# **DRAFT** Development Impact Fee Study

Prepared for: Mammoth Lakes, California



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# **TABLE OF CONTENTS**

Executive Summary	1
Legal Framework	1
U. S. Constitution	1
California Constitution	2
The Mitigation Fee Act	2
Required Findings	3
Identifying the Purpose of the Fees	
Identifying the Use of the Fees	3
Reasonable Relationship Requirement	
Demonstrating an Impact	
Demonstrating a Benefit	
Demonstrating Proportionality	
Development Impact Fees for Existing Facilities	
Development Impact Fee Calculation Methodology	
Plan-Based Method	
Cost Recovery Method	
Incremental Expansion Method	
Figure 1: Proposed Fee Methods and Cost Components	
Proposed Development Impact Fees	
Figure 2: Schedule of Maximum Supportable Development Impact Fees	7
Development and Demand Data	9
Background and Setting	9
Study Area and Time Frame	9
Police	10
Methodology	
Figure 3: Police Development Impact Fee Methodology Chart	
Level of Service	
Plan-Based Component	
Figure 4: Planned Police Station Cost Factors	
Incremental Expansion Component	
Figure 5: Police Vehicles Cost Factors	
Police Facility and Vehicle Demand to Serve New Growth	
Figure 6: Projected Demand for Police Vehicles	
Maximum Supportable Police Development Impact Fee	
Figure 7: Police Development Impact Fee Schedule	14
Projected Fee Revenue	15
Figure 8: Police Development Impact Fee Revenue Projection	15
Vehicle Circulation	16
Methodology	
Figure 9: Vehicle Circulation Development Impact Fee Methodology Chart	
Level of Service	
Plan-Based Component	
Figure 10: Planned Vehicle Circulation System Cost Factors	
Maximum Supportable Vehicle Circulation Development Impact Fee Fee	
Figure 11: Vehicle Circulation Development Impact Fee Schedule	
Projected Fee Revenue	
Figure 12: Vehicle Circulation Development Impact Fee Revenue Projection	19



Multi-Modal Circulation	20
Methodology	
Figure 13: Multi-Modal Circulation Development Impact Fee Methodology Chart	20
Incremental Expansion Component	21
Figure 14: Municipal Parking Lots Cost Factors	21
Municipal Parking Facility and Vehicle Demand to Serve New Growth	22
Figure 15: Projected Demand for Municipal Parking Lots	22
Plan-Based Component	
Figure 16: Planned Multi-Modal Circulation System Cost Factors	23
Maximum Supportable Multi-Modal Circulation Development Impact FeeFee	24
Figure 17: Multi-Modal Circulation Development Impact Fee Schedule	24
Projected Fee Revenue	25
Figure 18: Multi-Modal Circulation Development Impact Fee Revenue Projection	25
Storm Drainage	26
Methodology	
Figure 19: Storm Drainage Development Impact Fee Methodology Chart	
Level of Service	
Plan-Based Component	
Figure 20: Planned Storm Drainage Cost Factors	
Figure 21: Projected Increase in Acreage by Land Use to 2035	
Figure 22: Proportionate Share and Capital Cost per Acre	
Maximum Supportable Storm Drainage Development Impact FeeFee	
Figure 23: Storm Drainage Development Impact Fee Schedule	
Projected Fee Revenue	
Figure 24: Storm Drainage Development Impact Fee Revenue Projection	
General Facilities & Equipment	32
Methodology	
Figure 25: General Facilities & Equipment Development Impact Fee Methodology Chart	
Level of Service	
Plan-Based Component	
Figure 26: Planned Town Administrative Offices Cost Factors	
Cost Recovery Component	
Figure 27: Loaders and Blowers Cost Recovery Component	
Incremental Expansion Component	
Figure 28: Town Equipment Cost Factors	
Figure 29: Projected Demand for Town Equipment	
Maximum Supportable General Facilities & Equipment Development Impact Fee	
Figure 30: General Facilities & Equipment Development Impact Fee Schedule	
Projected Fee Revenue	
Figure 31: General Facilities & Equipment Development Impact Fee Revenue Projection	
Parkland and Recreation	
Methodology	
Figure 32: Parkland and Recreation Development Impact Fee Methodology Chart	
Level of Service	40
Incremental Expansion Component - Park Land	
Figure 33: Park Land Cost Factors	
Figure 34: Projected Demand for Parkland and Recreation Infrastructure	
Incremental Expansion Component - Park ImprovementsFigure 35: Park Improvements Cost Factors	
Incremental Expansion Component – Parkland and Recreation Facilities	
Figure 36: Parkland and Recreation Facilities Cost Factors	
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Maximum Supportable Parkland and Recreation Development Impact Fee	
Figure 37: Parkland and Recreation Development Impact Fee Schedule	
Projected Fee Revenue	
Figure 38: Parkland and Recreation Development Impact Fee Revenue Projection	45
Appendix	46
Residential Development	46
Recent Residential Construction	46
Figure A1: Residential Housing Units, 2011-2014	46
Current Household Size and Peak Population	46
Figure A2: Persons per Household by Type of Housing Unit	
Peak Population Estimate	
Figure A3: Household Occupancy Rates for Town of Mammoth Lakes	48
Figure A4: Peak Households	48
Figure A5: Peak Population Estimate	
Peak Population Estimates and Projections	
Figure A6: Population Estimates and Projections, 2010-2035	
Parks Population Estimates and Projections	
Residential Estimates and Projections	
Figure A7: Residential Development, 2015-2035	
Nonresidential Development	
Nonresidential Square Footage Development	51
Figure A8: Nonresidential Service Units per Development UnitUnit	
Jobs by Type of Nonresidential Development	51
Figure A9: Distribution of Jobs by Industry Type	52
Jobs and Nonresidential Development Projections	
Figure A10: Nonresidential Development, 2015-2035	53
Land Use Assumptions – Residential and Nonresidential Summary	54
Figure A11: Annual Demographic Data, 2015-2035	54
Commuting Patterns and Functional Population	55
Figure A12: Inflow/Outflow Analysis, 2011	55
Functional Population	55
Figure A13: Functional Population	56
Average Daily Vehicle Trips	56
Trip Rate Adjustments	
Adjustment for Pass-By Trips	
Figure A14: Average Daily Trips from Existing Development, 2015	58



# **EXECUTIVE SUMMARY**

The Town of Mammoth Lakes has retained TischlerBise to prepare this study to analyze the impacts of development on the Town's capital facilities and to calculate development impact fees based on that analysis. This report documents the data, methodology, and results of the development impact fee study. The methods used to calculate impact fees in this study are intended to satisfy all legal requirements governing such fees, including provisions of the U. S. Constitution, the California Constitution, and the California Mitigation Fee Act (Government Code Sections 66000 *et seq.*).

Mammoth Lakes has contracted with TischlerBise to prepare a development impact fee study for six categories of capital facilities. Specifically, the feasibility of implementing development impact fees has been evaluated for the following infrastructure categories:

- Police
- Vehicle Circulation
- Multi-Modal Circulation
- Storm Drainage
- General Facilities & Equipment
- Parkland and Recreation

The Town of Mammoth Lakes is no longer charging fees related to airport facilities, and, therefore, airport facilities are not included in this study. Also excluded from the study are District development impact fees: Library, Child Care, and Fire.

#### **LEGAL FRAMEWORK**

#### **U. S. Constitution**

Like all land use regulations, development exactions, including development impact fees, are subject to the Fifth Amendment prohibition on taking of private property for public use without just compensation. Both state and federal courts have recognized the imposition of impact fees on development as a legitimate form of land use regulation, provided the fees meet standards intended to protect against regulatory takings. To comply with the Fifth Amendment, development regulations must be shown to substantially advance a legitimate governmental interest. In the case of development impact fees, that interest is in the protection of public health, safety, and welfare by ensuring that development is not detrimental to the quality of essential public services.

There is little federal case law specifically dealing with development impact fees, although other rulings on other types of exactions (e.g. land dedication requirements) are relevant. In one of the most important exaction cases, the U. S. Supreme Court found that a government agency imposing exactions on development must demonstrate an "essential nexus" between the exaction and the interest being protected (See *Nollan v. California Coastal Commission*, 1987). In a more recent case (*Dolan v. City of Tigard, OR*, 1994), the Court ruled that an exaction also must be "roughly proportional" to the burden created by development. However, the *Dolan* decision appeared to set



a higher standard of review for mandatory dedications of land than for monetary exactions such as development impact fees. Constitutional issues related to development impact fees will be discussed in more detail below.

#### **California Constitution**

The California Constitution grants broad police power to local governments, including the authority to regulate land use and development. That police power is the source of authority for a wide range of regulations, including the authority to impose development impact fees on development to pay for infrastructure and capital facilities. Some development impact fees have been challenged on grounds that they are special taxes imposed without voter approval in violation of Article XIIIA, which was added by Proposition 13 in 1978. That objection is valid only if the fees exceed the cost of providing capital facilities needed to serve new development. If that were the case, then the fees would also run afoul of the U. S. Constitution and the Mitigation Fee Act. Articles XIIIC and XIIID, added by Proposition 218 in 1996, require voter approval for some "property-related fees," but exempt "the imposition of fees or charges as a condition of property development."

#### **The Mitigation Fee Act**

California's development impact fee statute originated in Assembly Bill 1600 during the 1987 session of the Legislature, and took effect in January, 1989. AB 1600 added several sections to the Government Code, beginning with Section 66000. Since that time the development impact fee statute has been amended from time to time, and in 1997 was officially titled the "Mitigation Fee Act." Unless otherwise noted, code sections referenced in this report are from the Government Code.

The Act does not limit the types of capital improvements for which development impact fees may be charged. It defines public facilities very broadly to include "public improvements, public services and community amenities." Although the issue is not specifically addressed in the Mitigation Fee Act, other provisions of the Government Code (see Section 65913.8) prohibit the use of development impact fees for maintenance or operating costs. Consequently, the fees calculated in this report are based on capital costs only.

The Mitigation Fee Act does not use the term "mitigation fee" except in its official title. Nor does it use the more common term "impact fee." The Act simply uses the word "fee," which is defined as "a monetary exaction, other than a tax or special assessment, ... that is charged by a local agency to the applicant in connection with approval of a development project for the purpose of defraying all or a portion of the cost of public facilities related to the development project ...." To avoid confusion with other types of fees, this report uses the widely-accepted term "impact fee," which should be understood to mean "fee" as defined in the Mitigation Fee Act.

The Mitigation Fee Act contains requirements for establishing, increasing and imposing development impact fees. They are summarized below. It also contains provisions that govern the collection and expenditure of fees, and require annual reports and periodic re-evaluation of development impact fee programs. Those administrative requirements are discussed in the Implementation Chapter of this report. Certain fees or charges related to development are exempted from the requirements of the Mitigation Fee Act. Among them are fees in lieu of park land dedication as authorized by the Quimby Act (Section 66477), fees collected pursuant to a



reimbursement agreement or developer agreement, and fees for processing development applications.

# **Required Findings**

Section 66001 requires that an agency establishing, increasing or imposing development impact fees, must make findings to:

- 1. Identify the purpose of the fee;
- 2. Identify the use of the fee; and,
- 3. Determine that there is a reasonable relationship between:
  - a. The use of the fee and the development type on which it is imposed;
  - b. The need for the facility and the type of development on which the fee is imposed; and
  - c. The amount of the fee and the facility cost attributable to the development project (Applies only upon imposition of fees).

Each of those requirements is discussed in more detail below.

#### <u>Identifying the Purpose of the Fees</u>

The broad purpose of development impact fees is to protect the public health, safety, and general welfare by providing for adequate public facilities. The specific purpose of the fees calculated in this study is to fund the construction and/or purchase of certain capital improvements identified in this report. Those improvements are needed to mitigate the impacts of additional development in the Town, and thereby prevent deterioration in public services that would result from additional development if development impact fee revenues were not available to fund such improvements. Findings with respect to the purpose of a fee should state the purpose of the fees as financing development-related public facilities in a broad category, such as street improvements or water supply system improvements.

# Identifying the Use of the Fees

According to Section 66001, if a fee is used to finance public facilities, those facilities must be identified. A capital improvement plan may be used for that purpose, but is not mandatory if the facilities are identified in the General Plan, a Specific Plan, *or in other public documents*. If a capital improvement plan is used to identify the use of the fees, it must be updated annually by resolution of the governing body at a noticed public hearing. Development impact fees calculated in this study are based on specific capital facilities identified in this report. We recommend that this report be designated as the public document identifying the use of the fees.

## Reasonable Relationship Requirement

As discussed above, Section 66001 requires that, for fees subject to its provisions, a "reasonable relationship" must be demonstrated between:

- 1. The use of the fee and the type of development on which it is imposed;
- 2. The need for a public facility and the type of development on which a fee is imposed; and,



3. The amount of the fee and the facility cost attributable to the development on which the fee is imposed.

These three reasonable relationship requirements as defined in the statute are closely related to "rational nexus" or "reasonable relationship" requirements enunciated by a number of state courts. Although the term "dual rational nexus" is often used to characterize the standard by which courts evaluate the validity of development impact fees under the U. S. Constitution, we prefer a formulation that recognizes three elements: "impact or need" "benefit," and "proportionality." The dual rational nexus test explicitly addresses only the first two, although proportionality is reasonably implied, and was specifically mentioned by the U.S. Supreme Court in the *Dolan* case.

The reasonable relationship language of the statute is considered less strict than the rational nexus standard used by many courts. Of course, the higher standard controls. We will use the nexus terminology in this report for two reasons: because it is more concise and descriptive, and also to signify that the methods used to calculate impact fees in this study are intended to satisfy the more demanding constitutional standard. Individual elements of the nexus standard are discussed further in the following paragraphs.

## Demonstrating an Impact

All new development in a community creates additional demands on some, or all, public facilities provided by local government. If the supply of facilities is not increased to satisfy that additional demand, the quality or availability of public services for the entire community will deteriorate. Impact fees may be used to recover the cost of development-related facilities, but only to the extent that the need for facilities is a consequence of development that is subject to the fees. The *Nollan* decision reinforced the principle that development exactions may be used only to mitigate conditions created by the developments upon which they are imposed. That principle clearly applies to impact fees. In this study, the impact of development on improvement needs is analyzed in terms of quantifiable relationships between various types of development and the demand for specific facilities, based on applicable level-of-service standards. This report contains all information needed to demonstrate this element of the nexus.

#### Demonstrating a Benefit

A sufficient benefit relationship requires that impact fee revenues be segregated from other funds and expended only on the facilities for which the fees were charged. Fees must be expended in a timely manner and the facilities funded by the fees must serve the development paying the fees. Nothing in the U.S. Constitution or California law requires that facilities paid for with impact fee revenues be available *exclusively* to development paying the fees.

Procedures for earmarking and expenditure of fee revenues are mandated by the Mitigation Fees Act, as are procedures to ensure that the fees are expended expeditiously or refunded. All of those requirements are intended to ensure that developments benefit from the impact fees they are required to pay. Thus, an adequate showing of benefit must address procedural as well as substantive issues.



#### Demonstrating Proportionality

The requirement that exactions be proportional to the impacts of development was clearly stated by the U.S. Supreme Court in the *Dolan* case (although the relevance of that decision to impact fees has been debated) and is logically necessary to establish a proper nexus. Proportionality is established through the procedures used to identify development-related facility costs, and in the methods used to calculate impact fees for various types of facilities and categories of development. In this study, the demand for facilities is measured in terms of relevant and measurable attributes of development. For example, the need for road improvements is measured by the number of vehicle trips generated by development.

In calculating development impact fees, costs for development-related facilities are allocated in proportion to the service needs created by different types and quantities of development. The following section describes methods used to allocate facility costs and calculate impact fees in ways that meet the proportionality standard.

#### **Development Impact Fees for Existing Facilities**

It is important to note that development impact fees may be used to pay for existing facilities, provided that those facilities are needed to serve additional development and have the capacity to do so. In other words, such fees must satisfy the same nexus requirements as any other development impact fee.

# **DEVELOPMENT IMPACT FEE CALCULATION METHODOLOGY**

Any one of several legitimate methods may be used to calculate development impact fees. The choice of a particular method depends primarily on the service characteristics and planning requirements for the facility type being addressed. Each method has advantages and disadvantages in a particular situation, and to some extent they are interchangeable, because they all allocate facility costs in proportion to the needs created by development.

Reduced to its simplest terms, the process of calculating development impact fees involves only two steps: determining the cost of development-related capital improvements, and allocating those costs equitably to various types of development. In practice, though, the calculation of development 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 those methods can be applied (see Figure 1).

