IDAHO FALLS

Capital Improvement Plan and Development Impact Fee Study

Submitted to:

City of Idaho Falls, Idaho

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Prepared by:

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Impact Fee Study
City of Idaho Falls, Idaho

EXECUTIVE SUMMARY

The City of Idaho Falls, Idaho, retained TischlerBise, Inc. to update the impact fees imposed on new development to meet the new demands generated for public facilities in the City. It is the intent of the City of Idaho Falls to evaluate and establish impact fees for: (1) parks, (2) transportation, (3) public safety (police and fire/EMS). This report presents the methodologies and calculations 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 City of Idaho Falls.

The purpose of this study is to demonstrate the City's compliance with Idaho Statutes as authorized by the Idaho Legislature. Consistent with the authorization, it is the intent of the City of Idaho Falls 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.

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 geographic area for all fees, except Fire, is the City of Idaho Falls. The Idaho Falls Fire Department service area includes the City of Idaho Falls and parts of unincorporated Bonneville County. The Fire impact fee is for the City of Idaho Falls service area. Parks and Recreation fees are based on residential demand, while the remaining four fees are calculated for both residential and nonresidential development.

IDAHO DEVELOPMENT IMPACT FEE ENABLING LEGISLATION

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 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 City of Idaho Falls, 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 x 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 ÷ B). By using existing infrastructure standards to determine the need for growth-related capital improvements, the City of Idaho Falls 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 PLANS AND DEVELOPMENT IMPACT FEES

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

Fee Methodologies

Of the fee methodologies discussed above, the *incremental expansion* and *plan-based* methodologies are used to calculate impact fees for the City of Idaho Falls. Where capacity is sufficient to serve current demand the *incremental expansion* method documents the current Level of Service (LOS) for each type of public facility. A *plan-based* method is used for the planned new police station. The following table summarizes the method(s) used to derive the impact fee for each type of public facility in Idaho Falls. A summary of each development fee is provided below:

Figure 1. Summary of Impact Fee Methodologies

Fee Category	Service Area	Incremental Expansion	Plan-Based	Cost Recovery	Cost Allocation
Parks and Recreation	Citywide	Neighborhood Parks, Urban/Community Parks, Civic Parks, Indoor Recreation Centers	n/a	n/a	Population
Transportation	Citywide	Arterial Capacity Improvements	n/a	n/a	Vehicle Miles Traveled (VMT)
Police	Citywide	Police Vehicles	New Police Station	n/a	Population, Nonresidential Vehicle Trips
Fire/EMS	Citywide	Station Facilities, Vehicles and Apparatus, Training Center	n/a	n/a	Fire/EMS Calls for Service

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).

PARKS AND RECREATION

The City's Park system includes four types of parks—neighborhood parks, urban/community parks, civic parks, and indoor recreation centers. Neighborhood parks serve a variety of age groups within a limited area or neighborhood and includes areas for both active and passive recreation. Community parks are larger than neighborhood parks and serve several neighborhoods. Community parks include areas for intense recreation activities and passive recreation opportunities. Civic parks are for specialized or single-purpose recreation activities. Indoor recreation centers include specialty use buildings such as aquatic centers, hockey rinks, and recreation centers.

The Parks and Recreation development impact fee is based on the existing level of service provided for park land and park improvements; and indoor recreation facilities. The development impact fee is calculated for residential development only. To serve projected growth at current levels of service, the following infrastructure is projected over the next ten years:

- 2.3 neighborhood park acres
- 55.8 community park acres
- 4.0 civic park acres
- 1.0 acre and 12,161 square feet of indoor recreation space

TRANSPORTATION

Transportation's development impact fee is based on an incremental expansion approach for major and minor arterial needs over a 10-year period. The incremental expansion methodology documents the current level of service provided to development and serves to maintain this as new development occurs. Transportation development impact fees are calculated for both residential and nonresidential development vehicle miles traveled to allocate capital costs to residential or nonresidential land uses.

To serve projected growth at current levels of service, the following infrastructure is projected over the next ten years:

- 23.4 arterial lane miles
- $16,050,000 growth-related costs to the City of Idaho Falls

POLICE

The Police development impact fee is based on police vehicles and the planned new police station serving the City of Idaho Falls. Police calls for service, population growth, and vehicle trip growth are used to determine residential and nonresidential proportionate share factors (i.e., how much of the current infrastructure serves residential or nonresidential land uses). Police development impact fees are calculated for residential and nonresidential development based on cost per person and cost per vehicle trips, respectively. New growth's percentage share of the planned police station is determined by population growth and vehicle trip growth through 2039.

The following infrastructure is projected over the next ten years to serve the estimated growth:

- 15.1 new police vehicles
- 7,008 square feet of new police station

FIRE/EMS

The Fire/EMS development impact fee is based on fire/EMS station facilities, training center, and vehicles and apparatus serving the City of Idaho Falls. Fire/EMS calls for service are used to determine residential and nonresidential proportionate share factors (i.e., how much of the current infrastructure serves residential or nonresidential land uses). Fire/EMS development impact fees are calculated for residential and nonresidential development based on cost per fire/EMS call for service.

To serve projected growth at current levels of service, the following infrastructure is projected over the next 10 years:

- 2.6 new fire/EMS vehicles and apparatus
- 6,031 square feet of fire/EMS stations
- 13,696 square feet of fire/EMS training center space

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 City of Idaho Falls. 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 City 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 10th 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

Development Type	Parks & Recreation	Transp.	Police	Fire/EMS	Maximum Supportable Fee
Residential (per housing unit)					
Single Family	$1,854	$3,013	$641	$519	$6,027
Multifamily	$1,282	$1,336	$443	$418	$3,479
Nonresidential (per 1,000 square feet)					
Retail	$0	$3,835	$1,822	$462	$6,119
Office	$0	$1,440	$618	$77	$2,135
Industrial	$0	$733	$315	$37	$1,085
Institutional	$0	$1,585	$681	$1,669	$3,935

CAPITAL IMPROVEMENT PLANS

The following section provides a summary of the Capital Improvement Plans depicting growth-related capital demands and costs on which the fees are based. Each infrastructure category is discussed in turn.

First, Figure 3 lists the projected growth over the next ten years in Idaho Falls. Overall, there is about a 14 percent increase is residential development (8,896 new residents and 3,480 new housing units) and a 16 percent increase in nonresidential development (8,840 new jobs and 3.8 million square feet of development). In turn, there is a 15 percent increase in transportation demand.

Figure 3. Ten-Year Projected Residential and Nonresidential Growth

City of Idaho Falls, ID	Base Year 2021	*1* 2022	*2* 2023	*3* 2024	*4* 2025	*5* 2026	*10* 2031	Total Increase
Population [1]	63,473	64,362	65,252	66,141	67,031	67,921	72,369	**8,896**
Housing Units by Type [2]								
Single Family	19,136	19,440	19,744	20,048	20,352	20,656	22,176	**3,040**
Multifamily	6,833	6,877	6,921	6,965	7,009	7,053	7,273	**440**
Total Housing Units	25,968	26,316	26,664	27,012	27,360	27,708	29,448	**3,480**
Jobs [3]								
Retail	13,281	13,449	13,617	13,784	13,952	14,120	14,959	**1,678**
Office	17,354	17,630	17,906	18,181	18,457	18,733	20,111	**2,757**
Industrial	9,796	10,022	10,248	10,473	10,699	10,925	12,053	**2,257**
Institutional	13,528	13,743	13,958	14,173	14,388	14,603	15,677	**2,149**
Total Jobs	53,960	54,844	55,728	56,612	57,496	58,380	62,800	**8,840**
Nonresidential Floor Area (1,000 sq. ft.) [4]								
Retail	5,668	5,739	5,811	5,883	5,954	6,026	6,384	**716**
Office	5,844	5,937	6,030	6,123	6,216	6,308	6,772	**928**
Industrial	6,024	6,163	6,301	6,440	6,579	6,718	7,412	**1,388**
Institutional	4,783	4,859	4,935	5,011	5,087	5,163	5,542	**760**
Total Floor Area	22,319	22,698	23,077	23,456	23,835	24,214	26,110	**3,792**
Vehicle Trips & Vehicle Miles Traveled (VMT) [5]								
Single Family Trips	117,645	119,514	121,383	123,252	125,121	126,990	136,335	**18,690**
Multifamily Trips	18,626	18,746	18,866	18,986	19,106	19,226	19,825	**1,199**
Residential Subtotal	*136,271*	*138,260*	*140,249*	*142,238*	*144,227*	*146,216*	*156,161*	***19,889***
Retail Trips	81,304	82,331	83,358	84,385	85,413	86,440	91,575	**10,271**
Office Trips	28,461	28,913	29,365	29,817	30,270	30,722	32,982	**4,521**
Industrial Trips	14,939	15,284	15,628	15,972	16,316	16,660	18,381	**3,441**
Institutional Trips	25,636	26,043	26,450	26,857	27,265	27,672	29,708	**4,072**
Nonresidential Subtotal	*150,340*	*152,571*	*154,801*	*157,032*	*159,263*	*161,493*	*172,646*	***22,305***
Total Vehicle Trips	286,612	290,831	295,051	299,270	303,489	307,709	328,806	**42,195**
Total VMT	984,340	998,845	1,013,349	1,027,854	1,042,358	1,056,863	1,129,386	**145,045**

[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: Bonneville Metropolitan Planning Organization; American Census Bureau OnTheMap
[4] Source: TischlerBise analysis; Institute of Transportation Engineers, Trip Generation, 2017
[5] Source: Institute of Transportation Engineers, *Trip Generation* , 10th Edition (2017)

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 all Capital Improvement Plans included in this study will occur within five years.

PARKS AND RECREATION

The City's Park system includes four types of parks—neighborhood parks, urban/community parks, civic parks, and indoor recreation centers. Neighborhood parks serve a variety of age groups within a limited area or neighborhood and includes areas for both active and passive recreation. Community parks are larger than neighborhood parks and serve several neighborhoods. Community parks include areas for intense recreation activities and passive recreation opportunities. Civic parks are for specialized or single-purpose recreation activities. Indoor recreation centers include specialty use buildings such as aquatic centers, hockey rinks, and recreation centers. The City has maintained a level of service of 0.26 acres per 1,000 persons of neighborhood parks, 6.28 acres of urban/community parks, 0.45 acres of civic parks, and 0.12 acres of indoor recreation centers. The City has also maintained a level of service of a total of approximately 1,367 square feet of indoor recreation space per 1,000 persons.

The Parks and Recreation development impact fee is based on the existing level of service provided for park land and park improvements; and indoor recreation facilities. The use of existing standards means there are no existing infrastructure deficiencies. New development is only paying its proportionate share for growth-related infrastructure.

A summary of the Parks and Recreation CIP is included below in Figure 4. As shown, the following additional infrastructure is needed to maintain current levels of service over the next ten years: 2.3 acres of neighborhood park acres and improvements with an estimated cost of almost $115,400; 55.8 acres of urban/community park acres and improvements estimated to cost $3,539,500; 4.0 acres of civic park land and improvements estimated to cost $761,200; and 12,161 square feet of indoor recreation center estimated to cost $1,781,184. The total projected Parks and Recreation capital improvement costs in current dollars are $6.2 million.

Figure 4. Parks & Recreation Capital Improvement Plan

Level of Service and Cost Factors						
Neighborhood Park LOS	0.26	acres	per 1,000 persons	0.33	improvements	per 1,000 persons
Urban/Community Park LOS	6.28	acres	per 1,000 persons	2.30	improvements	per 1,000 persons
Civic Park LOS	0.45	acres	per 1,000 persons	0.25	improvements	per 1,000 persons
Indoor Rec Center LOS	0.12	acres	per 1,000 persons	1,367	square feet	per 1,000 persons
Neighborhood Park Costs	$30,000	per acre		$16,000	per improvement	
Urban/Community Park Costs	$30,000	per acre		$91,000	per improvement	
Civic Park Costs	$165,000	per acre		$46,000	per improvement	
Indoor Rec Center Costs	$30,000	per acre		$144	per square foot	

Year		Population	Neighborhood Park Acres	Neighborhood Park Impr.	Community Park Acres	Community Park Impr.	Civic Park Acres	Civic Park Impr.	Indoor Rec Center Acres	Indoor Rec Center Sq. Ft.
Base	2021	63,473	16.5	20.900	398.6	145.9	28.5	15.8	7.6	86,767
Year 1	2022	64,362	16.7	21.200	404.1	148.0	28.9	16.0	7.7	87,983
Year 2	2023	65,252	16.9	21.500	409.7	150.0	29.3	16.3	7.8	89,199
Year 3	2024	66,141	17.1	21.800	415.3	152.1	29.7	16.5	7.9	90,415
Year 4	2025	67,031	17.4	22.100	420.9	154.1	30.1	16.7	8.0	91,631
Year 5	2026	67,921	17.6	22.400	426.5	156.2	30.5	16.9	8.1	92,847
Year 6	2027	68,810	17.8	22.700	432.1	158.2	30.9	17.2	8.2	94,063
Year 7	2028	69,700	18.1	23.000	437.7	160.3	31.3	17.4	8.3	95,279
Year 8	2029	70,589	18.3	23.200	443.3	162.3	31.7	17.6	8.4	96,495
Year 9	2030	71,479	18.5	23.500	448.8	164.4	32.1	17.8	8.5	97,711
Year 10	2031	72,369	18.8	23.800	454.4	166.4	32.5	18.0	8.6	98,928
Ten-Year Increase		8,896	2.3	2.9	55.8	20.5	4.0	2.2	1.0	12,161
		Cost per Unit	$30,000	$16,000	$30,000	$91,000	$165,000	$46,000	$30,000	$144
		Growth Related Costs	**$69,000**	**$46,400**	**$1,674,000**	**$1,865,500**	**$660,000**	**$101,200**	**$30,000**	**$1,751,184**

Total Parks & Recreation Ten-Year Growth-Related Cost **$6,197,284**

TRANSPORTATION

Transportation's development impact fee is based on an incremental expansion approach for major and minor arterial needs over a 10-year period. The incremental expansion methodology documents the current level of service provided to development and serves to maintain this as new development occurs. There may be other transportation needs, but only citywide arterial projects are included in the impact fee study. The current level of service is found by comparing the current vehicle miles traveled and the total arterial lane miles. Currently, there are 169.3 lane miles and due to the projected growth, there is a need for 23.4 new lane miles.

