Land Use Assumptions, Infrastructure Improvements Plan, and DRAFT Development Fee Report

Prepared for:
Sedona, Arizona

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EXECUTIVE SUMMARY

The City of Sedona, Arizona, contracted with TischlerBise to document land use assumptions, prepare the Infrastructure Improvements Plan (hereinafter referred to as the "IIP"), and update development fees pursuant to Arizona Revised Statutes ("ARS") § 9-436.05 (hereafter referred to as the "Enabling Legislation"). Municipalities in Arizona may assess development fees to offset infrastructure costs to a municipality for necessary public services. The development fees must be based on an Infrastructure Improvements Plan (IIP) and Land Use Assumptions (LUA). The IIP for each type of infrastructure is in the middle section of this document. The proposed development fees are displayed in the Development Fee Report in the next section.

Development fees are one-time payments used to construct system improvements needed to accommodate new development. The fee represents future development's proportionate share of infrastructure costs. Development fees may be used for infrastructure improvements or debt service for growth related infrastructure. In contrast to general taxes, development fees may not be used for operations, maintenance, replacement, or correcting existing deficiencies. This update of Sedona's Infrastructure Improvements Plan and associated update to its development fees includes the following necessary public services:

1. Parks and Recreational Facilities
2. Police Facilities
3. Street Facilities

This plan includes all necessary elements required to be in full compliance with SB 1525.

ARIZONA DEVELOPMENT FEE ENABLING LEGISLATION

The Enabling Legislation governs how development fees are calculated for municipalities in Arizona.

Necessary Public Services

Under the requirements of the Enabling Legislation, development fees may only be used for construction, acquisition or expansion of public facilities that are necessary public services. "Necessary public service" means any of the following categories of facilities that have a life expectancy of three or more years and that are owned and operated on behalf of the municipality: water, wastewater, storm water, library, street, fire, police, and parks and recreational. Additionally, a necessary public service includes any facility that was financed before June 1, 2011, and that meets the following requirements:

1. Development fees were pledged to repay debt service obligations related to the construction of the facility.
2. After August 1, 2014, any development fees collected are used solely for the payment of principal and interest on the portion of the bonds, notes, or other debt service obligations issued before June 1, 2011, to finance construction of the facility.

Infrastructure Improvements Plan

Development fees must be calculated pursuant to an IIP. For each necessary public service that is the subject of a development fee, by law, the IIP shall include the following seven elements:

1. A description of the existing necessary public services in the service area and the costs to update, improve, expand, correct or replace those necessary public services to meet existing needs and usage and stricter safety, efficiency, environmental or regulatory standards, which shall be prepared by qualified professionals licensed in this state, as applicable.
2. An analysis of the total capacity, the level of current usage and commitments for usage of capacity of the existing necessary public services, which shall be prepared by qualified professionals licensed in this state, as applicable.
3. A description of all or the parts of the necessary public services or facility expansions and their costs necessitated by and attributable to development in the service area based on the approved Land Use Assumptions, including a forecast of the costs of infrastructure, improvements, real property, financing, engineering and architectural services, which shall be prepared by qualified professionals licensed in this state, as applicable.
4. A table establishing the specific level or quantity of use, consumption, generation or discharge of a service unit for each category of necessary public services or facility expansions and an equivalency or conversion table establishing the ratio of a service unit to various types of land uses, including residential, commercial, and industrial.
5. The total number of projected service units necessitated by and attributable to new development in the service area based on the approved Land Use Assumptions and calculated pursuant to generally accepted engineering and planning criteria.
6. The projected demand for necessary public services or facility expansions required by new service units for a period not to exceed ten years.
7. A forecast of revenues generated by new service units other than development fees, which shall include estimated state-shared revenue, highway users revenue, federal revenue, ad valorem property taxes, construction contracting or similar excise taxes and the capital recovery portion of utility fees attributable to development based on the approved Land Use Assumptions and a plan to include these contributions in determining the extent of the burden imposed by the development.

Qualified Professionals

The IIP must be developed by qualified professionals using generally accepted engineering and planning practices. A qualified professional is defined as "a professional engineer, surveyor, financial analyst or planner providing services within the scope of the person's license, education, or experience." TischlerBise is a fiscal, economic, and planning consulting firm specializing in the cost of growth services. Our services include development fees, fiscal impact analysis, infrastructure financing analyses, user fee/cost of service studies, capital improvement plans, and fiscal software. TischlerBise has prepared over 800 development fee studies over the past 30 years for local governments across the United States.

Conceptual Development Fee Calculation

In contrast to project-level improvements, development fees fund growth-related infrastructure that will benefit multiple development projects, or the entire service area (usually referred to as system improvements). The first step is to determine an appropriate demand indicator for the particular type of infrastructure. The demand indicator measures the number of service units for each unit of development. For example, an appropriate indicator of the demand for parks is population growth and the increase in population can be estimated from the average number of persons per housing unit. The second step in the development fee formula is to determine infrastructure improvement units per service unit, typically called level-of-service (LOS) standards. In keeping with the park example, a common LOS standard is improved park acres per thousand people. The third step in the development fee formula is the cost of various infrastructure units. To complete the park example, this part of the formula would establish a cost per acre for land acquisition and/ or park amenities.

Evaluation of Credits/Offsets

Regardless of the methodology, a consideration of credits/offsets is integral to the development of a legally defensible development fee. There are two types of credits/offsets that should be addressed in development fee studies and ordinances. The first is a revenue credit/offset due to possible double payment situations, which could occur when other revenues may contribute to the capital costs of infrastructure covered by the development fee. This type of credit/offset is integrated into the fee calculation, thus reducing the fee amount. The second is a site-specific credit or developer reimbursement for dedication of land or construction of system improvements. This type of credit is addressed in the administration and implementation of the development fee program. For ease of administration, TischlerBise normally recommends developer reimbursements for system improvements.

INTRODUCTION TO DEVELOPMENT FEES

Development fees are one-time payments used to fund capital improvements necessitated by future development. Development fees have been utilized by local governments in various forms for at least fifty years. Development fees do have limitations and should not be regarded as the total solution for infrastructure financing needs. Rather, they should be considered one component of a comprehensive portfolio to ensure adequate provision of public facilities with the goal of maintaining current levels of service in a community. Any community considering development fees should note the following limitations:

1) Fees can only be used to finance capital infrastructure and cannot be used to finance ongoing operations and / or maintenance and rehabilitation costs.

2) Fees cannot be deposited in the General Fund. The funds must be accounted for separately in individual accounts and earmarked for the capital expenses for which they were collected.

3) Fees cannot be used to correct existing infrastructure deficiencies unless there is a funding plan in place to correct the deficiency for all current residents and businesses in the community.

REQUIRED FINDINGS

There are three reasonable relationship requirements for development fees that 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 fees under the U. S. Constitution, we prefer a more rigorous 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. Individual elements of the nexus standard are discussed further in the following paragraphs.

Demonstrating an Impact. All future 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. Development 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 development 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.

Demonstrating a Benefit. A sufficient benefit relationship requires that development 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. However, nothing in the U.S. Constitution or the State enabling Act authorizing development fees requires that facilities funded with fee revenues be available *exclusively* to development paying the fees. In other words, existing development may benefit from these improvements as well.

Procedures for the earmarking and expenditure of fee revenues are typically mandated by the State Enabling Legislation, as are procedures to ensure that the fees are expended expeditiously or refunded. All requirements are intended to ensure that developments benefit from the 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 development 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 development fees for various types of facilities and categories of development. The demand for facilities is measured in terms of relevant and measurable attributes of development.

DEVELOPMENT FEE REPORT

Development fees for the necessary public services made necessary by new development must be based on the same level of service (LOS) provided to existing development in the service area. There are three basic methodologies used to calculate development fees. They examine the past, present, and future status of infrastructure. The objective of evaluating these different methodologies is to determine the best measure of the demand created by new development for additional infrastructure capacity. Each methodology has advantages and disadvantages in a particular situation and can be used simultaneously for different cost components.

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

- **Cost Recovery** (past improvements) - The rationale for recoupment, often called cost recovery, is that new development is paying for its share of the useful life and remaining capacity of facilities already built, or land already purchased, from which new growth will benefit. This methodology is often used for utility systems that must provide adequate capacity before new development can take place.

- **Incremental Expansion** (concurrent improvements) - The incremental expansion methodology documents current LOS standards for each type of public facility, using both quantitative and qualitative measures. This approach assumes there are no existing infrastructure deficiencies or surplus capacity in infrastructure. New development is only paying its proportionate share for growth-related infrastructure. Revenue will be used to expand or provide additional facilities, as needed, to accommodate new development. An incremental expansion cost method is best suited for public facilities that will be expanded in regular increments to keep pace with development.

- **Plan-Based** (future improvements) - The plan-based methodology allocates costs for a specified set of improvements to a specified amount of development. Improvements are typically identified in a long-range facility plan and development potential is identified by a land use plan. There are two basic options for determining the cost per demand unit: (1) total cost of a public facility can be divided by total demand units (average cost), or (2) the growth-share of the public facility cost can be divided by the net increase in demand units over the planning timeframe (marginal cost).

DEVELOPMENT FEE COMPONENTS

Shown below, Figure 1 summarizes service areas, methodologies, and infrastructure cost components for the proposed fees.

Figure 1: Proposed Development Fee Service Areas, Methodologies, and Cost Components

Necessary Public Service	Service Area	Cost Recovery	Incremental Expansion	Plan-Based	Cost Allocation
Parks and Recreational	Citywide	N/A	Park Amenities, Shared-Use Paths	Park Land, Development Fee Report	Park Population, Jobs
Police	Citywide	N/A	Police Facilities, Police Vehicles, Communication Equipment	Development Fee Report	Peak Population, Vehicle Trips
Street	Citywide	N/A	Street Improvements, Shared-Use Paths, Intersection Improvements	Development Fee Report	VMT

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

CURRENT DEVELOPMENT FEES

Current development fees are assessed per dwelling unit, based on unit size, for residential development and per square foot of floor area for nonresidential development.

Figure 2: Current Development Fees

Residential Fees per Unit				
Unit Size	Parks & Recreational	Police	Street	Current Fees
700 or less	$717	$468	$2,088	$3,273
701 to 1,200	$1,004	$656	$2,831	$4,491
1,201 to 1,700	$1,363	$890	$3,580	$5,832
1,701 to 2,200	$1,578	$1,030	$4,134	$6,741
2,201 to 2,700	$1,721	$1,124	$4,574	$7,419
2,701 to 3,200	$1,865	$1,218	$4,943	$8,025
3,201 to 3,700	$2,008	$1,311	$5,256	$8,575
3,701 to 4,200	$2,151	$1,405	$5,526	$9,082
4,201 to 4,700	$2,223	$1,452	$5,767	$9,442
4,701 or more	$2,295	$1,498	$5,985	$9,778

Nonresidential Fees per Square Foot				
Development Type	Parks & Recreational	Police	Street	Current Fees
Industrial	$0.74	$0.16	$1.18	$2.09
Commercial	$1.07	$0.83	$5.36	$7.25
Office / Other Services	$1.36	$0.32	$2.32	$4.00
Institutional	$0.42	$0.43	$3.07	$3.92
Lodging (per room)	$1,434	$278	$1,990	$3,702

PROPOSED DEVELOPMENT FEES

Proposed development fees will be assessed per dwelling unit, based on unit size, for residential development and per square foot of floor area for nonresidential development. The proposed fees represent the maximum allowable fees. Sedona may adopt fees that are less than the amounts shown; however, a reduction in development fee revenue will necessitate an increase in other revenues, a decrease in planned capital improvements, and/or a decrease in level-of-service standards. All costs in the Development Fee Report represent current dollars with no assumed inflation over time. If costs change significantly over time, development fees should be recalculated.

Figure 3: Proposed Development Fees

Residential Fees per Unit				
Unit Size	Parks & Recreational	Police	Street	Proposed Fees
700 or less	$1,734	$1,274	$4,373	$7,381
701 to 1,200	$2,185	$1,605	$5,629	$9,419
1,201 to 1,700	$2,809	$2,064	$7,145	$12,018
1,701 to 2,200	$3,433	$2,522	$8,808	$14,763
2,201 to 2,700	$4,092	$3,006	$10,130	$17,228
2,701 to 3,200	$4,525	$3,325	$11,320	$19,170
3,201 to 3,700	$4,906	$3,605	$12,213	$20,724
3,701 to 4,200	$5,184	$3,809	$12,916	$21,909
4,201 to 4,700	$5,444	$4,000	$13,544	$22,988
4,701 or more	$5,687	$4,178	$14,106	$23,971

Nonresidential Fees per Square Foot				
Development Type	Parks & Recreational	Police	Street	Proposed Fees
Industrial	$1.03	$0.49	$2.83	$4.35
Commercial	$1.40	$2.46	$14.61	$18.47
Office / Other Services	$2.15	$1.09	$6.31	$9.55
Institutional	$1.99	$1.50	$8.68	$12.17
Lodging (per room)	$3,277	$807	$4,779	$8,863

DIFFERENCE BETWEEN PROPOSED AND CURRENT DEVELOPMENT FEES

The differences between the proposed and current development fees are displayed below in Figure 4.

Figure 4: Difference Between Proposed and Current Development Fees

Residential Fees per Unit				
Unit Size	Parks & Recreational	Police	Street	Difference
700 or less	$1,017	$806	$2,285	$4,108
701 to 1,200	$1,181	$949	$2,798	$4,928
1,201 to 1,700	$1,447	$1,174	$3,566	$6,186
1,701 to 2,200	$1,856	$1,492	$4,675	$8,022
2,201 to 2,700	$2,371	$1,882	$5,556	$9,809
2,701 to 3,200	$2,661	$2,108	$6,377	$11,145
3,201 to 3,700	$2,898	$2,294	$6,957	$12,149
3,701 to 4,200	$3,033	$2,404	$7,390	$12,827
4,201 to 4,700	$3,221	$2,548	$7,777	$13,546
4,701 or more	$3,392	$2,680	$8,121	$14,193

Nonresidential Fees per Square Foot				
Development Type	Parks & Recreational	Police	Street	Difference
Industrial	$0.29	$0.33	$1.65	$2.26
Commercial	$0.33	$1.63	$9.25	$11.22
Office / Other Services	$0.79	$0.77	$3.99	$5.55
Institutional	$1.57	$1.07	$5.61	$8.25
Lodging (per room)	$1,843	$529	$2,789	$5,161

LAND USE ASSUMPTIONS

Arizona's Development Fee Act requires the preparation of Land Use Assumptions, which are defined in Arizona Revised Statutes § 9-463.05(T)(6) as:

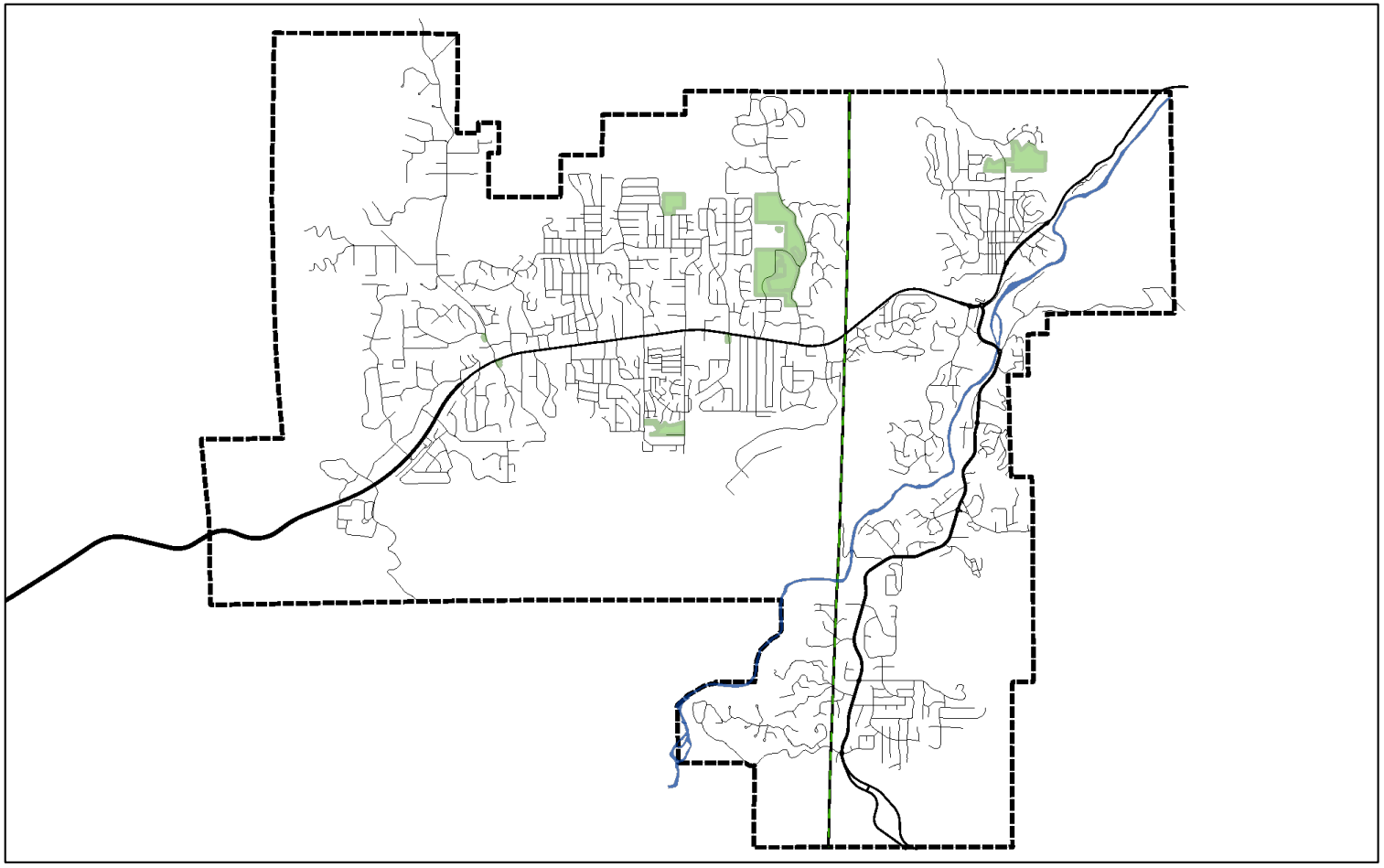
> *"projections of changes in land uses, densities, intensities and population for a specified service area over a period of at least ten years and pursuant to the General Plan of the municipality."*

The estimates and projections of residential and nonresidential development in this *Land Use Assumptions* document are for all areas within Sedona. The current demographic estimates and future development projections will be used in the Infrastructure Improvements Plan (IIP) and in the calculation of development fees. Current demographic data estimates for 2024 are used in calculating levels of service (LOS) provided to existing development in Sedona. Arizona's Enabling Legislation requires fees to be updated at least every five years and limits the IIP to a maximum of 10 years. The Infrastructure Improvements Plan and the Development Fee Report include a citywide service area.