#### **Plan-Based Method**

The plan-based method allocates costs for a specified set of improvements to a specified amount of development. The improvements are identified by a facility plan and the development is identified by a land use plan. 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. dwelling units or square feet of building area) in each category to arrive at a cost per unit of development.



The plan-based method is often the most workable approach where actual service usage is difficult to measure (as is the case with administrative facilities), or does not directly drive the need for added facilities (as is the case with fire stations). It is also useful for facilities, such as streets, where capacity cannot always be matched closely to demand. This method is relatively inflexible in the sense that it is based on the relationship between a particular facility plan and a particular land use plan. If either plan changes significantly, the fees should be recalculated.

#### **Cost Recovery Method**

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 from which new growth will benefit. To calculate a development impact fee using the cost recovery approach, facility cost is divided by ultimate number of demand units the facility will serve.

#### **Incremental Expansion Method**

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 capita or park acres per capita. 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, Mammoth Lakes will not use the funds for renewal and/or replacement of existing facilities. Rather, the Town will use the impact fee revenue 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.

Figure 1: Proposed Fee Methods and Cost Components

Type of Fee	Service Area	Incremental Expansion	Plan-Based	Cost Recovery	Cost Allocation
Police	Townwide	Vehicles	Police Station	N/A	Peak Population and Nonresidental Trips
Vehicle Circulation	Townwide	N/A	N/A System Improvements		Vehicle Trips
Multi-Modal Circulation	Townwide	Municipal Parking Lots	System Improvements	N/A	Vehicle Trips
Storm Drainage	Townwide	N/A	System Improvements	N/A	Acreage
General Facilities & Equipment	Townwide	Town Equipment	Town Administrative Offices	Loaders and Blowers	Peak Population and Jobs
Parkland and Recreation	Townwide	Park Land, Park Improvements, Parkland and Recreation Facilities	N/A	N/A	Parks Population



#### PROPOSED DEVELOPMENT IMPACT FEES

Figure 2 provides a schedule of the maximum supportable development impact fees for Mammoth Lakes. Development impact fees for residential development will be assessed per housing unit, and nonresidential development impact fees will be assessed per room for lodging and per square foot of floor area for all other uses. The Town may adopt fees that are less than the amounts shown. However, a reduction in development impact fee revenue will necessitate an increase in other revenues, a decrease in planned capital expenditures, and/or a decrease in the Town's LOS standards.

Figure 2: Schedule of Maximum Supportable Development Impact Fees

Residential (per unit)

Type of Fee	Single Family	Mobile Home	Multi-Unit
Police	\$143	\$122	\$149
Vehicle Circulation	\$253	\$132	\$176
Multi-Modal Circulation	\$1,325	\$694	\$925
Storm Drainage	\$806	\$438	\$558
General Facilities & Equipment	\$674	\$574	\$705
Parkland and Recreation	\$680	\$579	\$711
Airport	\$0	\$0	\$0
Proposed Fee*	\$3,881	\$2,539	\$3,224
Current Fee: Non-Transient**	\$15,314	\$11,616	\$10,208
Increase/Decrease	(\$11,433)	(\$9,077)	(\$6,984)
Current Fee: Transient**	\$19,162		\$14,363
Increase/Decrease	(\$15,281)		(\$11,139)

Nonresidential (per square foot)

Type of Fee	Lodging (per room)	Commercial	Office & Other Services	Industrial	Institutional
Police	\$287	\$0.99	\$0.39	\$0.25	\$0.54
Vehicle Circulation	\$158	\$0.55	\$0.21	\$0.14	\$0.30
Multi-Modal Circulation	\$831	\$2.87	\$1.12	\$0.71	\$1.57
Storm Drainage	\$417	\$0.08	\$0.08	\$0.26	\$0.31
General Facilities & Equipment	\$412	\$0.63	\$0.63	\$0.26	\$0.34
Parkland and Recreation	\$508	\$0.00	\$0.00	\$0.00	\$0.00
Airport	\$0	\$0.00	\$0.00	\$0.00	\$0.00
Proposed Fee	\$2,613	\$5.11	\$2.43	\$1.61	\$3.06
Current Fee**	\$14,363	\$9.41	\$9.41	\$4.35	\$9.41
Increase/Decrease	(\$11,750)	(\$4.30)	(\$6.98)	(\$2.74)	(\$6.35)

<sup>\*</sup>Proposed residential fees include transient and non-transient uses.

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 recommended annual evaluation and update of impact fees. One approach is to adjust for inflation in construction costs by means of an index like the one published by Engineering News Record (ENR). This index



<sup>\*\*</sup>Current fee does not include Library, Child Care, and Fire District fees. Current lodging fee based on multi-unit transient (per unit).

can be applied against the calculated development impact fees. If cost estimates change significantly, the fees should be recalculated.

It is important to note one change from the Town's current fee categories. To ease the administrative burden of residential fee assessment, transient and non-transient classifications are combined by housing unit type. For example, single-family transient and single-family non-transient are now single family. Another important change is the increase in the number of nonresidential fee categories. The Town's current nonresidential fees include a combined commercial and office fee and an industrial fee. New nonresidential fee categories include lodging (assessed per room), commercial, office & other services, and institutional.



# **DEVELOPMENT AND DEMAND DATA**

Both existing and planned development must be addressed as part of the nexus analysis required to support the establishment of impact fees. This chapter of the report organizes and correlates information on existing and planned development to provide a framework for the impact fee analysis contained in subsequent chapters of the report. The information in this chapter forms a basis for establishing levels of service, analyzing facility needs, and allocating the cost of capital facilities between existing and future development and among various types of new development.

Data on land use employed in this study are based on information obtained from Mammoth Lakes and the California Department of Finance. Demographic data used in this study are based on information obtained from the 2010 U.S. Census, 2013 American Community Survey 5-Year Estimates, Institute of Transportation Engineers, and the California Department of Transportation. These estimates and projections are discussed further in the Appendix.

#### **BACKGROUND AND SETTING**

The Town of Mammoth Lakes is located in the heart of California's Eastern Sierra Nevada mountain range in Mono County. Mammoth Lakes is about 325 miles north of Los Angeles, and about the same distance east of San Francisco. Mammoth Lakes is about 164 miles south of Reno, NV. Mammoth Lakes is located in the Inyo National Forest, Mammoth Ranger District. The Town is surrounded by acres of forest and is bordered by the Ansel Adams and John Muir Wilderness Areas. Yosemite National Park's eastern entrance, Hwy 120/Tioga Pass (closed in winter), is located just 45 minutes from the Town of Mammoth Lakes and approximately 2 ½ hours to the valley floor.¹

#### STUDY AREA AND TIME FRAME

The study area for the impact fee analysis is the existing Town. Data on future development used in this study represents the amount of additional development expected in the study area through 2035. The impact fees calculated in this study are based on the amount and type of projected development and the fees are calculated in terms of current dollars. Development may occur sooner or later than projected, but the rate and timing of development will only affect the fee calculations in rare cases where fee revenue will be used to repay debt issued to fund capital facilities. If this situation arises in the study, it will be discussed in the fee analysis for a particular type of facility.

<sup>&</sup>lt;sup>1</sup> Town of Mammoth Lakes Fact Sheet, Town of Mammoth Lakes.



9

# **POLICE**

## **METHODOLOGY**

The police development impact fees are calculated using a combination of the plan-based and incremental expansion methodologies. First, a plan-based methodology is used for a new police station. Second, an incremental expansion methodology is used for new police vehicles utilized by the Police Department.

As shown in Figure 3, the police development impact fees are based on demand units. A demand unit represents the impact of a typical development on the demand for police services, based on the assumption that the demand for services is reasonably proportional to the presence of people at the site of a land use. The residential component of the demand unit calculation is based on housing unit size (persons per housing unit). For nonresidential development, the demand unit calculation is per square foot of floor area, based on national trip generation data compiled by the Institute of Transportation Engineers (ITE). This ranking of trip rates is consistent with the relative demand for police protection from nonresidential development. Trip generation rates are highest for commercial development, such as a shopping center, and lowest for industrial development. Office and institutional trip rates fall between the other two categories while trip generation rates for lodging are calculated per room. Other possible nonresidential demand indicators, such as employment or floor area, do not accurately reflect the demand for police services. If employees per square foot of building area were used as the demand indicator, police development impact fees would be too high for office/institutional development. See the Appendix of this report for the calculation of demand units.

Figure 3: Police Development Impact Fee Methodology Chart





# LEVEL OF SERVICE

#### **Plan-Based Component**

The Mammoth Lakes Police Department currently operates out of a leased facility. However, the Town plans to construct a 4,500 square foot police station to replace the leased facility. The cost of the planned station is approximately \$2.5 million, or \$555 per square foot (\$2.5 million / 4,500 SF). This total, as shown in Figure 4, is based on a facility cost of \$1.87 million—\$2.2 million with a 15% credit from current the development impact fee balance—and a land and design cost of approximately \$630,000 (\$2.2 million - 15% revenue credit + \$630,000 = \$2.5 million). This new station is intended to serve new growth as well as enhance the level of service provided to current residents and businesses. Therefore, to ensure that new development is not charged for a higher level of service than is currently provided to existing residents and businesses, the cost of this facility is spread over the projected peak population and nonresidential trips in the year 2035.

To ensure residential and nonresidential development pay only their proportionate share of police station costs, police calls for service in 2013 and 2014 are used to allocate demand for police services. Based on data received from the Mammoth Lakes Police Department, approximately 43% of calls during this period were to residential development, and the remaining 57% of calls were to nonresidential development. To determine the planned level of service in 2035, the square footage of the planned police station is allocated proportionately between residential and nonresidential development and then divided by the projected service units for each type of development in 2035. The residential level of service is 0.0687 square feet per person (4,500 SF X 43% residential share / 28,305 peak population), and the nonresidential level of service is 0.0972 square feet per nonresidential trip (4,500 SF X 57% nonresidential share / 26,285 nonresidential trips). Based on the cost per square foot (\$555) and the planned level of service in 2035, the cost per person is \$38.13 (\$555 X 0.0687 SF per person) and the cost per nonresidential trip is \$53.94 (\$555 X 0.0972 SF per nonresidential trip). This is shown below in Figure 4.

Figure 4: Planned Police Station Cost Factors

ation cost i actors	
Police Station*	\$1,870,000
Land and Design	\$628,299
TOTAL	\$2,498,299
Allocation Factors for Police Station	
Square Feet	4,500
Cost per Square Foot	\$555
2035 Peak Population	28,305
2035 Nonres. Trips	26,285
Residential Share	43%
Nonresidential Share	57%
Level-of-Service (LOS) Standards	
Square Feet per Person	0.0687
Square Feet per Nonres. Trip	0.0972
Cost Analysis	
Cost per Person	\$38.13
Cost per Nonres. Trip	\$53.94





#### **Incremental Expansion Component**

The police development impact fee methodology also contains a cost component for vehicles operated by the Police Department. Since these vehicles will be purchased incrementally over time, an incremental expansion method is utilized. As shown in Figure 5, the Police Department currently operates a fleet of 15 vehicles. The current level of service is based on the residential and nonresidential shares of police calls for service and the 2015 demand units—peak population (25,546) for residential development and nonresidential trips (22,880) for nonresidential development. Therefore, the current residential level of service is 0.0003 vehicles per person (15 vehicles X 43% residential share / 25,546 peak population), and the nonresidential level of service equals 0.0004 vehicles per nonresidential trip (15 vehicles X 57% nonresidential share / 22,880 nonresidential trips).

Figure 5: Police Vehicles Cost Factors

Existing Police Vehicles	
Vehicles	15
Allocation Factors for Police Vehicles	
2015 Peak Population	25,546
2015 Nonres. Trips	22,880
Residential Share	43%
Nonresidential Share	57%
Level-of-Service (LOS) Standards	
, ,	
LOS: Vehicles per Person	0.0003
	0.0003 0.0004
LOS: Vehicles per Person	
LOS: Vehicles per Person LOS: Vehicles per Nonres. Trip	
LOS: Vehicles per Person LOS: Vehicles per Nonres. Trip  Cost Analysis	0.0004

\*Source: Town of Mammoth Lakes



# POLICE FACILITY AND VEHICLE DEMAND TO SERVE NEW GROWTH

With an LOS of 0.0003 vehicles per person and 0.0004 vehicles per nonresidential trip for residential and nonresidential development, respectively, and projected increases in peak population (2,759) and nonresidential trips (3,405), new development will require approximately two additional police vehicles during the study period ((0.0003 X 2,759) + (0.0004 X 3,405) = 1.97 vehicles). With a replacement cost of \$50,000 per vehicle, which includes the vehicle and equipment, the cost of police vehicles related to new growth, as shown in Figure 6, is \$98,373. The cost per person for police vehicles is \$15.41 (43% residential share X \$98,373 / 2,759 peak population increase), and the cost per nonresidential trip is \$16.40 (57% nonresidential share X \$98,373 / 3,405 nonresidential trip increase).

Figure 6: Projected Demand for Police Vehicles

Police Vehicles Level-of-Service Standards

# Vehicles - Residential Vehicles - Residential 0.0003 Vehicles per Person Vehicles - Nonresidential 0.0004 Vehicles per Nonres. Trip

Average Cost \$50,000 per Vehicle

	Need for Police Vehicles				
	Year	Peak	Nonres.	Vehicles	
		Population	Trips		
Base	2015	25,546	22,880	15	
Year 1	2016	25,678	23,159	15	
Year 2	2017	25,810	23,642	15	
Year 3	2018	25,942	23,923	15	
Year 4	2019	26,073	24,424	16	
Year 5	2020	26,208	24,514	16	
Year 6	2021	26,343	24,612	16	
Year 7	2022	26,478	24,701	16	
Year 8	2023	26,616	25,003	16	
Year 9	2024	26,751	25,093	16	
Year 10	2025	26,889	25,179	16	
Year 15	2030	27,589	25,804	17	
Year 20	2035	28,305	26,285	17	
Twe	nty-Yr Increase	2,759	3,405	2	
Grov	\$98,373				



# MAXIMUM SUPPORTABLE POLICE DEVELOPMENT IMPACT FEE

Figure 7 provides a summary of the costs per demand unit used to calculate the police development impact fees. As discussed previously, police development impact fees are calculated for both residential and nonresidential land uses. As shown at the top of Figure 7, the total cost per residential demand unit is \$53.54 per person, and the total cost per nonresidential demand unit is 70.34 per nonresidential trip. The middle section of the figure shows proposed police fees by type of residential unit. The proposed fee for a single-family unit is 143 (53.54 X 2.68 = 143) and represents a 492 decrease compared to the current non-transient fee and a 918 decrease compared to the current transient fee. Similarly, shown in the lower section of Figure 7, the cost per square foot of commercial development is 9.99 (70.34 X 9.99 trip ends X 9.99 trip rate adjustment 9.99 for a decrease of 9.09 per square foot compared to the current fee.

Figure 7: Police Development Impact Fee Schedule

Fee Component	Cost per Person	Cost per Nonres. Trip
Police Station	\$38.13	\$53.94
Vehicles	\$15.41	\$16.40
TOTAL	\$53.54	\$70.34

#### Residential (per unit)

Development Type	Persons per Housing Unit*	Proposed Fees	Current Fee Non- Transient	Increase / Decrease	Current Fee Transient	Increase / Decrease
Single Family	2.68	\$143	\$635	-\$492	\$1,061	-\$918
Mobile Home	2.28	\$122	\$635	-\$513		
Multi-Unit	2.80	\$149	\$635	-\$486	\$1,061	-\$912

<sup>\*</sup>See Figure A5.

#### Nonresidential (per square foot)

Development Type	Avg Wkdy Veh	Trip Rate	Proposed	Current	Increase /
Development Type	Trip Ends**	Adjustment	Fees	Fee	Decrease
Lodging (per room)***	8.17	50%	\$287	\$1,061	-\$1,053
Commercial	42.70	33%	\$0.99	\$1.06	-\$0.07
Office & Other Services	11.03	50%	\$0.39	\$1.06	-\$0.67
Industrial	6.97	50%	\$0.25	\$0.20	\$0.05
Institutional	15.43	50%	\$0.54	\$1.06	-\$0.52

<sup>\*\*</sup>See Figure A8.



<sup>\*\*\*</sup>Current lodging fee based on multi-unit transient (per unit).

