 21. Base Year Housing Units and Population**

Nampa Fire Protection District	Base Year 2023
Population [1]	127,834
<b>Housing Units [2]</b>	
Single Family	39,968
Multifamily	7,554
<b>Total Housing Units</b>	<b>47,522</b>

[1] COMPASS Traffic Analysis Zone Model; City of Nampa Impact Fee Study

[2] U.S. Census Bureau, 2021 American Community Survey 5-Year Estimates, TischlerBise analysis

## NEW RESIDENTIAL CONSTRUCTION TREND

To illustrate residential development trends in the Fire District, Figure 22 lists the past six years of new construction in City of Nampa excluding the peak of 2021. Over the past six years there has been a total of 9,791 housing units added with 6,574 being single family homes and 3,155 being multifamily homes. Excluding the peak of 2021, this leads to a weighted average of 1,520 housing units added annually with 1,019 being single family homes and 501 being multifamily homes.

**Figure 22. City of Nampa Building Permit History**

Housing Type	2018	2019	2020	2021	2022	2023	Total	Weighted Average
Single Family	857	1,113	1,278	1,481	895	950	6,574	1,019
Multifamily	232	642	458	651	882	290	3,155	501
<b>Total</b>	<b>1,089</b>	<b>1,755</b>	<b>1,736</b>	<b>2,132</b>	<b>1,777</b>	<b>1,240</b>	<b>9,729</b>	<b>1,520</b>

Source: City of Nampa Department of Building Safety

[1] Excludes the peak of 2021

**HOUSING UNIT AND POPULATION PROJECTIONS**

The residential projections are based on building permit trends within the City of Nampa and COMPASS traffic analysis zone data for the areas of the District outside of city limits. Past housing construction trends are assumed to continue through the next ten years. The annual average totals are included in the projections to estimate housing growth in the District. Population growth is estimated based on housing development and PPHU by housing type. As a result, there are 17,581 new housing units projected in the District over the next ten years, broken down into 12,192 single family units and 5,389 multifamily units. Based on the housing development, population in the District is estimated to grow by 45,162 residents or a 35 percent increase from the base year.

**Figure 23. Residential Development Projections**

Nampa Fire Protection District	Base Year 2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Total Increase
<b>Population [1]</b>	<b>127,834</b>	<b>132,173</b>	<b>136,512</b>	<b>141,053</b>	<b>145,594</b>	<b>150,136</b>	<b>154,677</b>	<b>159,218</b>	<b>163,811</b>	<b>168,404</b>	<b>172,997</b>	<b>45,162</b>
<b>Housing Units [2]</b>												
<b>Single Family</b>	<b>39,968</b>	<b>41,132</b>	<b>42,296</b>	<b>43,523</b>	<b>44,750</b>	<b>45,977</b>	<b>47,204</b>	<b>48,431</b>	<b>49,674</b>	<b>50,917</b>	<b>52,161</b>	<b>12,192</b>
<b>Multifamily</b>	<b>7,554</b>	<b>8,082</b>	<b>8,611</b>	<b>9,151</b>	<b>9,691</b>	<b>10,232</b>	<b>10,772</b>	<b>11,312</b>	<b>11,856</b>	<b>12,399</b>	<b>12,942</b>	<b>5,389</b>
<b>Total Housing Units</b>	<b>47,522</b>	<b>49,214</b>	<b>50,906</b>	<b>52,674</b>	<b>54,441</b>	<b>56,209</b>	<b>57,976</b>	<b>59,743</b>	<b>61,530</b>	<b>63,317</b>	<b>65,103</b>	<b>17,581</b>

[1] Population projections are based on housing growth and PPHU factors

[2] Housing projections are based on annual average without peak in Nampa and COMPASS projections outside of Nampa

**CURRENT EMPLOYMENT AND NONRESIDENTIAL FLOOR AREA**

The impact fee study will include nonresidential development as well. Utilizing employment data from the City of Nampa Impact Fee Study, COMPASS TAZ data for the areas of the District outside of city limits, and the City of Nampa website, 2023 total employment in the District is estimated at 46,139 jobs. Employment data from the City of Nampa website is used to breakdown this job total. Listed in Figure 24, there are an estimated 11,764 retail jobs, 7,507 office jobs, 15,461 industrial jobs, and 11,406 institutional jobs located in the District.