SUMMARY OF GROWTH INDICATORS

Key land use assumptions include projections of population, housing units, employment, and nonresidential floor area. TischlerBise projects future development based on recent and emerging development trends provided by city staff. Development projections are summarized in Figure L19. These projections will be used to estimate fee revenue and to indicate the anticipated need for growth-related infrastructure. However, development fee methodologies are designed to reduce sensitivity to development projections in the determination of the proportionate share fee amounts. If actual development occurs at a slower rate than projected, fee revenue will decline, but so will the need for growth-related infrastructure. In contrast, if development occurs at a faster rate than anticipated, fee revenue will increase, but Sedona will also need to accelerate infrastructure improvements to keep pace with the actual rate of development. During the next 10 years, residential development projections indicate a peak population increase of 2,171 persons in 1,150 housing units, and nonresidential development projections indicate an employment increase of 392 jobs in approximately 178,000 square feet of floor area.

Figure L1: Development Fee Service Area



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CITY PARKS

OAK CREEK

Street Centerline

State Route 179 & 89A

COUNTY LINE

City of Sedona

RESIDENTIAL DEVELOPMENT

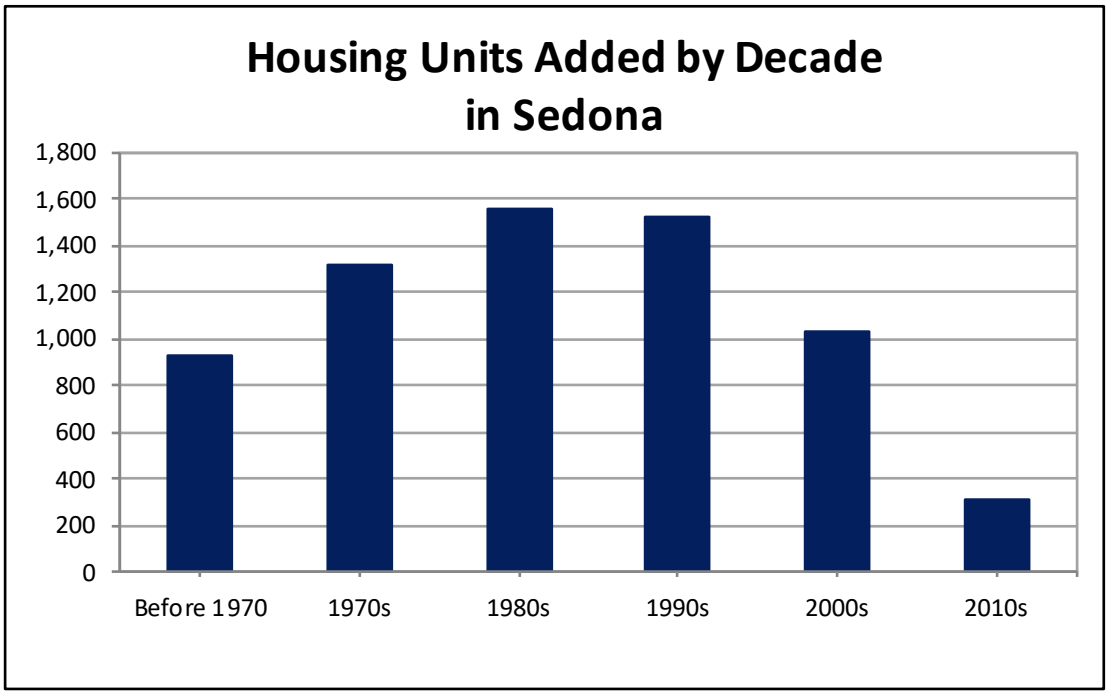
This section details current estimates and future projections of residential development including population and housing units.

Recent Residential Construction

Development fees require an analysis of current levels of service. For residential development, current levels of service are determined using estimates of population and housing units. Shown below, Figure L2 indicates the estimated number of housing units added by decade according to data obtained from the U.S. Census Bureau. In the previous decade, Sedona's housing stock grew by an average of 30 housing units per year.

Figure L2: Housing Units by Decade

Census 2010 Housing Units	6,367	Sedona's housing stock grew by an average of 30 housing units per year from 2010 to 2020.
Census 2020 Housing Units	6,671	
New Housing Units 2010 to 2020	304	



Source: U.S. Census Bureau, Census 2020 Summary File 1, Census 2010 Summary File 1, 2017-2021 5-Year American Community Survey (for 2000s and earlier, adjusted to yield total units in 2010).

Occupancy by Housing Type

According to the U.S. Census Bureau, a household is a housing unit occupied by year-round residents. Development fees often use per capita standards and persons per housing unit (PPHU) or persons per household (PPH) to derive proportionate share fee amounts. When using PPHU in the fee calculations, the analysis derives infrastructure standards using year-round population. When using PPH in the fee calculations, the development fee 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 Sedona impose development fees for residential development according to the number of persons per household.

Occupancy calculations require data on population 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 combined with attached single units (commonly known as townhouses, which share a common sidewall, but are constructed on an individual parcel of land). For occupancy estimates in Sedona, single-family units include detached units, attached units, and mobile home units. Multi-family units include duplexes, structures with two or more units on an individual parcel of land, recreational vehicles, and all other units.

Figure L3 below shows the occupancy estimates for Sedona based on 2017-2021 American Community Survey 5-Year Estimates. Single-family units averaged 2.00 persons per household and multi-family units averaged 1.84 persons per household. The estimates shown below are used only to calculate occupancy factors and may not match population and housing unit estimates shown throughout this report.

Figure L3: Occupancy by Housing Type

Housing Type	Persons	Households	Persons per Household	Housing Units	Persons per Housing Unit	Housing Mix	Vacancy Rate
Single-Family[1]	8,585	4,284	**2.00**	5,494	1.56	85.5%	22.02%
Multi-Family[2]	1,135	618	**1.84**	932	1.22	14.5%	33.69%
Total	9,720	4,902	**1.98**	6,426	1.51	100.0%	23.72%

Source: U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates

1. Includes detached, attached (townhouse), and mobile home units.
2. Includes dwellings in structures with two or more units, RVs, and all other units.

Occupancy by Bedroom Range

Development fees must be proportionate to the demand for infrastructure. Averages per household have a strong, positive correlation to the number of bedrooms, so TischlerBise recommends a fee schedule where larger units pay higher development fees. Benefits of the proposed methodology include 1) a proportionate assessment of infrastructure demand using local demographic data and 2) a progressive fee structure (i.e., smaller units pay less, and larger units pay more).

Custom tabulations of demographic data by bedroom range can be created from individual survey responses provided by the U.S. Census Bureau in files known as Public Use Microdata Samples (PUMS). PUMS files are only available for areas of at least 100,000 persons, and Sedona is in two Public Use Microdata Areas (AZ PUMAs 400 and 500).

Shown in Figure L4, cells with yellow shading indicate the unweighted survey results which yield the unadjusted estimate of 2.34 persons per household. Unadjusted persons per household estimates are adjusted to match the control total for Sedona – 1.98 persons per household (see Figure L3). Adjusted persons per household estimates range from 1.19 persons per household for units with zero to one bedroom up to 2.99 persons per household for units with five or more bedrooms.

Figure L4: Occupancy by Bedroom Range

Bedroom Range	Persons[1]	Vehicles Available[1]	Households[1]	Housing Mix	Unadjusted PPH	Adjusted PPH[2]	Unadjusted VPH	Adjusted VPH[2]
0-1	770	614	548	8%	1.41	1.19	1.12	1.02
2	3,685	3,100	1,915	27%	1.92	1.63	1.62	1.47
3	9,143	7,733	3,729	52%	2.45	2.07	2.07	1.89
4	2,636	2,047	834	12%	3.16	2.67	2.45	2.23
5+	637	500	180	2%	3.54	2.99	2.78	2.53
Total	16,871	13,994	7,206	100%	2.34	1.98	1.94	1.77

National Averages According to ITE

ITE Code	AWVTE per Person	AWVTE per Vehicle	AWVTE per HU	Sedona Housing Mix
210 SFD	2.65	6.36	9.43	87%
220 Apt	1.86	5.10	6.74	13%
Weighted Avg	2.55	6.20	9.09	100%

Recommended AWVTE per Household

Bedroom Range	AWVTE per Hhld Based on Persons[3]	AWVTE per Hhld Based on Vehicles[4]	AWVTE per Household[5]
0-1	3.03	6.32	4.68
2	4.16	9.11	6.64
3	5.28	11.72	8.50
4	6.81	13.83	10.32
5+	7.62	15.69	11.66
Average	5.05	10.97	8.01

1. American Community Survey, Public Use Microdata Sample for AZ PUMAs 400 and 500 (2017-2021 5-Year unweighted data).
2. Adjusted multipliers are scaled to make the average PUMS values match control totals for Sedona, based on American Community Survey 2017-2021 5-Year Estimates.
3. Adjusted persons per household multiplied by national weighted average trip rate per person.
4. Adjusted vehicles available per household multiplied by national weighted average trip rate per vehicle.
5. Average trip rates based on persons and vehicles per household.

Occupancy by Housing Size

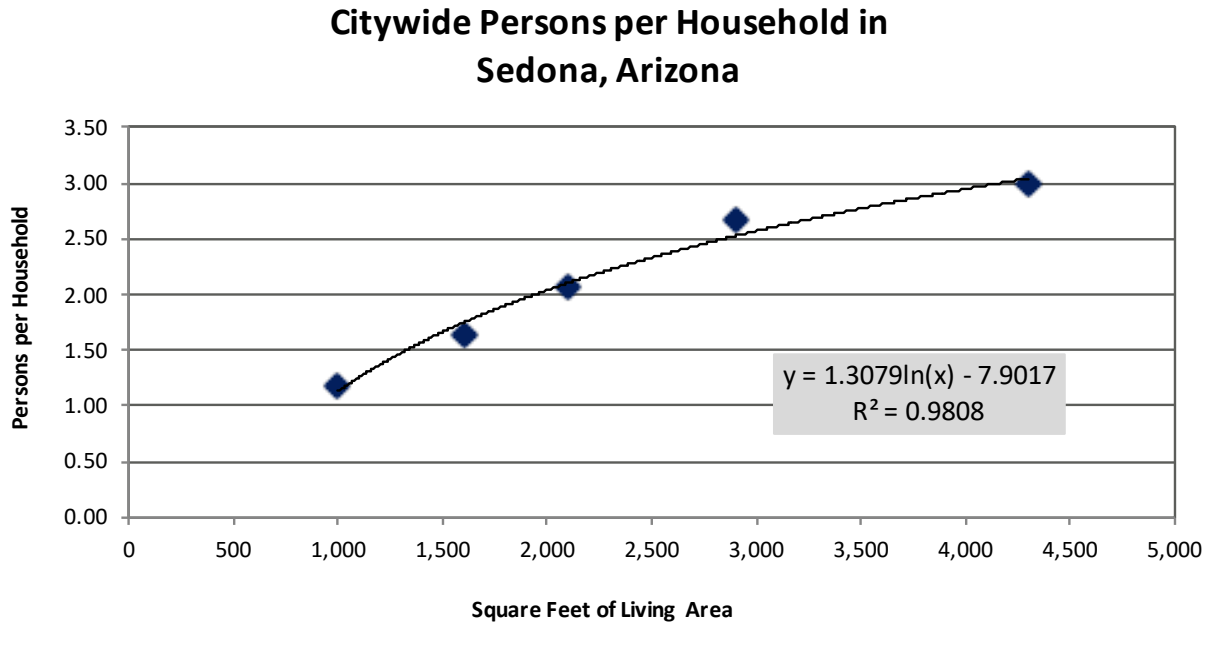
To estimate square feet of living area by bedroom range, TischlerBise uses 2021 U.S. Census Bureau data for housing units constructed in the west region. Based on 2021 estimates, living area ranges from 1,000 square feet for households with zero to one bedroom up to 4,300 square feet for households with five or more bedrooms.

Average square feet of living area and persons per household by bedroom range are plotted in Figure L5 with a logarithmic trend line derived from U.S. Census Bureau estimates discussed in the previous paragraph and adjusted persons per household estimates shown in Figure L4. Using the trend line formula shown in the figure, TischlerBise calculates the number of persons per household, by square feet of living area, using intervals of 500 square feet. TischlerBise recommends a minimum development fee based on a household size of 700 square feet and a maximum fee for units 4,701 square feet or more.

Figure L5: Occupancy by Housing Size

Average persons per household derived from 2017-2021 ACS 5-Year PUMS data for the area that includes Sedona. Unit size for 0-1 bedroom from the 2021 U.S. Census Bureau average for all multi-family units constructed in the Census West region. Unit size for all other bedrooms from the 2021 U.S. Census Bureau average for single-family units constructed in the Census West region.

Actual Averages per Household			Fitted-Curve Values	
Bedrooms	Square Feet	Persons	Sq Ft Range	Persons
0-1	1,000	1.19	700 or less	1.00
2	1,600	1.63	701 to 1,200	1.26
3	2,100	2.07	1,201 to 1,700	1.62
4	2,900	2.67	1,701 to 2,200	1.98
5+	4,300	2.99	2,201 to 2,700	2.36
			2,701 to 3,200	2.61
			3,201 to 3,700	2.83
			3,701 to 4,200	2.99
			4,201 to 4,700	3.14
			4,701 or more	3.28



Residential Estimates

Resident Population

Shown below, Figure L6 shows residential permits issued since the 2020 Census. The analysis uses the 2020 Census estimate of 6,671 housing units shown in Figure L2 and residential permits since 2020 to estimate 7,021 housing units in 2024.

Figure L6: Residential Permits

Year	Single Family	Multi-Family	Total
2020	62	0	62
2021	66	84	150
2022	57	1	58
2023[1]	34	46	80
Total	219	131	350

Source: Sedona Community Development Department

1. Through September 2023

For 2023, data published by Arizona Office of Economic Opportunity indicate a citywide population of 9,860 persons. Using the 2023 housing permit data shown in Figure L6 and the occupancy factors shown in Figure L3, Sedona's 2024 resident population includes 10,013 persons.

Lodging Population

According to information provided by city staff, there are currently 2,574 lodging rooms in the City of Sedona. Data from the Sedona Chamber of Commerce & Tourism Bureau indicate lodging averages 2.90 persons per room with an average occupancy rate of 65.2 percent. This results in an adjusted 1.89 persons per room (2.90 persons per room X 65.2 percent occupancy rate). Multiplying adjusted persons per room by the total number of lodging rooms results in a lodging population estimate of 4,865 persons.

Figure L7: Lodging Population

Lodging Factors	
Lodging Rooms[1]	2,574
Persons per Room[2]	2.90
Occupancy Rate[3]	65.2%
Adjusted Persons per Room	1.89
Lodging Population	4,865

1. City of Sedona
2. Sedona Chamber of Commerce & Tourism Bureau, 2018
3. Sedona Chamber of Commerce & Tourism Bureau, Annual Report FY22/23

Seasonal Population

To account for seasonal residents, the analysis includes vacant households used for seasonal, recreational, or occasional use. According to 2017-2021 ACS estimates shown in Figure L8, seasonal units account for 1,058 of Sedona's 1,524 vacant units. With all seasonal units occupied, Sedona's seasonal vacancy rate is 7.25 percent (5,960 resident and seasonal households / 6,426 housing units). Applying Sedona's occupancy rate of 1.98 persons per household to seasonal households provides a seasonal population estimate of 2,098 persons. Sedona's peak population estimate for 2024 is 12,111 (10,013 resident population + 2,098 seasonal population).

Figure L8: Seasonal Population

2021 Peak Population	
Resident Population	9,720
Resident Households	4,902
Persons per Household	1.98
Housing Units	6,426
Persons per Housing Unit	1.51
Vacant Housing Units (Year-Round)	1,524
Year-Round Vacancy Rate	23.72%
Vacant Housing Units (Seasonal, Recreation, or Occasional Use)	1,058
Seasonal Vacancy Rate	7.25%
Resident Households	4,902
Seasonal Households	1,058
Adjusted Households	5,960
Resident Population	9,720
Seasonal Population	2,098
Peak Population	11,818

Source: U.S. Census Bureau, 2017-2021 American Community Survey, 5-Yr Estimates.