# PROJECTED FEE REVENUE

Finally, the development impact fees shown in Figure 8 can be applied to future development to project the potential revenue generated by those fees if they are applied to future development projected in the Appendix. Police development impact fee revenue from future development is projected to total approximately \$387,000 over the next twenty years. Over the same time-period, the Town will spend approximately \$2.6 million on the planned police station and growth-related police vehicles. Projected capital costs will not be fully funded by impact fee revenue because the capital improvement plan used to derive the police impact fees represents an increase to the current level of service being provided by the Town. The projected \$2.2 million shortfall is the amount the Town must fund with other revenue to provide the increased level of service to the existing development base. This will ensure that future development pays for only its impacts and is not charged for a higher level of service than what is provided to existing residents.

Figure 8: Police Development Impact Fee Revenue Projection

Infrastructure Costs for Police

	Growth Cost	Total Cost
Police Station	\$288,839	\$2,498,299
Vehicles	\$98,373	\$98,373
TOTAL	\$387,211	\$2,596,672

Police Development Impact Fee Revenue

		Residential	Lodging	Commercial	Office & Other Services	Industrial	Institutional
		\$144	\$287	\$0.99	\$0.39	\$0.25	\$0.54
		per housing unit	per room	per SF	per SF	per SF	per SF
	Year	Hsg Units	Rooms	KSF	KSF	KSF	KSF
Base	2015	9,462	1,524	804	485	302	208
Year 1	2016	9,511	1,524	817	493	307	211
Year 2	2017	9,560	1,574	831	501	312	215
Year 3	2018	9,609	1,574	844	509	318	218
Year 4	2019	9,659	1,624	859	518	323	222
Year 5	2020	9,709	1,624	863	520	324	223
Year 6	2021	9,759	1,624	868	523	326	224
Year 7	2022	9,809	1,624	872	526	327	225
Year 8	2023	9,861	1,674	877	529	330	226
Year 9	2024	9,911	1,674	881	532	331	227
Year 10	2025	9,963	1,674	886	534	332	228
Year 15	2030	10,224	1,724	905	546	340	234
Year 20	2035	10,490	1,749	924	557	347	238
Twen	ty-Yr Increase	1,028	225	120	72	45	31
Projecte	d Revenue =>	\$147,696	\$64,651	\$119,117	\$28,042	\$11,105	\$16,576

Total Projected Revenues => \$387,187

Total Cost of Police Expenditures => \$2,596,672

Other Revenue Needed => \$2,209,485



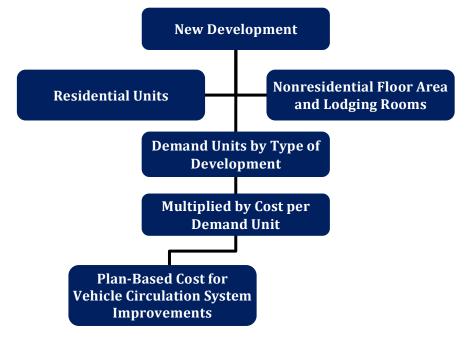
# **VEHICLE CIRCULATION**

#### **METHODOLOGY**

The vehicle circulation development impact fees are calculated using a plan-based methodology. Components of this fee include circulation improvements and intersection improvements. Projects in this component are designed to improve the efficiency of vehicle circulation within the Town.

As shown in Figure 9, the vehicle circulation development impact fees are based on demand units. A demand unit represents the impact of a typical development on the vehicle circulation system, based on the assumption that the demand placed on the vehicle circulation system is reasonably proportional to the presence of vehicles at the site of a land use. For residential and nonresidential development, the demand unit calculation is vehicle trips, based on national trip generation data compiled by the Institute of Transportation Engineers (ITE).

Figure 9: Vehicle Circulation Development Impact Fee Methodology Chart





#### LEVEL OF SERVICE

# **Plan-Based Component**

As shown in Figure 10, planned vehicle circulation system improvements have a total cost of \$7.65 million with approximately \$4.58 million covered by other funding sources. The Town's remaining share of planned system improvement costs is \$3.08 million, with approximately \$340,000 to be funded by impact fees (11.1%). Development impact fee funding for each project is calculated by applying a growth share of 11.1% (1 – (58,802 vehicle trips in 2015 / 66,112 vehicle trips in 2035) = 11.1%), based on vehicle trips, to the estimated cost of each project (\$1.25 million X 11.1% = \$138,219). Vehicle trip assumptions are discussed further in the Appendix.

To ensure residential and nonresidential development pay only their proportionate share of vehicle circulation system costs, vehicle trips in 2015 are used to allocate costs for system improvements. Based on housing unit estimates from the California Department of Finance, nonresidential square footage and hotel room estimates provided by Mammoth Lakes, and national trip generation data compiled by the Institute of Transportation Engineers (ITE), residential trips in 2015 account for approximately 61% of total trips with nonresidential trips accounting for the remaining 39% of trips. Based on projections and assumptions discussed in the Appendix, residential trips are projected to increase by 3,906 trips by 2035 with nonresidential trips increasing by 3,405 trips during the same period. The cost per residential trip is \$53.18 (\$340,020 X 61% residential share / 3,906 residential trip increase) and the cost per nonresidential trip is \$38.85 (\$340,020 X 39% nonresidential share / 3,405 nonresidential trip increase). This is shown below in Figure 10.

Figure 10: Planned Vehicle Circulation System Cost Factors

Planned Vehicle Circulation System Improvement Costs

Project #	Project Description	Cost*	Other Funding*	Town Share	Growth Share**	DIF Funding
ST-07 & New	Frontage Road Circulation Improvements	\$2,500,000	\$1,250,000	\$1,250,000	11.1%	\$138,219
ST-13, 16, 17, 27	Intersection Improvements - Main	\$1,650,000	\$825,000	\$825,000	11.1%	\$91,225
ST-12, 18, 20, 23, 28, 30	Intersection Improvements - Meridian	\$2,000,000	\$1,000,000	\$1,000,000	11.1%	\$110,576
ST-19, 21	Minaret / Forest Trail Intersection Improvements / Intersections	\$1,500,000	\$1,500,000	\$0	0.0%	\$0
,	TOTAL	\$7,650,000	\$4,575,000	\$3,075,000	11.1%	\$340,020
*Source: Town of Mammoth Lo	akes	Funding fron	n Other Reven	ue Sources =>	88.9%	\$2,734,980

<sup>\*</sup>Source: Town of Mammoth Lakes

\*\*Growth Share = 1 - (2015 trips / 2035 trips)

#### Cost Allocation for Vehicle Circulation System

2015-2035 Res. Tri	3,906	
2015-2035 Nonres. Tri	3,405	
	Share	Cost
Residential (per res. Trip)	61%	\$53.18
Nonresidential (per nonres. Trip)	39%	\$38.85



# MAXIMUM SUPPORTABLE VEHICLE CIRCULATION DEVELOPMENT IMPACT FEE

Figure 11 provides a summary of the costs per demand unit used to calculate the vehicle circulation development impact fees. As discussed previously, vehicle circulation development impact fees are calculated for both residential and nonresidential land uses. As shown in Figure 11, the cost per residential demand unit is \$53.18 per residential trip, and the cost per nonresidential demand unit is \$38.85 per nonresidential trip. The proposed fee for a unit in a multi-unit structure is \$176 (\$53.18 X 6.65 trip ends X 50% trip adjustment = \$176) and represents a \$620 decrease compared to the current non-transient fee and a \$468 decrease compared to the current transient fee. Similarly, the cost per square foot of industrial development is \$0.14 (\$38.85 X 6.97 trip ends X 50% trip rate adjustment / 1,000 = \$0.14) for a decrease of \$0.71 per square foot compared to the current fee.

Figure 11: Vehicle Circulation Development Impact Fee Schedule

Fee Component	Cost per Res. Trip	Cost per Nonres. Trip
Vehicle Circulation System	\$53.18	\$38.85

#### Residential (per unit)

Development Type	Avg Wkdy Veh Trip Ends*	Trip Rate Adjustment	Proposed Fees	Current Fee Non- Transient	Increase / Decrease	Current Fee Transient	Increase / Decrease
Single Family	9.52	50%	\$253	\$1,264	-\$1,011	\$644	-\$391
Mobile Home	4.99	50%	\$132	\$635	-\$503		
Multi-Unit	6.65	50%	\$176	\$796	-\$620	\$644	-\$468

<sup>\*</sup>See Figure A14.

#### Nonresidential (per square foot)

Development Type	Avg Wkdy Veh Trip Ends**	Trip Rate Adjustment	Proposed Fees	Current Fee	Increase / Decrease
Lodging (per room)***	8.17	50%	\$158	\$644	-\$636
Commercial	42.70	33%	\$0.55	\$1.20	-\$0.65
Office & Other Services	11.03	50%	\$0.21	\$1.20	-\$0.99
Industrial	6.97	50%	\$0.14	\$0.85	-\$0.71
Institutional	15.43	50%	\$0.30	\$1.20	-\$0.90

<sup>\*\*</sup>See Figure A8.



<sup>\*\*\*</sup>Current lodging fee based on multi-unit transient (per unit).

# PROJECTED FEE REVENUE

Finally, the development impact fees shown in Figure 12 can be applied to future development to project the potential revenue generated by those fees if they are applied to future development projected in the Appendix. Vehicle circulation development impact fee revenue from future development is expected to total approximately \$340,000 over the next twenty years. Over the same time period, the Town will spend approximately \$3.08 million on the planned system improvements. Projected capital costs will not be fully covered by development impact fee revenue because the capital improvement plan used to derive the vehicle circulation development impact fees represents an increase to the current level of service being provided by the Town. The projected \$2.74 million shortfall is the amount the Town must fund from other revenue to provide the increased level of service to the existing development base. This will ensure that future development pays for only its impacts and is not charged for a higher level of service than what is provided to existing residents.

Figure 12: Vehicle Circulation Development Impact Fee Revenue Projection

Infrastructure Cost for Vehicle Circulation System

Growth CostTotal CostVehicle Circulation System\$340,020\$3,075,000

Vehicle Circulation System Development Impact Fee Revenue

		Residential	Lodging	Commercial	Office & Other Services	Industrial	Institutional
		\$202	\$159	\$0.55	\$0.21	\$0.14	\$0.30
		per housing unit	per room	per SF	per SF	per SF	per SF
	Year	Hsg Units	Rooms	KSF	KSF	KSF	KSF
Base	2015	9,462	1,524	804	485	302	208
Year 1	2016	9,511	1,524	817	493	307	211
Year 2	2017	9,560	1,574	831	501	312	215
Year 3	2018	9,609	1,574	844	509	318	218
Year 4	2019	9,659	1,624	859	518	323	222
Year 5	2020	9,709	1,624	863	520	324	223
Year 6	2021	9,759	1,624	868	523	326	224
Year 7	2022	9,809	1,624	872	526	327	225
Year 8	2023	9,861	1,674	877	529	330	226
Year 9	2024	9,911	1,674	881	532	331	227
Year 10	2025	9,963	1,674	886	534	332	228
Year 15	2030	10,224	1,724	905	546	340	234
Year 20	2035	10,490	1,749	924	557	347	238
7	wenty-Yr Increase	1,028	225	120	72	45	31
Proj	jected Revenue =>	\$207,626	\$35,708	\$65,791	\$15,488	\$6,133	\$9,155

Total Projected Revenues => \$339,901

Total Cost of Vehicle Circulation Expenditures => \$3,075,000

Other Revenue Needed => \$2,735,099



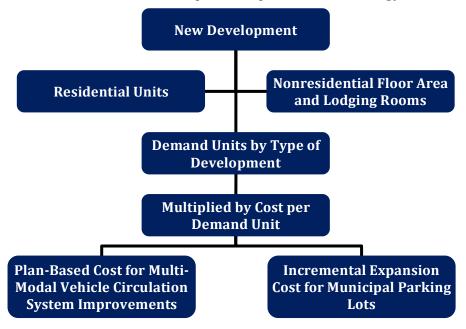
# **MULTI-MODAL CIRCULATION**

#### **METHODOLOGY**

The multi-modal circulation development impact fees are calculated using incremental expansion and plan-based methodologies. First, an incremental expansion methodology is used for new municipal parking spaces. Then, a plan-based methodology is used for improvements to the multi-modal circulation system.

As shown in Figure 13, the multi-modal circulation development impact fees are based on demand units. As discussed in the vehicle circulation section, a demand unit represents the impact of a typical development on the multi-modal circulation system, based on the assumption that the demand placed on the system is reasonably proportional to the presence of vehicles at the site of a land use. For both residential and nonresidential development, the demand unit calculation is vehicle trips, based on national trip generation data compiled by the Institute of Transportation Engineers (ITE).

Figure 13: Multi-Modal Circulation Development Impact Fee Methodology Chart





#### INCREMENTAL EXPANSION COMPONENT

The multi-modal development impact fee methodology contains a cost component for municipal parking lots. Since these parking spaces will be added over time, the incremental expansion method is utilized. As shown in Figure 14, Mammoth Lakes' current inventory includes 350 municipal parking spaces—this total does not include private parking spaces. The current level of service for parking spaces is based on vehicle trips in 2015—35,921 for residential and 22,880 for nonresidential—and the share of residential and nonresidential trips in 2015—61% for residential development and 39% for nonresidential development. Therefore, the current residential level of service is 0.006 parking spaces per residential trip (350 spaces X 61% residential share / 35,921 residential trips = 0.006), and the nonresidential level of service equals 0.006 parking spaces per nonresidential trip (350 spaces X 39% nonresidential share / 22,880 nonresidential trips = 0.006).

Figure 14: Municipal Parking Lots Cost Factors

# **Existing Standards for Municipal Parking Lots**

Parking Spaces 350

#### **Allocation Factors for Municipal Parking Lots**

2015 Res. Trips	35,921
2015 Nonres. Trips	
Residential Share	61%
Nonresidential Share	39%

#### Level-of-Service (LOS) Standards

LOS: Parking Spaces per Res. Trip	0.006
LOS: Parking Spaces per Nonres. Trip	0.006

#### **Cost Analysis**

Cost per Parking Space	\$25,000
Cost per Res. Trip	\$170.14
Cost per Nonres. Trip	\$124.32

## Cost Basis from Planned Projects

Project*	Spaces*	Cost*
ST-02: Municipal Parking Lots	200	\$5,000,000
Average Cost per Space	\$25,000	

<sup>\*</sup>Source: Town of Mammoth Lakes



# MUNICIPAL PARKING FACILITY AND VEHICLE DEMAND TO SERVE NEW GROWTH

Shown in Figure 15, residential trips are projected to equal 39,827 trips in 2035 for an increase of 3,906. Similarly, nonresidential trips are also projected to increase by 2035 to 26,285 trips (increase of 3,405). When applied to the current LOS, new development will demand approximately 44 parking spaces in municipal parking lots ((0.006 residential LOS X 3,906 residential trip increase) + (0.006 nonresidential LOS X 3,405 nonresidential trip increase) = 43.51 parking spaces). This total does not include parking spaces required as part of the Town's development process. Based on estimates provided by Mammoth Lakes, the average cost per parking space is \$25,000 (\$5 million / 200 parking spaces = \$25,000), so the growth-related expenditure on municipal parking lots is approximately \$1.09 million (43.51 parking spaces X \$25,000 = \$1.09 million). The cost per residential trip is \$170.14 (61% residential share X \$1.09 million / 3,906 residential trip increase), and the cost per nonresidential trip is \$124.32 (39% nonresidential share X \$1.09 million / 3,405 nonresidential trip increase).

Figure 15: Projected Demand for Municipal Parking Lots

Municipal Parking Lots Level-of-Service Standards

Municipal Parking - Residential	0.006 Parking Spaces per Res. Trip
Municipal Parking - Nonresidential	0.006 Parking Spaces per Nonres. Trip
Municipal Parking Cost	\$25,000 per Parking Space

	Need for Municipal Parking Infrastructure						
	Year	Res. Trips	Nonres. Trips	Parking Spaces			
Base	2015	35,921	22,880	350			
Year 1	2016	36,108	23,159	353			
Year 2	2017	36,296	23,642	357			
Year 3	2018	36,483	23,923	360			
Year 4	2019	36,668	24,424	364			
Year 5	2020	36,860	24,514	365			
Year 6	2021	37,052	24,612	367			
Year 7	2022	37,241	24,701	369			
Year 8	2023	37,437	25,003	372			
Year 9	2024	37,626	25,093	373			
Year 10	2025	37,823	25,179	375			
Year 15	2030	38,814	25,804	385			
Year 20	2035	39,827	26,285	394			
7	wenty-Yr Increase	3,405	44				
Growth-F	Related Expenditure	e on Municipal	Parking Lots =>	\$1,087,823			



# PLAN-BASED COMPONENT

As shown in Figure 16, planned multi-modal circulation system improvements have a total cost of \$16.55 million, with approximately \$10.29 million in other funding (grants, Measure R, Measure U, etc.). The Town's remaining share of planned system improvement costs is \$6.27 million, with approximately \$693,000 to be funded by impact fees (11.1%). Impact fee funding for each project is calculated by applying a growth share of 11.1% (1 – (58,802 vehicle trips in 2015 / 66,112 vehicle trips in 2035) = 11.1%), based on vehicle trips, to the estimated cost of each project (\$600,000 X 11.1% = \$66,345). Vehicle trip assumptions are discussed further in the Appendix.