Figure 5. Transportation Growth-Related Needs

	Base Year 2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total Increase
Single Family Units	19,136	19,440	19,744	20,048	20,352	20,656	20,960	21,264	21,568	21,872	22,176	3,040
Multifamily Units	6,833	6,877	6,921	6,965	7,009	7,053	7,097	7,141	7,185	7,229	7,273	440
Retail KSF	5,668	5,739	5,811	5,883	5,954	6,026	6,097	6,169	6,241	6,312	6,384	716
Office KSF	5,844	5,937	6,030	6,123	6,216	6,308	6,401	6,494	6,587	6,680	6,772	928
Industrial KSF	6,024	6,163	6,301	6,440	6,579	6,718	6,857	6,995	7,134	7,273	7,412	1,388
Institutional KSF	4,783	4,859	4,935	5,011	5,087	5,163	5,239	5,315	5,391	5,467	5,542	760
Single Family Units Trips	117,645	119,514	121,383	123,252	125,121	126,990	128,859	130,728	132,597	134,466	136,335	18,690
Multfamily Units Trips	18,626	18,746	18,866	18,986	19,106	19,226	19,346	19,466	19,586	19,705	19,825	1,199
Residential Subtotal	*136,271*	*138,260*	*140,249*	*142,238*	*144,227*	*146,216*	*148,205*	*150,194*	*152,183*	*154,172*	*156,161*	*19,889*
Retail Trips	81,304	82,331	83,358	84,385	85,413	86,440	87,467	88,494	89,521	90,548	91,575	10,271
Office Trips	28,461	28,913	29,365	29,817	30,270	30,722	31,174	31,626	32,078	32,530	32,982	4,521
Industrial Trips	14,939	15,284	15,628	15,972	16,316	16,660	17,004	17,348	17,692	18,037	18,381	3,441
Institutional Trips	25,636	26,043	26,450	26,857	27,265	27,672	28,079	28,486	28,893	29,301	29,708	4,072
Nonresidential Subtotal	*150,340*	*152,571*	*154,801*	*157,032*	*159,263*	*161,493*	*163,724*	*165,954*	*168,185*	*170,415*	*172,646*	*22,305*
Total Vehicle Trips	286,612	290,831	295,051	299,270	303,489	307,709	311,928	316,148	320,367	324,587	328,806	42,195
Arterial VMT	984,340	998,845	1,013,349	1,027,854	1,042,358	1,056,863	1,071,367	1,085,872	1,100,376	1,114,881	1,129,386	145,045
Arterial Lane Miles	**169.3**	**171.7**	**174.0**	**176.4**	**178.7**	**181.0**	**183.4**	**185.7**	**188.1**	**190.4**	**192.7**	**23.4**

Currently, the average cost to construct a lane mile of arterial roadway is $1,000,000. As a result, growth-related arterial needs cost a total of $23.4 million. However, 25 percent of future road projects are assumed to be funded through federal funding. Additionally, there is a current balance of $1.5 million in the capital fund for road construction. These two elements reduce the future growth-related costs to the City. Overall, the next ten years of growth is estimated to cost the City $16,050,000 in road projects.

Figure 6. Summary of Transportation Growth-Related Needs and Costs

10-Year Arterial Needs (lane miles)	23.4
Average Cost per Lane Mile [1]	$1,000,000
Total 10-Year Growth-Related Costs	**$23,400,000**

Total 10-Year Growth Related Costs	$23,400,000
Federal Funding for Future Projects (25%)	($5,850,000)
Existing Capital Fund Balance	($1,500,000)
City of Idaho Falls Growth-Related Cost	**$16,050,000**

City of Idaho Falls Growth-Related Cost	$16,050,000
10-Year Increase in Vehicle Miles Traveled	145,045
Capital Cost per Vehicle Miles Traveled	**$110.66**

[1] Source: City of Idaho Falls estimated current cost of an arterial lane mile

Similar to the other incremental expansion methodologies, the impact fee study only indicates the level of new capital facilities needed in the next ten years to accommodate growth. However, the City of Idaho Falls has identified four future transportation projects for the next five years (2021-2024 Capital Improvement Plan). Although a portion of these projects may be to serve existing demand, the growth-related portion would be impact fee eligible.

Figure 7. 2021-2024 Transportation Capital Improvement Plan

Project	Cost
Traffic Signal and Rd Widening at N 5th West (East River Rd) and University Blvd	$2,500,000
25th East (Hitt Rd) Widening - 49th South (Township Rd) North 1/2 Mile	$3,000,000
Elm Street Reconstruction Eastern to S Blvd	$1,800,000
E Street Improvements Memorial to Yellowstone	$1,800,000
Total City Cost	$9,100,000

Source: 2021-2024 Capital Improvement Plan

POLICE

The Police development impact fee is based on police vehicles and the planned new police station serving the City of Idaho Falls. Police calls for service, population growth, and vehicle trip growth are used to determine residential and nonresidential proportionate share factors (i.e., how much of the current infrastructure serves residential or nonresidential land uses). The new police station will be constructed to serve the existing demand and future growth. The construction of the station is funded by Certificates

of Participation and the debt will be serviced through 2039. New growth's percentage share of the planned police station is determined by population growth and vehicle trip growth through 2039.

Calculated in Figure 8, the new police station is 61,189 square feet and 44 percent is attributed to residential demand and 56 percent attributed to nonresidential demand. The attributed floor area is then compared to the projected growth through 2039 to find growth's share. As a result, residential growth accounts for 5,424 square feet and nonresidential growth accounts for 7,289 square feet. Based on the debt issued to construct the police station, growth's share results in a $4.2 million cost.

Figure 8. Growth's Share of New Police Station

Facility	Total Square Feet	Residential Share	Residential Floor Area (sq. ft.)	2021 Population	2039 Population	Growth's Share	Residential Growth's Floor Area (sq. ft.)
New Police Station	61,189	44%	26,923	63,473	79,485	20%	**5,424**

Facility	Total Square Feet	Nonresidential Share	Nonresidential Floor Area (sq. ft.)	2021 Vehicle Trips	2039 Vehicle Trips	Growth's Share	Nonresidential Growth's Floor Area (sq. ft.)
New Police Station	61,189	56%	34,266	150,340	190,965	21%	**7,289**

Additionally, shown in Figure 9, ten-year growth is estimated to generate a need for 15.1 new police vehicles, a total cost of $830,500.

Figure 9. Police Vehicle Capital Improvement Plan

Type of Infrastructure	Level of Service			Demand Unit	Cost / Unit
Police Vehicles	Residential	0.72	Vehicles	per 1,000 persons	$55,000
	Nonresidential	0.39		per 1,000 trips	

Growth-Related Need for Police Vehicles						
Year		Population	Nonres. Vehicle Trips	Residential Vehicles	Nonresidential Vehicles	Total Vehicles
Base	2021	63,473	150,340	45.7	58.6	104.3
Year 1	2022	64,362	152,571	46.3	59.5	105.8
Year 2	2023	65,252	154,801	46.9	60.3	107.2
Year 3	2024	66,141	157,032	47.6	61.2	108.8
Year 4	2025	67,031	159,263	48.2	62.1	110.3
Year 5	2026	67,921	161,493	48.9	62.9	111.8
Year 6	2027	68,810	163,724	49.5	63.8	113.3
Year 7	2028	69,700	165,954	50.1	64.7	114.8
Year 8	2029	70,589	168,185	50.8	65.5	116.3
Year 9	2030	71,479	170,415	51.4	66.4	117.8
Year 10	2031	72,369	172,646	52.1	67.3	119.4
Ten-Year Increase		8,896	22,305	**6.4**	**8.7**	**15.1**
			Projected Expenditure	**$352,000**	**$478,500**	**$830,500**

Growth-Related Expenditures for Police Vehicles	$830,500

FIRE/EMS

The Fire/EMS development impact fee includes fire/EMS station facilities, training center, and vehicles and apparatus serving the City of Idaho Falls. Fire/EMS calls for service are used to determine residential and nonresidential proportionate share factors (i.e., how much of the current infrastructure serves residential or nonresidential land uses). Additionally, demand from outside of the City boundaries has been removed from the analysis to accurately capture City-only demand. The City currently maintains 4.28 square feet of station space per service call, 1.88 fire/EMS vehicles per 1,000 service calls, and 9.72 square feet of fire/EMS training facility per service call.

The Fire/EMS development impact fee is based on the existing level of service. The use of existing standards means there are no existing infrastructure deficiencies. New development is only paying its proportionate share for growth-related infrastructure.

A summary of the Fire/EMS CIP is included below in Figure 10. As shown, the following additional infrastructure is needed to maintain current levels of service over the next ten years: 6,031 square feet of station space with an estimated cost of $2.6 million; 2.6 vehicles estimated to cost $837,080; 13,696 square feet of training facility estimated to cost $14,087. The total projected fire/EMS capital improvement costs in current dollars are $3.5 million.

Figure 10. Fire and EMS Capital Improvement Plan

Infrastructure	Level of Service		Demand Unit	Unit Cost
Fire & EMS Stations	4.28	Square Feet	per Calls for Service	$432
Fire & EMS Vehicles	1.88	Vehicles	per 1,000 Calls for Service	$316,000
Fire & EMS Training	9.72	Square Feet	per Calls for Service	$3

Growth-Related Need for Fire & EMS Facilities					
Year		Calls for Service	Total Station Square Feet	Total Vehicles	Total Training Square Feet
Base	2021	9,727	41,632	18.3	94,546
Year 1	2022	9,868	42,235	18.6	95,916
Year 2	2023	10,009	42,838	18.8	97,286
Year 3	2024	10,150	43,441	19.1	98,655
Year 4	2025	10,291	44,044	19.3	100,025
Year 5	2026	10,432	44,647	19.6	101,394
Year 6	2027	10,572	45,250	19.9	102,764
Year 7	2028	10,713	45,853	20.1	104,134
Year 8	2029	10,854	46,456	20.4	105,503
Year 9	2030	10,995	47,059	20.7	106,873
Year 10	2031	11,136	47,662	20.9	108,242
Ten-Year Increase		1,409	**6,031**	**2.6**	**13,696**
Projected Expenditure			**$2,605,249**	**$837,080**	**$41,087**

Total Growth-Related Expenditures for Fire & EMS Facilities	$3,483,416

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, the City of Idaho Falls charges a Bridge and Arterial Streets Fee to help mitigate construction costs for bridges and streets. The fee is formulated based on the number of parking spaces needed for the development. The Transportation Development Impact Fee is meant to replace the Bridge and Arterial Streets Fee, so no credit is included in the development impact fee for future revenue from that funding source. Additionally, there are no other dedicated revenues currently being collected by the City to fund growth-related projects for Parks & Recreation, Transportation, Police, and Fire/EMS.

Furthermore, the maximum supportable impact fees are constructed to offset all growth-related capital costs to the City for Parks & Recreation, Transportation, Police, and Fire/EMS facilities. Evidence is given in Figure 11 and 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.

Potential development impact fee revenues are summarized in Figure 11, assuming implementation of the fees at the maximum supportable level as indicated in this report. Because each type of development impact fee must be accounted for separately, TischlerBise has provided cash flow summaries in the development impact fee study for each type of public facility. Based on the land use assumptions detailed in the Appendix, over the next ten years Parks & Recreation development impact fees are projected to generate approximately $6.2 million; Transportation impact fees $16.1 million; Police impact fees $5 million; Fire/EMS impact fees $3.5 million. At the bottom of the figure, the estimated revenues are compared to the estimated growth-related capital costs. For each public facility type, the impact fee revenues are projected to offset all the capital costs. Note: the small remainder for Police funding is the result of rounding in calculations.

Figure 11. Projected Development Impact Fee Revenue

	Ten-Year Revenue Projections			
Development Type	Parks & Recreation	Transp.	Police	Fire/EMS
Residential				
Single Family	$5,636,160	$9,159,520	$1,948,640	$1,577,760
Multifamily	$564,080	$587,840	$194,920	$183,920
Nonresidential				
Retail	-	$2,745,917	$1,304,579	$330,799
Office	-	$1,336,723	$573,677	$71,478
Industrial	-	$1,017,114	$437,095	$51,341
Institutional	-	$1,204,106	$517,348	$1,267,920
Ten-Year Revenue	$6,200,000	$16,051,000	$4,976,000	$3,483,000
Ten-Year City Capital Costs	$6,197,000	$16,050,000	$4,983,000	$3,483,000
Non-Impact Fee Funding	$0	$0	$7,000	$0

PARKS & RECREATION DEVELOPMENT IMPACT FEE ANALYSIS

The Parks & Recreation 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. Parks & Recreation capital improvements are allocated 100 percent to residential development. Per the Idaho Act, a service unit is a person.

The Parks & Recreation infrastructure components included in the impact fee analysis are:

- Neighborhood Park Land & Improvements
- Urban/Community Parks Land & Improvements
- Civic Parks Land & Improvements
- Indoor Recreation Centers Land & Improvements

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 City to fund growth-related projects for Parks & Recreation facilities. Furthermore, the maximum supportable impact fees are constructed to offset all growth-related capital costs for Parks & Recreation 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.