To estimate the nonresidential floor area, employee density factors from the Institute of Transportation Engineers (ITE) *Trip Generation* Manual (2021) are applied to job estimates. Figure 24 lists the land use type and density factors that are included in the analysis. Overall, there is 27.7 million square feet estimated in the District in the base year. Industrial and retail development make up the majority of this with a combined 77 percent of the total floor area.

**Figure 24. Base Year Employment and Nonresidential Floor Area**

Nampa Fire Protection District	Base Year Jobs [1]	% of Total	Base Year Sq. Ft. [2]	% of Total
Retail	11,764	25%	5,540,925	20%
Office	7,507	16%	2,304,725	8%
Industrial	15,461	34%	15,901,010	57%
Institutional	11,406	25%	3,992,211	14%
<b>Total</b>	<b>46,139</b>	<b>100%</b>	<b>27,738,871</b>	<b>100%</b>

[1] COMPASS (Community Planning Association of Southwest Idaho) Traffic Analysis Zone Model; City of Nampa Impact Fee Study; cityofnampa.us

[2] Trip Generation, Institute of Transportation Engineers, 11th

[3] Note: To account for the recent boom in construction, industrial floor area has been calculated based on recent development and 2021 estimates.

**Figure 25. Institute of Transportation Engineers (ITE) Employment Density Factors**

Employment Industry	ITE Code	Land Use	Demand Unit	Emp Per Dmd Unit	Sq Ft Per Emp
Retail	820	Shopping Center	1,000 Sq Ft	2.12	471
Office	710	General Office	1,000 Sq Ft	3.26	307
Industrial	110	Light Industrial	1,000 Sq Ft	1.57	637
Institutional	610	Hospital	1,000 Sq Ft	2.86	350

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

**NONRESIDENTIAL CONSTRUCTION TREND**

To illustrate nonresidential development trends in the District, Figure 26 shows the average nonresidential construction in square feet over the last 5 years excluding the peak year (2022) and the Amazon Fulfillment Center (AFC) constructed in 2019 since this was a large, unique development. This average will be used for employment and floor area projections within the City of Nampa.

**Figure 26. Annual Nonresidential Construction Estimates**

Industry	2018	2019	2020	2021	2022	Total	5-Year Average	w/o 2022 Peak & AFC
Retail	76,677	53,111	52,838	41,951	111,062	335,639	67,128	56,144
Office	84,864	95,738	65,552	78,978	297,384	622,516	124,503	81,283
Industrial	655,730	3,338,413	490,116	836,289	3,260,783	8,581,331	1,716,266	684,126
Institutional	55,811	29,359	16,062	70,325	35,436	206,993	41,399	42,889
<b>Total</b>	<b>873,082</b>	<b>3,516,621</b>	<b>624,568</b>	<b>1,027,543</b>	<b>3,704,665</b>	<b>9,746,479</b>	<b>1,949,296</b>	<b>864,443</b>

Source: City of Nampa Department of Building Safety

[1] Includes Amazon Fulfillment Center, 2.6 million sq. ft. Without AFC industrial growth was 754,000 sq. ft.

**EMPLOYMENT AND NONRESIDENTIAL FLOOR AREA PROJECTIONS**

Job and nonresidential floor area projections for the next ten years are provided in Figure 27. Floor area is projected using commercial building permit data and COMPASS TAZ data for areas of the District outside of city limits. Over the next ten years, the nonresidential floor area is projected to increase by approximately 9.9 million square feet, a 36 percent increase from the base year.