To ensure residential and nonresidential development pay only their proportionate share of vehicle circulation system costs, vehicle trips in 2015 are used to allocate costs for system improvements. As discussed in the vehicle circulation section, residential trips in 2015 account for approximately 61% of total trips with nonresidential trips accounting for the remaining 39% of trips. Based on projections and assumptions discussed in the Appendix, residential trips are projected to increase by 3,906 trips by 2035 with nonresidential trips increasing by 3,405 trips during the same period. The cost per residential trip is \$108.35 (\$692,757 X 61% residential share / 3,906 residential trip increase) and the cost per nonresidential trip is \$79.17 (\$692,757 X 39% nonresidential share / 3,405 nonresidential trip increase). This is shown below in Figure 16.

Figure 16: Planned Multi-Modal Circulation System Cost Factors

Planned Multi-Modal Circulation System Improvement Costs

Project #	Project Description	Cost*	Other Funding*	Town Share	Growth Share**	DIF Funding
ST-04	Bus Equipment	\$2,400,000	\$1,800,000	\$600,000	11.1%	\$66,345
ST-07	Main Street Promenade	\$3,200,000	\$1,920,000	\$1,280,000	11.1%	\$141,537
ST-08	Street Lighting Projects	\$200,000	\$100,000	\$100,000	11.1%	\$11,058
ST-09	Transit Stops	\$600,000	\$300,000	\$300,000	11.1%	\$33,173
ST-03	Transit Facility	\$1,000,000	\$0	\$1,000,000	11.1%	\$110,576
New	Old Mammoth Road Capacity Improvements	\$3,000,000	\$1,800,000	\$1,200,000	11.1%	\$132,691
PR-09	MUP - Mammoth Creek Gap Closure	\$1,000,000	\$900,000	\$100,000	11.1%	\$11,058
PR-09	MUP - Minaret Rd Trail	\$3,000,000	\$2,100,000	\$900,000	11.1%	\$99,518
New	Municipal Signage and Wayfinding	\$350,000	\$315,000	\$35,000	11.1%	\$3,870
New	Transit Information System	\$200,000	\$50,000	\$150,000	11.1%	\$16,586
New	Pedestrian Overpass / Underpass projects	\$1,600,000	\$1,000,000	\$600,000	11.1%	\$66,345
	TOTAL	\$16,550,000	\$10,285,000	\$6,265,000	11.1%	\$692,757

<sup>\*</sup>Source: Town of Mammoth Lakes

#### Cost Allocation for Multi-Modal Circulation System

88.9%

\$5,572,243

Funding from Other Revenue Sources =>

2015-2035 Res. Tr		
2015-2035 Nonres. Tr	3,405	
	Share	Cost
Residential (per res. Trip)	61%	\$108.35
Nonresidential (per nonres. Trip)	39%	\$79.17



<sup>\*\*</sup>Growth Share = 1 - (2015 trips / 2035 trips)

# MAXIMUM SUPPORTABLE MULTI-MODAL CIRCULATION DEVELOPMENT IMPACT FEE

Figure 17 provides a summary of the costs per demand unit used to calculate the multi-modal circulation development impact fees. As discussed previously, multi-modal circulation development impact fees are calculated for both residential and nonresidential land uses. As shown in Figure 17, the total cost per residential demand unit is \$278.49, and the cost per nonresidential demand unit is \$203.49. The proposed fee for a single-family unit is \$1,325 (\$278.49 X 9.52 trip ends X 50% trip adjustment = \$1,325) and represents a \$745 decrease compared to the current non-transient fee and a \$2,132 decrease compared to the current transient fee. The cost per square foot of office and other services development is \$1.12 (\$203.49 X 11.03 trip ends X 50% trip rate adjustment / 1,000 = \$1.12) for a decrease of \$2.34 per square foot compared to the current fee.

Figure 17: Multi-Modal Circulation Development Impact Fee Schedule

Fee Component	Cost per Res. Trip	Cost per Nonres. Trip		
Municipal Parking	\$170.14	\$124.32		
System Improvements	\$108.35	\$79.17		
TOTAL	\$278.49	\$203.49		

#### Residential (per unit)

Development Type	Avg Wkdy Veh Trip Ends*	Trip Rate Adjustment	Proposed Fees	Current Fee Non-Transient	Increase / Decrease	Current Fee Transient	Increase / Decrease
Single Family	9.52	50%	\$1,325	\$2,070	-\$745	\$3,457	-\$2,132
Mobile Home	4.99	50%	\$694	\$2,070	-\$1,376		
Multi-Unit	6.65	50%	\$925	\$2,070	-\$1,145	\$3,457	-\$2,532

<sup>\*</sup>See Figure A14.

#### Nonresidential (per square foot)

Development Type	Avg Wkdy Veh	Trip Rate	Proposed	Current	Increase /
Development Type	Trip Ends**	Adjustment	Fees	Fee	Decrease
Lodging (per room)***	8.17	50%	\$831	\$3,457	-\$3,449
Commercial	42.70	33%	\$2.87	\$3.46	-\$0.59
Office & Other Services	11.03	50%	\$1.12	\$3.46	-\$2.34
Industrial	6.97	50%	\$0.71	\$0.64	\$0.07
Institutional	15.43	50%	\$1.57	\$3.46	-\$1.89

<sup>\*\*</sup>See Figure A8.



<sup>\*\*\*</sup>Current lodging fee based on multi-unit transient (per unit).

# PROJECTED FEE REVENUE

Finally, the development impact fees shown in Figure 18 can be applied to future development to project the potential revenue generated by those fees if they are applied to future development projected in the Appendix. Multi-modal circulation development impact fee revenue from future development is expected to total approximately \$1.78 million over the next twenty years. Over the same time period, the Town will spend approximately \$7.35 million on growth-related municipal parking and planned multi-modal circulation system improvements. Projected capital costs will not be fully met by development impact fee revenue because the capital improvement plan used to derive the multi-modal circulation development impact fees represents an increase to the current level of service being provided by the Town. The projected \$5.58 million shortfall is the amount the Town must fund from other revenue to provide the increased level of service to the existing development base. This will ensure that future development pays for only its impacts and is not charged for a higher level of service than what is provided to existing residents.

Figure 18: Multi-Modal Circulation Development Impact Fee Revenue Projection
Infrastructure Costs for Multi-Modal Circulation System

	Growth Cost	Total Cost
Municipal Parking	\$1,087,823	\$1,087,823
System Improvements	\$692,757	\$6,265,000
TOTAL	\$1,780,580	\$7,352,823

Multi-Modal Circulation System Development Impact Fee Revenue

		Residential	Lodging	Commercial	Office & Other Services	Industrial	Institutional
		\$1,057	\$831	\$2.87	\$1.12	\$0.71	\$1.57
		per housing unit	per room	per SF	per SF	per SF	per SF
Y	ear	Hsg Units	Rooms	KSF	KSF	KSF	KSF
Base	2015	9,462	1,524	804	485	302	208
Year 1	2016	9,511	1,524	817	493	307	211
Year 2	2017	9,560	1,574	831	501	312	215
Year 3	2018	9,609	1,574	844	509	318	218
Year 4	2019	9,659	1,624	859	518	323	222
Year 5	2020	9,709	1,624	863	520	324	223
Year 6	2021	9,759	1,624	868	523	326	224
Year 7	2022	9,809	1,624	872	526	327	225
Year 8	2023	9,861	1,674	877	529	330	226
Year 9	2024	9,911	1,674	881	532	331	227
Year 10	2025	9,963	1,674	886	534	332	228
Year 15	2030	10,224	1,724	905	546	340	234
Year 20	2035	10,490	1,749	924	557	347	238
Twenty	-Yr Increase	1,028	225	120	72	45	31
Projected	Revenue =>	\$1,087,284	\$187,033	\$344,600	\$81,123	\$32,126	\$47,952
					Total Projecte	d Revenues =>	\$1.780.118

Total Projected Revenues => \$1,780,118

Total Cost of Multi-Modal Circulation Expenditures => \$7,352,823

Other Revenue Needed => \$5,572,705



# STORM DRAINAGE

#### **METHODOLOGY**

The storm drainage development impact fees have been calculated using a plan-based methodology. Components of this fee include stormdrain basins and system improvements. Projects in this component are designed to improve the efficiency of storm drainage system within the Town. The growth-related cost of storm drainage system improvements is allocated to the vacant acreage of the Town that is designated for development, thus contributing to the demand for storm drainage facilities.

As shown in Figure 19, the cost of storm drainage improvements is multiplied by proportionate share factors for each type of land use, and then divided by the amount of land area by type of land use. Residential fees per housing unit are based on a gross density of 4 units per acre for single-family units and 12 units per acre for mobile home and multi-unit housing types. The cost per acre for nonresidential land uses is converted to a fee per square foot using an average floor area ratio (FAR) of 2.0 for commercial and office, 0.63 FAR for industrial, and 0.50 FAR for institutional. Lodging fees per room are based on a gross density of 16 rooms per acre.

Figure 19: Storm Drainage Development Impact Fee Methodology Chart





#### LEVEL OF SERVICE

#### **Plan-Based Component**

As shown in Figure 20, planned storm drainage system improvements have a total cost of \$11 million, with approximately \$3.3 million in other funding. The Town's remaining share of planned system improvement costs is \$7.7 million, with approximately \$789,000 to be funded by development impact fees (10.3%). Development impact fee funding for each project is calculated by applying a growth share of 10.3% (1 – ((25,546 peak population in 2015 + 4,607 jobs in 2015) / (28,305 peak population in 2035 + 5,293 jobs in 2035)) = 10.3%), based on population and jobs, to the estimated cost of each project (\$500,000 X 10.3% = \$51,262). Peak population and jobs assumptions are discussed further in the Appendix.

Figure 20: Planned Storm Drainage Cost Factors

#### **Planned Storm Drainage Improvement Costs**

Project #	Project Description	Cost*	Other Funding*	Town Share	Growth Share**	DIF Funding
SD-02	Conveyance Improvements	\$2,000,000	\$1,500,000	\$500,000	10.3%	\$51,262
SD-04	Stormdrain Basin #2	\$1,000,000	\$200,000	\$800,000	10.3%	\$82,020
SD-05	Stormdrain Basin #3	\$6,000,000	\$1,200,000	\$4,800,000	10.3%	\$492,120
SD-06	Stormdrain Water Quality	\$2,000,000	\$400,000	\$1,600,000	10.3%	\$164,040
	TOTAL	\$11,000,000	\$3,300,000	\$7,700,000	10.3%	\$789,442

<sup>\*</sup>Source: Town of Mammoth Lakes

Funding from Other Revenue Sources =>

89.7% \$6,910,558

The costs for the storm drainage system are allocated to the land area served by the improvements. In order to determine the land area served by the storm drainage system, TischlerBise applied average town residential density and nonresidential floor area ratio (FAR) factors (provided by the Town of Mammoth Lakes) anticipated for future growth to projected development over the next twenty years (through 2035) to determine the amount of acreage projected to be developed by type of land use.

Examples of the calculation of converting housing unit and nonresidential square footage projections to land acreages are as follows:

- Residential: An average of 17 single-family units developed per year / 4 dwelling units per acre (average density) = 4.28 acres developed per year. In other words, an average of 4.28 acres per year are projected to be developed with single-family units, or a twenty-year total of 88.60 acres.
- Nonresidential: An average of 13,000 square feet of commercial development to be developed per year / 2.0 average Floor Area Ratio (FAR)<sup>2</sup> for commercial buildings = 6,500 square feet of land needed, which equals 0.15 acres (where 6,500 square feet / 43,560

 $<sup>^2</sup>$  Where (FAR) = square feet of built floor area (total square footage) compared to the total land area on which the structure is built; a FAR of 1.0 would mean 43,560 square feet of building space on one acre (43,560 square feet per acre). If the building is one floor, the one-acre lot will be 100% covered. If the building is two floors, the one-acre lot will be 50% covered.



<sup>\*\*</sup>Growth Share = 1 - (2015 pop and jobs / 2035 pop and jobs)

square feet in an acre = 0.15 acres). In other words, an average of 0.15 acres per year are projected to be developed with commercial development, or a twenty-year total of 1.38 acres.

Figure 21: Projected Increase in Acreage by Land Use to 2035

Net Increse in Residential and Nonresidential Acres (20-Year Projections)							Cumi	ulative Incre	ases		
Residential Acreage	2015-16	2016-17	2017-18	2018-19	2019-20	2024-25	2029-30	2034-35	5-Year	10-Year	20-Year
Single Family	4.28	4.28	4.28	4.03	4.58	4.62	4.66	4.70	21.47	43.19	88.60
Mobile Home	0.08	0.08	0.08	0.17	0.08	0.08	0.08	0.08	0.50	1.08	2.25
Multi-Unit	2.58	2.58	2.58	2.58	2.58	2.67	2.75	2.83	12.92	26.25	53.92
NET INCREASE	6.95	6.95	6.95	6.78	7.24	7.37	7.50	7.62	34.88	70.52	144.77
									Cumi	ulative Incre	eases
Nonresidential Acreage	2015-16	2016-17	2017-18	2018-19	2019-20	2024-25	2029-30	2034-35	5-Year	10-Year	20-Year
Lodging	0.00	3.13	0.00	3.13	0.00	0.00	3.13	0.00	6.25	9.38	14.06
Commercial	0.15	0.15	0.16	0.16	0.05	0.05	0.04	0.04	0.68	0.94	1.38
Office & Other	0.10	0.09	0.09	0.09	0.03	0.03	0.03	0.03	0.41	0.56	0.83
Industrial	0.19	0.20	0.20	0.20	0.05	0.05	0.05	0.05	0.83	1.12	1.66
Institutional	0.14	0.19	0.14	0.19	0.05	0.05	0.05	0.05	0.70	0.93	1.40
NET INCREASE	0.59	3.75	0.59	3.77	0.18	0.17	3.29	0.16	2.62	3.56	5.28
									Cumi	ulative Incre	eases
	2015-16	2016-17	2017-18	2018-19	2019-20	2024-25	2029-30	2034-35	5-Year	10-Year	20-Year
TOTAL NET INCREASE	7.54	10.70	7.54	10.55	7.42	7.54	10.79	7.78	43.75	83.46	164.11

Based on the projected increase in acreage by land use described above, TischlerBise can determine proportionate share factors by land use by using weighting factors, representing the percentage of impervious surface area. An example of the calculation is as follows: There are 88.60 acres of land projected for single-family housing units, based on an average density of 4 dwellings per acre. The percent of impervious surface is estimated at 40%, based on data provided by the Town, resulting in 35.44 impervious acres. Based on projected development citywide, this represents 36.2% of the total net increase in impervious acreage in the Town (97.82 acres) over the next twenty years. This is shown in Figure 22 and repeated for each land use category.



Figure 22: Proportionate Share and Capital Cost per Acre
Storm Drainage System Improvements

Growth-Related Capital Costs \$789,442

Proportionate Share	Projected Land Use Acreage (20-Yr)*	ge Runoff Impervio		Proportionate Share
Single Family	88.60	0.40	35.44	36.2%
Mobile Home	2.25	0.65	1.46	1.5%
Multi-Family	53.92	0.83	44.75	45.8%
Lodging	14.06	0.83	11.67	11.9%
Commercial	1.38	0.83	1.15	1.2%
Office & Other	0.83	0.83	0.69	0.7%
Industrial	1.66	0.90	1.49	1.5%
Institutional	1.40	0.83	1.16	1.2%
TOTAL	164.10		97.82	100.0%

Capital Cost per Acre***					
Single Family	\$3,225				
Mobile Home	\$5,263				
Multi-Family	\$6,706				
Lodging	\$6,682				
Commercial	\$6,865				
Office & Other	\$6,658				
Industrial	\$7,134				
Institutional	\$6,767				

<sup>\*</sup> Land use area calculated by TischlerBise using average density and floor area ratios.