PARKS & RECREATION LEVEL OF SERVICE AND COST ANALYSIS

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

NEIGHBORHOOD PARK LAND AND PARK IMPROVEMENTS – INCREMENTAL EXPANSION

Listed in Figure 12, there is a total of 16.4 acres of neighborhood park land and 21 improvements within the parks. With a population of 63,473, the level of service is found to be 0.26 acres of neighborhood park land and 0.33 neighborhood park improvements per 1,000 persons. The level of service is combined with the average cost per acre/improvement to find the capital cost per person. Based on available information regarding land costs in Idaho Falls, City staff anticipates future neighborhood park land to cost $30,000 per acre. The average improvement cost is based on the replacement costs of the current improvements at each park.

As a result, the neighborhood park component of the impact fee is $8 per person for land and $5 per person for improvements (0.26 acres per 1,000 persons x $30,000 per acre = $8 per person, rounded).

Figure 12. Neighborhood Park Level of Service & Cost Analysis

Neighborhood Parks	Acres	Park Improvements	Improvement Replacement Cost [1]
20th Street Park	1.0	2	$25,000
Antares Park	1.1	2	$25,000
Bel-Aire Park	1.2	2	$25,000
Dunes Park	2.4	2	$25,000
Kate Curley Park	3.7	4	$126,000
Liberty Park	0.8	2	$25,000
Poitevin Park	2.8	2	$25,000
Waterford Storm Pond #1	1.9	1	$2,500
Waterford Storm Pond #2	1.2	2	$25,000
Willowbrook Park	0.4	2	$25,000
Total	16.4	21	$328,500

Level-of-Service Standards	Park Land	Park Improvements
Residential Share	100%	100%
Share of Acreage and Improvements	16.4	21
2021 Population	63,473	63,473
Acres/Improvements per 1,000 Persons	**0.26**	**0.33**

Cost Analysis	Park Land	Park Improvements
Acres/Improvements per 1,000 Persons	0.26	0.33
Average Cost per Acre/Improvement [2]	$30,000	$16,000
Capital Cost Per Person	**$8**	**$5**

[1] Source: City of Idaho Falls Parks & Recreation
[2] Source: Based on available information regarding land costs in Idaho Falls, City staff anticipates future park land to cost $30,000 per acre.

URBAN/COMMUNITY PARK LAND AND PARK IMPROVEMENTS – INCREMENTAL EXPANSION

Listed in Figure 13, there is a total of 398.8 acres of urban/community park land and 146 improvements within the parks. With a population of 63,473, the level of service is found to be 6.28 acres of urban/community park land and 2.30 urban/community park improvements per 1,000 persons. The level of service is combined with the average cost per acre/improvement to find the capital cost per person. Based on available information regarding land costs in Idaho Falls, City staff anticipates future neighborhood park land to cost $30,000 per acre. The average improvement cost is based on the replacement costs of the current improvements at each park.

As a result, the urban/community park component of the impact fee is $188 per person for land and $209 per person for improvements (6.28 acres per 1,000 persons x $30,000 per acre = $188 per person, rounded).

Figure 13. Urban/Community Park Level of Service & Cost Analysis

Urban/Community Parks	Acres	Park Improvements	Improvement Replacement Cost [1]
Central Park	8.1	5	$727,592
Civitan Park	3.0	5	$442,296
Community Park	30.3	11	$1,540,046
Compass Academy Skate Park	0.5	1	$100,000
Esquire Acres Park	10.4	7	$488,696
Freeman Park	60.8	11	$995,354
Highland Park and Melaleuca	4.3	5	$442,296
Lincoln Park	6.4	8	$878,592
North Tourist Park	2.1	3	$95,000
Reinhart Park	9.3	5	$442,296
Rollandet Park	8.4	6	$1,043,888
Ryder Park	39.5	6	$292,762
Snake River Animal Park	2.5	4	$134,500
Soccer Complex - Old Butte	85.8	18	$575,600
South Tourist Park	9.7	3	$169,762
Sugar Mill Substation Park	7.6	5	$683,392
Sunnyside Park	20.4	16	$1,437,288
Taupthaus Park	76.1	17	$1,980,684
Tennis Courts IFHS	0.5	4	$240,000
Tennis Courts SHHS	0.5	4	$240,000
Troy Ave Storm Pond	12.8	2	$318,796
Total	398.8	146	$13,268,842

Level-of-Service Standards	Park Land	Park Improvements
Residential Share	100%	100%
Share of Acreage and Improvements	398.8	146
2021 Population	63,473	63,473
Acres/Improvements per 1,000 Persons	**6.28**	**2.30**

Cost Analysis	Park Land	Park Improvements
Acres/Improvements per 1,000 Persons	6.28	2.30
Average Cost per Acre/Improvement [2]	$30,000	$91,000
Capital Cost Per Person	**$188**	**$209**

[1] Source: City of Idaho Falls Parks & Recreation
[2] Source: Based on available information regarding land costs in Idaho Falls, City staff anticipates future park land to cost $30,000 per acre.

CIVIC PARK LAND AND PARK IMPROVEMENTS – INCREMENTAL EXPANSION

Listed in Figure 14, there is a total of 28.7 acres of civic park land and 16 improvements within the parks. With a population of 63,473, the level of service is found to be 0.45 acres of civic park land and 0.25 civic park improvements per 1,000 persons. The level of service is combined with the average cost per acre/improvement to find the capital cost per person. The cost for civic park land is based on the 2020 appraisal of Capital Park-South Park, $165,000 per acre. The cost of land for this park type is anticipated

to be more expensive than other park types because of its location, along the greenbelt. The average improvement cost is based on the replacement costs of the current improvements at each park.

As a result, the civic park component of the impact fee is $74 per person for land and $12 per person for improvements (0.45 acres per 1,000 persons x $165,000 per acre = $74 per person, rounded).

Figure 14. Civic Park Land Level of Service & Cost Analysis

Civic Parks	Acres	Park Improvements	Improvement Replacement Cost [1]
Capital Park-South	5.2	4	$126,000
Civitan Plaza	0.1	1	$2,500
Eagle Rock Plaza	0.5	3	$103,500
River Walk Eastside	10.4	3	$169,762
River Walk Westside	11.8	3	$169,762
Rock Garden @ Taylor Crossing (Spring Hills)	0.8	2	$167,262
Total	28.7	16	$738,787

Level-of-Service Standards	Park Land	Park Improvements
Residential Share	100%	100%
Share of Acreage and Improvements	28.7	16
2021 Population	63,473	63,473
Acres/Improvements per 1,000 Persons	**0.45**	**0.25**

Cost Analysis	Park Land	Park Improvements
Acres/Improvements per 1,000 Persons	0.45	0.25
Average Cost per Acre/Improvement [2]	$165,000	$46,000
Capital Cost Per Person	**$74**	**$12**

[1] Source: City of Idaho Falls Parks & Recreation
[2] In 2020, Capital Park-South along the greenbelt appraised for an average of $165,000 per acre.

Indoor Recreation Center Land and Square Footage – Incremental Expansion

Listed in Figure 15, there is a total of 7.64 acres and 86,798 square feet of indoor recreation space within Idaho Falls. With a population of 63,473, the level of service is found to be 0.12 acres and 1,367 square feet of indoor recreation space per 1,000 persons. The level of service is combined with the average cost per acre/square foot to find the capital cost per person. As a result, the indoor recreation space component of the impact fee is $4 per person for land and $197 per person for square feet (1,367 square feet per 1,000 persons x $144 per square foot = $197 per person, rounded).

Figure 15. Indoor Recreation Center Level of Service & Cost Analysis

Indoor Recreation Centers	Acres	Square Feet [1]	Replacement Cost [1]
Activity Center/ Recreation Building	2.75	12,313	$1,581,127
Recreation Center	0.50	19,160	$3,057,046
Aquatic Center	2.53	19,501	$3,533,803
Hockey Rink Building	1.86	35,824	$4,290,721
	7.64	86,798	$12,462,697

Level-of-Service Standards	Land	Square Feet
Residential Share	100%	100%
Share of Square Feet	7.64	86,798
2021 Population	63,473	63,473
Acres/Square Feet per 1,000 Persons	**0.12**	**1,367**

Cost Analysis	Land	Square Feet
Acres/Square Feet per 1,000 Persons	0.12	1,367
Average Cost per Acre/Square Feet [2]	$30,000	$144
Capital Cost Per Person	**$4**	**$197**

[1] Source: Insurance valuation report

[2] Source: Based on available information regarding land costs in Idaho Falls, City staff anticipates future park land to cost $30,000 per acre.

PARKS & RECREATION 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 existing infrastructure and estimated costs over a specified period needed to maintain levels of service for expected unit increases.

NEIGHBORHOOD PARK LAND AND IMPROVEMENTS

The current level of service of 0.26 acres per 1,000 persons is combined with the population projections to illustrate the need for neighborhood park land. Shown in Figure 16, over the next ten years, there is a need for 2.3 new acres of neighborhood parks. The average cost per acre ($30,000) is multiplied by the need to find the projected capital need from growth ($69,000).

The current level of service of 0.33 improvements per 1,000 persons is combined with the population projections to illustrate the need for neighborhood park improvements. Shown in Figure 16, over the next ten years, there is a need for 2.9 new improvements in neighborhood parks. The average cost per improvement ($16,000) is multiplied by the need to find the projected capital need from growth ($46,400).

Figure 16. Project Demand for Neighborhood Park Improvements

Infrastructure	Level of Service			Cost/Unit
Neighborhood Parks	0.26	Acres	per 1,000 persons	$30,000
	0.33	Improvements	per 1,000 persons	$16,000

Growth-Related Need for Neighborhood Parks				
Year		Population	Park Acres	Park Improvements
Base	2021	63,473	16.5	20.9
Year 1	2022	64,362	16.7	21.2
Year 2	2023	65,252	16.9	21.5
Year 3	2024	66,141	17.1	21.8
Year 4	2025	67,031	17.4	22.1
Year 5	2026	67,921	17.6	22.4
Year 6	2027	68,810	17.8	22.7
Year 7	2028	69,700	18.1	23.0
Year 8	2029	70,589	18.3	23.2
Year 9	2030	71,479	18.5	23.5
Year 10	2031	72,369	18.8	23.8
Ten-Year Increase		8,896	**2.3**	**2.9**
	Projected Expenditure		**$69,000**	**$46,400**

Growth-Related Expenditures for Neighborhood Parks	$115,400

URBAN/COMMUNITY PARK LAND AND IMPROVEMENTS

The current level of service of 6.28 acres per 1,000 persons is combined with the population projections to illustrate the need for urban/community park land. Shown in Figure 17, over the next ten years, there is a need for 55.8 new acres of improved urban/community parks. The average cost per acre ($30,000) is multiplied by the need to find the projected capital need from growth ($1,674,000).

The current level of service of 2.30 improvements per 1,000 persons is combined with the population projections to illustrate the need for urban/community park improvements. Shown in Figure 17, over the next ten years, there is a need for 20.5 new improvements in urban/community parks. The average cost per improvement ($91,000) is multiplied by the need to find the projected capital need from growth ($1,865,500).

Figure 17. Projected Demand for Urban/Community Park Improvements

Infrastructure	Level of Service			Cost/Unit
Urban/Community Parks	6.28	Acres	per 1,000 persons	$30,000
	2.30	Improvements	per 1,000 persons	$91,000

Growth-Related Need for Urban/Community Parks				
Year		Population	Park Acres	Park Improvements
Base	2021	63,473	398.6	145.9
Year 1	2022	64,362	404.1	148.0
Year 2	2023	65,252	409.7	150.0
Year 3	2024	66,141	415.3	152.1
Year 4	2025	67,031	420.9	154.1
Year 5	2026	67,921	426.5	156.2
Year 6	2027	68,810	432.1	158.2
Year 7	2028	69,700	437.7	160.3
Year 8	2029	70,589	443.3	162.3
Year 9	2030	71,479	448.8	164.4
Year 10	2031	72,369	454.4	166.4
Ten-Year Increase		8,896	**55.8**	**20.5**
		Projected Expenditure	**$1,674,000**	**$1,865,500**

Growth-Related Expenditures for Urban/Community Parks	$3,539,500

CIVIC PARK LAND AND IMPROVEMENTS

The current level of service of 0.45 acres per 1,000 persons is combined with the population projections to illustrate the need for civic park land. Shown in Figure 18, over the next ten years, there is a need for 4.0 new acres of improved civic parks. The average cost per acre ($165,000) is multiplied by the need to find the projected capital need from growth ($660,000).

The current level of service of 0.25 improvements per 1,000 persons is combined with the population projections to illustrate the need for civic park improvements. Shown in Figure 18, over the next ten years, there is a need for 2.2 new improvements in civic parks. The average cost per improvement ($46,000) is multiplied by the need to find the projected capital need from growth ($101,200).

Figure 18. Projected Demand for Civic Park Improvements

Infrastructure	Level of Service			Cost/Unit
Civic Parks	0.45	Acres	per 1,000 persons	$165,000
	0.25	Improvements	per 1,000 persons	$46,000

Growth-Related Need for Civic Parks				
Year		Population	Park Acres	Park Improvements
Base	2021	63,473	28.5	15.8
Year 1	2022	64,362	28.9	16.0
Year 2	2023	65,252	29.3	16.3
Year 3	2024	66,141	29.7	16.5
Year 4	2025	67,031	30.1	16.7
Year 5	2026	67,921	30.5	16.9
Year 6	2027	68,810	30.9	17.2
Year 7	2028	69,700	31.3	17.4
Year 8	2029	70,589	31.7	17.6
Year 9	2030	71,479	32.1	17.8
Year 10	2031	72,369	32.5	18.0
Ten-Year Increase		8,896	**4.0**	**2.2**
		Projected Expenditure	**$660,000**	**$101,200**

Growth-Related Expenditures for Civic Parks	**$761,200**

INDOOR RECREATION CENTER LAND AND SQUARE FOOTAGE

The current level of service of 0.12 acres per 1,000 persons is combined with the population projections to illustrate the need for indoor recreation center land. Shown in Figure 19, over the next ten years, there is a need for 1.0 new acre of improved indoor recreation center land. The average cost per acre ($30,000) is multiplied by the need to find the projected capital need from growth ($30,000).