Residential Projections

Population and housing unit projections are used to illustrate the possible future pace of service demands, revenues, and expenditures. To the extent these factors change, the projected need for infrastructure will also change. If development occurs at a more rapid rate than projected, the demand for infrastructure will increase at a corresponding rate. If development occurs at a slower rate than projected, the demand for infrastructure will also decrease.

TischlerBise projects lodging development using recommendations provided by Sedona Community Development Department staff. TischlerBise uses occupancy factors shown in Figure L7 to convert projected lodging rooms to lodging population. During the next 10 years, lodging development growth of 215 lodging rooms results in a lodging population increase of 406 persons (215 lodging rooms X 1.89 persons per room).

Figure L9: Lodging Projections

Sedona, Arizona	2024	2025	2026	2027	2028	2029	2034	10-Year
	Base Year	1	2	3	4	5	10	Increase
Lodging								
Rooms	2,574	2,664	2,678	2,692	2,706	2,720	2,789	215
Population	4,865	5,035	5,061	5,087	5,114	5,140	5,271	406

Source: Sedona Community Development Department

The analysis uses housing unit projections provided by Sedona Community Development Department staff. Based on recent trends, the scarcity of available land, and increasing demand for multi-family units, Community Development Department staff project a 10-year increase of 1,150 housing units – 350 single-family units and 800 multi-family units. TischlerBise uses occupancy factors shown in Figure L3 to convert projected housing units to projected population. The peak population increase, which includes resident population and seasonal population, over the next 10 years is 2,171 persons ((350 single-family units X 2.00 persons per household) + (800 multi-family units X 1.84 persons per household)). The park population increase over the next 10 years, which includes resident population, seasonal population, and lodging population, is 2,577 persons (2,171 peak population increase + 406 lodging population increase). The analysis uses the park population in the calculation of parks and recreational facilities development fees to more accurately allocate demand for parks and recreational facilities.

Figure L10: Residential Projections

Sedona, Arizona	2024	2025	2026	2027	2028	2029	2034	10-Year
	Base Year	1	2	3	4	5	10	Increase
Population								
Peak Population[1]	**12,111**	**12,338**	**12,563**	**12,785**	**13,006**	**13,224**	**14,281**	**2,171**
Park Population[2]	**16,975**	**17,373**	**17,624**	**17,873**	**18,119**	**18,364**	**19,552**	**2,577**
Housing Units								
Single Family	5,922	5,962	6,001	6,039	6,076	6,111	6,272	350
Multi-Family	1,099	1,179	1,259	1,339	1,419	1,499	1,899	800
Total	**7,021**	**7,141**	**7,260**	**7,378**	**7,494**	**7,610**	**8,171**	**1,150**

1. Peak population includes resident and seasonal
2. Park population includes resident, seasonal, and lodging

NONRESIDENTIAL DEVELOPMENT

This section details current estimates and future projections of nonresidential development including jobs and nonresidential floor area.

Nonresidential Demand Factors

TischlerBise uses the term jobs to refer to employment by place of work. In Figure L11, gray shading indicates the nonresidential development prototypes used to derive employment densities. For nonresidential development, TischlerBise uses data published in Trip Generation, Institute of Transportation Engineers, 11th Edition (2021). The prototype for industrial development is Light Industrial (ITE 110) with 637 square feet of floor area per employee. For office development, the proxy is General Office (ITE 710) with 307 square feet of floor area per employee. Institutional development uses Government Office (ITE 730) with 330 square feet of floor area per employee. The prototype for commercial development is Shopping Center (ITE 820) with 471 square feet of floor area per employee.

Figure L11: Nonresidential Demand Units

ITE Code	Land Use / Size	Demand Unit	Wkdy Trip Ends Per Dmd Unit[1]	Wkdy Trip Ends Per Employee[1]	Emp Per Dmd Unit	Sq Ft Per Emp
110	Light Industrial	1,000 Sq Ft	4.87	3.10	1.57	637
130	Industrial Park	1,000 Sq Ft	3.37	2.91	1.16	864
140	Manufacturing	1,000 Sq Ft	4.75	2.51	1.89	528
150	Warehousing	1,000 Sq Ft	1.71	5.05	0.34	2,953
254	Assisted Living	bed	2.60	4.24	0.61	na
310	Hotel	room	7.99	14.34	0.56	na
565	Day Care	student	4.09	21.38	0.19	na
610	Hospital	1,000 Sq Ft	10.77	3.77	2.86	350
620	Nursing Home	bed	3.06	3.31	0.92	na
710	General Office (avg size)	1,000 Sq Ft	10.84	3.33	3.26	307
720	Medical-Dental Office	1,000 Sq Ft	36.00	8.71	4.13	242
730	Government Office	1,000 Sq Ft	22.59	7.45	3.03	330
770	Business Park	1,000 Sq Ft	12.44	4.04	3.08	325
820	Shopping Center (avg size)	1,000 Sq Ft	37.01	17.42	2.12	471

1. Trip Generation, Institute of Transportation Engineers, 11th Edition (2021).

Nonresidential Estimates

Esri Business Analyst 2023 employment estimates for Sedona include 9,278 jobs. This employment estimate includes 829 industrial jobs, 4,689 commercial jobs, 3,229 jobs related to office and other services, and 531 institutional jobs. Applying the employment density factors shown in Figure L11 to employment estimates shown in Figure L12 provides a nonresidential floor area estimate of 3,903,125 square feet.

Figure L12: Nonresidential Estimates

Nonresidential Category	2023 Jobs[1]	Percent of Total Jobs	Square Feet per Job[2]	2023 Estimated Floor Area[3]
Industrial[4]	829	9%	637	528,073
Commercial[5]	4,689	51%	471	2,208,519
Office / Other Services[6]	3,229	35%	307	991,303
Institutional[7]	531	6%	330	175,230
Total	9,278	100%		3,903,125

1. Esri Business Analyst Online, Business Summary, 2023.
2. Trip Generation, Institute of Transportation Engineers, 11th Edition (2021).
3. TischlerBise calculation (2023 jobs X square feet per job).
4. Major sectors are Manufacturing; Transportation & Warehousing.
5. Major sectors are Retail Trade; Accommodation & Food Services.
6. Major sectors are Real Estate, Rental & Leasing; Other Services.
7. Major sectors are Public Administration; Educational Services.

Nonresidential Projections

Employment and floor area projections are used to illustrate the possible future pace of service demands, revenues, and expenditures. To the extent these factors change, the projected need for infrastructure will also change. If development occurs at a more rapid rate than projected, the demand for infrastructure will increase at a corresponding rate. If development occurs at a slower rate than projected, the demand for infrastructure will also decrease.

TischlerBise projects future nonresidential development based on nonresidential building permit data and discussions with city staff. From 2021 through 2023, average annual permitted square feet equal approximately 1,700 square feet of industrial development, 11,100 square feet of commercial development, 1,300 square feet of office development, and 700 square feet of institutional development. Based on discussions with city staff, the analysis includes an upward adjustment of 20 percent to account for likely development trends. The analysis projects future nonresidential development using an average annual increase of 2,000 square feet of industrial development, 13,400 square feet of commercial development, 1,600 square feet of office development, and 800 square feet of institutional development.

Adding the average annual floor area increase to the 2023 nonresidential floor area estimates shown in Figure L12 provides a 2024 base year estimate of approximately 3,921,000 square feet. Projected nonresidential development growth over the next 10 years includes an increase of approximately 178,000 square feet. This includes 20,000 square feet of industrial development, 134,000 square feet of commercial development, 16,000 square feet related to office and other services development, and 8,000 square feet of institutional development.

Applying the employment density factors shown in Figure L12 to the employment projections shown below provides the necessary conversion from nonresidential floor area to jobs. Over the next 10 years, projected employment growth equals 392 jobs. This includes 31 industrial jobs (20,000 sq. ft. of industrial development / 637 square feet per job), 285 commercial jobs (134,000 sq. ft. of commercial development / 471 square feet per job), 52 jobs related to office and other services (16,000 sq. ft. of office and other services development / 307 square feet per job), and 24 institutional jobs (8,000 sq. ft. of institutional development / 330 square feet per job).

Figure L13: Nonresidential Projections

Sedona, Arizona	2024	2025	2026	2027	2028	2029	2034	10-Year
	Base Year	1	2	3	4	5	10	Increase
Employment								
Industrial	832	835	838	842	845	848	864	31
Commercial	4,717	4,746	4,774	4,803	4,831	4,860	5,002	285
Office / Other Services	3,234	3,239	3,245	3,250	3,255	3,260	3,286	52
Institutional	533	536	538	541	543	546	558	24
Total	**9,317**	**9,356**	**9,396**	**9,435**	**9,474**	**9,513**	**9,709**	**392**
Nonres. Floor Area (x1,000)								
Industrial	530	532	534	536	538	540	550	20
Commercial	2,222	2,235	2,249	2,262	2,276	2,289	2,356	134
Office / Other Services	993	995	996	998	999	1,001	1,009	16
Institutional	176	177	178	178	179	180	184	8
Total	**3,921**	**3,939**	**3,957**	**3,974**	**3,992**	**4,010**	**4,099**	**178**

AVERAGE WEEKDAY VEHICLE TRIPS

Sedona uses average weekday vehicle trips (AWVT) in the calculation of police and street facilities fees. Components used to determine AWVT include average weekday vehicle trip generation rates, adjustments for commuting patterns, and adjustments for pass-by trips.

Residential Trip Generation Rates

As an alternative to simply using national average trip generation rates for residential development, published by the Institute of Transportation Engineers (ITE), TischlerBise calculates custom trip rates using local demographic data. Key inputs needed for the analysis, including average number of persons and vehicles available per housing unit, are available from American Community Survey (ACS) data.

Vehicle Trip Ends by Bedroom Range

TischlerBise recommends a fee schedule where larger units pay higher development fees than smaller units. Benefits of the proposed methodology include: 1) proportionate assessment of infrastructure demand using local demographic data, and 2) progressive fee structure (i.e., smaller units pay less, and larger units pay more).

TischlerBise creates custom tabulations of demographic data by bedroom range from individual survey responses provided by the U.S. Census Bureau in files known as Public Use Microdata Samples (PUMS). PUMS files are only available for areas of at least 100,000 persons, with Sedona in two Public Use Microdata Areas (AZ PUMAs 400 and 500). Shown in Figure L14, cells with yellow shading indicate the survey results, which yield the unadjusted number of persons and vehicles available per household. Unadjusted vehicles per household are adjusted to control totals in Sedona – 1.77 vehicles per household.

Figure L14: Vehicle Trip Ends by Bedroom Range

Bedroom Range	Persons[1]	Vehicles Available[1]	Households[1]	Housing Mix	Unadjusted PPH	Adjusted PPH[2]	Unadjusted VPH	Adjusted VPH[2]
0-1	770	614	548	8%	1.41	1.19	1.12	1.02
2	3,685	3,100	1,915	27%	1.92	1.63	1.62	1.47
3	9,143	7,733	3,729	52%	2.45	2.07	2.07	1.89
4	2,636	2,047	834	12%	3.16	2.67	2.45	2.23
5+	637	500	180	2%	3.54	2.99	2.78	2.53
Total	16,871	13,994	7,206	100%	2.34	1.98	1.94	1.77

National Averages According to ITE

ITE Code	AWVTE per Person	AWVTE per Vehicle	AWVTE per HU	Sedona Housing Mix
210 SFD	2.65	6.36	9.43	87%
220 Apt	1.86	5.10	6.74	13%
Weighted Avg	2.55	6.20	9.09	100%

Recommended AWVTE per Household

Bedroom Range	AWVTE per Hhld Based on Persons[3]	AWVTE per Hhld Based on Vehicles[4]	AWVTE per Household[5]
0-1	3.03	6.32	4.68
2	4.16	9.11	6.64
3	5.28	11.72	8.50
4	6.81	13.83	10.32
5+	7.62	15.69	11.66
Average	5.05	10.97	8.01

1. American Community Survey, Public Use Microdata Sample for AZ PUMAs 400 and 500 (2017-2021 5-Year unweighted data).
2. Adjusted multipliers are scaled to make the average PUMS values match control totals for Sedona, based on American Community Survey 2017-2021 5-Year Estimates.
3. Adjusted persons per household multiplied by national weighted average trip rate per person.
4. Adjusted vehicles available per household multiplied by national weighted average trip rate per vehicle.
5. Average trip rates based on persons and vehicles per household.

Vehicle Trip Ends by Housing Size

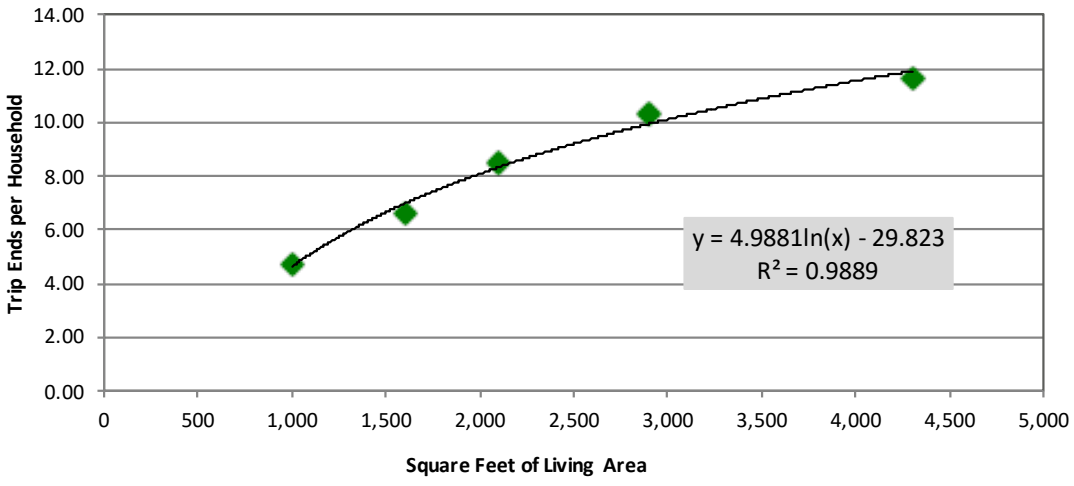
To derive average weekday vehicle trip ends by dwelling size, Tischler Bise uses 2021 U.S. Census Bureau data for housing units constructed in the west region. Based on 2021 estimates, living area ranges from 1,000 square feet for households with zero to one bedroom up to 4,300 square feet for households with five or more bedrooms.

Citywide average floor area and weekday vehicle trip ends, by bedroom range, are plotted in Figure L15 with a logarithmic trend line. TischlerBise uses the trend line formula to derive estimated trip ends by household size in increments of 500 square feet. TischlerBise recommends a minimum fee based on a unit size of 700 square feet and a maximum fee for units 4,701 square feet or larger. For the upper threshold, each dwelling averages 12.81 vehicle trip ends.

Figure L15: Vehicle Trip Ends by Housing Size

Average weekday vehicle trips per household derived from 2017-2021 ACS 5-Year PUMS data for the area that includes Sedona. Unit size for 0-1 bedroom from the 2021 U.S. Census Bureau average for all multi-family units constructed in the Census West region. Unit size for all other bedrooms from the 2021 U.S. Census Bureau average for single-family units constructed in the Census West region.

Actual Averages per Household			Fitted-Curve Values	
Bedrooms	Square Feet	Trip Ends	Sq Ft Range	Trip Ends
0-1	1,000	4.68	700 or less	3.97
2	1,600	6.64	701 to 1,200	5.11
3	2,100	8.50	1,201 to 1,700	6.49
4	2,900	10.32	1,701 to 2,200	8.00
5+	4,300	11.66	2,201 to 2,700	9.20
			2,701 to 3,200	10.28
			3,201 to 3,700	11.09
			3,701 to 4,200	11.73
			4,201 to 4,700	12.30
			4,701 or more	12.81



Nonresidential Trip Generation Rates

For nonresidential development, TischlerBise uses trip generation rates published in Trip Generation, Institute of Transportation Engineers, 11th Edition (2021). The prototype for industrial development is Light Industrial (ITE 110) which generates 4.87 average weekday vehicle trip ends per 1,000 square feet of floor area. The prototype for lodging development is Hotel (ITE 310) which generates 7.99 average weekday vehicle trip ends per room. For office & other services development, the proxy is General Office (ITE 710), and it generates 10.84 average weekday vehicle trip ends per 1,000 square feet of floor area. Institutional development uses Government Office (ITE 730) and generates 22.59 average weekday vehicle trip ends per 1,000 square feet of floor area. The prototype for commercial development is Shopping Center (ITE 820) which generates 37.01 average weekday vehicle trips per 1,000 square feet of floor area.

Figure L16: Average Weekday Vehicle Trip Ends by Land Use

ITE Code	Land Use / Size	Demand Unit	Wkdy Trip Ends Per Dmd Unit[1]	Wkdy Trip Ends Per Employee[1]	Emp Per Dmd Unit	Sq Ft Per Emp
110	Light Industrial	1,000 Sq Ft	4.87	3.10	1.57	637
130	Industrial Park	1,000 Sq Ft	3.37	2.91	1.16	864
140	Manufacturing	1,000 Sq Ft	4.75	2.51	1.89	528
150	Warehousing	1,000 Sq Ft	1.71	5.05	0.34	2,953
254	Assisted Living	bed	2.60	4.24	0.61	na
310	Hotel	room	7.99	14.34	0.56	na
565	Day Care	student	4.09	21.38	0.19	na
610	Hospital	1,000 Sq Ft	10.77	3.77	2.86	350
620	Nursing Home	bed	3.06	3.31	0.92	na
710	General Office (avg size)	1,000 Sq Ft	10.84	3.33	3.26	307
720	Medical-Dental Office	1,000 Sq Ft	36.00	8.71	4.13	242
730	Government Office	1,000 Sq Ft	22.59	7.45	3.03	330
770	Business Park	1,000 Sq Ft	12.44	4.04	3.08	325
820	Shopping Center (avg size)	1,000 Sq Ft	37.01	17.42	2.12	471

1. Trip Generation, Institute of Transportation Engineers, 11th Edition (2021).

Trip Rate Adjustments

Trip generation rates require an adjustment factor to avoid double counting each trip at both the origin and destination points. Therefore, the basic trip adjustment factor is 50 percent. As discussed further in this section, the development fee methodology includes additional adjustments to make the fees proportionate to the infrastructure demand for each type of development.