Job growth is converted into nonresidential floor area using the ITE square feet per employee averages shown in Figure 25. Over the next ten years there is a projected increase of 18,490 jobs in the District, a 40 percent increase from the base year. Industrial development accounts for the greatest share of the increase at 75 percent of the total projected new jobs.

**Figure 27. Employment and Nonresidential Floor Area Projections**

Industry	Base Year	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Total
	2023											Increase
<b>Jobs [1]</b>												
Retail	11,764	11,964	12,165	12,340	12,515	12,690	12,865	13,040	13,240	13,441	13,641	<b>1,877</b>
Office	7,507	7,824	8,140	8,441	8,741	9,041	9,342	9,642	9,959	10,275	10,592	<b>3,085</b>
Industrial	15,461	16,642	17,822	18,970	20,117	21,264	22,412	23,559	24,740	25,920	27,101	<b>11,640</b>
Institutional	11,406	11,607	11,809	11,985	12,162	12,339	12,515	12,692	12,893	13,094	13,296	<b>1,889</b>
<b>Total</b>	<b>46,139</b>	<b>48,037</b>	<b>49,936</b>	<b>51,735</b>	<b>53,535</b>	<b>55,334</b>	<b>57,134</b>	<b>58,933</b>	<b>60,832</b>	<b>62,730</b>	<b>64,629</b>	<b>18,490</b>
<b>Nonresidential Floor Area (1,000 sq. ft.) [2]</b>												
Retail	5,541	5,635	5,730	5,812	5,894	5,977	6,059	6,142	6,236	6,330	6,425	<b>884</b>
Office	2,305	2,402	2,499	2,591	2,684	2,776	2,868	2,960	3,057	3,155	3,252	<b>947</b>
Industrial	15,901	16,653	17,405	18,136	18,867	19,598	20,329	21,059	21,811	22,563	23,315	<b>7,414</b>
Institutional	3,992	4,063	4,133	4,195	4,257	4,319	4,380	4,442	4,513	4,583	4,653	<b>661</b>
<b>Total</b>	<b>27,739</b>	<b>28,753</b>	<b>29,767</b>	<b>30,734</b>	<b>31,701</b>	<b>32,669</b>	<b>33,636</b>	<b>34,604</b>	<b>35,618</b>	<b>36,631</b>	<b>37,645</b>	<b>9,906</b>

[1] Source: Institute of Transportation Engineers, *Trip Generation*, 2021

[2] Source: Building permit analysis by TischlerBise

**VEHICLE TRIP GENERATION**

**RESIDENTIAL VEHICLE TRIPS BY HOUSING TYPE**

A customized trip rate is calculated for the single family and multifamily units in the Nampa Fire Protection District. In Figure 28, the most recent data from the US Census American Community Survey is inputted into equations provided by the ITE to calculate the trip ends per housing unit factor. A single family unit is estimated to generate 10.83 trip ends and a multifamily unit is estimated to generate 5.45 trip ends on an average weekday.

**Figure 28. Customized Residential Trip End Rates by Housing Type**

Tenure by Units in Structure	Vehicles Available <sup>1</sup>	Households by Structure Type <sup>2</sup>			Vehicles per HH by Tenure
		Single Family	Multifamily	Total	
Owner-Occupied	53,591	23,358	109	23,467	2.28
Renter-Occupied	19,632	6,230	5,203	11,433	1.72
Total	73,223	29,588	5,312	34,900	2.10
Housing Units <sup>3</sup>		30,271	5,721	35,992	

  

Housing Type	Persons in Households <sup>4</sup>	Trip Ends <sup>5</sup>	Vehicles by Type of Unit	Trip Ends <sup>6</sup>	Average Trip Ends	Local Trip Ends per Unit	National Trip Ends per Unit <sup>7</sup>
Single Family	85,668	238,513	63,972	416,946	327,729	10.83	9.43
Multifamily	11,312	25,823	9,198	36,532	31,178	5.45	4.54
Total	96,980	264,336	73,170	453,478	358,907	9.97	