The current level of service of 1,367 square feet per 1,000 persons is combined with the population projections to illustrate the need for indoor recreation center square footage. Shown in Figure 19, over the next ten years, there is a need for 12,161 new square feet in indoor recreation centers. The average cost per square foot ($144) is multiplied by the need to find the projected capital need from growth ($1,751,170).

Figure 19. Projected Demand for Indoor Recreation Center Square Feet

Infrastructure	Level of Service			Cost/Unit
Indoor Rec Center Facilities	0.12	Acres	per 1,000 persons	$30,000
	1,367	Improvements	per 1,000 persons	$144

Growth-Related Need for Indoor Rec Center Facilities				
Year		Population	Park Acres	Square Feet
Base	2021	63,473	7.6	86,767
Year 1	2022	64,362	7.7	87,983
Year 2	2023	65,252	7.8	89,199
Year 3	2024	66,141	7.9	90,415
Year 4	2025	67,031	8.0	91,632
Year 5	2026	67,921	8.1	92,848
Year 6	2027	68,810	8.2	94,064
Year 7	2028	69,700	8.3	95,280
Year 8	2029	70,589	8.4	96,496
Year 9	2030	71,479	8.5	97,712
Year 10	2031	72,369	8.6	98,928
Ten-Year Increase		8,896	**1.0**	**12,161**
	Projected Expenditure		**$30,000**	**$1,751,170**

Growth-Related Expenditures for Indoor Rec Center Facilities	**$1,781,170**

PARKS & RECREATION INPUT VARIABLES AND DEVELOPMENT IMPACT FEES,854.

Figure 20 provides a summary of the input variables (described in the chapter sections above) used to calculate the net cost per person of neighborhood parks, urban/community parks, civic parks, and indoor recreation centers. The Parks & Recreation impact fees are the product of persons per housing unit, by type, multiplied by the total net cost per person. Fees are provided for the single family and multifamily housing type. An example of the calculation for a single family unit is: the net cost per person ($697) multiplied by the persons per housing unit for that size unit (2.66) to arrive at the development impact fee per average single family unit of $1,854.

Figure 20. Parks & Recreation Maximum Supportable Impact Fees

Fee Component	Land Cost per Person	Improvement Cost per Person
Neighborhood Parks	$8	$5
Urban/Community Parks	$188	$209
Civic Parks	$74	$12
Indoor Recreation Centers	$4	$197
Gross Total	$274	$423
Net Total	**$274**	**$423**

Residential

Housing Type	Persons per Housing Unit	Maximum Supportable Fee
Single Family	2.66	**$1,854**
Multifamily	1.84	**$1,282**

CASH FLOW PROJECTIONS FOR PARKS & RECREATION MAXIMUM SUPPORTABLE IMPACT FEE

This section summarizes the potential cash flow to the City of Idaho Falls if the Parks & Recreation development impact fee is 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.

At the top of Figure 21, the cost for growth over the next ten years is listed. The summary provides an indication of the impact fee revenue generated by new development. For example, with a ten-year increase of 3,040 single family housing units and a maximum supportable impact fee of $1,854 per single family housing unit there is a projected revenue of $5,636,160. Shown at the bottom of the figure, the maximum supportable Parks & Recreation impact fee is estimated to cover all growth-related capital costs.

Figure 21. Projected Revenue for Parks & Recreation Maximum Supportable Impact Fee

Infrastructure Costs for Park Facilities

	Total Cost	Growth Cost
Neighborhood Parks	$115,400	$115,400
Urban/Community Parks	$3,539,500	$3,539,500
Civic Parks	$761,200	$761,200
Indoor Recreation Centers	$1,781,184	$1,781,184
Total Expenditures	**$6,197,284**	**$6,197,284**

Projected Development Impact Fee Revenue

		Single Family $1,854 per unit	Multifamily $1,282 per unit	Retail $0 per KSF	Office $0 per KSF	Industrial $0 per KSF	Institutional $0 per KSF
Year		Housing Units	Housing Units	KSF	KSF	KSF	KSF
Base	2021	19,136	6,833	5,668	5,844	6,024	4,783
Year 1	2022	19,440	6,877	5,739	5,937	6,163	4,859
Year 2	2023	19,744	6,921	5,811	6,030	6,301	4,935
Year 3	2024	20,048	6,965	5,883	6,123	6,440	5,011
Year 4	2025	20,352	7,009	5,954	6,216	6,579	5,087
Year 5	2026	20,656	7,053	6,026	6,308	6,718	5,163
Year 6	2027	20,960	7,097	6,097	6,401	6,857	5,239
Year 7	2028	21,264	7,141	6,169	6,494	6,995	5,315
Year 8	2029	21,568	7,185	6,241	6,587	7,134	5,391
Year 9	2030	21,872	7,229	6,312	6,680	7,273	5,467
Year 10	2031	22,176	7,273	6,384	6,772	7,412	5,542
Ten-Year Increase		3,040	440	716	928	1,388	760
Projected Revenue		$5,636,160	$564,080	$0	$0	$0	$0
						Projected Revenue =>	**$6,200,000**
						Total Expenditures =>	**$6,197,000**
						Non-Impact Fee Funding =>	**$0**

TRANSPORTATION DEVELOPMENT IMPACT FEE ANALYSIS

METHODOLOGY

The City of Idaho Falls Transportation impact fees are calculated using an incremental expansion approach for major and minor arterial needs over a 10-year period. The incremental expansion methodology documents the current level of service provided to development and serves to maintain this as new development occurs.

The transportation system in the City of Idaho Falls includes roads, streets, arterials, and collectors in addition to multimodal pathways and bike lanes. Reasonably allocating the cost of transportation system improvements requires consideration of several transportation planning challenges. Because street networks are "open" systems, newly expanded capacity can be readily absorbed by driver adaptations. For example, drivers may change their route of travel, departure times and even mode (i.e., automobile, bicycle, walking, or transit) to take advantage of street improvements.

Vehicular travel within a jurisdiction requires a system of controlled access streets, major and minor arterials, collectors, major access roads, and local streets. However, streets development impact fees typically are based on a subset of the system reflecting streets to be funded in whole or part by the locality as opposed to other sources (e.g., federal, state, private) as well as other considerations discussed below.

To clarify the question of who pays for what for transportation improvements, it is useful to distinguish between project-level improvements and system improvements (i.e., infrastructure that benefits multiple development projects and typically located offsite). The need for project-level improvements may be addressed through development exactions that remain roughly proportional to the specific project. Project-level improvements are typically specified in a development agreement or similar instrument and should be distinguished from the need for system improvements, determined by adopted standards. Because system improvements are larger and more costly, they typically require funding from multiple development projects and/or broad-based revenues. Thus, only future growth-related capital costs for arterial roadway improvements are included in the development impact fee analysis.

Specified in Idaho Code 67-8209(2), local governments must consider historical, available, and alternative sources of funding for system improvements. Currently, the City of Idaho Falls charges a Bridge and Arterial Streets Fee to help mitigate construction costs for bridges and streets. The fee is formulated based on the number of parking spaces needed for the development. The Transportation Development Impact Fee is meant to replace the Bridge and Arterial Streets Fee, so no credit is included in the development impact fee for future revenue from that funding source.

Furthermore, the maximum supportable impact fees are constructed to offset all growth-related capital costs to the City for major and minor arterial transportation 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.

DEMAND FOR TRANSPORTATION INFRASTRUCTURE

The City of Idaho Falls has planned several roads improvement projects intended to increase capacity and service new development. To estimate new development's share of costs associated with these projects, TischlerBise has developed a travel demand model for the City of Idaho Falls. This model serves to establish the base year characteristics of demand for transportation services and, using the residential and nonresidential projections outlined in Appendix B, estimate the pace of future development's demand on the City's arterial network.

The steps to calculate a current level of service for the City of Idaho Fall's street network involve calibrating existing development to the arterial street network (major and minor arterials). To do so, development units by type are multiplied by adjusted vehicle trip ends per development unit and shown below in Figure 22.

TRIP LENGTH WEIGHTING FACTOR BY TYPE OF LAND USE

The Transportation impact fees methodology includes a percentage adjustment, or weighting factor, to account for trip length variation by type of land use. As documented in the 2009 National Household Travel Survey, vehicle trips from residential development are approximately 121 percent of the average trip length. The residential trip length adjustment factor includes data on home-base work trips, social, and recreational purposes. Conversely, shopping trips associated with commercial development are roughly 66 percent of the average trip length while other nonresidential development typically accounts for trips that are 73 percent of the average for all trips.

LANE CAPACITY

Transportation impact fees are based on established daily per-lane capacities for each classification of roadways. The daily per-lane capacity of arterials in Idaho Falls was established to be 6,200. The capacity for arterials is used to calculate vehicle miles of travel (VMT) on the city street network to reflect the ability of roads to absorb additional VMT before reaching capacity.

SUMMARY OF DEMAND MODEL INPUTS

Knowing the City's current inventory of arterial lane miles (169.3), TischlerBise determined a weighted-average trip length of 3.66 miles on the current system using a series of spreadsheet iterations. As shown in Figure 22 below, based on the trip generation, trip adjustment, and trip length factors discussed above, are used in order to determine vehicle miles of travel.

Figure 22. Summary of Travel Demand Input Variables

Land Use	ITE Codes	Daily Vehicle Trip Ends	Trip Adj. Factor	Average Trip Length (miles)	Trip Length Wgt. Factor
Residential (per housing unit)					
Single Family	210	10.60	58%	3.66	121%
Multifamily	220	4.70	58%	3.66	121%
Nonresidential (per 1,000 square feet)					
Retail	820	37.75	38%	3.66	66%
Office	710	9.74	50%	3.66	73%
Industrial	110	4.96	50%	3.66	73%
Institutional	610	10.72	50%	3.66	73%

Source: Institute of Transportation Engineers, *Trip Generation*, 10th Edition (2017); National Household Travel Survey, 2009

PROJECTED TRAVEL DEMAND

The projected need for system lane miles is a function of the ten-year development forecast (see Appendix B) and the existing infrastructure standards discussed above. A typical vehicle trip, such as a person leaving their home and traveling to work, generally begins on a local street that connects to a collector street, which connects to an arterial road and eventually to a state or interstate highway. For the purpose of impact fees, this progression of travel up and down the functional classification chain narrows the average trip length determination to the following question, "what is the average vehicle trip length on transportation impact fee system improvements (i.e., the same type of streets used to document current infrastructure standards)?"

As shown in Figure 23, new development increases vehicle miles of travel on arterial roads from 984,340 in 2021 to 1,129,386 in 2031, for a net increase of 145,045 VMT. When VMT is compared to the current infrastructure (existing level of service) standards discussed previously new development generates the need for an additional 23.4 lane miles of City-maintained arterial roads in the next 10 years.

Figure 23. Arterial Road Transportation Improvement Demand Model

	Base Year 2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total Increase
Single Family Units	19,136	19,440	19,744	20,048	20,352	20,656	20,960	21,264	21,568	21,872	22,176	3,040
Multifamily Units	6,833	6,877	6,921	6,965	7,009	7,053	7,097	7,141	7,185	7,229	7,273	440
Retail KSF	5,668	5,739	5,811	5,883	5,954	6,026	6,097	6,169	6,241	6,312	6,384	716
Office KSF	5,844	5,937	6,030	6,123	6,216	6,308	6,401	6,494	6,587	6,680	6,772	928
Industrial KSF	6,024	6,163	6,301	6,440	6,579	6,718	6,857	6,995	7,134	7,273	7,412	1,388
Institutional KSF	4,783	4,859	4,935	5,011	5,087	5,163	5,239	5,315	5,391	5,467	5,542	760
Single Family Units Trips	117,645	119,514	121,383	123,252	125,121	126,990	128,859	130,728	132,597	134,466	136,335	18,690
Multfamily Units Trips	18,626	18,746	18,866	18,986	19,106	19,226	19,346	19,466	19,586	19,705	19,825	1,199
Residential Subtotal	*136,271*	*138,260*	*140,249*	*142,238*	*144,227*	*146,216*	*148,205*	*150,194*	*152,183*	*154,172*	*156,161*	*19,889*
Retail Trips	81,304	82,331	83,358	84,385	85,413	86,440	87,467	88,494	89,521	90,548	91,575	10,271
Office Trips	28,461	28,913	29,365	29,817	30,270	30,722	31,174	31,626	32,078	32,530	32,982	4,521
Industrial Trips	14,939	15,284	15,628	15,972	16,316	16,660	17,004	17,348	17,692	18,037	18,381	3,441
Institutional Trips	25,636	26,043	26,450	26,857	27,265	27,672	28,079	28,486	28,893	29,301	29,708	4,072
Nonresidential Subtotal	*150,340*	*152,571*	*154,801*	*157,032*	*159,263*	*161,493*	*163,724*	*165,954*	*168,185*	*170,415*	*172,646*	*22,305*
Total Vehicle Trips	286,612	290,831	295,051	299,270	303,489	307,709	311,928	316,148	320,367	324,587	328,806	42,195
Arterial VMT	984,340	998,845	1,013,349	1,027,854	1,042,358	1,056,863	1,071,367	1,085,872	1,100,376	1,114,881	1,129,386	145,045
Arterial Lane Miles	**169.3**	**171.7**	**174.0**	**176.4**	**178.7**	**181.0**	**183.4**	**185.7**	**188.1**	**190.4**	**192.7**	**23.4**

ROADS IMPROVEMENTS – INCREMENTAL EXPANSION

As shown in Figure 23, new development increases vehicle miles traveled (VMT) on arterial roads from 984,340 in 2021 to 1,129,386 in 2031, for a net increase of 145,045 VMT and will generate the need for an additional 23.4 lane miles of City-maintained arterial roads in the next 10 years. At an average cost of $1 million per lane mile, the 23.4 lane miles increase is projected to cost approximately $23.4 million.