Commuter Trip Adjustment

Residential development has a larger trip adjustment factor of 59 percent to account for commuters leaving Sedona for work. According to the 2009 National Household Travel Survey (see Table 30) weekday work trips are typically 31 percent of production trips (i.e., all out-bound trips, which are 50 percent of all trip ends). As shown in Figure L17, the U.S. Census Bureau's OnTheMap web application indicates 60 percent of resident workers traveled outside of Sedona for work in 2021. In combination, these factors (0.31 x 0.50 x 0.60 = 0.09) support the additional 9 percent allocation of trips to residential development.

Figure L17: Commuter Trip Adjustment

Trip Adjustment Factor for Commuters	
Employed Residents	3,136
Residents Living and Working in Sedona	1,268
Residents Commuting Outside Sedona for Work	1,868
Percent Commuting out of Sedona	60%
Additional Production Trips[1]	9%
Residential Trip Adjustment Factor	59%

Source: U.S. Census Bureau, OnTheMap Application (version 6.23.4) and LEHD Origin-Destination Employment Statistics, 2021.

1. According to the National Household Travel Survey (2009)*, published in December 2011 (see Table 30), home-based work trips are typically 30.99 percent of "production" trips, in other words, out-bound trips (which are 50 percent of all trip ends). Also, LED OnTheMap data from 2021 indicate that 60 percent of Sedona's workers travel outside the city for work. In combination, these factors (0.3099 x 0.50 x 0.60 = 0.09) account for 9 percent of additional production trips. The total adjustment factor for residential includes attraction trips (50 percent of trip ends) plus the journey-to-work commuting adjustment (9 percent of production trips) for a total of 59 percent.
*http://nhts.ornl.gov/publications.shtml ; Summary of Travel Trends - Table "Daily Travel Statistics by Weekday vs. Weekend"

Adjustment for Pass-By Trips

For commercial and institutional development, the trip adjustment factor is less than 50 percent because these types of development attract vehicles as they pass by on arterial and collector roads. For example, when someone stops at a convenience store on the way home from work, the convenience store is not the primary destination. For the average shopping center, ITE data indicate 34 percent of the vehicles that enter are passing by on their way to some other primary destination. The remaining 66 percent of attraction trips have the commercial site as their primary destination. Because attraction trips are half of all trips, the trip adjustment factor is 66 percent multiplied by 50 percent, or approximately 33 percent of the trip ends.

Average Weekday Vehicle Trips

Shown below in Figure L18, multiplying average weekday vehicle trip ends and trip adjustment factors (discussed on the previous page) by Sedona's existing development units provides the average weekday vehicle trips generated by existing development. As shown below, existing development citywide generates 68,261 vehicle trips on an average weekday.

Figure L18: Average Weekday Vehicle Trips

Development Type	Development Unit	ITE Code	Avg Wkday VTE	Trip Adjustment	2024 Dev Units	2024 Veh Trips
Residential	HU	Avg	8.00	59%	7,021	33,139
Industrial	KSF	130	4.87	50%	530	1,291
Commercial	KSF	820	37.01	33%	2,222	27,137
Office & Other Services	KSF	710	10.84	50%	993	5,382
Institutional	KSF	610	22.59	33%	176	1,312
Total						68,261

DEVELOPMENT PROJECTIONS

Provided below is a summary of development projections used in the Development Fee Report. Base year estimates for 2024 are used in the fee calculations. Development projections are used to illustrate a possible future pace of demand for service units and cash flows resulting from revenues and expenditures associated with those demands.

Figure L19: Projections Summary

Sedona, Arizona	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	10-Year
	Base Year	1	2	3	4	5	6	7	8	9	10	Increase
Population												
Peak Population[1]	**12,111**	**12,338**	**12,563**	**12,785**	**13,006**	**13,224**	**13,440**	**13,653**	**13,865**	**14,074**	**14,281**	**2,171**
Park Population[2]	**16,975**	**17,373**	**17,624**	**17,873**	**18,119**	**18,364**	**18,606**	**18,846**	**19,084**	**19,319**	**19,552**	**2,577**
Housing Units												
Single Family	5,922	5,962	6,001	6,039	6,076	6,111	6,146	6,179	6,211	6,242	6,272	350
Multi-Family	1,099	1,179	1,259	1,339	1,419	1,499	1,579	1,659	1,739	1,819	1,899	800
Total	**7,021**	**7,141**	**7,260**	**7,378**	**7,494**	**7,610**	**7,724**	**7,838**	**7,950**	**8,061**	**8,171**	**1,150**
Employment												
Industrial	832	835	838	842	845	848	851	854	857	860	864	31
Commercial	4,717	4,746	4,774	4,803	4,831	4,860	4,888	4,917	4,945	4,974	5,002	285
Office / Other Services	3,234	3,239	3,245	3,250	3,255	3,260	3,265	3,271	3,276	3,281	3,286	52
Institutional	533	536	538	541	543	546	548	550	553	555	558	24
Total	**9,317**	**9,356**	**9,396**	**9,435**	**9,474**	**9,513**	**9,553**	**9,592**	**9,631**	**9,670**	**9,709**	**392**
Nonres. Floor Area (x1,000)												
Industrial	530	532	534	536	538	540	542	544	546	548	550	20
Commercial	2,222	2,235	2,249	2,262	2,276	2,289	2,302	2,316	2,329	2,343	2,356	134
Office / Other Services	993	995	996	998	999	1,001	1,003	1,004	1,006	1,007	1,009	16
Institutional	176	177	178	178	179	180	181	182	182	183	184	8
Total	**3,921**	**3,939**	**3,957**	**3,974**	**3,992**	**4,010**	**4,028**	**4,046**	**4,063**	**4,081**	**4,099**	**178**

1. Peak population includes resident and seasonal
2. Park population includes resident, seasonal, and lodging

AVERAGE WEEKDAY VEHICLE TRIP PROJECTIONS

TischlerBise uses the projections shown below in the calculation of police and street facilities development fees.

Figure L20: Average Weekday Vehicle Trips Summary

Sedona, Arizona	Base	1	2	3	4	5	6	7	8	9	10	10-Year
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Increase
Residential Units	7,021	7,141	7,260	7,378	7,494	7,610	7,724	7,838	7,950	8,061	8,171	1,150
Industrial KSF	530	532	534	536	538	540	542	544	546	548	550	20
Commercial KSF	2,222	2,235	2,249	2,262	2,276	2,289	2,302	2,316	2,329	2,343	2,356	134
Office & Other Services KSF	993	995	996	998	999	1,001	1,003	1,004	1,006	1,007	1,009	16
Institutional KSF	176	177	178	178	179	180	181	182	182	183	184	8
Residential Trips	33,139	33,706	34,267	34,823	35,373	35,919	36,459	36,994	37,523	38,048	38,567	5,428
Residential Trips	33,139	33,706	34,267	34,823	35,373	35,919	36,459	36,994	37,523	38,048	38,567	5,428
Industrial Trips	1,291	1,296	1,300	1,305	1,310	1,315	1,320	1,325	1,330	1,335	1,339	49
Commercial Trips	27,137	27,301	27,464	27,628	27,792	27,955	28,119	28,283	28,446	28,610	28,774	1,637
Office & Other Services Trips	5,382	5,390	5,399	5,408	5,416	5,425	5,434	5,442	5,451	5,460	5,468	87
Institutional Trips	1,312	1,318	1,324	1,330	1,336	1,342	1,348	1,354	1,360	1,366	1,372	60
Nonresidential Trips	35,121	35,305	35,488	35,671	35,854	36,037	36,220	36,404	36,587	36,770	36,953	1,832
Total Vehicle Trips	**68,261**	**69,010**	**69,754**	**70,494**	**71,227**	**71,956**	**72,679**	**73,397**	**74,110**	**74,818**	**75,520**	**7,260**

PARKS AND RECREATIONAL FACILITIES IIP

ARS § 9-463.05 (T)(7)(g) defines the facilities and assets that can be included in the Parks and Recreational Facilities IIP:

> *"Neighborhood parks and recreational facilities on real property up to thirty acres in area, or parks and recreational facilities larger than thirty acres if the facilities provide a direct benefit to the development. Park and recreational facilities do not include vehicles, equipment or that portion of any facility that is used for amusement parks, aquariums, aquatic centers, auditoriums, arenas, arts and cultural facilities, bandstand and orchestra facilities, bathhouses, boathouses, clubhouses, community centers greater than three thousand square feet in floor area, environmental education centers, equestrian facilities, golf course facilities, greenhouses, lakes, museums, theme parks, water reclamation or riparian areas, wetlands, zoo facilities or similar recreational facilities, but may include swimming pools."*

The Parks and Recreational Facilities IIP includes components for park land, park amenities, shared-use paths, and the cost of preparing the Parks and Recreational Facilities IIP and related Development Fee Report. The incremental expansion methodology is used for park amenities and shared-use paths. The plan-based methodology is used for park land and the Development Fee Report.

SERVICE AREA

Sedona uses a citywide service area for the Parks and Recreational Facilities IIP.

PROPORTIONATE SHARE

ARS § 9-463.05 (B)(3) states that the development fee shall not exceed a proportionate share of the cost of necessary public services needed to accommodate new development. The Parks and Recreational Facilities IIP and development fees allocate the cost of necessary public services between residential and nonresidential based on functional population. TischlerBise estimates Sedona's 2021 park population equal to 16,683 persons. Based on 2021 estimates from the U.S. Census Bureau's OnTheMap web application, 4,818 inflow commuters traveled to Sedona for work in 2021. The proportionate share is based on cumulative impact days per year with a resident potentially impacting parks and recreational facilities 365 days per year and an inflow commuter potentially impacting parks and recreational facilities 250 days per year. For parks and recreational facilities, residential development generates 83 percent of demand and nonresidential development generates the remaining 17 percent of demand.

Figure PR1: Proportionate Share

Development Type	Service Unit	Impact Days per Year	Cumulative Impact Days per Year	Proportionate Share
Residential	16,683 persons[1]	365	6,089,244	83%
Nonresidential	4,818 inflow commuters[2]	250	1,204,500	17%
Total			7,293,744	100%

1. TischlerBise calculation; includes resident, peak, and lodging population, 2021.

2. U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics, Version 6.23.4, 2021

Residential Impact: 365 days per year

Nonresidential Impact: 5 days per week X 50 weeks per year

RATIO OF SERVICE UNIT TO DEVELOPMENT UNIT

ARS § 9-463.05(E)(4) requires:

> *"A table establishing the specific level or quantity of use, consumption, generation or discharge of a service unit for each category of necessary public services or facility expansions and an equivalency or conversion table establishing the ratio of a service unit to various types of land uses, including residential, commercial and industrial."*

Figure PR2 displays the demand indicators for residential and nonresidential land uses. For residential development, the table displays the number of persons per household. For nonresidential development, the table displays the number of employees per thousand square feet of floor area.

Figure PR2: Ratio of Service Unit to Development Unit

Residential Development per Unit	
Unit Size	Persons per Household[1]
700 or less	1.00
701 to 1,200	1.26
1,201 to 1,700	1.62
1,701 to 2,200	1.98
2,201 to 2,700	2.36
2,701 to 3,200	2.61
3,201 to 3,700	2.83
3,701 to 4,200	2.99
4,201 to 4,700	3.14
4,701 or more	3.28
Lodging (per room)	1.89

Nonresidential Development per 1,000 Square Feet	
Development Type	Jobs per 1,000 Sq Ft[1]
Industrial	1.57
Commercial	2.12
Office / Other Services	3.26
Institutional	3.03

1. See Land Use Assumptions

Analysis of Capacity, Usage, and Costs of Existing Public Services

ARS § 9-463.05(E)(1) requires:

> *"A description of the existing necessary public services in the service area and the costs to upgrade, update, improve, expand, correct or replace those necessary public services to meet existing needs and usage and stricter safety, efficiency, environmental or regulatory standards, which shall be prepared by qualified professionals licensed in this state, as applicable."*

ARS § 9-463.05(E)(2) requires:

> *"An analysis of the total capacity, the level of current usage and commitments for usage of capacity of the existing necessary public services, which shall be prepared by qualified professionals licensed in this state, as applicable."*

Park Land – Plan-Based

Existing Level of Service

Sedona currently provides 144.10 acres of park land. To allocate the proportionate share of demand for park land to residential and nonresidential development, this analysis uses the proportionate share shown in Figure PR1. Sedona's existing LOS for residential development is 0.00705 acres per person (144.10 acres X 83 percent residential share / 16,975 persons). For nonresidential development, the existing LOS is 0.00263 acres per job (144.10 acres X 17 percent nonresidential share / 9,317 jobs).

Figure PR3: Existing Level of Service

Level-of-Service (LOS) Standards	
Existing Acres	144.10
Residential	
Residential Share	83%
2024 Park Population	16,975
Acres per Person	0.00705
Nonresidential	
Nonresidential Share	17%
2024 Jobs	9,317
Acres per Job	0.00263

Source: Sedona Parks and Recreation Department

To maintain the existing level of service, Sedona needs to acquire 19.19 acres of park land to serve future development. Based on a projected park population increase of 2,577 persons, future residential development demands an additional 18.16 acres (2,577 additional persons X 0.00705 acres per person). With projected employment growth of 392 jobs, future nonresidential development demands an additional 1.03 acres (392 additional jobs X 0.00263 acres per job).

Planned Level of Service

Due to the scarcity of potential park land sites, Sedona plans to acquire 5.0 acres of park land to serve future development during the next 10 years. Since this is fewer acres than needed to maintain the existing level of service, the analysis includes a downward adjustment to the existing level of service. To calculate the adjusted level of service, the analysis applies an adjustment factor of 26 percent (5.0 planned acres / 19.19 acres based on existing LOS) to the existing level of service. Sedona currently provides 37.5 adjusted acres (144.10 acres X 26 percent adjustment) to existing development.

To allocate the proportionate share of demand for park land to residential and nonresidential development, this analysis uses the proportionate share shown in Figure PR1. Sedona's adjusted LOS for residential development is 0.00184 adjusted acres per person (37.5 adjusted acres X 83 percent residential share / 16,975 persons). For nonresidential development, the adjusted LOS is 0.00069 adjusted acres per job (37.5 adjusted acres X 17 percent nonresidential share / 9,317 jobs).

Based on estimates provided by the Sedona Parks and Recreation Department, the cost to acquire park land is $500,000 per acre. For park land, the cost is $917.98 per person (0.00184 adjusted acres per person X $500,000 per acre) and $342.56 per job (0.00069 adjusted acres per job X $500,000 per acre).

Figure PR4: Planned Level of Service

Cost Factors	
Cost per Acre	$500,000

Level-of-Service (LOS) Standards	
Existing Acres	144.10
Adjustment	26%
Adjusted Acres	37.5
Residential	
Residential Share	83%
2024 Park Population	16,975
Adjusted Acres per Person	0.00184
Cost per Person	$917.98
Nonresidential	
Nonresidential Share	17%
2024 Jobs	9,317
Adjusted Acres per Job	0.00069
Cost per Job	$342.56

Source: Sedona Parks and Recreation Department

Park Amenities – Incremental Expansion

Sedona currently provides 69 park amenities in its existing parks and plans to construct additional park amenities to serve future development. Based on recent and planned costs to construct park amenities, the total cost of Sedona's existing park amenities in the is $15,789,500. The weighted average cost is $228,833 per park amenity, and the analysis uses this as a proxy for future park amenity costs.

Figure PR5: Existing Park Amenities

Description	Units	Unit Cost	Total Cost
Baseball / Softball Field, Lighted	1	$900,000	$900,000
Basketball Court, Lighted	1	$180,000	$180,000
Basketball Court, Unlighted	1	$120,000	$120,000
Bike Park	1	$523,000	$523,000
Concession Building	1	$379,000	$379,000
Disc Golf	1	$90,000	$90,000
Dog Park	1	$444,000	$444,000
Fitness Trail	1	$100,000	$100,000
Parking Lot	12	$300,000	$3,600,000
Pickleball Court	8	$150,000	$1,200,000
Playground	3	$400,000	$1,200,000
Ramada	12	$74,000	$888,000
Restroom	6	$350,000	$2,100,000
Shade Structure	11	$45,000	$495,000
Skate Park	1	$852,000	$852,000
Soccer Field	1	$530,000	$530,000
Splash Pad	1	$400,000	$400,000
The Hub	1	$1,130,500	$1,130,500
Tennis Court, Lighted	2	$180,000	$360,000
Tennis Court, Unlighted	2	$110,000	$220,000
Volleyball Court (sand)	1	$78,000	$78,000
Total	69	$228,833	$15,789,500

Source: Sedona Parks and Recreation Department

To allocate the proportionate share of demand for park amenities to residential and nonresidential development, this analysis uses the proportionate share shown in Figure PR1. Sedona's existing LOS for residential development is 0.00337 units per person (69 units X 83 percent residential share / 16,975 persons). For nonresidential development, the existing LOS is 0.00126 units per job (69 units X 17 percent nonresidential share / 9,317 jobs).