1. Vehicles available by tenure from Table B25046, American Community Survey, 2021 5-Year Estimates.
2. Households by tenure and units in structure from Table B25032, American Community Survey, 2021 5-Year Estimates.
3. Housing units from Table B25024, American Community Survey, 2021 5-Year Estimates.
4. Total population in households from Table B25033, American Community Survey, 2021 5-Year Estimates.
5. Vehicle trips ends based on persons using formulas from ITE *Trip Generation* . For single-family housing (ITE 210), the fitted curve equation is  $EXP(0.89*LN(persons)+1.72)$  [ITE 2017]. To approximate the average population of the ITE studies, persons were divided by 66 and the equation result multiplied by 66. For multi-family housing (ITE 221), the fitted curve equation is  $(2.29*persons)-81.02$  [ITE 2017].
6. Vehicle trip ends based on vehicles available using formulas from ITE *Trip Generation* . For single-family housing (ITE 210), the fitted curve equation is  $EXP(0.99*LN(vehicles)+1.93)$  [ITE 2017]. To approximate the average number of vehicles in the ITE studies, vehicles available were divided by 118 and the equation result multiplied by 118. For multifamily housing (ITE 220), the fitted curve equation is  $(3.94*vehicles)+293.58$  [ITE 2012].
7. Trip Generation, Institute of Transportation Engineers, 11th Edition (2021).

**RESIDENTIAL VEHICLE TRIPS ADJUSTMENT FACTORS**

A vehicle trip end is the out-bound or in-bound leg of a vehicle trip. As a result, so to not double count trips, a standard 50 percent adjustment is applied to trip ends to calculate a vehicle trip. For example, the out-bound trip from a person’s home to work is attributed to the housing unit and the trip from work back home is attributed to the employer.

However, an additional adjustment is necessary to capture Nampa residents’ work bound trips that are outside of the city. The trip adjustment factor includes two components. According to the National Household Travel Survey, home-based work trips are typically 31 percent of out-bound trips (which are 50 percent of all trip ends). Also, utilizing the most recent data from the Census Bureau's web application "OnTheMap", 73 percent of Nampa workers travel outside the District for work. In combination, these factors account for 11 percent of additional production trips ( $0.31 \times 0.50 \times 0.73 = 0.11$ ). Shown in Figure 29, the total adjustment factor for residential housing units includes attraction trips (50 percent of trip ends) plus the journey-to-work commuting adjustment (11 percent of production trips) for a total of 61 percent.

**Figure 29. Residential Trip Adjustment Factor for Commuters**

***Trip Adjustment Factor for Commuters***

<b>Employed Nampa Residents (2020)</b>	<b>45,307</b>
<b>Residents Working in Nampa (2020)</b>	<b>12,170</b>
<b>Residents Commuting Outside of Nampa for Work</b>	<b>33,137</b>
<b>Percent Commuting Out of Nampa</b>	<b>73%</b>
<b>Additional Production Trips</b>	<b>11%</b>

  

<b>Standard Trip Adjustment Factor</b>	<b>50%</b>
<b>Residential Trip Adjustment Factor</b>	<b>61%</b>

Source: U.S. Census, OnTheMap Application, 2020

**NONRESIDENTIAL VEHICLE TRIPS**

Vehicle trip generation for nonresidential land uses are calculated by using ITE’s average daily trip end rates and adjustment factors found in their recently published 11<sup>th</sup> edition of Trip Generation. To estimate the trip generation in the Nampa Fire Protection District, the weekday trip end per 1,000 square feet factors listed in Figure 30 are used.