However, based on previous and future funding of projects, City staff anticipates federal funding providing 25 percent of the total cost. This results in a reduction of $5,850,000 to the City's future burden over the next ten years. Additionally, there is an existing balance of $1,500,000 in capital funds for road projects. This will be used to fund future projects, further reducing the City's burden. As a result, the growth-related cost to the City of Idaho Falls is $16,050,000.

As shown in Figure 24, the City's cost is compared to the increase in VMT and results in a capital cost of $110.66 per vehicle miles traveled ($16,050,0000 ten-year City cost / 145,045 VMT ten-year increase = $110.66 per VMT, rounded).

Figure 24. Summary of Growth-Related Arterial Needs

10-Year Arterial Needs (lane miles)	23.4
Average Cost per Lane Mile [1]	$1,000,000
Total 10-Year Growth-Related Costs	**$23,400,000**

Total 10-Year Growth Related Costs	$23,400,000
Federal Funding for Future Projects (25%)	($5,850,000)
Existing Capital Fund Balance	($1,500,000)
City of Idaho Falls Growth-Related Cost	**$16,050,000**

City of Idaho Falls Growth-Related Cost	$16,050,000
10-Year Increase in Vehicle Miles Traveled	145,045
Capital Cost per Vehicle Miles Traveled	**$110.66**

[1] Source: City of Idaho Falls estimated current cost of an arterial lane mile

TRANSPORTATION INPUT VARIABLES AND DEVELOPMENT IMPACT FEES

Figure 25 provides a summary of the input variables used to calculate the net cost per VMT for transportation capital infrastructure.

The Transportation Impact Fees are the product of average daily vehicle trip ends, trip adjustment rates, average miles per vehicle trip, and trip length weighting combined with the cost per VMT. Fees are provided for both residential and nonresidential development types. An example of the calculation for a single family unit is: the net cost per VMT ($110.66) multiplied by the average daily vehicle trip ends (10.60), trip adjustment rate (58%), average miles per vehicle trip (3.66), and trip length weighting (121%), to arrive at the development impact fee per average single family unit of $3,013.

Figure 25. Transportation Input Variables and Maximum Supportable Impact Fees

Fee Component	Cost per VMT
10-Year Capital Needs	$110.66
Gross Total	$110.66
Net Total	**$110.66**

Development Type	Ave. Daily Veh. Trip Ends	Trip Rate Adjustment	Ave. Miles per Veh. Trip	Trip Length Weighting	Maximum Supportable Fee
Residential (per housing unit)					
Single Family	10.60	58%	3.66	121%	**$3,013**
Multifamily	4.70	58%	3.66	121%	**$1,336**
Nonresidential (per 1,000 square feet)					
Retail	37.75	38%	3.66	66%	**$3,835**
Office/Service	9.74	50%	3.66	73%	**$1,440**
Industrial	4.96	50%	3.66	73%	**$733**
Institutional	10.72	50%	3.66	73%	**$1,585**

CASH FLOW PROJECTIONS FOR TRANSPORTATION MAXIMUM SUPPORTABLE IMPACT FEE

This section summarizes the potential cash flow to the City of Idaho Falls, if the Transportation Development Impact Fee is 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.

At the top of Figure 26, the cost for growth over the next ten years is listed. The summary provides an indication of the impact fee revenue generated by new development. For example, with a ten-year increase of 3,040 single family housing units and a maximum supportable impact fee of $3,013 per single family housing unit there is a projected revenue of $9,159,520. Shown at the bottom of the figure, the maximum supportable Transportation Impact Fee is estimated to cover all growth-related capital costs.

Figure 26. Cash Flow Summary for Transportation

Infrastructure Costs for Road Facilities

	Total Cost	City Cost
10-Year Capital Needs	$23,400,000	$16,050,000
Total Expenditures	**$23,400,000**	**$16,050,000**

Projected Development Impact Fee Revenue

		Single Family $3,013 per unit	Multifamily $1,336 per unit	Retail $3,835 per KSF	Office $1,440 per KSF	Industrial $733 per KSF	Institutional $1,585 per KSF
Year		Housing Units	Housing Units	KSF	KSF	KSF	KSF
Base	2021	19,136	6,833	5,668	5,844	6,024	4,783
Year 1	2022	19,440	6,877	5,739	5,937	6,163	4,859
Year 2	2023	19,744	6,921	5,811	6,030	6,301	4,935
Year 3	2024	20,048	6,965	5,883	6,123	6,440	5,011
Year 4	2025	20,352	7,009	5,954	6,216	6,579	5,087
Year 5	2026	20,656	7,053	6,026	6,308	6,718	5,163
Year 6	2027	20,960	7,097	6,097	6,401	6,857	5,239
Year 7	2028	21,264	7,141	6,169	6,494	6,995	5,315
Year 8	2029	21,568	7,185	6,241	6,587	7,134	5,391
Year 9	2030	21,872	7,229	6,312	6,680	7,273	5,467
Year 10	2031	22,176	7,273	6,384	6,772	7,412	5,542
Ten-Year Increase =>		3,040	440	716	928	1,388	760
Projected Revenue =>		$9,159,520	$587,840	$2,745,917	$1,336,723	$1,017,114	$1,204,106

Projected Revenue =>	**$16,051,000**
Project City Expenditures =>	**$16,050,000**
Non-Impact Fee Funding =>	**$0**

POLICE DEVELOPMENT IMPACT FEE ANALYSIS

METHODOLOGY

The Police development fee includes two components: new police station and police vehicles. Two development impact fee methodologies are used— plan-based and incremental expansion. The new police station component is a plan-based approach and the incremental expansion approach is used for police vehicles. 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 new police station and police vehicles are allocated to both residential and nonresidential development. To calculate nonresidential development impact fees, nonresidential vehicle trips are used as the demand indicator for new police Station and police vehicles. Trip generation rates are highest for commercial developments, such as shopping centers, and lowest for industrial/warehouse development. Office/institutional trip rates fall between the other two categories. This ranking of trip rates is consistent with the relative demand for police 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, police development impact fees would be too high for office/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.)

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. The City of Idaho Falls recently issued debt to finance the construction of a new police station. The development impact fees have been calculated to fund the growth-related portions of the police station and the attributed future debt service. Thus, a credit is not necessary to offset future revenue from growth for the debt servicing. Furthermore, there are no other dedicated revenues for police facilities that would require a credit in the development impact fee.

COST ALLOCATION FOR POLICE INFRASTRUCTURE

Calls for service were used to allocate police facilities to residential and nonresidential development. The City of Idaho Falls Police Department provided calls for service for the entire City and categorized the calls by land use, residential, nonresidential, and traffic. Traffic calls for service featured the largest share of all service calls and must be attributed to residential and nonresidential activity.

Figure 27. Calls for Service for Police

Land Use	City Calls for Service	% of Total
Residential	11,065	25%
Nonresidential	15,843	35%
Traffic	17,775	40%
Total	44,683	100%

Source: City of Idaho Falls Police Department

Calls for service attributed to the traffic land use were allocated to either residential or nonresidential land uses based on the percentage share of base year vehicle trips for residential and nonresidential land uses. As shown in Figure 28, nonresidential land uses have the greater share of vehicle trips (52 percent), therefore, the nonresidential land use had 52 percent of the 17,775 traffic calls for service allocated to its total calls for service.

Figure 28. Base Year Vehicle Trips - Police

Land Use	Base Year Vehicle Trips	% of Total
Residential	136,271	48%
Nonresidential	150,340	52%
Total	286,612	100%

Source: City of Idaho Falls Police Department

As shown in Figure 29, the cost allocation is 56 percent for nonresidential development (25,176 calls for service of nonresidential demand out of a total 44,683 calls for service). The cost allocation is 44 percent for residential development (19,516 calls for service of residential demand out of a total 44,683 calls for service).

Figure 29. Calls for Service for Police - Allocated

Land Use	City Calls for Service	% of Total
Residential	19,516	44%
Nonresidential	25,167	56%
Total	44,683	100%

Source: City of Idaho Falls Police Department

POLICE LEVEL OF SERVICE AND COST ANALYSIS

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

POLICE STATION – PLAN-BASED

As shown in Figure 30, the new police station space totals 61,189 square feet. The station was financed through the Certificate of Participation 2020 series and the overall cost is $36.3 million, or $593 per square foot.

Figure 30. Police Station Cost

Facility	Square Feet	Total COP Series 2020 Payments	Cost per Square Feet
New Police Station	61,189	$36,280,997	$593

Source: City of Idaho Falls Police Department

The floor area is allocated to residential and nonresidential demand based on the calls for service analysis. Calculating growth's share of cost is found by combining residential and nonresidential growth's share of the allocated floor area of the new police station with the 2021 residential and nonresidential demand units (population and nonresidential vehicle trips). As shown in Figure 31, this results in 0.339 square feet per person and 0.179 square feet per nonresidential vehicle trips.

To find the capital cost per person or per nonresidential vehicle trip, the level of service standards are applied to the average cost per square foot. For example, the residential cost per person is $201 (0.339 square feet per person x $593 per square foot = $201 per person, rounded).

Figure 31. Police Station Level of Service and Cost Analysis

Residential Analysis

Residential Share	Residential Floor Area (sq. ft.)	2021 Population	2039 Population	Growth's Share
44%	26,923	63,473	79,485	20%

Residential Growth's Share	Residential Growth's Floor Area (sq. ft.)	Population Increase	Square Feet per Person	Capital Cost per Person
20%	5,424	16,013	0.339	$201

Nonresidential Analysis

Nonresidential Share	Nonresidential Floor Area (sq. ft.)	2021 Vehicle Trips	2039 Vehicle Trips	Growth's Share
56%	34,266	150,340	190,965	21%

Nonresidential Growth's Share	Nonresidential Growth's	Vehicle Trip Increase	Square Feet per Vehicle	Capital Cost per Vehicle
21%	7,289	40,624	0.179	$106

POLICE VEHICLES – INCREMENTAL EXPANSION

As shown in Figure 32, there are 104 law enforcement specific vehicles in the Police fleet. The vehicles are allocated to residential and nonresidential demand based on the calls for service analysis. Of the attributed vehicles, 45.76 units are allocated to residential demand and 58.24 units are allocated to nonresidential demand.

The current level of service is found by dividing the allocated floor area by the 2021 residential and nonresidential demand units (population and nonresidential vehicle trips). Specifically, 0.72 units per 1,000 persons and 0.39 units per 1,000 nonresidential vehicle trips.

To find the capital cost per person or per nonresidential vehicle trip, the level of service standards are applied to the average cost per square foot. For example, the residential cost per person is $46 (0.72 units per 1,000 persons x $55,000 per unit = $40 per person, rounded).

Figure 32. Police Vehicles Level of Service and Cost Allocation

Vehicle Type	Total Units
Mini Van	1
Pickup	6
Sedan	21
SUV	76
Total	**104**

Level-of-Service Standards	**Residential**	**Nonresidential**
Proportionate Share	44%	56%
Share of Vehicle Fleet	45.76	58.24
2021 Population and Nonres Vehicle Trips	63,473	150,340
Vehicles per 1,000 Persons/Vehicle Trips	**0.72**	**0.39**

Cost Analysis	**Residential**	**Nonresidential**
Vehicles per 1,000 Persons/Vehicle Trips	0.72	0.39
Average Cost per Vehicle [1]	$55,000	$55,000
Capital Cost per Person and Vehicle Trip	**$40**	**$21**

[1] Source: City of Idaho Falls Police Department

POLICE CAPITAL IMPROVEMENT NEEDS TO SERVE GROWTH

POLICE VEHICLES

Based on a projected population increase of 8,896 persons over the next 10 years, future residential development demands an additional 6.4 units of Police vehicles (8,896 additional persons x 0.72 units per 1,000 persons). With projected nonresidential trip end growth of 22,305 over the next 10 years, future nonresidential development demands an additional 8.7 units (22,305 additional trips x 0.39 units per 1,000 vehicle trips). As a result, future development demands an additional 15.1 units of Police vehicles at a cost of $830,500 (15.1 units x $55,000 per unit).

Figure 33. Projected Demand for Police Vehicles

Type of Infrastructure	Level of Service			Demand Unit	Cost / Sq. Ft.
Police Vehicles	Residential	0.72	Vehicles	per 1,000 persons	$55,000
	Nonresidential	0.39		per 1,000 trips	

Growth-Related Need for Police Vehicles						
Year		Population	Nonres. Vehicle Trips	Residential Vehicles	Nonresidential Vehicles	Total Vehicles
Base	2021	63,473	150,340	45.7	58.6	104.3
Year 1	2022	64,362	152,571	46.3	59.5	105.8
Year 2	2023	65,252	154,801	46.9	60.3	107.2
Year 3	2024	66,141	157,032	47.6	61.2	108.8
Year 4	2025	67,031	159,263	48.2	62.1	110.3
Year 5	2026	67,921	161,493	48.9	62.9	111.8
Year 6	2027	68,810	163,724	49.5	63.8	113.3
Year 7	2028	69,700	165,954	50.1	64.7	114.8
Year 8	2029	70,589	168,185	50.8	65.5	116.3
Year 9	2030	71,479	170,415	51.4	66.4	117.8
Year 10	2031	72,369	172,646	52.1	67.3	119.4
Ten-Year Increase		8,896	22,305	**6.4**	**8.7**	**15.1**
			Projected Expenditure	**$352,000**	**$478,500**	**$830,500**

Growth-Related Expenditures for Police Vehicles	$830,500

POLICE INPUT VARIABLES AND DEVELOPMENT IMPACT FEES

Figure 34 provides a summary of the input variables used to calculate the net capital cost per person and per nonresidential vehicle trip for police stations and vehicles.