The weighted average cost of existing park amenities is $228,833 per unit ($15,789,500 total cost / 69 units), and the analysis uses this as a proxy for future park amenity costs. Sedona may use development fees to construct additional park amenities in existing or future parks. For park amenities, the cost is $772.01 per person (0.00337 units per person X $228,833 per unit) and $288.09 per job (0.00126 units per job X $228,833 per unit).

Figure PR6: Existing Level of Service

Cost Factors	
Weighted Average per Unit	$228,833

Level-of-Service (LOS) Standards	
Existing Units	69
Residential	
Residential Share	83%
2024 Park Population	16,975
Units per Person	0.00337
Cost per Person	$772.01
Nonresidential	
Nonresidential Share	17%
2024 Jobs	9,317
Units per Job	0.00126
Cost per Job	$288.09

Source: Sedona Parks and Recreation Department

Shared-Use Paths – Incremental

Sedona currently provides 1.24 miles of shared-use paths in its existing parks and plans to construct additional shared-use paths to serve future development. Based on planned construction costs, the total cost of Sedona's existing shared-use paths is $680,777. The weighted average cost is $547,525 per mile, and the analysis uses this as a proxy for future shared-use path costs.

To allocate the proportionate share of demand for shared-use paths to residential and nonresidential development, this analysis uses the proportionate share shown in Figure PR1. Sedona's existing LOS for residential development is 0.00006 miles per person (1.24 miles X 83 percent residential share / 16,975 persons). For nonresidential development, the existing LOS is 0.00002 miles per job (1.24 miles X 17 percent nonresidential share / 9,317 jobs).

The weighted average cost of existing shared-use paths is $547,525 per mile ($680,777 total cost / 1.24 miles), and the analysis uses this as a proxy for future shared-use path costs. Sedona may use development fees to construct additional shared-use paths in existing or future parks. For shared-use paths, the cost is $33.29 per person (0.00006 miles per person X $547,525 per mile) and $12.42 per job (0.00002 miles per job X $547,525 per mile).

Figure PR7: Existing Level of Service

Description	Miles	Unit Cost	Total Cost
Decomposed Granite	0.94	$300,000	$280,682
Concrete	0.31	$1,300,000	$400,095
Total	1.24	$547,525	$680,777

Cost Factors	
Weighted Average per Mile	$547,525

Level-of-Service (LOS) Standards	
Existing Shared-Use Paths (miles)	1.24
Residential	
Residential Share	83%
2024 Park Population	16,975
Miles per Person	0.00006
Cost per Person	$33.29
Nonresidential	
Nonresidential Share	17%
2024 Jobs	9,317
Miles per Job	0.00002
Cost per Job	$12.42

Source: Sedona Parks and Recreation Department

Development Fee Report – Plan-Based

The cost to prepare the Parks and Recreational Facilities IIP and development fees totals $17,500. Sedona plans to update its report every five years. Based on this cost, proportionate share, and five-year projections of new development from the *Land Use Assumptions* document, the cost is $10.46 per person and $15.17 per job.

Figure PR8: IIP and Development Fee Report

Necessary Public Service	Cost	Proportionate Share		Service Unit	5-Year Change	Cost per Service Unit
Parks and Recreational	$17,500	Residential	83%	Park Population	1,388	$10.46
		Nonresidential	17%	Jobs	196	$15.17
Police	$18,000	Residential	69%	Police Population	1,113	$11.16
		Nonresidential	31%	Vehicle Trips	916	$6.09
Street	$20,820	All Development	100%	VMT	13,299	$1.56
Total	$56,320					

PROJECTED DEMAND FOR SERVICES AND COSTS

ARS § 9-463.05(E)(5) requires:

> *"The total number of projected service units necessitated by and attributable to new development in the service area based on the approved land use assumptions and calculated pursuant to generally accepted engineering and planning criteria."*

ARS § 9-463.05(E)(6) requires:

> *"The projected demand for necessary public services or facility expansions required by new service units for a period not to exceed ten years."*

As shown in the *Land Use Assumptions* document, Sedona's park population is expected to increase by 2,577 persons and employment is expected to increase by 392 jobs over the next 10 years. To maintain the desired levels of service, Sedona plans to acquire five acres of park land, construct approximately 9.2 park amenities, and construct approximately 0.17 miles of shared-use paths (this does not include shared-use paths within street rights of way included in the street facilities development fee). The following pages include a more detailed projection of demand for services and costs for the Parks and Recreational Facilities IIP.

Park Land – Plan-Based

Sedona plans to acquire five acres of park land in the next 10 years. Based on a projected park population increase of 2,577 persons, future residential development demands an additional 4.73 acres (2,577 additional persons X 0.00184 adjusted acres per person). With projected employment growth of 392 jobs, future nonresidential development demands an additional 0.27 acres (392 additional jobs X 0.00069 adjusted acres per job). This results in a cost of $2,500,000 (5.0 acres X $500,000 per acre).

Figure PR9: Projected Demand

Type of Infrastructure	Level of Service	Demand Unit	Cost per Acre
Park Land	0.00184 Adjusted Acres	per Person	$500,000
	0.00069 Adjusted Acres	per Job	

Demand for Park Land					
Year	Park Population	Jobs	Acres		
			Residential	Nonresidential	Total
2024	16,975	9,317	31.17	6.38	37.55
2025	17,373	9,356	31.90	6.41	38.31
2026	17,624	9,396	32.36	6.44	38.79
2027	17,873	9,435	32.81	6.46	39.28
2028	18,119	9,474	33.27	6.49	39.76
2029	18,364	9,513	33.72	6.52	40.23
2030	18,606	9,553	34.16	6.54	40.70
2031	18,846	9,592	34.60	6.57	41.17
2032	19,084	9,631	35.04	6.60	41.64
2033	19,319	9,670	35.47	6.63	42.09
2034	19,552	9,709	35.90	6.65	42.55
10-Yr Increase	2,577	392	4.73	0.27	5.00

Growth-Related Expenditures	$2,365,627	$134,373	$2,500,000

Park Amenities – Incremental Expansion

Sedona plans to maintain its existing level of service for park amenities over the next 10 years. Based on a projected park population increase of 2,577 persons, future residential development demands an additional 8.7 park amenities (2,577 additional persons X 0.00337 units per person). With projected employment growth of 392 jobs, future nonresidential development demands an additional 0.5 park amenities (392 additional jobs X 0.00126 units per job). Future development demands 9.2 additional park amenities at a cost of $2,102,479 (9.2 units X $228,833 per unit). Sedona may use development fees to construct additional park amenities.

Figure PR10: Projected Demand

Type of Infrastructure	Level of Service	Demand Unit	Cost per Unit
Park Amenities	0.00337 Units	per Person	$228,833
	0.00126 Units	per Job	

Demand for Park Amenities					
Year	Park Population	Jobs	Units		
			Residential	Nonresidential	Total
2024	16,975	9,317	57.3	11.7	69.0
2025	17,373	9,356	58.6	11.8	70.4
2026	17,624	9,396	59.5	11.8	71.3
2027	17,873	9,435	60.3	11.9	72.2
2028	18,119	9,474	61.1	11.9	73.1
2029	18,364	9,513	62.0	12.0	73.9
2030	18,606	9,553	62.8	12.0	74.8
2031	18,846	9,592	63.6	12.1	75.7
2032	19,084	9,631	64.4	12.1	76.5
2033	19,319	9,670	65.2	12.2	77.4
2034	19,552	9,709	66.0	12.2	78.2
10-Yr Increase	2,577	392	8.7	0.5	9.2

Growth-Related Expenditures	$1,989,473	$113,006	$2,102,479

Shared-Use Paths – Incremental Expansion

Sedona plans to maintain its existing level of service for shared-use paths over the next 10 years. Based on a projected park population increase of 2,577 persons, future residential development demands an additional 0.16 miles of shared-use paths (2,577 additional persons X 0.00006 miles per person). With projected employment growth of 392 jobs, future nonresidential development demands an additional 0.01 miles of shared-use paths (392 additional jobs X 0.00002 miles per job). Future development demands 0.17 miles of shared-use paths at a cost of $90,650 (0.17 miles X $547,525 per amenity). Sedona may use development fees to construct additional shared-use paths.

Figure PR11: Projected Demand

Type of Infrastructure	Level of Service	Demand Unit	Cost per Unit
Shared-Use Paths	0.00006 Miles	per Person	$547,525
	0.00002 Miles	per Job	

Demand for Shared-Use Paths					
Year	Park Population	Jobs	Miles		
			Residential	Nonresidential	Total
2024	16,975	9,317	1.03	0.21	1.24
2025	17,373	9,356	1.06	0.21	1.27
2026	17,624	9,396	1.07	0.21	1.28
2027	17,873	9,435	1.09	0.21	1.30
2028	18,119	9,474	1.10	0.21	1.32
2029	18,364	9,513	1.12	0.22	1.33
2030	18,606	9,553	1.13	0.22	1.35
2031	18,846	9,592	1.15	0.22	1.36
2032	19,084	9,631	1.16	0.22	1.38
2033	19,319	9,670	1.17	0.22	1.39
2034	19,552	9,709	1.19	0.22	1.41
10-Yr Increase	2,577	392	0.16	0.01	0.17

Growth-Related Expenditures	$85,778	$4,872	$90,650

PARKS AND RECREATIONAL FACILITIES DEVELOPMENT FEES

Revenue Credit/Offset

A revenue credit/offset is not necessary for development fees, because Sedona's construction transaction privilege tax rate does not exceed the amount of the transaction privilege tax rate imposed on the majority of other transaction privilege tax classifications. Appendix A contains the forecast of revenues required by Arizona's Enabling Legislation (ARS § 9-463.05(E)(7)).

Parks and Recreational Facilities Development Fees

Infrastructure components and cost factors for parks and recreational facilities are summarized in the upper portion of Figure PR12. The cost per service unit is $1,733.74 per person and $658.24 per job.

Parks and recreational facilities fees for residential development are calculated per housing unit, based on unit size, and vary proportionately according to the number of persons per household. The fee of $3,433 for a residential unit with 2,000 square feet is calculated using a cost per service unit of $1,733.74 per person multiplied by a demand unit of 1.98 persons per household.

Nonresidential development fees are calculated per square foot and vary proportionately according to the number of jobs per service unit. The fee of $1.03 per square foot of industrial development is derived from a cost per service unit of $658.24 per job, multiplied by a demand unit of 1.57 jobs per 1,000 square feet, and divided by 1,000.

Figure PR12: Parks and Recreational Facilities Development Fees

Fee Component	Cost per Person	Cost per Job
Park Land	$917.98	$342.56
Park Amenities	$772.01	$288.09
Shared-Use Paths	$33.29	$12.42
Development Fee Report	$10.46	$15.17
Total	$1,733.74	$658.24

Residential Fees per Unit				
Unit Size	Persons per Household[1]	Proposed Fees	Current Fees	Difference
700 or less	1.00	$1,734	$717	$1,017
701 to 1,200	1.26	$2,185	$1,004	$1,181
1,201 to 1,700	1.62	$2,809	$1,363	$1,447
1,701 to 2,200	1.98	$3,433	$1,578	$1,856
2,201 to 2,700	2.36	$4,092	$1,721	$2,371
2,701 to 3,200	2.61	$4,525	$1,865	$2,661
3,201 to 3,700	2.83	$4,906	$2,008	$2,898
3,701 to 4,200	2.99	$5,184	$2,151	$3,033
4,201 to 4,700	3.14	$5,444	$2,223	$3,221
4,701 or more	3.28	$5,687	$2,295	$3,392
Lodging (per room)	1.89	$3,277	$1,434	$1,843

Nonresidential Fees per Square Foot				
Development Type	Jobs per 1,000 Sq Ft[1]	Proposed Fees	Current Fees	Difference
Industrial	1.57	$1.03	$0.74	$0.29
Commercial	2.12	$1.40	$1.07	$0.33
Office / Other Services	3.26	$2.15	$1.36	$0.79
Institutional	3.03	$1.99	$0.42	$1.57

1. See Land Use Assumptions

PARKS AND RECREATIONAL FACILITIES DEVELOPMENT FEE REVENUE

Appendix A contains the forecast of revenues required by Arizona's Enabling Legislation (ARS § 9-463.05(E)(7)). In accordance with state law, this report includes an IIP for parks and recreational facilities needed to accommodate new development. Projected fee revenue shown in Figure PR13 is based on the development projections in the *Land Use Assumptions* document and the updated development fees for parks and recreational facilities shown in Figure PR12. If development occurs at a more rapid rate than projected, the demand for infrastructure will increase and development fee revenue will increase at a corresponding rate. If development occurs at a slower rate than projected, the demand for infrastructure will also decrease, along with development fee revenue. Projected development fee revenue equals $4,191,084, and projected expenditures equal $4,710,629. Since Sedona will assess residential development fees based on unit size, and the analysis projects residential development fee revenue based on a residential unit with 2,000 square feet (average size residential unit), actual development fee revenue will vary based on the actual mix of future residential units.

Figure PR13: Parks and Recreational Facilities Development Fee Revenue

Fee Component	Growth Share	Existing Share	Total
Park Land	$2,500,000	$0	$2,500,000
Park Amenities	$2,102,479	$0	$2,102,479
Shared-Use Paths	$90,650	$0	$90,650
Development Fee Report	$17,500	$0	$17,500
Total	$4,710,629	$0	$4,710,629

		Residential $3,433 per unit	Industrial $1.03 per sq ft	Commercial $1.40 per sq ft	Office / Other $2.15 per sq ft	Institutional $1.99 per sq ft
Year		Hsg Unit	KSF	KSF	KSF	KSF
Base	2024	7,021	530	2,222	993	176
Year 1	2025	7,141	532	2,235	995	177
Year 2	2026	7,260	534	2,249	996	178
Year 3	2027	7,378	536	2,262	998	178
Year 4	2028	7,494	538	2,276	999	179
Year 5	2029	7,610	540	2,289	1,001	180
Year 6	2030	7,724	542	2,302	1,003	181
Year 7	2031	7,838	544	2,316	1,004	182
Year 8	2032	7,950	546	2,329	1,006	182
Year 9	2033	8,061	548	2,343	1,007	183
Year 10	2034	8,171	550	2,356	1,009	184
10-Year Increase		1,150	20	134	16	8
Projected Revenue		$3,936,105	$20,431	$184,838	$33,938	$15,772

Projected Fee Revenue	$4,191,084
Total Expenditures	$4,710,629

POLICE FACILITIES IIP

ARS § 9-463.05 (T)(7)(f) defines the eligible facilities and assets for the Police Facilities IIP:

> *"Fire and police facilities, including all appurtenances, equipment and vehicles. Fire and police facilities do not include a facility or portion of a facility that is used to replace services that were once provided elsewhere in the municipality, vehicles and equipment used to provide administrative services, helicopters or airplanes or a facility that is used for training firefighters or officers from more than one station or substation."*

The Police Facilities IIP includes components for police facilities, police vehicles, communication equipment, and the cost of preparing the Police Facilities IIP and related Development Fee Report. The incremental expansion methodology, based on the current level of service, is used for police facilities, police vehicles, and communication equipment. The plan-based methodology is used for the Development Fee Report.

SERVICE AREA

Sedona uses a citywide service area for the Police Facilities IIP.

PROPORTIONATE SHARE

ARS § 9-463.05 (B)(3) states that the development fee shall not exceed a proportionate share of the cost of necessary public services needed to accommodate new development. The Police Facilities IIP and development fees will allocate the cost of police infrastructure between residential and nonresidential using functional population. Functional population is similar to what the U.S. Census Bureau calls "daytime population," by accounting for people living and working in a jurisdiction, but also considers commuting patterns and time spent at home and at nonresidential locations. The functional population approach allocates the cost of the police infrastructure to residential and nonresidential development based on the activity of residents and workers through the 24 hours in a day.

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 Sedona are assigned 14 hours to residential development and 10 hours to nonresidential development. Residents that work outside Sedona are assigned 14 hours to residential development, the remaining 10 hours in the day are assumed to be spent working outside of Sedona. Inflow commuters are assigned 10 hours to nonresidential development. Based on 2021 functional population data, residential development accounts for 69 percent of the functional population, while nonresidential development accounts for 31 percent.

Figure P1: Proportionate Share

Demand Units in 2021					
Residential				Demand Hours/Day	Person Hours
	Peak Population	11,818			
	Residents Not Working		8,682	20	173,640
	Employed Residents		3,136		
	Employed in Sedona			1,268	14	17,752
	Employed outside Sedona			1,868	14	26,152
				Residential Subtotal		217,544
				Residential Share		**69%**
Nonresidential					
	Non-working Residents		8,682	4	34,728
	Jobs Located in Sedona		6,086		
	Residents Employed in Sedona			1,268	10	12,680
	Non-Resident Workers (inflow commuters)			4,818	10	48,180
				Nonresidential Subtotal		95,588
				Nonresidential Share		**31%**
				Total		313,132

Source: Arizona Office of Economic Opportunity (population), U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics, Version 6.23.4 (employment).