The capital cost per acre for each land use is listed in Figure 22. For a single-family unit, the capital cost per acre is \$3,225. This is a function of the growth-related capital costs, proportionate share, and projected land use acreage. The capital cost per acre for single family is calculated as follows: The proportionate share of 36.2% is allocated to the growth-related capital cost of \$789,442 and divided between the acres of projected single-family development over the next twenty years ((36.2% single family share X \$789,442 growth-related capital cost) / 88.60 acres of single-family development = \$3,225).



<sup>\*\*</sup> Runoff factors from Town of Mammoth Lakes.

<sup>\*\*\*</sup> For each type of development, the level-of-service standard (expressed in terms of capital cost per acre) is equal to the capital cost multiplied by the proportionate share factor, divided by the acreage to be developed.

## MAXIMUM SUPPORTABLE STORM DRAINAGE DEVELOPMENT IMPACT FEE

Figure 23 provides a summary of the costs per demand unit used to calculate the storm drainage development impact fees. As discussed previously, storm drainage development impact fees are calculated for both residential and nonresidential land uses. As shown in Figure 23, the capital cost per acre for a multi-unit structure is 6,706. To calculate the fee per unit in a multi-unit structure of 558, the capital cost per acre is divided by the units per acre (6,706 / 12 units per acre = 558) and represents a 1,822 decrease compared to the current non-transient fee and a 1,418 decrease compared to the current transient fee. Similarly, the cost room of lodging development is 417 (6,682 / 16 rooms per acre = 417) for a decrease of 1,559 per room compared to the current multi-unit transient fee.

Figure 23: Storm Drainage Development Impact Fee Schedule

#### Residential (per unit)

noonania (por anno)							
Development Type	Capital Cost	Units	Proposed	Current Fee	Increase /	Current Fee	Increase /
Бечегортен туре	per Acre	per Acre*	Fees	Non-Transient	Decrease	Transient	Decrease
Single Family	\$3,225	4.00	\$806	\$7,018	-\$6,212	\$6,775	-\$5,969
Mobile Home	\$5,263	12.00	\$438	\$3,952	-\$3,514		
Multi-Unit	\$6,706	12.00	\$558	\$2,380	-\$1,822	\$1,976	-\$1,418

#### Nonresidential (per square foot)

Development Type	Capital Cost per Acre	FAR*	Proposed Fees	Current Fee	Increase / Decrease
Lodging (per room)**	\$6,682	16.00	\$417	\$1,976	-\$1,559
Commercial	\$6,865	2.00	\$0.08	\$1.74	-\$1.66
Office & Other Services	\$6,658	2.00	\$0.08	\$1.74	-\$1.66
Industrial	\$7,134	0.63	\$0.26	\$2.30	-\$2.04
Institutional	\$6,767	0.50	\$0.31	\$1.74	-\$1.43

<sup>\*</sup>Town of Mammoth Lakes. Lodging 16 rooms per acre.



<sup>\*\*</sup>Current lodging fee based on multi-unit transient (per unit).

# PROJECTED FEE REVENUE

The storm drainage development impact fees shown in Figure 24 can be applied to future development to project the potential revenue generated by those fees if they are applied to future development projected in the Appendix. Storm drainage development impact fee revenue from future development is expected to total approximately \$789,000 over the next twenty years. Over the same time period, the Town will spend approximately \$7.7 million on the planned storm drainage system improvements. Projected capital costs will not be fully covered by development impact fee revenue because the capital improvement plan used to derive the storm drainage development impact fees represents an increase to the current level of service being provided by the Town. The projected \$6.9 million shortfall is the amount the Town must fund from other revenue to provide the increased level of service to the existing development base. This will ensure that future development pays for only its impacts and is not charged for a higher level of service than what is provided to existing residents.

Figure 24: Storm Drainage Development Impact Fee Revenue Projection Infrastructure Costs for Storm Drainage

	Growth Cost	Total Cost
Storm Drainage Improvements	\$789,442	\$7,700,000

Storm Drainage Development Impact Fee Revenue

		Residential	Lodging	Commercial	Office & Other Services	Industrial	Institutional
		\$640	\$417	\$0.08	\$0.08	\$0.26	\$0.31
		per housing unit	per room	per SF	per SF	per SF	per SF
	Year	Hsg Units	Rooms	KSF	KSF	KSF	KSF
Base	2015	9,462	1,524	804	485	302	208
Year 1	2016	9,511	1,524	817	493	307	211
Year 2	2017	9,560	1,574	831	501	312	215
Year 3	2018	9,609	1,574	844	509	318	218
Year 4	2019	9,659	1,624	859	518	323	222
Year 5	2020	9,709	1,624	863	520	324	223
Year 6	2021	9,759	1,624	868	523	326	224
Year 7	2022	9,809	1,624	872	526	327	225
Year 8	2023	9,861	1,674	877	529	330	226
Year 9	2024	9,911	1,674	881	532	331	227
Year 10	2025	9,963	1,674	886	534	332	228
Year 15	2030	10,224	1,724	905	546	340	234
Year 20	2035	10,490	1,749	924	557	347	238
	Twenty-Yr Increase	1,028	225	120	72	45	31
	Projected Revenue =>	\$658,504	\$93,825	\$9,470	\$5,524	\$11,870	\$9,490

Total Projected Revenues => \$788,683

Total Cost of Storm Drainage Expenditures => \$7,700,000

Other Revenue Needed => \$6,911,317



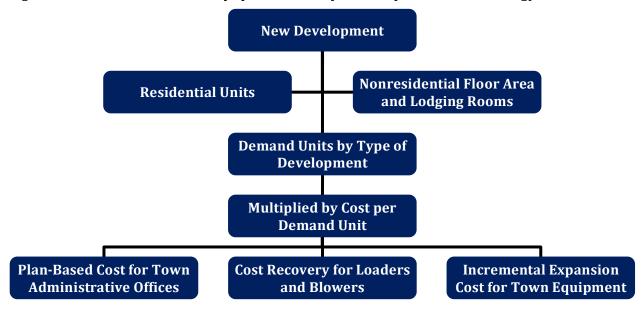
# **GENERAL FACILITIES & EQUIPMENT**

# **METHODOLOGY**

The general facilities and equipment development impact fees have been calculated using a combination of the plan-based, cost recovery, and incremental expansion methodologies. First, a plan-based methodology is used for new town administrative offices. Secondly, a cost recovery methodology is used for loaders and blowers. Finally, an incremental expansion methodology is used for new town equipment.

As shown in Figure 25, the general facilities and equipment development impact fees are based on demand units. A demand unit represents the impact of a typical development on the demand for services, based on the assumption that the demand for services is reasonably proportional to the presence of people at the site of a land use. The residential component of the demand unit calculation is based on housing unit size (persons per housing unit). For nonresidential development, the demand unit calculation is jobs per 1,000 square feet. See the Appendix of this report for the calculation of demand units.

Figure 25: General Facilities & Equipment Development Impact Fee Methodology Chart



#### LEVEL OF SERVICE

#### **Plan-Based Component**

The Town of Mammoth Lakes currently operates out of a leased facility. However, the Town plans to construct a 20,000 square foot town administrative office to replace the leased facility. The cost of the planned facility is approximately \$6.3 million, or \$315 per square foot (\$6.3 million / 20,000 SF). This total, as shown in Figure 26, is based on a facility cost of \$6.3 million (\$9 million – 30% revenue credit = \$6.3 million). This new facility is intended to serve new growth as well as enhance the level of service provided to current residents and businesses. Therefore, to ensure that new



development is not charged for a higher level of service than is currently provided to existing residents and businesses, the cost of this facility is spread over the projected peak population and jobs in the year 2035.

To ensure residential and nonresidential development pay only their proportionate share of town administrative offices costs, functional population is used to allocate demand for town services. Based on data from the California Department of Finance and the U.S. Census Bureau's OnTheMap web application, residential development accounts for approximately 78% of demand for town services and nonresidential development accounts for the remaining 22% of demand. To determine the planned level of service in 2035, the square footage of the planned facility is allocated proportionately between residential and nonresidential development and then divided by the projected service units for each type of development in 2035. The residential level of service is 0.5511 square feet per person (20,000 SF X 78% residential share / 28,305 peak population), and the nonresidential level of service is 0.8313 square feet per job (20,000 SF X 22% nonresidential share / 5,293 jobs). Based on the cost per square foot of \$315, and the planned level of service in 2035, the cost per person is \$173.61 (\$315 X 0.5511 SF per person = \$173.61) and the cost per job is \$261.85 (\$315 X 0.8313 SF per job = \$261.85). This is shown below in Figure 26.

Figure 26: Planned Town Administrative Offices Cost Factors

## **General Facilities Cost Factors**

	Square Feet	Cost*
Town Administrative Offices	20,000	\$6,300,000

## **Allocation Factors for General Facilities**

Cost per Square Foot	\$315
2035 Peak Population	
2035 Jobs	
Residential Share	
Nonresidential Share	22%

# Level-of-Service (LOS) Standards

Square Feet per Person	0.5511
Square Feet per Job	0.8313

## **Cost Analysis**

Cost per Person	\$173.61
Cost per Job	\$261.85

<sup>\*\$9</sup> million (facility cost) - 30% (current revenue) = \$6.3 million.



#### **Cost Recovery Component**

Since snow removal services are provided throughout the Town, new development in Mammoth Lakes will benefit from the existing loaders and blowers. Therefore, the general facilities and equipment development impact fees contain a cost recovery component. Figure 27 indicates that the current value of the existing loaders and blowers is \$765,000. The current value is determined by depreciating the 2007 cost of \$1.275 million based on the remaining useful life (\$1.275 million / 20-year useful life X 12 years of remaining useful life = \$765,000). To ensure new development is charged for only its share of the cost, a growth share of 6.1% is applied to the current value. The growth share is based on the increase in peak population and jobs from 2015 through 2026—the last year of the useful life of the loaders and blowers (1 - ((25,546 peak population + 4,607 jobs) / (27,027 + 5,096))). Based on projections and assumptions discussed in the Appendix, peak population is projected to increase by 1,481 by 2026 with jobs increasing by 489 during the same period. The cost per person is \$24.70 (\$46,921 X 78% residential share / 1,481 population increase) and the cost per job is \$21.10 (\$46,921 X 22% nonresidential share / 489 job increase).

Figure 27: Loaders and Blowers Cost Recovery Component

Debt Obligation	Growth Share*	End of Useful Life	Remaining Value	Growth Cost	Population Increase 2015-2026	Jobs Increase 2015-2026
Loaders and Blowers	6.1%	2026	\$765,000	\$46,921	1,481	489

Cost Allocation			
Residential (per person)	78%	\$24.70	
Nonresidential (per job)	22%	\$21.10	

<sup>\*</sup>Growth Share = 1 - (2015 peak pop and jobs / 2026 peak pop and jobs)



# **Incremental Expansion Component**

The general facilities and equipment development impact fee methodology also contains a cost component for equipment operated by the Town. Since this equipment will be purchased over time, an incremental expansion method is utilized. As shown in Figure 28, the Town's inventory currently includes 18 units of equipment. The current level of service is based on the functional population and the 2015 demand units—peak population (25,546) for residential development and jobs (4,607) for nonresidential development. Therefore, the current residential level of service is 0.0005 units per person (18 units X 78% residential share / 25,546 peak population), and the nonresidential level of service equals 0.0009 units per job (18 units X 22% nonresidential share / 4,607 jobs).

Figure 28: Town Equipment Cost Factors

# **Existing Town Equipment**

Equipment (units)			
Allocation Factors for Town Equipment			
2015 Population	25.546		

2015 Population	
2015 Jobs	4,607
Residential Share	78%
Nonresidential Share	22%

## Level-of-Service (LOS) Standards

LOS: Units per Person	0.0005
LOS: Units per Job	0.0009
Cost Analysis	

Cost per Unit	\$90,000
Cost per Person	\$53.58
Cost per Job	\$60.77

#### Cost Basis from Planned Projects

Project*	Units*	Unit Cost*	Total Cost*
GF-08: Sidewalk/Trail Snow Removal	2	\$90,000	\$180,000
Average Cost per Unit	\$90,000		

<sup>\*</sup>Source: Town of Mammoth Lakes



Shown in Figure 29, peak population is projected to equal 28,305 in 2035 for an increase of 2,759. Similarly, jobs are also projected to increase by 2035 to 5,293, or an increase of 686. When applied to the current LOS, new development will demand approximately 2 additional units of equipment ((0.0005 residential LOS X 2,759 peak population increase) + (0.0009 nonresidential LOS X 686 job increase) = 2.106). Based on estimates from Mammoth Lakes, the average cost per unit of equipment is \$90,000, so the growth-related expenditure on town equipment is \$189,520 (2.106 units of equipment X \$90,000 = \$189,520). The cost per person for town equipment is \$53.58 (78% residential share X \$189,520 / 2,759 peak population increase), and the cost per job is \$60.77 (22% nonresidential share X \$189,520 / 686 job increase).

Figure 29: Projected Demand for Town Equipment

# **Town Equipment Level-of-Service Standards**

Equipment - Residential	0.0005 Units per Person
Equipment - Nonresidential	0.0009 Units per Job
Average Cost	\$90,000 per Unit

		wn Equipment		
	Year	Population	Jobs	Units
Base	2015	25,546	4,607	18
Year 1	2016	25,678	4,683	18
Year 2	2017	25,810	4,760	18
Year 3	2018	25,942	4,838	18
Year 4	2019	26,073	4,918	19
Year 5	2020	26,208	4,944	19
Year 6	2021	26,343	4,970	19
Year 7	2022	26,478	4,996	19
Year 8	2023	26,616	5,023	19
Year 9	2024	26,751	5,049	19
Year 10	2025	26,889	5,072	19
Year 15	2030	27,589	5,188	20
Year 20	2035	28,305	5,293	20
Tı	2			
G	\$189,520			



# MAXIMUM SUPPORTABLE GENERAL FACILITIES & EQUIPMENT DEVELOPMENT IMPACT FEE

Figure 30 provides a summary of the costs per demand unit used to calculate the general facilities and equipment development impact fees. As discussed previously, general facilities and equipment development impact fees are calculated for both residential and nonresidential land uses. As shown in Figure 30, the total cost per residential demand unit is \$251.89 per person, and the total cost per nonresidential demand unit is \$343.72 per job. The proposed fee for a unit in a multi-unit structure is \$705 (\$251.89 X 2.80 persons per housing unit = \$705) and represents a \$464 decrease compared to the current non-transient fee and a \$1,247 decrease compared to the current transient fee. Similarly, the cost per square foot of institutional development is \$0.34 (\$343.72 X 0.98 jobs per 1,000 SF / 1,000 = \$0.34) for a decrease of \$1.62 per square foot compared to the current fee.

Figure 30: General Facilities & Equipment Development Impact Fee Schedule

Fee Component	Cost per Person	Cost per Job
Town Administrative Offices	\$173.61	\$261.85
Loaders and Blowers	\$24.70	\$21.10
Town Equipment	\$53.58	\$60.77
TOTAL	\$251.89	\$343.72

#### Residential (per unit)

Development Type	Persons per Housing Unit*	Proposed Fees	Current Fee Non-Transient		Current Fee Transient	Increase / Decrease
Single Family	2.68	\$674	\$1,169	-\$495	\$1,952	-\$1,278
Mobile Home	2.28	\$574	\$1,169	-\$595		
Multi-Unit	2.80	\$705	\$1,169	-\$464	\$1,952	-\$1,247

<sup>\*</sup>See Figure A5.

#### Nonresidential (per square foot)

Development Type	Jobs per	Proposed	Current	Increase /
Бечеюртені туре	1,000 Sq Ft**	Fees	Fee	Decrease
Lodging (per room)***	1.20	\$412	\$1,952	-\$1,540
Commercial	1.82	\$0.63	\$1.95	-\$1.33
Office & Other Services	1.82	\$0.63	\$1.95	-\$1.33
Industrial	0.75	\$0.26	\$0.36	-\$0.10
Institutional	0.98	\$0.34	\$1.95	-\$1.62

<sup>\*\*</sup>See Figure A9. Lodging equals jobs per room.



<sup>\*\*\*</sup>Current lodging fee based on multi-unit transient (per unit).

# PROJECTED FEE REVENUE

Finally, the development impact fees shown in Figure 31 can be applied to future development to project the potential revenue generated by those fees if they are applied to future development projected in the Appendix. General facilities and equipment development impact fee revenue from new growth is expected to total approximately \$894,000 over the next twenty years. Over the same time-period, the Town will spend approximately \$7.25 million on the planned administrative offices and growth-related units of equipment. Projected capital costs will not be fully covered by development impact fee revenue because the capital improvement plan used to derive the general facilities and equipment development impact fees represents an increase to the current level of service being provided by the Town. The projected \$6.36 million shortfall is the amount the Town must fund from other revenue to provide the increased level of service to the existing development base. This will ensure that future development pays for only its impacts and is not charged for a higher level of service than what is provided to existing residents.