The residential Police impact fees are the product of persons per housing unit by type multiplied by the total net capital cost per person. Fees are provided for single family and multifamily housing type. Each PPHU is multiplied by the net capital cost per person to derive the residential impact fee per housing unit. The nonresidential Police impact fees are the product of trips per 1,000 square feet of nonresidential land use multiplied by the net capital cost per nonresidential vehicle trip. For example, the calculation for a single family unit is: the net capital cost per person ($241) multiplied by the persons per housing unit for that size unit (2.66) to arrive at the impact fee per average single family unit of $641.

Figure 34. Police Maximum Supportable Development Impact Fees

Fee Component	Cost per Person	Cost per Nonres. Vehicle Trips
Police Station	$201	$106
Police Vehicles	$40	$21
Gross Total	$241	$127
Net Total	**$241**	**$127**

Residential

Housing Type	Persons per Housing Unit	Maximum Supportable Fee per Unit
Single Family	2.66	**$641**
Multifamily	1.84	**$443**

Nonresidential

Development Type	Trips per 1,000 Sq. Ft.	Maximum Supportable Fee per 1,000 Sq. Ft.
Retail	14.35	**$1,822**
Office	4.87	**$618**
Industrial	2.48	**$315**
Institutional	5.36	**$681**

CASH FLOW PROJECTIONS FOR POLICE MAXIMUM SUPPORTABLE IMPACT FEE

This section summarizes the potential cash flow to the City of Idaho Falls if the Police development impact fee is 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.

At the top of Figure 35, the cost for growth over the next ten years is listed. The summary provides an indication of the impact fee revenue generated by new development. For example, with a ten-year increase of 3,040 single family housing units and a maximum supportable impact fee of $641 per single family housing unit there is a projected revenue of $1,948,640. Shown at the bottom of the figure, the maximum supportable Police impact fee is estimated to cover all growth-related capital costs. With that said, the impact fees are offsetting only the growth-related costs, the cost attributed to the existing demand for the Police Station will be funded from other sources.

Figure 35. Cash Flow Summary for Police Impact Fees

Infrastructure Costs for Police Facilities

	Total Cost	Growth Cost
Police Station	$36,280,997	$4,152,441
Police Vehicles	$830,500	$830,500
Total Expenditures	**$37,111,497**	**$4,982,941**

Projected Development Impact Fee Revenue

Year		Single Family $641 per unit	Multifamily $443 per unit	Retail $1,822 per KSF	Office $618 per KSF	Industrial $315 per KSF	Institutional $681 per KSF
		Housing Units	Housing Units	KSF	KSF	KSF	KSF
Base	2021	19,136	6,833	5,668	5,844	6,024	4,783
Year 1	2022	19,440	6,877	5,739	5,937	6,163	4,859
Year 2	2023	19,744	6,921	5,811	6,030	6,301	4,935
Year 3	2024	20,048	6,965	5,883	6,123	6,440	5,011
Year 4	2025	20,352	7,009	5,954	6,216	6,579	5,087
Year 5	2026	20,656	7,053	6,026	6,308	6,718	5,163
Year 6	2027	20,960	7,097	6,097	6,401	6,857	5,239
Year 7	2028	21,264	7,141	6,169	6,494	6,995	5,315
Year 8	2029	21,568	7,185	6,241	6,587	7,134	5,391
Year 9	2030	21,872	7,229	6,312	6,680	7,273	5,467
Year 10	2031	22,176	7,273	6,384	6,772	7,412	5,542
Ten-Year Increase		3,040	440	716	928	1,388	760
Projected Revenue		$1,948,640	$194,920	$1,304,579	$573,677	$437,095	$517,348

Projected Revenue =>	**$4,976,000**
Total Expenditures =>	**$4,983,000**
Non-Impact Fee Funding =>	**$7,000**

FIRE/EMS DEVELOPMENT IMPACT FEE ANALYSIS

METHODOLOGY

The Fire/EMS Development Impact Fee includes three components: fire station, vehicles and apparatuses, and a training center. TischlerBise recommends an *incremental expansion* approach because current inventory is sufficient to serve current demand. 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 calls 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 City to fund growth-related projects for Fire/EMS facilities. Furthermore, the maximum supportable impact fees are constructed to offset all growth-related capital costs for Fire/EMS 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.

SERVICE AREA

The Idaho Falls Fire Department (IFFD) serves the entirety of the City, as well as areas outside the City. To determine the City's share of IFFD services, TischlerBise has used data on IFFD calls for service broken down by location. The data shows that in 2020, the City of Idaho Falls was responsible for approximately 83 percent of IFFD calls for service. This information will be used to attribute the demand for fire department capital facilities to just the demand from the City of Idaho Falls.

Figure 36. Fire Department Calls for Service

Station No.	2020 Total Calls	Idaho Falls Calls	% of calls to Idaho Falls
1	3,142	2,864	91%
2	1,572	576	37%
3	1,219	1,111	91%
4	4,520	4,175	92%
5	1,200	1,001	83%
	11,653	9,727	83%

Source: City of Idaho Falls Fire Department

COST ALLOCATION FOR FIRE/EMS INFRASTRUCTURE

Calls for service, shown in Figure 37, were used to allocate capital costs to residential and nonresidential development. The IFFD provided calls for service for the City and categorized the calls by housing type, development type, and traffic. Overall, there were 9,727 calls and the single family housing type was responsible for the largest share.

Figure 37. Calls for Service for Fire/EMS

Housing Type	Fire/EMS Calls
Single Family	3,594
Multifamily	1,087
Subtotal	4,681

Development Type	Fire/EMS Calls
Retail	768
Office	80
Industrial	39
Institutional	3,138
Subtotal	4,025
Traffic	1,021
Grand Total	9,727

Calls for service attributed to traffic were allocated to the different housing and development types shown in Figure 37 based on the percentage share of base year vehicle trips of residential and nonresidential land uses. As shown in Figure 38, the single family housing type features the greater share of vehicle trips (41 percent).

Figure 38. Base Year Vehicle Trips

Housing Type	Vehicle Trips	% of Total
Single Family	117,645	41%
Multifamily	18,626	6%
Subtotal	136,271	48%

Development Type	Vehicle Trips	% of Total
Retail	81,304	28%
Office	28,461	10%
Industrial	14,939	5%
Institutional	25,636	9%
Subtotal	150,340	52%
Grand Total	286,612	

The traffic calls are added to each land use based on its share of vehicles trips. For example, with 41 percent of the 1,021 traffic calls for service allocated to its total calls for service, the single family housing type's new calls for service for fire/EMS totals 4,013. As further shown in Figure 39, all 1,021 traffic calls for service are distributed between the other housing and development types, based upon their share of projected base year vehicle trips.

Figure 39. Calls for Service for Fire/EMS – Allocated

Housing Type	Fire/EMS Calls	% of Total
Single Family	4,013	41%
Multifamily	1,153	12%
Subtotal	5,166	53%

Development Type	Fire/EMS Calls	% of Total
Retail	1,058	11%
Office	181	2%
Industrial	92	1%
Institutional	3,229	33%
Subtotal	4,561	47%
Grand Total	9,727	100%

Specific demand from housing and development type is found by comparing call totals to the existing housing units or nonresidential floor area. For example, the demand factor from single family housing is 0.210 (4,013 fire/EMS calls for service / 19,126 base year housing units = 0.210 calls per housing unit, rounded).

Figure 40. Fire/EMS Demand Factors

Housing Type	Fire/EMS Calls	Housing Units	Call per Housing Unit
Single Family	4,013	19,136	0.210
Multifamily	1,153	6,833	0.169

Development Type	Fire/EMS Calls	1,000 Sq. Ft.	Call per 1,000 Sq. Ft.
Retail	1,058	5,668	0.187
Office	181	5,844	0.031
Industrial	92	6,024	0.015
Institutional	3,229	4,783	0.675

FIRE/EMS LEVEL OF SERVICE AND COST ANALYSIS

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

FIRE/EMS STATION FACILITIES – INCREMENTAL EXPANSION

As shown in Figure 41, fire/EMS station space includes five stations with a total of 49,942 square feet. The floor area of each station is attributed to City demand based on the City's call demand.

The current level of service is found by dividing the share of floor area by the 2020 total fire/EMS calls for service from the City of Idaho Falls. This results in 4.28 square feet of fire station per fire/EMS call.

According to IFFD, a typical future two bay fire station is approximately 8,000 square feet and the cost of construction is approximately $2,880,000. With an additional 20% added to cost for architectural and electrical services, the total cost would be $3,456,000, resulting in a cost per square foot of $432. Based upon the fire station square footage allocated to the City of Idaho Falls, 41,611 square feet, the estimated future cost of the current fire station inventory is $17, 976,071. To find the capital cost per fire/EMS call, the square feet per fire/EMS call is combined with the average cost per square foot. As shown in Figure 41, the capital cost per fire/EMS call is $1,849 (4.28 square feet per fire/EMS call x $432 per square foot = $1,849 per call, rounded).

Figure 41. Fire/EMS Station Facilities Level of Service and Cost Allocation

Facility	Total Square Feet [1]	% of Calls to Idaho Falls [1]	Idaho Falls Square Feet	Cost per Square Foot [2]	City of Idaho Falls Replacement Cost
Station 1	19,286	91%	17,580	$432	$7,594,387
Station 2	6,744	37%	2,471	$432	$1,067,508
Station 3	9,751	91%	8,887	$432	$3,839,222
Station 4	9,618	92%	8,884	$432	$3,837,837
Station 5	4,543	83%	3,790	$432	$1,637,115
Total	**49,942**		**41,611**		**$17,976,071**

Level-of-Service Standards	Idaho Falls
Share of Floor Area (sq. ft.)	41,611
2020 Total Idaho Falls Fire/EMS Calls	9,727
Square Feet per Fire/EMS Call	**4.28**

Cost Analysis	Total
Square Feet per Fire/EMS Call	4.28
Average Cost per Square Foot [2]	$432
Capital Cost per Fire/EMS Call	**$1,849**

[1] Source: Idaho Falls Fire Department
[2] Estimated current cost of a prototypical fire station the City will build in the future

FIRE/EMS VEHICLES AND APPARATUS – INCREMENTAL EXPANSION

As shown in Figure 42, there is a total of 36 vehicles in the Fire/EMS Department. The vehicles are attributed to City demand based on the specific call volume at each station. As a result, there are 18.26 units attributed to the City. The current level of service is found by dividing the share of the vehicle fleet by the 2020 total fire/EMS calls for service from the City of Idaho Falls. Specifically, 1.88 vehicles per 1,000 fire/EMS call.

Based on the replacement cost of the current inventory ($5,765,267), the average cost per unit of vehicles and apparatus is $316,000. To find the capital cost per fire/EMS call, the vehicles per 1,000 fire/EMS call is combined with the average cost per unit. As shown in Figure 42, the capital cost per fire/EMS call is $594 (1.88 vehicles per 1,000 fire/EMS call x $316,000 per unit = $594 per call, rounded).

Figure 42. Fire/EMS Vehicles and Apparatus Level of Service and Cost Allocation

Vehicle Type	Total Units [1]	Idaho Falls Units	Cost per Vehicle [1]	City of Idaho Falls Replacement Cost
Ladder Truck	2	1.82	$1,000,000	$1,823,043
Engine	5	2.67	$545,000	$1,454,737
Rescue	2	1.84	$300,000	$550,558
Squad Vehicle	14	3.04	$52,000	$157,854
Ambulance	13	8.90	$200,000	$1,779,076
Total	**36**	**18.26**		**$5,765,267**

Level-of-Service Standards	Idaho Falls
Share of Vehicle Fleet	18.26
2020 Total Idaho Falls Fire/EMS Calls	9,727
Vehicles per 1,000 Fire/EMS Call	**1.88**

Cost Analysis	Total
Vehicles per Fire/EMS Call	1.88
Average Cost per Unit	$316,000
Capital Cost per Fire/EMS Call	**$594**

[1] Source: Idaho Falls Fire Department

FIRE/EMS TRAINING CENTER – INCREMENTAL EXPANSION

As shown in Figure 43, the City's fire/EMS training center has a total square footage of 113,256. As discussed previously, the City of Idaho Falls is responsible for 83% of IFFD services, which is approximately 94,537 square feet.

The current level of service is found by dividing the share of floor area by the 2020 total fire/EMS calls for service from the City of Idaho Falls. This results in 9.72 square feet of fire station per fire/EMS call.

Based on the replacement cost of the training center ($283,805), the average cost per square foot is $3. To find the capital cost per fire/EMS call, the square feet per fire/EMS call is combined with the average cost per square foot. As shown in Figure 43, the capital cost per fire/EMS call is $29 (9.72 square feet per fire/EMS call x $3 per square foot = $29 per call, rounded).

Figure 43. Fire/EMS Training Center Level of Service and Cost Allocation

Facility	Total Square Feet [1]	Idaho Falls Square Feet	Total Replacement Value [1]	City of Idaho Falls Replacement Value
Training Center	113,256	94,537	$340,000	$283,805
Total	**113,256**	**94,537**		**$283,805**

Level-of-Service Standards	Idaho Falls
Share of Floor Area (sq. ft.)	94,537
2020 Total Idaho Falls Fire/EMS Calls	9,727
Square Feet per Fire/EMS Call	**9.72**

Cost Analysis	Total
Square Feet per Fire/EMS Call	9.72
Average Cost per Square Foot	$3
Capital Cost per Fire/EMS Call	**$29**

[1] Source: Boam & Associates Real Estate Appraisal, May, 2021

FIRE/EMS CAPITAL IMPROVEMENT NEEDS TO SERVE GROWTH

FIRE/EMS STATION FACILITIES

Based on a projected call for service increase of 1,409 persons over the next 10 years, future development in Idaho Falls demands an additional 6,031 square feet of fire/EMS station space (1,409 additional calls for service x 4.28 square feet per call for service). As a result, future growth cost for fire/EMS stations is $2,605,249 (6,031 square feet x $432 per square foot).