The proportionate share of costs attributable to residential development will be allocated to population and then converted to an appropriate amount by type of housing unit. TischlerBise recommends using vehicle trips as the demand indicator for nonresidential demand for police services. Trip generation rates are used for nonresidential development because vehicle trips are highest for commercial developments, such as shopping centers, and lowest for industrial development. Office and institutional trip rates fall between the other two categories. This ranking of trip rates is consistent with the relative demand for public safety services from nonresidential development. Other possible nonresidential demand indicators, such as employment or floor area, will not accurately reflect the demand for service. For example, if employees per thousand square feet were used as the demand indicator, police development fees would be disproportionately high for office and institutional development because these types of development typically have more employees per 1,000 square feet than commercial uses. If floor area were used as the demand indicator, police development fees would be disproportionately high for industrial development.

Ratio of Service Unit to Development Unit

ARS § 9-463.05(E)(4) requires:

> *"A table establishing the specific level or quantity of use, consumption, generation or discharge of a service unit for each category of necessary public services or facility expansions and an equivalency or conversion table establishing the ratio of a service unit to various types of land uses, including residential, commercial and industrial."*

Figure P2 displays the demand indicators for residential and nonresidential land uses. For residential development, the table displays the number of persons per household. For nonresidential development, the table displays vehicle trips per thousand square feet of floor area.

Figure P2: Ratio of Service Unit to Development Unit

Residential Development per Unit	
Unit Size	Persons per Household[1]
700 or less	1.00
701 to 1,200	1.26
1,201 to 1,700	1.62
1,701 to 2,200	1.98
2,201 to 2,700	2.36
2,701 to 3,200	2.61
3,201 to 3,700	2.83
3,701 to 4,200	2.99
4,201 to 4,700	3.14
4,701 or more	3.28

Nonresidential Development per 1,000 Square Feet			
Development Type	AWVTE per 1,000 Sq Ft[1]	Trip Rate Adjustment	Avg Weekday Vehicle Trips
Industrial	4.87	50%	2.44
Commercial	37.01	33%	12.21
Office / Other Services	10.84	50%	5.42
Institutional	22.59	33%	7.45
Lodging (per room)	7.99	50%	4.00

1. See Land Use Assumptions

Analysis of Capacity, Usage, and Costs of Existing Public Services

ARS § 9-463.05(E)(1) requires:

> *"A description of the existing necessary public services in the service area and the costs to upgrade, update, improve, expand, correct or replace those necessary public services to meet existing needs and usage and stricter safety, efficiency, environmental or regulatory standards, which shall be prepared by qualified professionals licensed in this state, as applicable."*

ARS § 9-463.05(E)(2) requires:

> *"An analysis of the total capacity, the level of current usage and commitments for usage of capacity of the existing necessary public services, which shall be prepared by qualified professionals licensed in this state, as applicable."*

Police Facilities – Incremental Expansion

Sedona currently provides 20,354 square feet of police facilities to existing development, and Sedona plans to construct additional police facilities to serve future development. To allocate the proportionate share of demand for police vehicles to residential and nonresidential development, this analysis uses functional population outlined in Figure P1. Sedona's existing level of service for residential development is 1.1597 square feet per person (20,354 square feet X 69 percent residential share / 12,111 persons). The nonresidential level of service is 0.1797 square feet per vehicle trip (20,354 square feet X 31 percent nonresidential share / 35,121 vehicle trips).

Based on TischlerBise estimates, the construction cost for police facilities is $750 per square foot. Sedona may use development fees to construct or expand polices facilities to serve future development. For police facilities, the cost is $869.75 per person (1.1597 square feet per person X $750 per square foot) and $134.74 per vehicle trip (0.1797 square feet per vehicle trip X $750 per square foot).

Figure P3: Existing Level of Service

Description	Square Feet
Police Station	7,960
Parking Garage	11,227
Shooting Range	1,167
Total	20,354

Cost Factors	
Cost per Square Foot	$750

Level-of-Service (LOS) Standards	
Existing Square Feet	20,354
Residential	
Residential Share	69%
2024 Peak Population	12,111
Square Feet per Person	1.1597
Cost per Person	$869.75
Nonresidential	
Nonresidential Share	31%
2024 Vehicle Trips	35,121
Square Feet per Vehicle Trip	0.1797
Cost per Vehicle Trip	$134.74

Source: Sedona Police Department

Police Vehicles – Incremental Expansion

Sedona has 49 police vehicles with a total cost of $4,076,600, and Sedona plans to acquire additional police vehicles to serve future development. To allocate the proportionate share of demand for police vehicles to residential and nonresidential development, this analysis uses functional population outlined in Figure P1. Sedona's existing level of service for residential development is 0.0028 units per person (49 units X 69 percent residential share / 12,111 persons). The nonresidential level of service is 0.0004 units per vehicle trip (49 units X 31 percent nonresidential share / 35,121 vehicle trips).

Based on the total cost of Sedona's existing fleet of police vehicles, the weighted average cost is $83,196 per unit ($4,076,600 total cost / 49 units). Sedona may use development fees to expand its police vehicle fleet. For police vehicles, the cost is $232.26 per person (0.0028 units per person X $83,196 per unit) and $35.98 per vehicle trip (0.0004 units per vehicle trip X $$83,196 per unit).

Figure P4: Existing Level of Service

Description	Units	Unit Cost	Total Cost
Patrol Vehicle - Marked	31	$89,600	$2,777,600
Patrol Vehicle - Unmarked	12	$74,400	$892,800
Pickup Truck	3	$79,400	$238,200
Motorcycle	3	$56,000	$168,000
Total	49	$83,196	$4,076,600

Cost Factors	
Weighted Average per Unit	$83,196

Level-of-Service (LOS) Standards	
Existing Units	49
Residential	
Residential Share	69%
2024 Peak Population	12,111
Units per Person	0.0028
Cost per Person	$232.26
Nonresidential	
Nonresidential Share	31%
2024 Vehicle Trips	35,121
Units per Vehicle Trip	0.0004
Cost per Vehicle Trip	$35.98

Source: Sedona Police Department

Communication Equipment – Incremental Expansion

Sedona has 58 units of communication equipment with a total cost of $2,819,100, and Sedona plans to acquire additional units to serve future development. To allocate the proportionate share of demand for communication equipment to residential and nonresidential development, this analysis uses functional population outlined in Figure P1. Sedona's existing level of service for residential development is 0.0033 units per person (58 units X 69 percent residential share / 12,111 persons). The nonresidential level of service is 0.0005 units per vehicle trip (58 units X 31 percent nonresidential share / 35,121 trips).

Based on the total cost of Sedona's existing communication equipment, the weighted average cost is $48,605 per unit ($2,819,100 total cost / 58 units). Sedona may use development fees to acquire additional communication equipment. For communication equipment, the cost is $160.62 per person (0.0033 units per person X $48,605 per unit) and $24.88 per trip (0.0005 units per trip X $48,605 per unit).

Figure P5: Existing Level of Service

Description	Units	Unit Cost	Total Cost
Radio Infrastructure	1	$1,549,100	$1,549,100
Radios - Handheld	52	$3,000	$156,000
Dispatch Center Equipment	1	$64,500	$64,500
Dispatch Work Station	2	$25,800	$51,600
Spillman	1	$710,000	$710,000
Qwest / 911	1	$287,900	$287,900
Total	58	$48,605	$2,819,100

Cost Factors	
Weighted Average per Unit	$48,605

Level-of-Service (LOS) Standards	
Existing Units	58
Residential	
Residential Share	69%
2024 Peak Population	12,111
Units per Person	0.0033
Cost per Person	$160.62
Nonresidential	
Nonresidential Share	31%
2024 Vehicle Trips	35,121
Units per Vehicle Trip	0.0005
Cost per Vehicle Trip	$24.88

Source: Sedona Police Department

Development Fee Report – Plan-Based

The cost to prepare the Police Facilities IIP and related Development Fee Report equals $18,000. Sedona plans to update its report every five years. Based on this cost, proportionate share, and five-year projections of new residential and nonresidential development from the *Land Use Assumptions* document, the cost is $11.16 per person and $6.09 per vehicle trip.

Figure P6: IIP and Development Fee Report

Necessary Public Service	Cost	Proportionate Share		Service Unit	5-Year Change	Cost per Service Unit
Parks and Recreational	$17,500	Residential	83%	Park Population	1,388	$10.46
		Nonresidential	17%	Jobs	196	$15.17
Police	$18,000	Residential	69%	Police Population	1,113	$11.16
		Nonresidential	31%	Vehicle Trips	916	$6.09
Street	$20,820	All Development	100%	VMT	13,299	$1.56
Total	$56,320					

PROJECTED DEMAND FOR SERVICES AND COSTS

ARS § 9-463.05(E)(5) requires:

> *"The total number of projected service units necessitated by and attributable to new development in the service area based on the approved land use assumptions and calculated pursuant to generally accepted engineering and planning criteria."*

ARS § 9-463.05(E)(6) requires:

> *"The projected demand for necessary public services or facility expansions required by new service units for a period not to exceed ten years."*

As shown in the *Land Use Assumptions* document, Sedona's peak population is expected to increase by 2,171 persons and nonresidential vehicle trips are expected to increase by 1,832 over the next 10 years. To maintain the existing levels of service over the next 10 years, Sedona needs to construct approximately 2,846 square feet of facilities, acquire approximately 7 police vehicles, and acquire approximately 8 units of communication equipment. The following pages include a more detailed projection of demand for services and costs for the Police Facilities IIP.

Police Facilities – Incremental Expansion

Sedona plans to maintain its existing level of service for police facilities over the next 10 years. Based on a projected peak population increase of 2,171 persons, future residential development demands an additional 2,517.2 square feet (2,171 additional persons X 1.1597 square feet per person). With projected nonresidential vehicle trip growth of 1,832 vehicle trips, future nonresidential development demands an additional 329.1 square feet (1,832 additional vehicle trips X 0.1797 square feet per vehicle trip). Future development demands approximately 2,846 square feet of police facilities at a cost of $2,134,713 (2,846.3 square feet X $750 per square foot). Sedona may use development fees to expand its police facilities.

Figure P7: Projected Demand

Type of Infrastructure	Level of Service	Demand Unit	Cost per Sq Ft
Police Facilities	1.1597 Square Feet	per Person	$750
	0.1797 Square Feet	per Vehicle Trip	

Demand for Police Facilities					
Year	Peak Population	Vehicle Trips	Square Feet		
			Residential	Nonresidential	Total
2024	12,111	35,121	14,044.3	6,309.7	20,354.0
2025	12,338	35,305	14,307.6	6,342.6	20,650.2
2026	12,563	35,488	14,568.4	6,375.6	20,943.9
2027	12,785	35,671	14,826.5	6,408.5	21,235.0
2028	13,006	35,854	15,082.1	6,441.4	21,523.5
2029	13,224	36,037	15,335.1	6,474.3	21,809.4
2030	13,440	36,220	15,585.6	6,507.2	22,092.8
2031	13,653	36,404	15,833.4	6,540.1	22,373.5
2032	13,865	36,587	16,078.7	6,573.0	22,651.7
2033	14,074	36,770	16,321.4	6,605.9	22,927.3
2034	14,281	36,953	16,561.5	6,638.8	23,200.3
10-Yr Increase	2,171	1,832	2,517.2	329.1	2,846.3

Growth-Related Expenditures	$1,887,916	$246,797	$2,134,713

Police Vehicles – Incremental Expansion

Sedona plans to maintain its existing level of service for police vehicles over the next 10 years. Based on a projected population increase of 2,171 persons, future residential development demands an additional 6.1 units (2,171 additional persons X 0.0028 units per person). With projected nonresidential vehicle trip growth of 1,832 vehicle trips, future nonresidential development demands an additional 0.8 units (1,832 additional vehicle trips X 0.0004 units per vehicle trip). Future development demands approximately 6.9 units at a cost of $570,068 (6.9 units X $83,196 per unit). Sedona may use development fees to expand its police vehicle fleet.

Figure P8: Projected Demand

Type of Infrastructure	Level of Service	Demand Unit	Cost per Unit
Police Vehicles	0.0028 Units	per Person	$83,196
	0.0004 Units	per Vehicle Trip	

Demand for Police Vehicles					
Year	Peak Population	Vehicle Trips	Units		
			Residential	Nonresidential	Total
2024	12,111	35,121	33.8	15.2	49.0
2025	12,338	35,305	34.4	15.3	49.7
2026	12,563	35,488	35.1	15.3	50.4
2027	12,785	35,671	35.7	15.4	51.1
2028	13,006	35,854	36.3	15.5	51.8
2029	13,224	36,037	36.9	15.6	52.5
2030	13,440	36,220	37.5	15.7	53.2
2031	13,653	36,404	38.1	15.7	53.9
2032	13,865	36,587	38.7	15.8	54.5
2033	14,074	36,770	39.3	15.9	55.2
2034	14,281	36,953	39.9	16.0	55.9
10-Yr Increase	2,171	1,832	6.1	0.8	6.9

Growth-Related Expenditures	$504,161	$65,906	$570,068

Communication Equipment – Incremental Expansion

Sedona plans to maintain its existing level of service for communication equipment over the next 10 years. Based on a projected population increase of 2,171 persons, future residential development demands an additional 7.2 units (2,171 additional persons X 0.0033 units per person). With projected nonresidential vehicle trip growth of 1,832 vehicle trips, future nonresidential development demands an additional 0.9 units (1,832 additional vehicle trips X 0.0005 units per vehicle trip). Future development demands approximately 8.1 units at a cost of $394,220 (8.1 units X $48,605 per unit).

Figure P9: Projected Demand

Type of Infrastructure	Level of Service	Demand Unit	Cost per Unit
Communication Equipment	0.0033 Units	per Person	$48,605
	0.0005 Units	per Vehicle Trip	

Demand for Communication Equipment					
Year	Peak Population	Vehicle Trips	Units		
			Residential	Nonresidential	Total
2024	12,111	35,121	40.0	18.0	58.0
2025	12,338	35,305	40.8	18.1	58.8
2026	12,563	35,488	41.5	18.2	59.7
2027	12,785	35,671	42.2	18.3	60.5
2028	13,006	35,854	43.0	18.4	61.3
2029	13,224	36,037	43.7	18.4	62.1
2030	13,440	36,220	44.4	18.5	63.0
2031	13,653	36,404	45.1	18.6	63.8
2032	13,865	36,587	45.8	18.7	64.5
2033	14,074	36,770	46.5	18.8	65.3
2034	14,281	36,953	47.2	18.9	66.1
10-Yr Increase	2,171	1,832	7.2	0.9	8.1

Growth-Related Expenditures	$348,644	$45,576	$394,220

POLICE FACILITIES DEVELOPMENT FEES

Revenue Credit/Offset

A revenue credit/offset is not necessary for development fees, because Sedona's construction transaction privilege tax rate does not exceed the amount of the transaction privilege tax rate imposed on the majority of other transaction privilege tax classifications. Appendix A contains the forecast of revenues required by Arizona's Enabling Legislation (ARS § 9-463.05(E)(7)).

Police Facilities Development Fees

Infrastructure components and cost factors for police facilities are summarized in the upper portion of Figure P10. The cost per service unit is $1,273.79 per person and $201.69 per vehicle trip.

Police facilities fees for residential development are calculated per housing unit, based on unit size, and vary proportionately according to the number of persons per household. The fee of $2,522 for a residential unit with 2,000 square feet is calculated using a cost per service unit of $1,273.79 per person multiplied by a demand unit of 1.98 persons per household.

Nonresidential development fees are calculated per square foot and vary proportionately according to the number of vehicle trips per service unit. The fee of $0.49 per square foot of industrial development is derived from a cost per service unit of $201.69 per job, multiplied by a demand unit of 2.44 vehicle trips per 1,000 square feet, and divided by 1,000.

Figure P10: Police Facilities Development Fees

Fee Component	Cost per Person	Cost per Trip
Police Facilities	$869.75	$134.74
Police Vehicles	$232.26	$35.98
Communication Equipment	$160.62	$24.88
Development Fee Report	$11.16	$6.09
Total	$1,273.79	$201.69

Residential Fees per Unit				
Unit Size	Persons per Household[1]	Proposed Fees	Current Fees	Difference
700 or less	1.00	$1,274	$468	$806
701 to 1,200	1.26	$1,605	$656	$949
1,201 to 1,700	1.62	$2,064	$890	$1,174
1,701 to 2,200	1.98	$2,522	$1,030	$1,492
2,201 to 2,700	2.36	$3,006	$1,124	$1,882
2,701 to 3,200	2.61	$3,325	$1,218	$2,108
3,201 to 3,700	2.83	$3,605	$1,311	$2,294
3,701 to 4,200	2.99	$3,809	$1,405	$2,404
4,201 to 4,700	3.14	$4,000	$1,452	$2,548
4,701 or more	3.28	$4,178	$1,498	$2,680

Nonresidential Fees per Square Foot				
Development Type	AWVT per 1,000 Sq Ft[1]	Proposed Fees	Current Fees	Difference
Industrial	2.44	$0.49	$0.16	$0.33
Commercial	12.21	$2.46	$0.83	$1.63
Office / Other Services	5.42	$1.09	$0.32	$0.77
Institutional	7.45	$1.50	$0.43	$1.07
Lodging (per room)	4.00	$807	$278	$529

1. See Land Use Assumptions

POLICE FACILITIES DEVELOPMENT FEE REVENUE

Appendix A contains the forecast of revenues required by Arizona's Enabling Legislation (ARS § 9-463.05(E)(7)). In accordance with state law, this report includes an IIP for police facilities needed to accommodate new development. Projected fee revenue shown in Figure P11 is based on the development projections in the *Land Use Assumptions* document and the updated development fees for police facilities shown in Figure P10. If development occurs at a more rapid rate than projected, the demand for infrastructure will increase and development fee revenue will increase at a corresponding rate. If development occurs at a slower rate than projected, the demand for infrastructure will also decrease, along with development fee revenue. Projected development fee revenue equals $3,251,792, and projected expenditures equal $3,117,001. Since Sedona will assess residential development fees based on unit size, and the analysis projects residential development fee revenue based on a residential unit with 2,000 square feet (average size residential unit), actual development fee revenue will vary based on the actual mix of future residential units.