**Figure 30. Institute of Transportation Engineers Nonresidential Factors**

Employment Industry	ITE Code	Land Use	Demand Unit	Wkdy Trip Ends per Dmd Unit	Wkdy Trip Ends per Employee
<b>Retail</b>	820	Shopping Center	1,000 Sq Ft	37.01	17.42
<b>Office</b>	710	General Office	1,000 Sq Ft	10.84	3.33
<b>Industrial</b>	110	Light Industrial	1,000 Sq Ft	4.87	3.10
<b>Institutional</b>	610	Hospital	1,000 Sq Ft	10.77	3.77

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

For nonresidential land uses, the standard 50 percent adjustment is applied to office, industrial, and institutional. A lower vehicle trip adjustment factor is used for retail because this type of development attracts vehicles as they pass-by on arterial and collector roads. For example, when someone stops at a convenience store on their way home from work, the convenience store is not their primary destination.

In Figure 31, the Institute for Transportation Engineers’ land use code, daily vehicle trip end rate, and trip adjustment factor is listed for each land use.

**Figure 31. Daily Vehicle Trip Factors**

Land Use	ITE Codes	Daily Vehicle Trip Ends	Trip Adj. Factor	Daily Vehicle Trips
<b>Residential (per housing unit)</b>				
Single Family	210	10.83	61%	6.61
Multifamily	220	5.45	61%	3.32
<b>Nonresidential (per 1,000 square feet)</b>				
Retail	820	37.01	38%	14.06
Office	710	10.84	50%	5.42
Industrial	110	4.87	50%	2.44
Institutional	610	10.77	50%	5.39

Source: *Trip Generation*, Institute of Transportation Engineers, 11th Edition (2021); National Household Travel Survey, 2009

**VEHICLE TRIP PROJECTIONS**

The base year vehicle trip totals and vehicle trip projections are calculated by combining the vehicle trip end factors, the trip adjustment factors, and the residential and nonresidential assumptions for housing stock and floor area. Districtwide, residential land uses account for 289,155 vehicle trips and nonresidential land uses account for 150,635 vehicle trips in the base year (Figure 32).

Through 2033, it is projected that daily vehicle trips will increase by 137,639 trips with the majority of the growth being generated by single family (59 percent) and multifamily (13 percent) development which leads to a 31 percent increase in vehicle trips from the base year through 2033.

**Figure 32. Vehicle Trip Projections**

Nampa Fire Protection District	Base Year 2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Total Increase
<b>Residential Trips</b>												
Single Family	264,043	271,729	279,418	287,524	295,631	303,737	311,844	319,951	328,163	336,376	344,589	80,546
Multifamily	25,112	26,870	28,626	30,423	32,219	34,015	35,812	37,608	39,414	41,221	43,027	17,915
<b>Subtotal</b>	<b>289,155</b>	<b>298,598</b>	<b>308,044</b>	<b>317,947</b>	<b>327,850</b>	<b>337,753</b>	<b>347,656</b>	<b>357,558</b>	<b>367,578</b>	<b>377,597</b>	<b>387,616</b>	<b>98,461</b>
<b>Nonresidential Trips</b>												
Retail	77,926	79,253	80,580	81,739	82,899	84,058	85,218	86,377	87,704	89,031	90,357	12,431
Office	12,492	13,018	13,545	14,045	14,545	15,044	15,544	16,044	16,571	17,097	17,624	5,132
Industrial	38,719	40,550	42,381	44,161	45,941	47,720	49,500	51,280	53,111	54,942	56,773	18,054
Institutional	21,498	21,877	22,256	22,589	22,922	23,255	23,588	23,921	24,300	24,680	25,059	3,561
<b>Subtotal</b>	<b>150,635</b>	<b>154,699</b>	<b>158,762</b>	<b>162,534</b>	<b>166,306</b>	<b>170,078</b>	<b>173,850</b>	<b>177,622</b>	<b>181,686</b>	<b>185,750</b>	<b>189,813</b>	<b>39,178</b>
<b>Vehicle Trips</b>												
<b>Grand Total</b>	<b>439,790</b>	<b>453,297</b>	<b>466,806</b>	<b>480,481</b>	<b>494,156</b>	<b>507,831</b>	<b>521,506</b>	<b>535,181</b>	<b>549,264</b>	<b>563,346</b>	<b>577,429</b>	<b>137,639</b>

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