Figure 44. Projected Demand for Fire Station Facilities

Infrastructure	Level of Service		Demand Unit	Unit Cost
Fire & EMS Stations	4.28	Square Feet	per Calls for Service	$432

Growth-Related Need for Fire & EMS Stations			
Year		Calls for Service	Total Square Feet
Base	2021	9,727	41,632
Year 1	2022	9,868	42,235
Year 2	2023	10,009	42,838
Year 3	2024	10,150	43,441
Year 4	2025	10,291	44,044
Year 5	2026	10,432	44,647
Year 6	2027	10,572	45,250
Year 7	2028	10,713	45,853
Year 8	2029	10,854	46,456
Year 9	2030	10,995	47,059
Year 10	2031	11,136	47,662
Ten-Year Increase		1,409	**6,031**
Projected Expenditure			**$2,605,249**

Growth-Related Expenditures for Fire & EMS Stations	$2,605,249

FIRE/EMS VEHICLES AND APPARATUS

Based on a projected call for service increase of 1,409 persons over the next 10 years, future residential development demands an additional 2.6 units of fire vehicles and apparatus (1,409 additional persons x 1.88 units per 1,000 calls for service / 1,000). As a result, future growth cost for fire/EMS vehicles and apparatus is $837,080 (2.6 units x $316,000 per unit).

Figure 45. Projected Demand for Fire/EMS Vehicles and Apparatus

Infrastructure	Level of Service		Demand Unit	Unit Cost
Fire & EMS Vehicles	1.88	Vehicles	per 1,000 Calls for Service	$316,000

Growth-Related Need for Fire & EMS Vehicles			
Year		Calls for Service	Total Vehicles
Base	2021	9,727	18.3
Year 1	2022	9,868	18.6
Year 2	2023	10,009	18.8
Year 3	2024	10,150	19.1
Year 4	2025	10,291	19.3
Year 5	2026	10,432	19.6
Year 6	2027	10,572	19.9
Year 7	2028	10,713	20.1
Year 8	2029	10,854	20.4
Year 9	2030	10,995	20.7
Year 10	2031	11,136	20.9
Ten-Year Increase		1,409	**2.6**
Projected Expenditure			**$837,080**

Growth-Related Expenditures for Fire & EMS Vehicles	$837,080

FIRE/EMS TRAINING CENTER

Based on a projected call for service increase of 1,409 persons over the next 10 years, future development in Idaho Falls demands an additional 13,696 square feet of fire/EMS training center space (1,409 additional calls for service x 9.72 square feet per call for service). As a result, future growth cost for fire/EMS station space is $41,087 (6,031 square feet x $3 per square foot).

Figure 46. Projected Demand for Fire/EMS Training Center

Infrastructure	Level of Service		Demand Unit	Unit Cost
Fire & EMS Training	9.72	Square Feet	per Calls for Service	$3

Growth-			
Year		Calls for Service	Total Square Feet
Base	2021	9,727	94,546
Year 1	2022	9,868	95,916
Year 2	2023	10,009	97,286
Year 3	2024	10,150	98,655
Year 4	2025	10,291	100,025
Year 5	2026	10,432	101,394
Year 6	2027	10,572	102,764
Year 7	2028	10,713	104,134
Year 8	2029	10,854	105,503
Year 9	2030	10,995	106,873
Year 10	2031	11,136	108,242
Ten-Year Increase		1,409	**13,696**
Projected Expenditure			**$41,087**

Growth-Related Expenditures for Fire & EMS Training	$41,087

FIRE INPUT VARIABLES AND DEVELOPMENT IMPACT FEES

Figure 47 provides a summary of the input variables used to calculate the net capital cost per housing unit and per 1,000 square feet of nonresidential floor area of fire station facilities, vehicles and apparatus, and training center space.

The residential Fire impact fees are the product of calls per housing unit by type multiplied by the total net capital cost per call for service. Fees are provided for both single family and multifamily housing types. Each call for service per housing unit is multiplied by the net capital cost per call to derive the residential impact fee per housing unit. The nonresidential Fire impact fees are the product of calls for service per 1,000 square feet of nonresidential land use multiplied by the net capital cost per call. An example of the calculation for an average single family unit is: the net capital cost per call ($2,472) multiplied by the calls per housing unit (0.210) to arrive at the impact fee per single family unit of $519.

Figure 47. Fire/EMS Input Variables and Maximum Supportable Impact Fees

Fee Component	Cost per Fire/EMS Call
Fire/EMS Stations	$1,849
Fire/EMS Vehicles and Apparatuses	$594
Fire/EMS Training Cener	$29
Gross Total	$2,472
Net Total	**$2,472**

Residential

Housing Type	Fire/EMS Calls per Housing Unit	Maximum Supportable Fee per Unit
Single Family	0.210	**$519**
Multifamily	0.169	**$418**

Nonresidential

Development Type	Fire/EMS Calls per 1,000 Sq Ft	Maximum Supportable Fee per 1,000 Sq Ft
Retail	0.187	**$462**
Office	0.031	**$77**
Industrial	0.015	**$37**
Institutional	0.675	**$1,669**

CASH FLOW PROJECTIONS FOR FIRE/EMS MAXIMUM SUPPORTABLE IMPACT FEE

This section summarizes the potential cash flow to the City of Idaho Falls if the Fire development impact fee is 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.

At the top of Figure 48, the cost for growth over the next ten years is listed. The summary provides an indication of the impact fee revenue generated by new development. For example, with a ten-year increase of 3,040 single family housing units and a maximum supportable impact fee of $519 per single family housing unit there is a projected revenue of $1,577,760. Shown at the bottom of the figure, the maximum supportable Fire impact fee is estimated to cover all growth-related capital costs.

Figure 48. Cash Flow Summary for Fire Development Impact Fees

Infrastructure Costs for Fire Facilities

	Total Cost	Growth Cost
Fire/EMS Stations	$2,605,249	$2,605,249
Fire/EMS Vehicles and Apparatuses	$837,080	$837,080
Fire/EMS Training Cener	$41,087	$41,087
Total Expenditures	**$3,483,416**	**$3,483,416**

Projected Development Impact Fee Revenue

Year		Single Family $519 per unit	Multifamily $418 per unit	Retail $462 per KSF	Office $77 per KSF	Industrial $37 per KSF	Institutional $1,669 per KSF
		Housing Units	Housing Units	KSF	KSF	KSF	KSF
Base	2021	19,136	6,833	5,668	5,844	6,024	4,783
Year 1	2022	19,440	6,877	5,739	5,937	6,163	4,859
Year 2	2023	19,744	6,921	5,811	6,030	6,301	4,935
Year 3	2024	20,048	6,965	5,883	6,123	6,440	5,011
Year 4	2025	20,352	7,009	5,954	6,216	6,579	5,087
Year 5	2026	20,656	7,053	6,026	6,308	6,718	5,163
Year 6	2027	20,960	7,097	6,097	6,401	6,857	5,239
Year 7	2028	21,264	7,141	6,169	6,494	6,995	5,315
Year 8	2029	21,568	7,185	6,241	6,587	7,134	5,391
Year 9	2030	21,872	7,229	6,312	6,680	7,273	5,467
Year 10	2031	22,176	7,273	6,384	6,772	7,412	5,542
Ten-Year Increase		3,040	440	716	928	1,388	760
Projected Revenue =>		$1,577,760	$183,920	$330,799	$71,478	$51,341	$1,267,920
						Projected Revenue =>	**$3,483,000**
						Total Expenditures =>	**$3,483,000**
						Non-Impact Fee Funding =>	**$0**

PROPORTIONATE SHARE ANALYSIS

Development impact fees for the City of Idaho Falls 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 City in the provision of system improvements to serve new development. The City 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 City of Idaho Falls are based on new growth's share of the costs of previously built projects along with planned public facilities as provided by the City of Idaho Falls. Projects are included in the City'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, citywide service area; results are shown in the cash flow analyses in this report. 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. 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 City 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 City. These procedures should be addressed in the development impact fee ordinance. One service area represented by the City of Idaho Falls 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 City formed a Development Impact Fee Advisory Committee (DIFAC). TischlerBise and City 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 City 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 City 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 City 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 City'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 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

As discussed below, residential development categories are based on data from the U.S. Census Bureau, American Community Survey. The City of Idaho Falls 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

Nonresidential development categories used throughout this study are based on land use classifications from the book *Trip Generation* (ITE, 2017). 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, TischlerBise recommends that fees for residential development in Idaho Falls 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 City facilities and services. Figure 49 shows the US Census American Community Survey 2019 5-Year Estimates data for the City of Idaho Falls. Single family units have a household size of 2.66 persons and multifamily units have a household size of 1.84 persons.

The estimates in Figure 49 are for household size calculations. Base year population and housing units are estimated with another, more recent data source.

Figure 49. Persons per Housing Unit

Housing Type	Persons	Housing Units	Persons per Housing Unit	Households	Persons per Household	Housing Unit Mix
Single Family [1]	48,851	18,381	**2.66**	17,324	2.82	75%
Multifamily [2]	11,410	6,212	**1.84**	5,541	2.06	25%
Total	60,261	24,593	**2.45**	22,865	2.64	

[1] Includes attached and detached single family homes and mobile homes
[2] Includes structures with 2+ units
Source: U.S. Census Bureau, 2019 American Community Survey 5-Year Estimates

RESIDENTIAL BUILDING PERMITS

The City of Idaho Falls provided residential building permit data for single family and multifamily housing units within City limits over the previous five years, from 2016 to 2020. Attached housing is considered single family housing in the residential building permit data. Approximately 87 percent of the total number of building permits issued over this five-year period were issued to single family units. Building permit data is used for residential development population and housing unit projections as shown in Figure 50.

Overall, there is has been an average annual growth of 349 housing units. Additionally, there has been a steady increase from 2016 to 2018. Despite a large decrease in issued permits in 2019 and the onset of the COVID-19 pandemic, 2020 saw a significant uptick in and largest total number of issued permits.

Figure 50. Residential Building Permits Issued

Housing Type	2016	2017	2018	2019	2020	Total	Average
Single Family [1]	278	283	327	273	360	1,521	**304**
Multifamily	0	0	96	0	126	222	**44**
Total	278	283	423	273	486	1,743	**349**

Source: City of Idaho Falls
[1] Single Family building permits include attached housing units

BASE YEAR POPULATION AND HOUSING UNITS

The Bonneville Metropolitan Planning Organization (BMPO) provides current household and household projections at the traffic analysis area (TAZ) level for the Bonneville County region of Idaho. An analysis of the TAZs resulted in a number of TAZs being partially included in the City of Idaho Falls boundary. To not overestimate population, the average between the TAZs only wholly in Idaho Falls and those plus the TAZs partially in the City was calculated.

The household estimates from Bonneville County Assessor's Office provides are of occupied homes. However, the Impact Fee study requires housing units (occupied and vacant housing units). The vacancy rates for single family units (6.1 percent) and multifamily (12.1 percent) are applied to estimate vacant homes and then added to the occupied estimate to find totals. Overall, 25,968 housing units are estimated, the majority being in single family housing.

The base year population was calculated applying persons per housing unit factors to housing estimates. From this calculation there is an estimated household population of 63,473.

Figure 51. Base Year Population and Housing Units

City of Idaho Falls	Base Year 2021
Population [1]	63,473
Housing Units [2]	
Single Family	19,136
Multifamily	6,833
Total Housing Units	25,968

[1] Source: U.S. Census Bureau, 2019 American Community Survey 5-Year Estimates

[2] Source: Bonneville County Assessor's Office

POPULATION AND HOUSING UNIT PROJECTIONS

Recent growth in Idaho Falls is assumed to continue so, the five-year average of building permits is assumed to continue through the 10-year projection period. Population growth is based on persons per housing unit factors and housing development.

Estimates based upon the building permit data show a growth rate of over 1 percent annually, 14.0 percent over the next ten years, as shown in Figure 52. Resulting in an increase of 8,896 residents and a housing unit increase of 3,480. Single family development accounts for approximately 87 percent of the total housing growth.

Figure 52. Residential Development Projections

City of Idaho Falls, ID	Base Year 2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total Increase
Population [1]	63,473	64,362	65,252	66,141	67,031	67,921	68,810	69,700	70,589	71,479	72,369	**8,896**
Percent Increase		*1.4%*	*1.4%*	*1.4%*	*1.3%*	*1.3%*	*1.3%*	*1.3%*	*1.3%*	*1.3%*	*1.2%*	*14.0%*
Housing Units [2]												
Single Family	19,136	19,440	19,744	20,048	20,352	20,656	20,960	21,264	21,568	21,872	22,176	**3,040**
Multifamily	6,833	6,877	6,921	6,965	7,009	7,053	7,097	7,141	7,185	7,229	7,273	**440**
Total Housing Units	25,968	26,316	26,664	27,012	27,360	27,708	28,056	28,404	28,752	29,100	29,448	**3,480**

[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

CURRENT EMPLOYMENT AND NONRESIDENTIAL FLOOR AREA

The impact fee study will include nonresidential development as well. Based on the Bonneville Metropolitan Planning Organization's TAZ database, 53,960 jobs are estimated in the City of Idaho Falls (Figure 53). The model forecasts employment growth for the entire City from 2020 to 2050 in five-year increments. To find the total employment in the base year, 2021, a straight-line approach from 2020 to 2025 was used.

Industry employment totals were determined using the United States Census Bureau's OnTheMap resource, conjointly with partial industry employment figures provided by the Bonneville Metropolitan Planning Organization. OnTheMap provides employment breakdowns by industry for the City of Idaho Falls, most recently in the year 2018. By applying the industry specific employment breakdowns from 2018 to the total and employment estimates provided by the Bonneville Metropolitan Planning Organization TAZ, we are able to provide complete employment estimates by industry. As can be seen in Figure 53, nearly to one-third of employment is in the Office industry, with the Industrial industry featuring the lowest percentage share.