Figure P11: Police Facilities Development Fee Revenue

Fee Component	Growth Share	Existing Share	Total
Police Facilities	$2,134,713	$0	$2,134,713
Police Vehicles	$570,068	$0	$570,068
Communication Equipment	$394,220	$0	$394,220
Development Fee Report	$18,000	$0	$18,000
Total	$3,117,001	$0	$3,117,001

		Residential $2,522 per unit	Industrial $0.49 per sq ft	Commercial $2.46 per sq ft	Office / Other $1.09 per sq ft	Institutional $1.50 per sq ft
Year		Hsg Unit	KSF	KSF	KSF	KSF
Base	2024	7,021	530	2,222	993	176
Year 1	2025	7,141	532	2,235	995	177
Year 2	2026	7,260	534	2,249	996	178
Year 3	2027	7,378	536	2,262	998	178
Year 4	2028	7,494	538	2,276	999	179
Year 5	2029	7,610	540	2,289	1,001	180
Year 6	2030	7,724	542	2,302	1,003	181
Year 7	2031	7,838	544	2,316	1,004	182
Year 8	2032	7,950	546	2,329	1,006	182
Year 9	2033	8,061	548	2,343	1,007	183
Year 10	2034	8,171	550	2,356	1,009	184
10-Year Increase		1,150	20	134	16	8
Projected Revenue		$2,888,021	$9,694	$325,011	$17,226	$11,839

Projected Fee Revenue	$3,251,792
Total Expenditures	$3,117,001

STREET FACILITIES IIP

ARS § 9-463.05 (T)(7)(e) defines the eligible facilities and assets for the Street Facilities IIP:

> *"Street facilities located in the service area, including arterial or collector streets or roads that have been designated on an officially adopted plan of the municipality, traffic signals and rights-of-way and improvements thereon."*

The Street Facilities IIP includes components for street improvements, shared-use paths, intersection improvements, and the cost of preparing the Street Facilities IIP and related Development Fee Report. The incremental expansion methodology is used for street improvements, shared-use paths, and intersection improvements. The plan-based methodology is used for the Development Fee Report.

SERVICE AREA

Sedona uses a citywide service area for the Street Facilities IIP.

PROPORTIONATE SHARE

ARS § 9-463.05 (B)(3) states that the development fee shall not exceed a proportionate share of the cost of necessary public services needed to accommodate new development. The Street Facilities IIP and development fees will allocate the cost of necessary public services between residential and nonresidential based on trip generation rates, trip adjustment factors, and trip lengths.

RATIO OF SERVICE UNIT TO DEVELOPMENT UNIT

ARS § 9-463.05(E)(4) requires:

> *"A table establishing the specific level or quantity of use, consumption, generation or discharge of a service unit for each category of necessary public services or facility expansions and an equivalency or conversion table establishing the ratio of a service unit to various types of land uses, including residential, commercial and industrial."*

Sedona will use vehicle miles traveled (VMT) as the demand units for street facilities fees. Components used to determine VMT include average weekday vehicle trip generation rates, adjustments for commuting patterns and pass-by trips, and trip length weighting factors.

Residential Trip Generation Rates

As an alternative to simply using national average trip generation rates for residential development, published by the Institute of Transportation Engineers (ITE), TischlerBise calculates custom trip rates using local demographic data. Key inputs needed for the analysis, including average number of persons and vehicles available per housing unit, are available from American Community Survey (ACS) data.

Vehicle Trip Ends by Bedroom Range

TischlerBise recommends a fee schedule where larger units pay higher development fees than smaller units. Benefits of the proposed methodology include: 1) proportionate assessment of infrastructure demand using local demographic data, and 2) progressive fee structure (i.e., smaller units pay less, and larger units pay more).

TischlerBise creates custom tabulations of demographic data by bedroom range from individual survey responses provided by the U.S. Census Bureau in files known as Public Use Microdata Samples (PUMS). PUMS files are only available for areas of at least 100,000 persons, with Sedona in two Public Use Microdata Areas (AZ PUMAs 400 and 500). Shown in Figure S1, cells with yellow shading indicate the survey results, which yield the unadjusted number of persons and vehicles available per household. Unadjusted vehicles per household are adjusted to control totals in Sedona – 1.98 vehicles per unit.

Figure S1: Vehicle Trip Ends by Bedroom Range

Bedroom Range	Persons[1]	Vehicles Available[1]	Households[1]	Housing Mix	Unadjusted PPH	Adjusted PPH[2]	Unadjusted VPH	Adjusted VPH[2]
0-1	770	614	548	8%	1.41	1.19	1.12	1.02
2	3,685	3,100	1,915	27%	1.92	1.63	1.62	1.47
3	9,143	7,733	3,729	52%	2.45	2.07	2.07	1.89
4	2,636	2,047	834	12%	3.16	2.67	2.45	2.23
5+	637	500	180	2%	3.54	2.99	2.78	2.53
Total	16,871	13,994	7,206	100%	2.34	1.98	1.94	1.77

National Averages According to ITE

ITE Code	AWVTE per Person	AWVTE per Vehicle	AWVTE per HU	Sedona Housing Mix
210 SFD	2.65	6.36	9.43	87%
220 Apt	1.86	5.10	6.74	13%
Weighted Avg	2.55	6.20	9.09	100%

Recommended AWVTE per Household

Bedroom Range	AWVTE per Hhld Based on Persons[3]	AWVTE per Hhld Based on Vehicles[4]	AWVTE per Household[5]
0-1	3.03	6.32	4.68
2	4.16	9.11	6.64
3	5.28	11.72	8.50
4	6.81	13.83	10.32
5+	7.62	15.69	11.66
Average	5.05	10.97	8.01

1. American Community Survey, Public Use Microdata Sample for AZ PUMAs 400 and 500 (2017-2021 5-Year unweighted data).
2. Adjusted multipliers are scaled to make the average PUMS values match control totals for Sedona, based on American Community Survey 2017-2021 5-Year Estimates.
3. Adjusted persons per household multiplied by national weighted average trip rate per person.
4. Adjusted vehicles available per household multiplied by national weighted average trip rate per vehicle.
5. Average trip rates based on persons and vehicles per household.

Vehicle Trip Ends by Housing Size

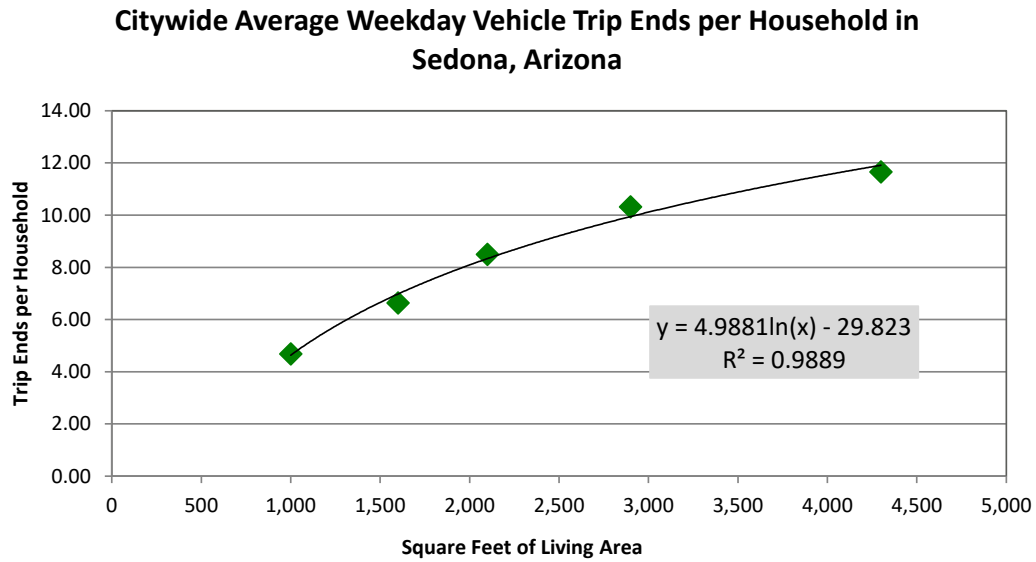
To derive average weekday vehicle trip ends by dwelling size, Tischler Bise uses 2021 U.S. Census Bureau data for housing units constructed in the west region. Based on 2021 estimates, living area ranges from 1,000 square feet for households with zero to one bedroom up to 4,300 square feet for households with five or more bedrooms. Citywide average floor area and weekday vehicle trip ends, by bedroom range, are plotted in Figure S2 with a logarithmic trend line. TischlerBise uses the trend line formula to derive estimated trip ends by housing unit size in increments of 500 square feet. TischlerBise recommends a minimum fee based on a unit size of 700 square feet and a maximum fee for units 4,701 square feet or larger. For the upper threshold, each dwelling averages 12.81 vehicle trip ends.

A medium-size residential unit in Sedona with 1,701 to 2,200 square feet has a fitted-curve value of 8.00 vehicle trip ends on an average weekday. A small unit of 700 square feet or less would pay 49 percent of the street fee paid by a medium-size unit. A large unit of 4,701 square feet or more would pay 160 percent of the street fee paid by a medium-size unit. With a "one-size-fits-all" approach, small units pay more than their proportionate share while large units pay less than their proportionate share. An average fee that does not vary by size makes small units less affordable and essentially subsidizes larger units.

Figure S2: Vehicle Trip Ends by Housing Size

Average weekday vehicle trips per household derived from 2017-2021 ACS 5-Year PUMS data for the area that includes Sedona. Unit size for 0-1 bedroom from the 2021 U.S. Census Bureau average for all multi-family units constructed in the Census West region. Unit size for all other bedrooms from the 2021 U.S. Census Bureau average for single-family units constructed in the Census West region.

Actual Averages per Household			Fitted-Curve Values	
Bedrooms	Square Feet	Trip Ends	Sq Ft Range	Trip Ends
0-1	1,000	4.68	700 or less	3.97
2	1,600	6.64	701 to 1,200	5.11
3	2,100	8.50	1,201 to 1,700	6.49
4	2,900	10.32	1,701 to 2,200	8.00
5+	4,300	11.66	2,201 to 2,700	9.20
			2,701 to 3,200	10.28
			3,201 to 3,700	11.09
			3,701 to 4,200	11.73
			4,201 to 4,700	12.30
			4,701 or more	12.81



Nonresidential Trip Generation Rates

For nonresidential development, TischlerBise uses trip generation rates published in Trip Generation, Institute of Transportation Engineers, 11th Edition (2021). The prototype for industrial development is Light Industrial (ITE 110) which generates 4.87 average weekday vehicle trip ends per 1,000 square feet of floor area. The prototype for commercial development is Shopping Center (ITE 820) which generates 37.01 average weekday vehicle trips per 1,000 square feet of floor area. For office & other services development, the proxy is General Office (ITE 710), and it generates 10.84 average weekday vehicle trip ends per 1,000 square feet of floor area. Institutional development uses Government Office (ITE 730) and generates 22.59 average weekday vehicle trip ends per 1,000 square feet of floor area.

Figure S3: Average Weekday Vehicle Trip Ends by Land Use

ITE Code	Land Use / Size	Demand Unit	Wkdy Trip Ends Per Dmd Unit[1]	Wkdy Trip Ends Per Employee[1]	Emp Per Dmd Unit	Sq Ft Per Emp
110	Light Industrial	1,000 Sq Ft	4.87	3.10	1.57	637
130	Industrial Park	1,000 Sq Ft	3.37	2.91	1.16	864
140	Manufacturing	1,000 Sq Ft	4.75	2.51	1.89	528
150	Warehousing	1,000 Sq Ft	1.71	5.05	0.34	2,953
254	Assisted Living	bed	2.60	4.24	0.61	na
310	Hotel	room	7.99	14.34	0.56	na
565	Day Care	student	4.09	21.38	0.19	na
610	Hospital	1,000 Sq Ft	10.77	3.77	2.86	350
620	Nursing Home	bed	3.06	3.31	0.92	na
710	General Office (avg size)	1,000 Sq Ft	10.84	3.33	3.26	307
720	Medical-Dental Office	1,000 Sq Ft	36.00	8.71	4.13	242
730	Government Office	1,000 Sq Ft	22.59	7.45	3.03	330
770	Business Park	1,000 Sq Ft	12.44	4.04	3.08	325
820	Shopping Center (avg size)	1,000 Sq Ft	37.01	17.42	2.12	471

1. Trip Generation, Institute of Transportation Engineers, 11th Edition (2021).

Trip Rate Adjustments

To calculate street facilities fees, trip generation rates require an adjustment factor to avoid double counting each trip at both the origin and destination points. Therefore, the basic trip adjustment factor is 50 percent. As discussed further in this section, the development fee methodology includes additional adjustments to make the fees proportionate to the infrastructure demand for particular types of development.

Commuter Trip Adjustment

Residential development has a larger trip adjustment factor of 59 percent to account for commuters leaving Sedona for work. According to the 2009 National Household Travel Survey (see Table 30) weekday work trips are typically 31 percent of production trips (i.e., all out-bound trips, which are 50 percent of all trip ends). As shown in Figure S4, the U.S. Census Bureau's OnTheMap web application indicates 60 percent of resident workers traveled outside of Sedona for work in 2021. In combination, these factors (0.31 x 0.50 x 0.60 = 0.09) support the additional nine percent allocation of trips to residential development.

Figure S4: Commuter Trip Adjustment

Trip Adjustment Factor for Commuters	
Employed Residents	3,136
Residents Living and Working in Sedona	1,268
Residents Commuting Outside Sedona for Work	1,868
Percent Commuting out of Sedona	60%
Additional Production Trips[1]	9%
Residential Trip Adjustment Factor	59%

Source: U.S. Census Bureau, OnTheMap Application (version 6.23.4) and LEHD Origin-Destination Employment Statistics, 2021.

1. According to the National Household Travel Survey (2009)*, published in December 2011 (see Table 30), home-based work trips are typically 30.99 percent of "production" trips, in other words, out-bound trips (which are 50 percent of all trip ends). Also, LED OnTheMap data from 2021 indicate that 60 percent of Sedona's workers travel outside the city for work. In combination, these factors (0.3099 x 0.50 x 0.60 = 0.09) account for 9 percent of additional production trips. The total adjustment factor for residential includes attraction trips (50 percent of trip ends) plus the journey-to-work commuting adjustment (9 percent of production trips) for a total of 59 percent.
*http://nhts.ornl.gov/publications.shtml ; Summary of Travel Trends - Table "Daily Travel Statistics by Weekday vs. Weekend"

Adjustment for Pass-By Trips

For commercial and institutional development, the trip adjustment factor is less than 50 percent because these types of development attract vehicles as they pass by on arterial and collector roads. For example, when someone stops at a convenience store on the way home from work, the convenience store is not the primary destination. For the average shopping center, ITE data indicate 34 percent of the vehicles that enter are passing by on their way to some other primary destination. The remaining 66 percent of attraction trips have the commercial site as their primary destination. Because attraction trips are half of all trips, the trip adjustment factor is 66 percent multiplied by 50 percent, or approximately 33 percent of the trip ends.

Average Weekday Vehicle Trips

Shown below in Figure S5, multiplying average weekday vehicle trip ends and trip adjustment factors (discussed on the previous page) by Sedona's existing development units provides the average weekday vehicle trips generated by existing development. As shown below, Sedona's existing citywide development generates 68,261 vehicle trips on an average weekday.

Figure S5: Average Weekday Vehicle Trips by Land Use

Development Type	Development Unit	ITE Code	Avg Wkday VTE	Trip Adjustment	2024 Dev Units	2024 Veh Trips
Residential	HU	Avg	8.00	59%	7,021	33,139
Industrial	KSF	130	4.87	50%	530	1,291
Commercial	KSF	820	37.01	33%	2,222	27,137
Office & Other Services	KSF	710	10.84	50%	993	5,382
Institutional	KSF	610	22.59	33%	176	1,312
Total						68,261

Trip Length Weighting Factor

The street facilities development fee methodology includes a percentage adjustment, or weighting factor, to account for trip length variation by type of land use. As documented in Table 6a, Table 6b, and Table 6c of the 2017 National Household Travel Survey, vehicle trips from residential development are approximately 117 percent of the average trip length. The residential trip length adjustment factor includes data on home-based work trips, social, and recreational purposes. Conversely, shopping trips associated with commercial development are roughly 75 percent of the average trip length while other nonresidential development typically accounts for trips that are 73 percent of the average for all trips.

Local Trip Lengths

According to recent estimates, Sedona provides approximately 27.43 lane miles of arterials and collectors citywide. Using a capacity standard of 8,000 vehicles per lane mile, Sedona's existing network provides 219,415 vehicle miles of capacity (27.43 lane miles X 8,000 vehicles per lane mile). To derive the average utilization (i.e., average trip length expressed in miles) of the major streets, divide vehicle miles of capacity by vehicle trips attracted to development in Sedona. As shown in Figure S5, citywide development currently attracts 68,261 average weekday vehicle trips. Dividing 219,415 vehicle miles of capacity by existing average weekday vehicle trips yields an unweighted-average trip length of approximately 3.214 miles. The calibration of average trip length includes the same adjustment factors used in the development fee calculations (i.e., commuter trip adjustment, pass-by trip adjustment, and average trip length adjustment). With these refinements, the weighted-average trip length is 3.378 miles.