Figure 31: General Facilities & Equipment Development Impact Fee Revenue Projection
Infrastructure Cost for General Facilities & Equipment

	Growth Cost	Total Cost
<b>Town Administrative Offices</b>	\$658,552	\$6,300,000
Loaders and Blowers	\$46,921	\$765,000
Town Equipment	\$189,520	\$189,520
	\$894,993	\$7,254,520

General Facilities & Equipment Development Impact Fee Revenue

		Residential	Lodging	Commercial	Office & Other Services	Industrial	Institutional
		\$676	\$412	\$0.63	\$0.63	\$0.26	\$0.34
		per housing unit	per room	per SF	per SF	per SF	per SF
	Year	Hsg Units	Rooms	KSF	KSF	KSF	KSF
Base	2015	9,462	1,524	804	485	302	208
Year 1	2016	9,511	1,524	817	493	307	211
Year 2	2017	9,560	1,574	831	501	312	215
Year 3	2018	9,609	1,574	844	509	318	218
Year 4	2019	9,659	1,624	859	518	323	222
Year 5	2020	9,709	1,624	863	520	324	223
Year 6	2021	9,759	1,624	868	523	326	224
Year 7	2022	9,809	1,624	872	526	327	225
Year 8	2023	9,861	1,674	877	529	330	226
Year 9	2024	9,911	1,674	881	532	331	227
Year 10	2025	9,963	1,674	886	534	332	228
Year 15	2030	10,224	1,724	905	546	340	234
Year 20	2035	10,490	1,749	924	557	347	238
Tv	venty-Yr Increase	1,028	225	120	72	45	31
Proje	cted Revenue =>	\$663,317	\$90,906	\$73,871	\$44,439	\$11,467	\$10,099
							4004 000

Total Projected Revenues => \$894,099

Total Cost of General Facilities & Equipment Expenditures => \$7,254,520

Other Revenue Needed => \$6,360,421



# PARKLAND AND RECREATION

# **METHODOLOGY**

The development impact fees for parkland and recreation are derived using an incremental expansion methodology. As shown in Figure 32, cost components are allocated 100% to residential development<sup>3</sup> and include park land, park improvements, and recreation facilities. This methodology will enable Mammoth Lakes to maintain the current LOS standard as the Town grows. Development impact fee revenue collected using this methodology may not be used to replace or rehabilitate existing improvements.

Figure 32: Parkland and Recreation Development Impact Fee Methodology Chart



<sup>&</sup>lt;sup>3</sup> Residential development for parkland and recreation fees refers to the parks population, which includes the peak population and the population in lodging units.



# LEVEL OF SERVICE

## **Incremental Expansion Component - Park Land**

The parkland and recreation development impact fee methodology contains a cost component for park land. As shown in Figure 33, Mammoth Lakes' current inventory of park land includes 30.96 acres. The current level of service for park land is based on the 2015 parks population of 28,549 (25,546 peak population and 3,048 lodging population) with acres allocated per 1,000 persons. Therefore, the current level of service for park land is 1.08 acres per 1,000 persons (30.96 acres / (28,549 parks population / 1,000) = 1.08).

Figure 33 lists current cost estimates for the acquisition of park land in Mammoth Lakes. Based on estimates from Town staff, the cost to acquire 12 acres of park land is approximately \$4.7 million. This is based on a cost per square foot of \$9 (\$18 X 50% discount). Other funding<sup>4</sup> is expected to cover 75% of the total cost, which leaves a Town share of approximately \$1.18 million (\$4.7 million -75% = \$1.18 million). The per acre cost for park land after all discounts and other funding sources is \$98,010 (\$1.18 million / 12 acres = \$98,010). As discussed above, the cost of park land is allocated 100% to residential development.

Figure 33: Park Land Cost Factors

## **Existing Park Land**

Site		Acres
Bell Parcel		16.70
Community Center Park		5.18
Mammoth Creek Park West		4.97
Trails End Park		4.11
	TOTAL	30 96

## Level-of-Service (LOS) Standards

2015 Parks Population	28,594
LOS: Acres per 1,000 Persons	1.08

#### **Cost Analysis**

Average Land Cost per Acre	\$98,010
Land Cost per Person	\$105.99

# Cost Basis from Planned Projects

Project*	Acres*	Cost per SF*	Total Cost	Other Funding*	Town Share
PR-10, 06: Park Land Acquisition	12.00	\$9	\$4,704,480	\$3,528,360	\$1,176,120
Average Cost per Acre	\$98,010				

<sup>\*</sup>Source: Town of Mammoth Lakes

<sup>&</sup>lt;sup>4</sup> Other funding includes grants, other revenue, and funding from Measure R and Measure U.



40

Shown in Figure 34, the parks population is projected to equal 31,803 in 2035 for an increase of 3,209. When applied to the current LOS, new residential development will demand 3.47 additional acres of park land (1.08 LOS X (3,209 parks population increase / 1,000) = 3.47). Based on the average cost per acre of \$98,010, the growth-related expenditure on park land is \$340,095 (3.47 acres X \$98,010 = \$340,095), and the cost per person for park land is \$105.99 (\$340,095 / 3,209 parks population increase = \$105.99).

Figure 34: Projected Demand for Parkland and Recreation Infrastructure

Parkland and Recreation Level-of-Service Standards

Park Land	1.08 Acres per 1,000 Persons
Park Land Cost	\$98,010 per Acre
Park Improvements	0.17 Acres per 1,000 Persons
Park Improvements Cost	\$312,500 per Acre
Parkland and Recreation Facilities	787 SF per 1,000 Persons
Parkland and Recreation Facilities Cost	\$119 per SF

	Need for Parkland and Recreation Infrastructure						
	Year	Parks	Total	Developed	Facility SF		
	rear	Population	Acres	Acres	rucinty 31		
Base	2015	28,594	30.96	5.00	22,500		
Year 1	2016	28,726	31.10	5.02	22,604		
Year 2	2017	28,958	31.35	5.06	22,786		
Year 3	2018	29,090	31.50	5.09	22,890		
Year 4	2019	29,321	31.75	5.13	23,072		
Year 5	2020	29,456	31.89	5.15	23,178		
Year 6	2021	29,591	32.04	5.17	23,285		
Year 7	2022	29,726	32.19	5.20	23,391		
Year 8	2023	29,964	32.44	5.24	23 <i>,</i> 578		
Year 9	2024	30,099	32.59	5.26	23,684		
Year 10	2025	30,237	32.74	5.29	23,793		
Year 15	2030	31,037	33.61	5.43	24,422		
Year 20	2035	31,803	34.43	5.56	25 <i>,</i> 025		
	Twenty-Yr Increase	3,209	3.47	0.56	2,525		
Growt							
	\$300,448						
	Growth-Related Expenditure on Parkland and Recreation Facilities =>  Growth-Related Expenditure on Parkland and Recreation =>						



#### **Incremental Expansion Component - Park Improvements**

The parkland and recreation development impact fee also includes a cost component for park improvements. Similar to the park land component, park improvements are also allocated on a per acre basis. For this component, however, developed park acres are used to determine the LOS. As shown in Figure 35, the current inventory of park improvements—developed acres—is 5.0 acres. The current level of service for park improvements is also based on the 2015 parks population of 28,549 (25,546 peak population and 3,048 lodging population) with acres allocated per 1,000 persons. Therefore, the current level of service for park improvements is 0.17 acres per 1,000 persons (5.0 acres / (28,549 parks population / 1,000) = 0.17).

Figure 35 lists current cost estimates for park improvements in Mammoth Lakes. Based on estimates from Town staff, the cost to improve five acres of park land is 6.25 million. Similar to the park land cost component, other funding is expected to cover 75% of the total cost, which leaves a Town share of approximately 1.56 million (6.25 million - 75% = 1.56 million). Therefore, the cost per acre for park improvements is 1.56 million / 5.0 acres = 1.56 million / 1.56 million /

Figure 35: Park Improvements Cost Factors

## **Existing Park Improvements**

	Developed	Undeveloped	Total
Park Improvements	5.00	25.96	30.96
Level-of-Service (LOS) Standards			
2015 Parks Population	28,594		
LOS: Developed Acres Per 1,000 Persons	0.17		
Cost Analysis			
Average Improvement Cost per Acre	\$312,500		
Improvement Cost per Person	\$54.54		

# Cost Basis from Planned Projects

Project*	Acres*	Total Cost	Other Funding*	Town Share
PR-10, 06: Park Land Development	5.00	\$6,250,000	\$4,687,500	\$1,562,500
Average Cost per Acre	\$312,500			

<sup>\*</sup>Source: Town of Mammoth Lakes

Shown in Figure 34, the parks population is projected to equal 31,803 in 2035 for an increase of 3,209. When applied to the current LOS, new residential development will demand approximately 0.56 additional developed acres of park improvements (0.17 LOS X (3,209 parks population increase /1,000) = 0.56). With an average cost per acre of \$312,500, the growth-related expenditure on park improvements is \$175,000 (0.56 acres X \$312,500 = \$175,000), and the cost per person for park improvements is \$54.54 (\$175,000 / 3,209 parks population increase \$54.54).

 $<sup>^{\</sup>rm 5}$  Other funding includes grants, other revenue, and funding from Measure R and Measure U.



#### Incremental Expansion Component – Parkland and Recreation Facilities

The final cost component of the parkland and recreation development impact fee is for parkland and recreation facilities. The Town's inventory of parkland and recreation facilities includes a 2,500-square-foot community center and a 20,000-square-foot multi-use facility for a total of 22,500 square. Like the other parkland and recreation components, the current level of service for parkland and recreation facilities is based on the 2015 parks population of 28,549 (25,546 peak population and 3,048 lodging population) and facility square footage is allocated per 1,000 persons. Therefore, the current level of service for parkland and recreation facilities is 787 square feet per 1,000 persons (22,500 square feet / (28,549 parks population / 1,000) = 787).

Figure 36 lists current cost estimates for recreation facilities in Mammoth Lakes. Based on estimates from Town staff, the cost to construct the projects listed in the bottom portion of Figure 36 is \$28.4 million and includes 69,500 square feet of recreation facilities. Similar to the other parkland and recreation cost components, other funding<sup>6</sup> is expected to cover a portion of the total cost, which leaves a Town share of approximately \$8.25 million (\$28.4 million - \$20.15 million = \$8.25 million). When averaged over the total square footage, the cost per square foot of recreation facilities is \$119 (\$8.25 million / 69,500 square feet = \$119). As discussed above, the cost of recreation facilities is allocated 100% to residential development.

Figure 36: Parkland and Recreation Facilities Cost Factors

#### **Existing Parkland and Recreation Facilities**

Facility	Total SF
Community Center	2,50
Multi-Use Facility	20,00
-	TOTAL 22,50

# Level-of-Service (LOS) Standards

LOS: Square Feet Per 1,000 Persons	<i>787</i>
2015 Parks Population	28,594
Facility Square Footage	22,500

#### **Cost Analysis**

Average Cost per Square Foot	\$119
Facility Cost per Person	\$93.64

#### Cost Basis from Planned Projects

Project*	Square Feet*	Facility Cost*	Other Funding*	Town Share
PR-01: Outdoor Venue/Amphitheater	16,000	\$8,000,000	\$6,000,000	\$2,000,000
PR-02A: Recreation Center	25,000	\$15,000,000	\$11,250,000	\$3,750,000
PR-02B: Multi-Use Facility	26,000	\$2,400,000	\$1,400,000	\$1,000,000
Community Center	2,500	\$3,000,000	\$1,500,000	\$1,500,000
TOTAL	69,500	\$28,400,000	\$20,150,000	\$8,250,000
Average Cost per Square Foot	\$119			

<sup>\*</sup>Source: Town of Mammoth Lakes

<sup>&</sup>lt;sup>6</sup> Other funding includes grants, other revenue, and funding from Measure R and Measure U.



As shown in Figure 34, the parks population is projected to equal 31,803 in 2035 for an increase of 3,209. When applied to the current LOS, new residential development will demand approximately 2,525 additional square feet of parkland and recreation facilities (787 LOS X (3,209 parks population increase / 1,000) = 2,525). With an average cost per square foot of \$119, the growth-related expenditure on parkland and recreation facilities is \$300,448 (2,525 square feet X \$119 = \$300,448), and the cost per person for parkland and recreation facilities is \$93.64 (\$300,448 / 3,209 parks population increase = \$93.64).

# MAXIMUM SUPPORTABLE PARKLAND AND RECREATION DEVELOPMENT IMPACT FEE

Figure 37 provides a summary of the costs per demand unit used to calculate the parkland and recreation development impact fees. As previously discussed, parkland and recreation development impact fees are calculated for residential land uses. Because visitors staying in Mammoth Lakes hotels increase demand for parkland and recreation services, lodging is considered a residential land use for parkland and recreation fees. As shown in Figure 37, the total cost per residential demand unit is \$254.17. The proposed fee for a single-family unit is \$680 (\$254.17 X 2.68 persons per housing unit = \$680) and represents a \$2,212 decrease compared to the current non-transient fee and a \$4,149 decrease compared to the current transient fee. For lodging, the cost per room is \$508 (\$254.17 X 2.0 persons per room = \$508) for a decrease of \$4,321 compared to the current multi-unit transient fee.

Figure 37: Parkland and Recreation Development Impact Fee Schedule

Fee Component	Cost per Person
Park Land	\$105.99
Park Improvements	\$54.54
Parkland and Recreation Facilities	\$93.64
TOTAL	\$254.17

## Residential (per unit)

Development Type	Persons per Housing Unit*	Proposed Fees	Current Fee Non-Transient	•	Current Fee Transient	Increase / Decrease
Single Family	2.68	\$680	\$2,892	-\$2,212	\$4,829	-\$4,149
Mobile Home	2.28	\$579	\$2,892	-\$2,313		
Multi-Unit	2.80	\$711	\$2,892	-\$2,181	\$4,829	-\$4,118
Lodging (per room)**	2.00	\$508			\$4,829	-\$4,321

<sup>\*</sup>See Figure A5.



<sup>\*\*</sup>Persons per room provided by Mammoth Lakes. Current lodging fee based on multi-unit transient (per unit).

# PROJECTED FEE REVENUE

Finally, the development impact fees shown in Figure 38 can be applied to future development to project the potential revenue generated by those fees if they are applied to future development projected in the Appendix. Parkland and recreation development impact fee revenue from future development is expected to total approximately \$815,500 over the next twenty years. Over the same time period, the Town will spend the same amount on growth-related parkland and recreation infrastructure.

Figure 38: Parkland and Recreation Development Impact Fee Revenue Projection
Infrastructure Costs for Parkland and Recreation

Park Land	\$340,095
Park Improvements	\$175,000
Parkland and Recreation Facilities	\$300,448
TOTAL	\$815,543

Parkland and Recreation Development Impact Fee Revenue

		Residential \$682	<i>Lodging</i> \$508
		per housing unit	per room
	Year	Hsg Units	Rooms
Base	2015	9,462	1,524
Year 1	2016	9,511	1,524
Year 2	2017	9,560	1,574
Year 3	2018	9,609	1,574
Year 4	2019	9,659	1,624
Year 5	2020	9,709	1,624
Year 6	2021	9,759	1,624
Year 7	2022	9,809	1,624
Year 8	2023	9,861	1,674
Year 9	2024	9,911	1,674
Year 10	2025	9,963	1,674
Year 15	2030	10,224	1,724
Year 20	2035	10,490	1,749
	Twenty-Yr Increase	1,028	225
		\$701,165	\$114,378
Total Projected Revenues =>			\$815,543
Total Cost of Parkland and Recreation Expenditures =>			\$815,543
Other Revenue Needed =>			\$0



# **APPENDIX**

The population, housing unit, job, and nonresidential floor area projections discussed in this document provide the foundation for the calculation of development impact fees. To evaluate the demand for growth-related infrastructure from various types of development, TischlerBise prepared documentation on population, housing units by type, jobs, floor area by type of nonresidential development, and average weekday vehicle trip generation rates.

Development impact fees are based on the need for growth-related improvements and they must be proportionate by type of land use. The demographic data and development projections are used to demonstrate proportionality and anticipate the need for future infrastructure. Demographic data reported by the U.S. Census Bureau and the California Department of Finance, and data provided by the Town, are used to calculate base year estimates and annual projections for a 20-year horizon. Typically, impact fee studies look out five to ten years, with the expectation that fees will be periodically updated (every three to five years).