Figure 53. Base Year Employment by Industry

Employment Industries	Base Year 2021	Percent of Total
Retail [1]	13,281	25%
Office [2]	17,354	32%
Industrial [1]	9,796	18%
Institutional [2]	13,528	25%
Total [1]	53,960	100%

[1] Source: Bonneville Metropolitan Planning Organization

[2] United States Census Bureau OnTheMap Idaho Falls 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 54. For Industrial the Light Industrial factors are used; for Institutional the Hospital factors are used; for Retail the Shopping Center factors are used; for Office the General Office factors are used.

Figure 54. Institute of Transportation Engineers (ITE) Employment Density Factors

ITE Code	Land Use	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	4.96	3.05	1.63	615
130	Industrial Park	1,000 Sq Ft	3.37	2.91	1.16	864
140	Manufacturing	1,000 Sq Ft	3.93	2.47	1.59	628
150	Warehousing	1,000 Sq Ft	1.74	5.05	0.34	2,902
254	Assisted Living	bed	2.60	4.24	0.61	na
520	Elementary School	1,000 Sq Ft	19.52	21.00	0.93	1,076
610	Hospital	1,000 Sq Ft	10.72	3.79	2.83	354
710	General Office (avg size)	1,000 Sq Ft	9.74	3.28	2.97	337
714	Corporate Headquarters	1,000 Sq Ft	7.95	2.31	3.44	291
760	Research & Dev Center	1,000 Sq Ft	11.26	3.29	3.42	292
770	Business Park	1,000 Sq Ft	12.44	4.04	3.08	325
820	Shopping Center (avg size)	1,000 Sq Ft	37.75	16.11	2.34	427

Source: Trip Generation, Institute of Transportation Engineers, 10th Edition (2017)

By combining the base year job totals and the ITE square feet per employee factors, the nonresidential floor area is calculated in Figure 55. There is an estimated total of 22.3 million square feet of nonresidential floor area in Idaho Falls. The Industrial industry accounts for the highest amount of the total nonresidential floor area in Idaho Falls, with approximately 27 percent. Office accounts for 26 percent, Retail accounts for 25 percent, and Institutional accounts for 21 percent of the total.

Figure 55. Base Year Nonresidential Floor Area

Employment Industries	Base Year Jobs [1]	Sq. Ft. per job [2]	Base Year Floor Area (sq. ft.)
Retail	13,281	427	5,667,759
Office	17,354	337	5,844,205
Industrial	9,796	615	6,023,942
Institutional	13,528	354	4,782,798
Total	53,960		22,318,704

[1] Source: Bonneville Metropolitan Planning Organization; American Census Bureau OnTheMap

[2] Source: Trip Generation, Institute of Transportation Engineers, 10th Edition (2017)

NONRESIDENTIAL FLOOR AREA PROJECTIONS

Based on the Bonneville MPO TAZ employment database, over the ten-year projection period, it is estimated that there will be an increase of 8,840 jobs. The majority of the increase comes from the Office industry (31%); however, the Industrial (26%) and Institutional industries (24%) 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 3.8 million square feet, a 17 percent increase from the base year. The Industrial and Office sectors have the greatest increase.

Figure 56. Employment Floor Area and Employment Projections

Industry	Base Year 2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total Increase
Jobs [1]												
Retail	13,281	13,449	13,617	13,784	13,952	14,120	14,288	14,456	14,623	14,791	14,959	**1,678**
Office	17,354	17,630	17,906	18,181	18,457	18,733	19,008	19,284	19,560	19,835	20,111	**2,757**
Industrial	9,796	10,022	10,248	10,473	10,699	10,925	11,150	11,376	11,602	11,827	12,053	**2,257**
Institutional	13,528	13,743	13,958	14,173	14,388	14,603	14,817	15,032	15,247	15,462	15,677	**2,149**
Total	53,960	54,844	55,728	56,612	57,496	58,380	59,264	60,148	61,032	61,916	62,800	**8,840**
Nonresidential Floor Area (1,000 sq. ft.) [2]												
Retail	5,668	5,739	5,811	5,883	5,954	6,026	6,097	6,169	6,241	6,312	6,384	**716**
Office	5,844	5,937	6,030	6,123	6,216	6,308	6,401	6,494	6,587	6,680	6,772	**928**
Industrial	6,024	6,163	6,301	6,440	6,579	6,718	6,857	6,995	7,134	7,273	7,412	**1,388**
Institutional	4,783	4,859	4,935	5,011	5,087	5,163	5,239	5,315	5,391	5,467	5,542	**760**
Total	22,319	22,698	23,077	23,456	23,835	24,214	24,594	24,973	25,352	25,731	26,110	**3,792**

[1] Source: Bonneville Metropolitan Planning Organization; American Census Bureau OnTheMap
[2] Source: TischlerBise analysis; Institute of Transportation Engineers, Trip Generation, 2017

FUNCTIONAL POPULATION

Both residential and nonresidential developments increase the demand on City services and facilities. To calculate the proportional share between residential and nonresidential demand on service and facilities, a functional population approach is used. The functional population approach allocates the cost of the facilities to residential and nonresidential development based on the activity of residents and workers in the City through the 24 hours in a day.

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 City of Idaho Falls are assigned 14 hours to residential development and 10 hours to nonresidential development. Residents that work outside the City are assigned 14 hours to residential development, the remaining hours in the day are assumed to be spent outside of the City working. Inflow commuters are assigned 10 hours to nonresidential development. Based on the most recent functional population data (2018), residential development accounts for 65 percent of the functional population, while nonresidential development accounts for 35 percent.

Figure 57. Idaho Falls Functional Population

Idaho Falls, ID (2018)				
Residential			*Demand*	*Person*
Population*	60,147		*Hours/Day*	*Hours*
Residents Not Working		31,798	20	635,960
Employed Residents		28,349		
Employed in Idaho Falls		14,433	14	202,062
Employed outside Idaho Falls		13,916	14	194,824
			Residential Subtotal	1,032,846
			Residential Share =>	**65%**
Nonresidential				
Non-working Residents		31,798	4	127,192
Jobs Located in Idaho Falls		42,656		
Residents Employed in Idaho Falls		28,223	10	282,230
Non-Resident Workers (inflow commuters)		14,433	10	144,330
			Nonresidential Subtotal	553,752
			Nonresidential Share =>	**35%**
			TOTAL	1,586,598

Source: U.S. Census Bureau, OnTheMap 6.1.1 Application and LEHD Origin-Destination Employment Statistics.
* Source: U.S. Census Bureau, American Community Survey, 2018

VEHICLE TRIP GENERATION

RESIDENTIAL VEHICLE TRIPS BY HOUSING TYPE

A customized trip rate is calculated for the single family and multifamily units in Idaho Falls. In Figure 58, 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 10.60 trip ends and a multifamily unit is estimated to generate 4.70 trip ends on an average weekday.

Figure 58. Customized Residential Trip End Rates

Average Weekday Vehicle Trip Ends by Housing Type

		Households (2)			Vehicles per
	Vehicles Available (1)	Single Family*	Multifamily Units	Total HHs	Household by Tenure
Owner-occupied	32,499	14,248	194	14,442	2.25
Renter-occupied	12,084	3,076	5,347	8,423	1.43
TOTAL	**44,583**	**17,324**	**5,541**	**22,865**	**1.95**
Housing Units (6) =>		18,381	6,212	24,593	
Persons per Housing Unit =>		2.66	1.84	2.45	

	Persons (3)	Trip Ends (4)	Vehicles by ype of Housin	Trip Ends (5)	Average Trip Ends	**Trip Ends per Housing Unit**	ITE Trip Ends Per Unit	Difference from ITE
Single Family*	48,851	150,649	36,475	238,440	194,545	**10.60**	9.44	12%
Multifamily	11,410	26,048	8,108	32,238	29,143	**4.70**	5.44	-14%
TOTAL	**60,261**	**176,697**	**44,583**	**270,677**	**223,687**	**9.80**		

** Includes Single Family Detached, Attached, and Manufactured Homes*

(1) Vehicles available by tenure from Table B25046, 2015-2019 American Community Survey 5-Year Estimates.

(2) Households by tenure and units in structure from Table B25032, American Community Survey, 2015-2019.

(3) Persons by units in structure from Table B25033, American Community Survey, 2015-2019.

(4) Vehicle trips ends based on persons using formulas from Trip Generation (ITE 2017). For single family housing (ITE 210), the fitted curve equation is EXP(0.96*LN(persons)+1.43). To approximate the average population of the ITE studies, persons were divided by 221 and the equation result multiplied by 221. For multifamily housing (ITE 221), the fitted curve equation is (2.29*persons)-81.02.

(5) Vehicle trip ends based on vehicles available using formulas from Trip Generation (ITE 2017). For single family housing (ITE 210), the fitted curve equation is EXP(0.99*LN(vehicles)+1.93). To approximate the average number of vehicles in the ITE studies, vehicles available were divided by 191 and the equation result multiplied by 191. For multifamily housing (ITE 220), the fitted curve equation is (3.94*vehicles)+293.58 (ITE 2012).

(6) Housing units from Table B25024, American Community Survey, 2015-2019.

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 City residents' work bound trips that are outside of the City. The trip adjustment factor includes two components. According to the National Household Travel Survey (2009), 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", 49 percent of Idaho Falls workers travel outside the City for work. In combination, these factors account for 8 percent of additional production trips (0.31 x 0.50 x 0.49 = 0.08). Shown in Figure 59, the total adjustment factor for residential housing units includes attraction trips (50 percent of trip ends) plus the journey-to-work commuting adjustment (8 percent of production trips) for a total of 58 percent.

Figure 59. Trip Adjustment Factor for Commuters

Trip Adjustment Factor for Commuters

Employed Idaho Falls Residents (2018)	28,349
Residents Working in the City (2018)	14,433
Residents Commuting Outside of the City for Work	13,916
Percent Commuting Out of the City	49%
Additional Production Trips	**8%**

Standard Trip Adjustment Factor	**50%**
Residential Trip Adjustment Factor	**58%**

Source: U.S. Census, OnTheMap Application, 2018

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 10th edition of Trip Generation. To estimate the trip generation in Idaho Falls, the weekday trip end per 1,000 square feet factors highlighted in Figure 60 are used.

Figure 60. Institute of Transportation Engineers Nonresidential Factors

ITE Code	Land Use	Demand Unit	Wkdy Trip Ends Per Dmd Unit	Wkdy Trip Ends Per Employee
110	Light Industrial	1,000 Sq Ft	4.96	3.05
130	Industrial Park	1,000 Sq Ft	3.37	2.91
140	Manufacturing	1,000 Sq Ft	3.93	2.47
150	Warehousing	1,000 Sq Ft	1.74	5.05
254	Assisted Living	bed	2.60	4.24
520	Elementary School	1,000 Sq Ft	19.52	21.00
610	Hospital	1,000 Sq Ft	10.72	3.79
710	General Office (avg size)	1,000 Sq Ft	9.74	3.28
714	Corporate Headquarters	1,000 Sq Ft	7.95	2.31
760	Research & Dev Center	1,000 Sq Ft	11.26	3.29
770	Business Park	1,000 Sq Ft	12.44	4.04
820	Shopping Center (avg size)	1,000 Sq Ft	37.75	16.11

Source: Trip Generation, Institute of Transportation Engineers, 10th Edition (2017)

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 61, the Institute for Transportation Engineers' land use code, daily vehicle trip end rate, and trip adjustment factor is listed for each land use.

Figure 61. Daily Vehicle Trip Factors

Land Use	ITE Codes	Daily Vehicle Trip Ends	Trip Adj. Factor
Residential (per housing unit)			
Single Family	210	10.60	58%
Multifamily	220	4.70	58%
Nonresidential (per 1,000 square feet)			
Retail	820	37.75	38%
Office	710	9.74	50%
Industrial	110	4.96	50%
Institutional	610	10.72	50%

Generation, 10th Edition (2017); National Household Travel Survey, 2009

VEHICLE TRIP PROJECTION

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. Citywide, residential land uses account for 136,271 vehicle trips and nonresidential land uses account for 150,340 vehicle trips in the base year (Figure 62).

Through 2031, it is projected that daily vehicle trips will increase by 42,194 trips with the majority of the growth being generated by single family (44%) and retail (24%) development.

Figure 62. Total Daily Vehicle Trip Projections

Development Type	Base Year 2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total Increase
Residential Trips												
Single Family	117,645	119,514	121,383	123,252	125,121	126,990	128,859	130,728	132,597	134,466	136,335	**18,690**
Multifamily	18,626	18,746	18,866	18,986	19,106	19,226	19,346	19,466	19,586	19,705	19,825	**1,199**
Subtotal	136,271	138,260	140,249	142,238	144,227	146,216	148,205	150,194	152,183	154,172	156,161	**19,889**
Nonresidential Trips												
Retail	81,304	82,331	83,358	84,385	85,413	86,440	87,467	88,494	89,521	90,548	91,575	**10,271**
Office	28,461	28,913	29,365	29,817	30,270	30,722	31,174	31,626	32,078	32,530	32,982	**4,521**
Industrial	14,939	15,284	15,628	15,972	16,316	16,660	17,004	17,348	17,692	18,037	18,381	**3,441**
Institutional	25,636	26,043	26,450	26,857	27,265	27,672	28,079	28,486	28,893	29,301	29,708	**4,072**
Subtotal	150,340	152,571	154,801	157,032	159,263	161,493	163,724	165,954	168,185	170,415	172,646	**22,305**
Vehicle Trips												
Grand Total	286,612	290,831	295,051	299,270	303,489	307,709	311,928	316,148	320,367	324,587	328,806	**42,194**

Source: Institute of Transportation Engineers, *Trip Generation*, 10th Edition (2017)