## RESIDENTIAL DEVELOPMENT

Current estimates and future projections of residential development are detailed in this section, including population and housing units by type.

#### **Recent Residential Construction**

Figure A1 shows an estimate of housing units added annually by type of housing unit (tracked by the California Department of Finance). Residential construction prior to the recession was at or above 100 units annually. Since 2010, 2013 is the only year above 10 units.

25 Single Unit 20 2+ Unit 15 10 5 2011 2012 2013 2014 Single Unit 1 11 4 2+ Unit 0 2 0 4

Figure A1: Residential Housing Units, 2011-2014

Source: California Department of Finance, E-5 Population and Housing Estimates for Cities.

#### **Current Household Size and Peak Population**

According to the U.S. Census Bureau, a household is a housing unit that is occupied by year-round residents. Development impact fees often use per capita standards and persons per housing unit



(PPHU) or persons per household (PPH) to derive proportionate share fee amounts. When PPHU is used in the fee calculations, infrastructure standards are derived using year-round population. When PPH is used in the fee calculations, the methodology assumes a higher percentage of housing units will be occupied, thus requiring seasonal or peak population to be used when deriving infrastructure standards. TischlerBise recommends that development impact fees for residential development in the Town of Mammoth Lakes be imposed according to the number of persons per household. This methodology recognizes the impacts of seasonal population peaks.

Persons per Household requires data on population in occupied units and the types of units by structure. The 2010 census did not obtain detailed information using a "long-form" questionnaire. Instead, the U.S. Census Bureau switched to a continuous monthly mailing of surveys, known as the American Community Survey (ACS), which has limitations due to sample-size constraints. For example, data on detached housing units are now combined with attached single units (commonly known as townhouses). For development impact fees in Mammoth Lakes, "single family" residential units, listed as single units below, include detached (both stick-built and manufactured) and attached (commonly known as townhouses that share a common sidewall but are constructed on an individual parcel of land). The second residential category—"mobile homes"—includes mobile and manufactured homes. The final residential category, referred to as "multi-unit" in this study, includes duplexes and all other structures with two or more units on an individual parcel of land. This category is shown below as 2+ units.

Figure A2 below shows the ACS 2013 5-Year Estimates for Town of Mammoth Lakes. To calculate the PPH, persons (8,014) is divided by households (2,688). Dwellings with a single unit per structure (detached and attached) averaged 2.94 PPH. Mobile homes averaged 2.28 persons per household, and dwellings in structures with multiple units averaged 3.15 persons per household. The 2013 Town of Mammoth Lakes average *Persons per Household* factor was 2.98.

Figure A2: Persons per Household by Type of Housing Unit

2013 Summary by Type of Housing	Persons	House- holds	PPH	Housing Units	PPHU	Housing Mix
Single Units [1]	3,233	1,099	2.94	3,249	1.00	34%
Mobile Home	577	253	2.28	253	2.28	3%
2+ Units [2]	4,204	1,336	3.15	5,941	0.71	63%
Subtotal	8,014	2,688	2.98	9,443	0.85	Vacancy
Group Quarters	166					Rate
TOTAL	8,180	2,688		9,443		72%

Source: 2013 American Community Survey 5-Year Estimates

#### Peak Population Estimate

The first step in determining a base year peak population estimate is to calculate a peak occupancy rate using ACS estimates of housing units by occupancy. The peak occupancy rate is used to determine the number of peak households (occupied housing units during seasonal/peak periods). Occupied and vacant housing unit estimates shown in Figure A3 are from the 2013 ACS 5-Year Estimates, which is the most recent information available for the Town. Based on the ACS estimates, 86% (5,807) of the estimated 6,755 vacant units are seasonally populated. Peak



<sup>[1] &</sup>quot;Single Units" includes detached and attached.

<sup>[2] &</sup>quot;2+ Unit" includes units in structures with 2 or more units and "other" units.

households (8,495) is the sum of year-round occupied households (2,688) and seasonally-populated units (5,807). The 2013 peak occupancy rate of 90 percent is the relationship of peak households (8,495) to total housing units (2,688 occupied + 5,807 vacant). Using peak households reduces the vacancy rate from a year-round rate of 72% to a seasonal rate of approximately 10%.

Figure A3: Household Occupancy Rates for Town of Mammoth Lakes

Housing	Housing Units			Peak Hou	ıseholds	Peak Occ.	
Unit Type	Occupied	Vacant	Vac. Share	Seasonal	Count	Share	Rate
Single Unit	1,099	2,150	32%	1,858	2,957	35%	91%
Mobile Homes	253	0	0%	0	253	3%	100%
2+ Units	1,336	4,605	68%	3,949	5,285	62%	89%
Total	2,688	6,755		5,807	8,495	100%	90%

Source: 2013 American Community Survey 5-Year Estimates

Next, peak occupancy rates by unit type are applied to the 2013 and 2014 new residential units from Figure A1 to determine how many peak households have been added since the 2013 estimates. See Figure A4 for additional detail.

Figure A4: Peak Households

Housing	2013 P	eak	Housing Unit	s Added [2]	2015 Peak
Unit Type	Households [1]	Occupancy	2013	2014	Households
Single Unit	2,957	91%	10	4	2,971
Mobile Homes	253	100%	0	0	253
2+ Units	5,285	89%	0	4	5,289
Total	8,495	90%	10	8	8,513

<sup>[1] 2013</sup> American Community Survey 5-Year Estimates

The last step in calculating a base year peak population is the application of the PPH factors by housing type from Figure A2 to the base year peak households by housing type (see Figure A4). The 2013 peak population estimate for the Town of Mammoth Lakes, 25,546, is the population in single family, mobile homes, and multifamily households (25,381) plus the 2015 estimate of the group quarters population (165). The group quarters population is estimated by applying the distribution of group quarters population (166) to the total population (8,180) from the 2013 ACS 5-Year Estimates to the estimate of year-round population in the Town of Mammoth Lakes for 2015 (8,140). As shown in Figure A5, the 2015 group quarters population estimate of 165 is added to the peak households population estimate of 25,381 to determine a base year 2015 peak population of 25,546 persons in the Town of Mammoth Lakes.

Figure A5: Peak Population Estimate

Housing	Persons Per	Ped	ak	Housing Uni	ts Added	Housing	2015 Peak
Unit Type	Household	Households	Population	2013	2014	Units	PPHU
Single Unit	2.94	2,971	8,740	11	4	3,264	2.68
Mobile Homes	2.28	253	577	0	0	253	2.28
2+ Units	3.15	5,289	16,643	0	4	5,945	2.80
Total	2.98	8,513	25,381	11	8	9,462	2.68

Group Quarters\* 165
Total Base Year Peak Population 25,546

Source: 2013 American Community Survey 5-Year Estimates group quarters population estimate applied to 2015 CA Dept. of Finance year-

round population estimate.



<sup>[2]</sup> California Department of Finance, E-5 Population and Housing Estimates for Cities

# Peak Population Estimates and Projections

TischlerBise analyzed recent growth trends and reviewed Town documents to calculate a 2015 year-round population. Based on data from the California Department of Finance, the Town assumes there will be steady, annual population growth, but the Town will add population at a rate of 0.51%, compared to the County's projected growth rate of 0.69% over the next two decades. Using this growth rate, Mammoth Lakes' 2015 year-round population estimate is 8,140. Seasonal population is also projected based on the California Department of Finance's assumptions and projections. Seasonal population includes part-time inhabitants who utilize, or may be expected to utilize, public facilities or services, but are not residents. As such, some impact fee categories will combine year-round and seasonal population as peak population in order to better allocate infrastructure costs to demand for infrastructure. Seasonal population is assumed to be 214% of the year-round population.

Figure A6 shows projections for year-round and seasonal population and households through 2035. The figure shows population projections for both households and housing units with group quarters held constant. Years with adopted population estimates or projections are marked in yellow in the table below. To project numbers of households through 2035, TischlerBise divided peak population in households by the current weighted average persons per household of 2.98 (see Figure A2). Similarly, to project numbers of housing units during the same period, TischlerBise divided peak population in households by the 2015 peak persons per housing unit of 2.68 (see Figure A5).

Figure A6: Population Estimates and Projections, 2010-2035

	Рори		d Housing t of Calend		[1]	Base Year	Projections [2]			
	2010	2011	2012	2013	2014	2015	2020	2025	2030	2035
Year-Round Population - Mono	14,202	14,348	14,416	14,301	14,143	14,481	15,103	15,705	16,199	16,620
TOML %	58.0%	57.5%	57.4%	57.3%	57.3%	56.2%	55.3%	54.6%	54.3%	54.3%
Year-Round Population - TOML	8,234	8,245	8,272	8,197	8,098	8,140	8,351	8,568	8,791	9,019
Seasonal Populuation		17,631	17,688	17,528	17,316	17,406	17,857	18,321	18,798	19,286
Peak Population		25,876	25,960	25,725	25,414	25,546	26,208	26,889	27,589	28,305
Group Quarters				166	158	165	165	165	165	165
Peak Population in Households				25,559	25,256	25,381	26,043	26,724	27,424	28,140
Peak Households				8,573	8,471	8,513	8,735	8,964	9,198	9,438
Housing Units				9,528	9,416	9,462	9,709	9,963	10,224	10,490

<sup>[1]</sup> California Department of Finance, E-5 Population and Housing Estimates for Cities

Population and housing unit projections are used for the purpose of having an understanding of the possible future pace of service demands, revenues, and expenditures. As these factors will vary to the extent that future development varies, depending on the methodologies used for the impact fee calculations, there will be little or no effect on the actual amount of the impact fee.

# Parks Population Estimates and Projections

In order to allocate demand for parkland and recreation infrastructure to lodging, a parks population is needed. This total, 28,594 in 2015, is the sum of the peak population and the number of persons in hotel rooms (lodging). According to the Town of Mammoth Lakes, hotels rooms



<sup>[2]</sup> California Department of Finance, P-4 Projected Households, Household Population, Group Quarters and Persons per Household for the Counties and State of California, 2010-2030, March 2015.

(lodging) average two persons per room with a current inventory of 1,524 rooms. In 2015, hotel rooms had a year-round population of 3,048. When combined with the 2015 peak population, the 2015 parks population is 28,594 (25,546 + 3,048). Lodging projections shown in Figure A10, and the persons per hotel room average (2.0), are used to project the population in hotel rooms needed for the parks population.

# **Residential Estimates and Projections**

Based on California Department of Finance data and recent residential building trends, the Town is projected to add population and housing units over the next 20 years. To calculate the annual projections of housing units by type, the annual total unit projection is multiplied by the 2013 ACS estimates housing stock distribution of 34% single units, 3% mobile homes, and 63% 2+ units (see Figure A2). The Town is projected to gain approximately 1,000 new housing units between 2015 and 2035, at an average annual increase of 51 units. This annual increase falls between the pre-recession increases in excess of 100 units annually and post-recession trends discussed in Figure A1.

Figure A7: Residential Development, 2015-2035

Fiscal

						Five-Year	Incremen	its ===>		Cum	ulative Incred	ise
	Base Yr	1	2	3	4	5	10	15	20	5-Year	10-Year	20-Year
	2015	2016	2017	2018	2019	2020	2025	2030	2035	2015-2019	2015-2025	2015-2035
POPULATION												
Year-Round	8,140	8,182	8,224	8,266	8,308	8,351	8,568	8,791	9,019	211	428	879
Peak	25,546	25,678	25,810	25,942	26,073	26,208	26,889	27,589	28,305	662	1,343	2,759
Parks Population	28,594	28,726	28,958	29,090	29,321	29,456	30,237	31,037	31,803	862	1,643	3,209
HOUSING UNITS												
Single Family	3,255	3,272	3,289	3,306	3,323	3,341	3,428	3,518	3,609	86	173	354
Mobile Home	254	255	256	257	259	260	267	274	281	6	13	27
Multi-Unit	5,953	5,984	6,015	6,046	6,077	6,108	6,268	6,432	6,600	155	315	647
TOTAL HOUSING UNITS	9.462	9.511	9.560	9.609	9.659	9.709	9.963	10.224	10.490	247	501	1.028

	Year								Averag	ge Annual Incr	eases
ANNUAL INCREASES	2015-16	2016-17	2017-18	2018-19	2019-20	2024-25	2029-30	2034-35	5-Year	10-Year	20-Year
Population	42	42	42	42	43	44	46	46	42	43	44
Single Family	17	17	17	16	18	18	19	19	17	17	18
Mobile Home	1	1	1	2	1	1	1	1	1	1	1
Multi-Unit	31	31	31	31	31	32	33	34	31	32	32
Total Housing Units	49	49	49	49	50	51	53	54	49	50	51



# Nonresidential Development

Current estimates and future projections of nonresidential development are detailed in this section, including employment and square footage by industry type.

## **Nonresidential Square Footage Development**

TischlerBise uses the term "jobs" to refer to employment by place of work. Job estimates by industry type are used to calculate nonresidential square footage based on nationally recognized average *Square Feet per Employee* data published by The Institute of Transportation Engineers (ITE), and shown in Figure A8 below. The five land uses highlighted in grey serve as nonresidential prototypes that are used by TischlerBise to derive average weekday vehicle trips and the projected increase in nonresidential floor area. Current units (rooms) for lodging and floor area estimates for commercial, office & other services, industrial, and institutional land uses are documented in the next section.

Figure A8: Nonresidential Service Units per Development Unit

			<u> </u>			
ITE	Land Use	Demand	Wkdy Ti		Emp Per	Sq Ft
Code	Lunu Ose	Unit	Per 1,000 Sq Ft [1]	Per Employee [1]	1,000 Sq Ft	Per Emp [2]
			Commercial			
	Average	1,000 Sq Ft	42.70	na	2.00	500
820	10K gross leasable area	1,000 Sq Ft	152.03	na	3.33	300
820	25K gross leasable area	1,000 Sq Ft	110.32	na	3.03	330
820	50K gross leasable area	1,000 Sq Ft	86.56	na	2.86	350
		Genera	l Office and Other S	ervices		
	Average	1,000 Sq Ft	11.03	3.32	3.32	301
710	10K gross floor area	1,000 Sq Ft	22.66	5.06	4.48	223
710	25K gross floor area	1,000 Sq Ft	18.35	4.43	4.14	241
710	50K gross floor area	1,000 Sq Ft	15.65	4.00	3.91	256
			Industrial			
110	Light Industrial	1,000 Sq Ft	6.97	3.02	2.31	433
140	Manufacturing	1,000 Sq Ft	3.82	2.13	1.79	558
150	Warehousing	1,000 Sq Ft	3.56	3.89	0.92	1,093
			Institutional			
520	Elementary School	1,000 Sq Ft	15.43	15.71	0.98	1,018
550	University/College	student	1.71	8.96	0.19	na
530	High School	student	1.71	19.74	0.09	na
		C	Other Nonresidentia	l		
610	Hospital	1,000 Sq Ft	13.22	4.50	2.94	340
310	Hotel	room	8.17	14.34	0.57	na
254	Assisted Living	bed	2.66	3.93	0.68	na

 $<sup>\</sup>label{eq:continuous} \textbf{[1] Trip Generation, Institute of Transportation Engineers, 2012}.$ 

## **Jobs by Type of Nonresidential Development**

TischlerBise reviewed data prepared by the U.S. Census Bureau's OnTheMap web application, the California Department of Transportation (CADOT), and estimates from the Town of Mammoth



<sup>[2]</sup> Square feet per employee calculated from trip rates except for Shopping Center data, which are derived from the Urban Land Institute's Development Handbook and Dollars and Cents of Shopping Centers.

Lakes to calculate a 2015 estimate of jobs by land use, and used a four-step process summarized below to estimate base year jobs and annual projections by industry type.

- 1. First, TischlerBise used the 2011 distribution of Mono County jobs in Mammoth Lakes (65.6%) from OnTheMap and the 2015 CADOT jobs projection for Mono County (7,022) to calculate a cumulative 2015 Town jobs estimate of 4,607.
- 2. Second, the 2011 OnTheMap distribution of jobs in the Town, organized by industry type (shown below in Figure A9), is applied to the 2015 jobs estimate of 4,607 to establish base year, rounded estimates of jobs by industry type.
- 3. Third, the CADOT growth rate for Mono County job growth, in five-year increments, is used to project annual job growth for the Town. Growth rates range from a high of 1.65% from 2014 through 2019 to a low of 0.40% from 2029 through 2034.
- 4. Finally, TischlerBise applies the 2011 OnTheMap distribution of jobs to the annual total jobs projection for each year past the base to calculate the jobs by industry for each year (see Figure A10).

As shown in Figure A9, 40% of jobs located in Mammoth Lakes in 2015 are assumed to be lodging jobs, 32% are commercial, office & other services jobs equal 19%, 5% are industrial jobs, and the remaining 4% are estimated to be institutional jobs, which includes both government and education jobs. Also shown in Figure A9 is an estimate of hotel (lodging) rooms and the current nonresidential floor area provided by the Town of Mammoth Lakes.

Figure A9: Distribution of Jobs by Industry Type

Туре	2011 Town Distribution [1]		Square Feet per Employee	2015 Base Year SF [3]	Jobs per 1,000 SF
Lodging (rooms)	40%	1,833	0.83	1,524	1.2
Commercial	32%	1,462	550	803,820	1.82
Office & Other Services	19%	882	550	484,864	1.82
Industrial	5%	226	1,335	301,799	0.75
Institutional	4%	204	1,018	207,702	0.98
TOTAL	100%	4,607	-	1,798,185	

 $<sup>[1] \</sup> U.S. \ Census \ Bureau, On The Map \ Application \ and \ LEHD \ Origin-Destination \ Employment \ Statistics, \ 2011.$ 

#### **Jobs and Nonresidential Development Projections**

Over the next twenty years, the Town is projected to continue adding jobs, but at a decreasing rate. Job growth rates, as defined by CADOT, in five-year increments are as follows:

1. 2014-2019: 1.65%

2. 2019-2024: 0.53%

3. 2024-2029: 0.46%

4. 2029-2034: 0.40%

To calculate jobs projections for each year past the base, the projected job growth rate calculated from CADOT data is used for the projection period, as is the 2011 distribution of jobs by industry



<sup>[2]</sup> Total jobs is 65.6% of Mono County jobs from the CA Dept. of Transportation, based on LEHD Mammoth Lakes and Mono County 2011 estimates.

<sup>[3]</sup> Commercial, Office & Other Services, and Industrial provided by Town of Mammoth Lakes.

type shown in Figure A9. This equates to an additional 686 jobs above the 2015 base year estimate of 4,607 with an average of 34 jobs a year for the next twenty years.

Using commercial development as an example, the annual square footage by industry type is calculated as follows: 1,462 (2015 commercial jobs) X 550 square feet per employee = 804 square feet (expressed in thousands). This calculation is repeated for each industry type and for each year of the projection period. To keep pace with job growth, the Town should expect to add roughly 13,000 square feet of nonresidential development annually over the next twenty years.

Figure A10: Nonresidential Development, 2015-2035

Fiscal

		Five-Year Increments ===>								Cun	ulative Incred	ise
	Base Yr	1	2	3	4	5	10	15	20	5-Year	10-Year	20-Year
	2015	2016	2017	2018	2019	2020	2025	2030	2035	2015-2019	2015-2025	2015-2035
EMPLOYMENT BY TYPE												
Lodging	1,833	1,863	1,894	1,925	1,956	1,967	2,018	2,064	2,106	134	185	273
Commercial	1,462	1,486	1,510	1,535	1,561	1,569	1,610	1,646	1,680	107	148	218
Office and Other Services	882	897	911	926	941	946	971	993	1,013	64	89	131
Industrial	226	230	234	238	242	243	249	255	260	17	23	34
Institutional	204	207	211	214	218	219	224	230	234	15	20	30
TOTAL JOBS	4,607	4,683	4,760	4,838	4,918	4,944	5,072	5,188	5,293	337	465	686
NONRES. FLOOR AREA (1,000 SF)							-					
Lodging (rooms)	1,524	1,524	1,574	1,574	1,624	1,624	1,674	1,724	1,749	100	150	225
Commercial	804	817	831	844	859	863	886	905	924	59	82	120
Office & Other Services	485	493	501	509	518	520	534	546	557	35	49	72
Industrial	302	307	312	318	323	324	332	340	347	23	31	45
Institutional	208	211	215	218	222	223	228	234	238	15	20	31
TOTAL NONRES. FLOOR AREA	1,798	1,828	1,859	1,889	1,921	1,931	1,980	2,026	2,066	132	182	268

	Year								Averag	ge Annual Incr	eases
ANNUAL INCREASES	2015-16	2016-17	2017-18	2018-19	2019-20	2024-25	2029-30	2034-35	5-Year	10-Year	20-Year
Jobs	76	77	78	80	26	23	21	21	67	47	34
Lodging (rooms)	0	50	0	50	0	0	50	0	20	15	11
Commercial Sq. Ft. (x1,000)	13	13	14	14	4	4	4	3	12	8	6
Office & Other Sq. Ft. (x1,000)	8	8	8	8	3	2	2	2	7	5	4
Industrial Sq. Ft. (x1,000)	5	5	5	5	1	1	1	1	5	3	2
Institutional Sq. Ft. (x1,000)	3	4	3	4	1	1	1	1	3	2	2
Total Nonres. Floor Area (x1,000)	30	30	30	32	10	9	8	8	26	18	13



# LAND USE ASSUMPTIONS - RESIDENTIAL AND NONRESIDENTIAL SUMMARY

Demographic data summarized in Figure A11 are the key inputs for the Development Impact Fee Study. Cumulative data are shown at the top and projected annual increases by type of development are shown at the bottom of the figure. The annual increases for the demographic indicators increase over the 20-year projection period, which is reflected by the 5-year, 10-year, and 20-year average annual increases shown at the bottom of Figure A11.

These projections are used to estimate development impact fee revenue and to indicate the anticipated need for growth-related infrastructure. However, development impact fee methodologies are designed to reduce sensitivity to accurate development projections in the determination of the proportionate share fee amounts. If actual development is slower than projected, development impact fee revenue will decline, but so will the need for growth-related infrastructure. In contrast, if development is faster than anticipated, the Town will receive an increase in development impact fee revenue but will also need to accelerate capital improvements to keep pace with development.

Figure A11: Annual Demographic Data, 2015-2035

						Five-Year	Incremen	its ===>		Cun	ulative Incred	ise
	Base Yr	1	2	3	4	5	10	15	20	5-Year	10-Year	20-Year
	2015	2016	2017	2018	2019	2020	2025	2030	2035	2015-2019	2015-2025	2015-2035
POPULATION	·		·	·	·		,	,				
Year-Round	8,140	8,182	8,224	8,266	8,308	8,351	8,568	8,791	9,019	211	428	879
Peak	25,546	25,678	25,810	25,942	26,073	26,208	26,889	27,589	28,305	662	1,343	2,759
Parks Population	28,594	28,726	28,958	29,090	29,321	29,456	30,237	31,037	31,803	862	1,643	3,209
HOUSING UNITS												
Single Family	3,255	3,272	3,289	3,306	3,323	3,341	3,428	3,518	3,609	86	173	354
Mobile Home	254	255	256	257	259	260	267	274	281	6	13	27
Multi-Unit	5,953	5,984	6,015	6,046	6,077	6,108	6,268	6,432	6,600	155	315	647
TOTAL HOUSING UNITS	9,462	9,511	9,560	9,609	9,659	9,709	9,963	10,224	10,490	247	501	1,028
EMPLOYMENT BY TYPE												
Lodging	1,833	1,863	1,894	1,925	1,956	1,967	2,018	2,064	2,106	134	185	273
Commercial	1,462	1,486	1,510	1,535	1,561	1,569	1,610	1,646	1,680	107	148	218
Office and Other Services	882	897	911	926	941	946	971	993	1,013	64	89	131
Industrial	226	230	234	238	242	243	249	255	260	17	23	34
Institutional	204	207	211	214	218	219	224	230	234	15	20	30
TOTAL JOBS	4,607	4,683	4,760	4,838	4,918	4,944	5,072	5,188	5,293	337	465	686
NONRES. FLOOR AREA (1,000 SF)												
Lodging (rooms)	1,524	1,524	1,574	1,574	1,624	1,624	1,674	1,724	1,749	100	150	225
Commercial	804	817	831	844	859	863	886	905	924	59	82	120
Office & Other Services	485	493	501	509	518	520	534	546	557	35	49	72
Industrial	302	307	312	318	323	324	332	340	347	23	31	45
Institutional	208	211	215	218	222	223	228	234	238	15	20	31
TOTAL NONRES. FLOOR AREA	1,798	1,828	1,859	1,889	1,921	1,931	1,980	2,026	2,066	132	182	268

=	Fiscal										
	Year								Averag	ge Annual Incr	eases
ANNUAL INCREASES	2015-16	2016-17	2017-18	2018-19	2019-20	2024-25	2029-30	2034-35	5-Year	10-Year	20-Year
Population	42	42	42	42	43	44	46	46	42	43	44
Single Family	17	17	17	16	18	18	19	19	17	17	18
Mobile Home	1	1	1	2	1	1	1	1	1	1	1
Multi-Unit	31	31	31	31	31	32	33	34	31	32	32
Total Housing Units	49	49	49	49	50	51	53	54	49	50	51
Jobs	76	77	78	80	26	23	21	21	67	47	34
Lodging (rooms)	0	50	0	50	0	0	50	0	20	15	11
Commercial Sq. Ft. (x1,000)	13	13	14	14	4	4	4	3	12	8	6
Office & Other Sq. Ft. (x1,000)	8	8	8	8	3	2	2	2	7	5	4
Industrial Sq. Ft. (x1,000)	5	5	5	5	1	1	1	1	5	3	2
Institutional Sq. Ft. (x1,000)	3	4	3	4	1	1	1	1	3	2	2
Total Nonres. Floor Area (x1,000)	30	30	30	32	10	9	8	8	26	18	13



# COMMUTING PATTERNS AND FUNCTIONAL POPULATION

As shown in Figure A12, the U.S. Census Bureau's Longitudinal Employer-Household Dynamics (LEHD) web application, OnTheMap, indicates that Mammoth Lakes received a significant inflow of 3,566 workers on an average weekday in 2011 (the most recent data year available). In addition to these non-resident workers, another 1,339 persons lived and worked in Mammoth Lakes in 2011. TischlerBise will account for commuting patterns in the allocation of transportation infrastructure costs to residential and nonresidential development, and to derive functional population, as described below.

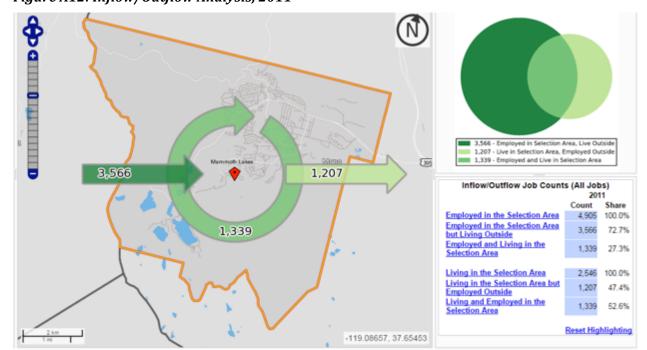


Figure A12: Inflow/Outflow Analysis, 2011

Source: U.S. Census Bureau. (2015). OnTheMap Version 6, Inflow/Outflow Jobs Counts All Jobs) Town of Mammoth Lakes, CA.

# **Functional Population**

TischlerBise recommends functional population to allocate the cost of certain facilities to residential and nonresidential development. Functional population has a long history in the professional literature. Originally called activity analysis by Stuart Chapin in 1965, and incorporated into the impact fee methodology by James Nicholas in the mid-1980s, functional population can be used to equitably spread infrastructure costs between residential and nonresidential sectors. TischlerBise has refined the functional population concept by incorporating what the U.S. Census Bureau calls "daytime population." Using jurisdiction-specific data on commuting patterns (discussed above), it is now possible to roughly estimate where people live and work (i.e., spend their daily hours).

As shown below, residents that do not work are assigned 20 hours per day to residential development and four hours per day to nonresidential development (annualized averages).



Residents that work in the Town are assigned 14 hours to residential development and 10 hours to nonresidential development. Residents that work outside the Town are assigned 14 hours to residential development. Inflow commuters are assigned 10 hours to nonresidential development.

Based on 2011 population data from the Town, and U.S. Census Bureau data from the LEHD program, the proportionate share for residential development is 78% (rounded), while nonresidential development accounts for 22% (rounded) of the functional population distribution.

Figure A13: Functional Population

Demand Units in 201:	!	Demand Hours/Day	Person Hours	Proportionate Share
Residential				
Estimated Residents 25,876				
Residents Not Working 23,33	)	20	466,594	
Employed Residents 2,54	<u>5</u>			
	47-	_		_
Employed in Service Area	1,339	14	18,746	
Employed outside Service Area	1,207	14	16,898	
	Resident	tial Subtotal	502,238	78%
Nonresidential		•		
Non-working Residents	23,330	4	93,319	
Jobs in Service Area 4,90	<u>2</u>			
Residents Employed in Service Area	1,339	10	13,390	
Non-Resident Workers (inflow Commuters)	3,566	10	35,660	
	Nonresident	tial Subtotal	142,369	22%
		-		
		TOTAL	644,607	100%

Source: California Department of Finance 2011 Population Estimate; U.S. Census Bureau, OnTheMap 6.1.1 Application and LEHD Origin-Destination Employment Statistics.

## **AVERAGE DAILY VEHICLE TRIPS**

Average daily vehicle trips are used for police, vehicle circulation, and multi-modal circulation impact fee categories as a measure of demand by land use. Vehicle trips are estimated using average weekday trip ends from the reference book, Trip Generation, 9th Edition, published by the Institute of Transportation Engineers (ITE) in 2012. A vehicle trip end represents a vehicle either entering or exiting a development (as if a traffic counter were placed across a driveway).

# **Trip Rate Adjustments**

Trip generation rates are adjusted to avoid double counting each trip at both the origin and destination points. Therefore, the basic trip adjustment factor is 50 percent. As discussed below, additional adjustments are made to ensure the fees are proportionate to the infrastructure demand for particular types of development.



# Adjustment for Pass-By Trips

The basic trip adjustment factor of 50 percent is applied to the lodging, office & other services, industrial, and institutional categories. The commercial category has a trip factor of less than 50 percent because this type of development attracts vehicles as they pass by on arterial and collector roads. For example, for an average size shopping center, the ITE (2012) indicates that on average 34% of the vehicles that enter are passing by on their way to some other primary destination. The remaining 66% of attraction trips have the shopping center as their primary destination. Because attraction trips are half of all trips, the trip adjustment factor is 66% multiplied by 50%, or approximately 33% of the trip ends.

Figure A14 below details the calculations to determine that existing development in Mammoth Lakes generates an average of 58,802 vehicle trips on an average weekday. Residential development is estimated to generate 35,921 vehicle trips, or 61% of all trips, compared to 22,880 vehicle trips (39%) generated by nonresidential development. An example of the calculation for single residential units is as follows: 3,255 units X 9.52 vehicle trips per day per unit X 50% adjustment factor = 15,494 total vehicle trips per day from single-family units in the Town. The same calculation is repeated for each land use type.



Figure A14: Average Daily Trips from Existing Development, 2015

Residential Vehicle Trips on an Average Weekday*	2015	
Residential Units	Assumptions	
Single Family	3,255	
Mobile Home	254	
Multi-Unit	5,953	
Average Weekday Vehicle Trip Ends per Unit*	Trip Rate	Trip Factor
Single Family	9.52	50%
Mobile Home	4.99	50%
Multi-Unit	6.65	50%
Residential Vehicle Trip Ends of an Average Weekday		
Single Family	15,494	
Mobile Home	634	
Multi-Unit	19,794	% of total
Total Residential Trips	35,921	61%
Nonresidential Vehicle Trips on an Average Weekday*	2015	
Nonresidential Gross Floor Area (1,000 sq. ft.)	Assumptions	
Lodging (rooms)	1,524	
Commercial	804	
Office and Other Services	485	
Industrial	302	
Institutional	208	
Average Weekday Vehicle Trips Ends per 1,000 Sq. Ft.*	Trip Rate	Trip Factor
Lodging (per room)	8.17	50%
Commercial	42.70	33%
Office and Other Services	11.03	50%
Industrial	6.97	50%
Institutional	15.43	50%
Nonresidential Vehicle Trips on an Average Weekday		
Lodging	6,226	
Commercial	11,327	
Office and Other Services	2,674	
Industrial	1,052	
Institutional	1,602	
Total Nonresidential Trips	22,880	39%
TOTAL TRIPS	58,802	100%

<sup>\*</sup>Trip rates are from the Institute of Transportation Engineers (ITE) Trip Generation Manual (2012)