Local Vehicle Miles Traveled

Shown below are the demand indicators for residential and nonresidential land uses related to vehicle miles traveled (VMT). For residential development, the table displays the number of VMT per household. For nonresidential development, the table displays VMT per thousand square feet of floor area.

Figure S6: Ratio of Service Unit to Development Unit

Residential Development per Unit					
Unit Size	AWVTE per unit[1]	Trip Adjustment[1]	Average Trip Length (miles)	Trip Length Adjustment	Avg Weekday VMT
700 or less	3.97	59%	3.378	117%	9.26
701 to 1,200	5.11	59%	3.378	117%	11.92
1,201 to 1,700	6.49	59%	3.378	117%	15.13
1,701 to 2,200	8.00	59%	3.378	117%	18.65
2,201 to 2,700	9.20	59%	3.378	117%	21.45
2,701 to 3,200	10.28	59%	3.378	117%	23.97
3,201 to 3,700	11.09	59%	3.378	117%	25.86
3,701 to 4,200	11.73	59%	3.378	117%	27.35
4,201 to 4,700	12.30	59%	3.378	117%	28.68
4,701 or more	12.81	59%	3.378	117%	29.87

Nonresidential Development per 1,000 Square Feet					
Development Type	AWVTE per 1,000 Sq Ft[1]	Trip Adjustment[1]	Average Trip Length (miles)	Trip Length Adjustment	Avg Weekday VMT
Industrial	4.87	50%	3.378	73%	6.00
Commercial	37.01	33%	3.378	75%	30.94
Office / Other Services	10.84	50%	3.378	73%	13.37
Institutional	22.59	33%	3.378	73%	18.38
Lodging (per room)	7.99	50%	3.378	75%	10.12

1. See Land Use Assumptions

PROJECTED DEMAND FOR SERVICES AND COSTS

ARS § 9-463.05(E)(5) requires:

> *"The total number of projected service units necessitated by and attributable to new development in the service area based on the approved land use assumptions and calculated pursuant to generally accepted engineering and planning criteria."*

ARS § 9-463.05(E)(6) requires:

> *"The projected demand for necessary public services or facility expansions required by new service units for a period not to exceed ten years."*

As shown in the *Land Use Assumptions* document, projected development includes an additional 1,150 housing units and 178,000 square feet of nonresidential floor area over the next 10 years. Based on the trip generation factors discussed in this section, projected development generates an additional 26,080 VMT over the next 10 years. Shown below in Figure S7, Sedona needs to construct approximately 3.26 lane miles of street improvements, 0.95 miles of shared-use paths, and 0.36 intersection improvements over the next 10 years to maintain the existing levels of service.

Figure S7: Projected Travel Demand

Development Type	Development Unit	ITE Code	Weekday Veh Trips	Local Trip Length	Trip Length Adj	Weekday VMT
Residential	HU	Avg	4.72	3.38	117%	18.65
Industrial	KSF	130	2.44	3.38	73%	6.00
Commercial	KSF	820	12.21	3.38	75%	30.94
Office & Other Services	KSF	710	5.42	3.38	73%	13.37
Institutional	KSF	610	7.45	3.38	73%	18.38

VMC Per Lane Mile	8,000
Average Trip Length (miles)	3.378

Sedona, Arizona	Base	1	2	3	4	5	10	10-Year Increase
	2024	2025	2026	2027	2028	2029	2034	
Residential Units	7,021	7,141	7,260	7,378	7,494	7,610	8,171	1,150
Industrial KSF	530	532	534	536	538	540	550	20
Commercial KSF	2,222	2,235	2,249	2,262	2,276	2,289	2,356	134
Office & Other Services KSF	993	995	996	998	999	1,001	1,009	16
Institutional KSF	176	177	178	178	179	180	184	8
Residential Trips	33,139	33,706	34,267	34,823	35,373	35,919	38,567	5,428
Residential Trips	33,139	33,706	34,267	34,823	35,373	35,919	38,567	5,428
Industrial Trips	1,291	1,296	1,300	1,305	1,310	1,315	1,339	49
Commercial Trips	27,137	27,301	27,464	27,628	27,792	27,955	28,774	1,637
Office & Other Services Trips	5,382	5,390	5,399	5,408	5,416	5,425	5,468	87
Institutional Trips	1,312	1,318	1,324	1,330	1,336	1,342	1,372	60
Nonresidential Trips	35,121	35,305	35,488	35,671	35,854	36,037	36,953	1,832
Total Vehicle Trips	**68,261**	**69,010**	**69,754**	**70,494**	**71,227**	**71,956**	**75,520**	**7,260**
Vehicle Miles Traveled (VMT)	**219,415**	**222,117**	**224,797**	**227,457**	**230,096**	**232,714**	**245,495**	**26,080**
Lane Miles (Total)	27.43	27.76	28.10	28.43	28.76	29.09	30.69	3.26
Lane Miles Cost (Annual)		$1,012,983	$1,005,210	$997,438	$989,665	$981,892	$943,028	$9,780,056
Shared-Use Paths (Total)	7.97	8.07	8.17	8.26	8.36	8.45	8.92	0.95
Shared-Use Paths Cost (Annual)		$102,875	$102,086	$101,296	$100,507	$99,718	$95,771	$993,230
Improved Intersections (Total)	3.00	3.04	3.07	3.11	3.15	3.18	3.36	0.36
Impr. Intersections Cost (Annual)		$155,649	$154,454	$153,260	$152,066	$150,872	$144,900	$1,502,743

Analysis of Capacity, Usage, and Costs of Existing Public Services

ARS § 9-463.05(E)(1) requires:

> *"A description of the existing necessary public services in the service area and the costs to upgrade, update, improve, expand, correct or replace those necessary public services to meet existing needs and usage and stricter safety, efficiency, environmental or regulatory standards, which shall be prepared by qualified professionals licensed in this state, as applicable."*

ARS § 9-463.05(E)(2) requires:

> *"An analysis of the total capacity, the level of current usage and commitments for usage of capacity of the existing necessary public services, which shall be prepared by qualified professionals licensed in this state, as applicable."*

Street Improvements – Incremental Expansion

Sedona currently provides approximately 27.43 lane miles of arterial and collector streets to existing development, and Sedona plans to construct additional street improvements to serve future development. Sedona's existing level of service is 1.25 lane miles per 10,000 VMT (27.43 lane miles / (219,415 VMT / 10,000)).

Based on Public Works Department estimates of recent and planned street improvements, the construction cost for street improvements is $3,000,000 per lane mile. The analysis uses this cost as a proxy for future growth-related street improvement costs, and Sedona may use development fees to construct street improvements to serve future development. For street improvements, the cost is $375.00 per VMT (1.25 lane miles per 10,000 VMT / 10,000 X $3,000,000 per lane mile).

Figure S8: Existing Level of Service

Cost Factors	
Cost per Lane Mile	$3,000,000

Level-of-Service (LOS) Standards	
Existing Lane Miles	27.43
2024 VMT	219,415
Lane Miles per 10,000 VMT	1.25
Cost per VMT	$375.00

Source: Sedona Public Works Department

Shared-Use Paths – Incremental Expansion

Sedona currently provides 7.97 miles of shared-use paths within street rights of way to existing development, and Sedona plans to construct additional shared-use paths to serve future development. Sedona's current level of service for shared-use paths is 0.3633 miles per 10,000 VMT (7.97 miles of shared-use paths / (219,415 VMT / 10,000)).

The weighted average cost of Sedona's existing shared-use paths is $1,048,366 per mile ($8,356,155 total cost / 7.97 miles), and the analysis uses this cost as a proxy for future growth-related shared-use path costs. Sedona may use development fees to construct additional shared-use paths within street rights of way. The cost for shared-use paths is $38.08 per VMT (0.3633 miles per 10,000 VMT / 10,000 X $1,048,366 per mile).

Figure S9: Existing Level of Service

Shared-Use Path Type	Miles	Unit Cost	Total Cost
Decomposed Granite	2.01	$300,000	$601,705
Concrete	5.96	$1,300,000	$7,754,451
Total	7.97	$1,048,366	$8,356,155

Cost Factors	
Weighted Average Cost per Mile	$1,048,366

Level-of-Service (LOS) Standards	
Existing Miles	7.97
2024 VMT	219,415
Miles per 10,000 VMT	0.3633
Cost per VMT	$38.08

Source: Sedona Public Works Department

Intersection Improvements – Incremental Expansion

Sedona currently provides 3.0 intersection improvements to existing development, and Sedona plans to construct additional intersection improvements to serve future development. Sedona's current level of service for intersection improvements is 0.1367 intersections per 10,000 VMT (3.0 intersection improvements / (219,415 VMT / 10,000)).

The Sedona Public Works Department provided construction costs for three future intersection improvements equal to $12,642,751. The weighted average cost of these intersection improvements is $4,214,250 per intersection ($12,642,751/ 3.0 intersection improvements), and the analysis uses this cost as a proxy for future growth-related intersection improvement costs. Sedona may use development fees to construct these improvements or to construct other growth-related intersection improvements. The cost for intersection improvements is $57.62 per VMT (0.1367 intersection improvements per 10,000 VMT / 10,000 X $4,214,250 per intersection).

Figure S10: Existing Level of Service

Cost Factors	
Ranger Rd / Brewer Rd RAB (SIM-05d)	$6,274,993
Ranger Rd / SR 179 (SIM-04e)	$1,072,500
Forest Rd / Ranger Rd / SR 89A (SIM-05e)	$5,295,258
Total	$12,642,751
Average	**$4,214,250**

Level-of-Service (LOS) Standards	
Existing Intersection Improvements	3.0
2024 VMT	219,415
Intersection Improvements per 10,000 VMT	0.1367
Cost per VMT	$57.62

Source: Sedona Public Works Department

Development Fee Report – Plan-Based

The cost to prepare the Street Facilities IIP and related Development Fee Report equals $20,820. Sedona plans to update its report every five years. Based on this cost, proportionate share, and five-year projections of new residential and nonresidential development from the *Land Use Assumptions* document, the cost is $1.56 per VMT.

Figure S11: IIP and Development Fee Report

Necessary Public Service	Cost	Proportionate Share		Service Unit	5-Year Change	Cost per Service Unit
Parks and Recreational	$17,500	Residential	83%	Park Population	1,388	$10.46
		Nonresidential	17%	Jobs	196	$15.17
Police	$18,000	Residential	69%	Police Population	1,113	$11.16
		Nonresidential	31%	Vehicle Trips	916	$6.09
Street	$20,820	All Development	100%	VMT	13,299	$1.56
Total	$56,320					

Street Facilities Development Fees

Revenue Credit/Offset

A revenue credit/offset is not necessary for development fees, because Sedona's construction transaction privilege tax rate does not exceed the amount of the transaction privilege tax rate imposed on the majority of other transaction privilege tax classifications. Appendix A contains the forecast of revenues required by Arizona's Enabling Legislation (ARS § 9-463.05(E)(7)).

Street Facilities Development Fees

Infrastructure components and cost factors for street facilities are summarized in the upper portion of Figure S12. The cost per service unit is $472.26 per VMT.

Street facilities fees for residential development are calculated per housing unit, based on unit size, and vary proportionately according to the number of VMT per household. The fee of $8,808 for a residential unit with 2,000 square feet is calculated using a cost per service unit of $472.26 per VMT multiplied by a demand unit of 18.65 VMT per unit.

Nonresidential development fees are calculated per square foot and vary proportionately according to the number of VMT per service unit. The fee of $2.83 per square foot of industrial development is calculated using a cost per service unit of $472.26 per VMT, multiplied by a demand unit of 6.00 VMT per 1,000 square feet, and divided by 1,000.

Figure S12: Street Facilities Development Fees

Fee Component	Cost per VMT
Street Improvements	$375.00
Shared-Use Paths	$38.08
Intersection Improvements	$57.62
Development Fee Report	$1.56
Total	$472.26

Residential Fees per Unit				
Unit Size	Avg Wkdy VMT per Unit[1]	Proposed Fees	Current Fees	Difference
700 or less	9.26	$4,373	$2,088	$2,285
701 to 1,200	11.92	$5,629	$2,831	$2,798
1,201 to 1,700	15.13	$7,145	$3,580	$3,566
1,701 to 2,200	18.65	$8,808	$4,134	$4,675
2,201 to 2,700	21.45	$10,130	$4,574	$5,556
2,701 to 3,200	23.97	$11,320	$4,943	$6,377
3,201 to 3,700	25.86	$12,213	$5,256	$6,957
3,701 to 4,200	27.35	$12,916	$5,526	$7,390
4,201 to 4,700	28.68	$13,544	$5,767	$7,777
4,701 or more	29.87	$14,106	$5,985	$8,121

Nonresidential Fees per Square Foot				
Development Type	Avg Wkdy VMT per 1,000 Sq Ft[1]	Proposed Fees	Current Fees	Difference
Industrial	6.00	$2.83	$1.18	$1.65
Commercial	30.94	$14.61	$5.36	$9.25
Office / Other Services	13.37	$6.31	$2.32	$3.99
Institutional	18.38	$8.68	$3.07	$5.61
Lodging (per room)	10.12	$4,779	$1,990	$2,789

1. See Land Use Assumptions

STREET FACILITIES DEVELOPMENT FEE REVENUE

Appendix A contains revenue forecasts required by Arizona's Enabling Legislation (ARS § 9-463.05(E)(7)). Projected fee revenue shown in Figure S13 is based on the development projections in the *Land Use Assumptions* document and the updated street facilities development fees. If development occurs faster than projected, the demand for infrastructure will increase along with development fee revenue. If development occurs slower than projected, the demand for infrastructure will decrease and development fee revenue will decrease at a similar rate. Projected development fee revenue equals $12,293,830 and projected expenditures equal $12,296,849. Since Sedona will assess residential development fees based on unit size, and the analysis projects residential development fee revenue based on a residential unit with 2,000 square feet (average size residential unit), actual development fee revenue will vary based on the actual mix of future residential units.

Figure S13: Street Facilities Development Fee Revenue

Fee Component	Growth Share	Existing Share	Total
Street Improvements	$9,780,056	$0	$9,780,056
Shared-Use Paths	$993,230	$0	$993,230
Intersection Improvements	$1,502,743	$0	$1,502,743
Development Fee Report	$20,820	$0	$20,820
Total	$12,296,849	$0	$12,296,849

Year		Residential $8,808 per unit	Industrial $2.83 per sq ft	Commercial $14.61 per sq ft	Office / Other $6.31 per sq ft	Institutional $8.68 per sq ft
		Hsg Unit	KSF	KSF	KSF	KSF
Base	2024	7,021	530	2,222	993	176
Year 1	2025	7,141	532	2,235	995	177
Year 2	2026	7,260	534	2,249	996	178
Year 3	2027	7,378	536	2,262	998	178
Year 4	2028	7,494	538	2,276	999	179
Year 5	2029	7,610	540	2,289	1,001	180
Year 6	2030	7,724	542	2,302	1,003	181
Year 7	2031	7,838	544	2,316	1,004	182
Year 8	2032	7,950	546	2,329	1,006	182
Year 9	2033	8,061	548	2,343	1,007	183
Year 10	2034	8,171	550	2,356	1,009	184
10-Year Increase		1,150	20	134	16	8
Projected Revenue		$10,112,471	$56,436	$1,954,737	$100,859	$69,326

Projected Fee Revenue	$12,293,830
Total Expenditures	$12,296,849

APPENDIX A: FORECAST OF REVENUES OTHER THAN FEES

ARS § 9-463.05(E)(7) requires:

> *"A forecast of revenues generated by new service units other than development fees, which shall include estimated state-shared revenue, highway users revenue, federal revenue, ad valorem property taxes, construction contracting or similar excise taxes and the capital recovery portion of utility fees attributable to development based on the approved land use assumptions, and a plan to include these contributions in determining the extent of the burden imposed by the development as required in subsection B, paragraph 12 of this section."*

ARS § 9-463.05(B)(12) states,

> *"The municipality shall forecast the contribution to be made in the future in cash or by taxes, fees, assessments or other sources of revenue derived from the property owner towards the capital costs of the necessary public service covered by the development fee and shall include these contributions in determining the extent of the burden imposed by the development. Beginning August 1, 2014, for purposes of calculating the required offset to development fees pursuant to this subsection, if a municipality imposes a construction contracting or similar excise tax rate in excess of the percentage amount of the transaction privilege tax rate imposed on the majority of other transaction privilege tax classifications, the entire excess portion of the construction contracting or similar excise tax shall be treated as a contribution to the capital costs of necessary public services provided to development for which development fees are assessed, unless the excess portion was already taken into account for such purpose pursuant to this subsection."*

REVENUE PROJECTIONS

Sedona does not have a higher-than-normal construction excise tax rate; therefore, the required offset described above is not applicable. Shown in Figure A1, Sedona provided the required forecast of non-development fee revenue from identified sources that can be attributed to future development over a period of five years. Sedona directs the revenues shown below to non-development fee eligible capital needs including maintenance, repair, and replacement.

Figure A1: Revenue Projections

NOTE TO STAFF: WE NEED TO PROJECT FUTURE REVENUE.

APPENDIX B: PROFESSIONAL SERVICES

As stated in Arizona's development fee enabling legislation, "a municipality may assess development fees to offset costs to the municipality associated with providing necessary public services to a development, including the costs of infrastructure, improvements, real property, engineering and architectural services, financing and professional services required for the preparation or revision of a development fee pursuant to this section, including the relevant portion of the infrastructure improvements plan" (see ARS § 9-463.05.A). Because development fees must be updated at least every five years, the cost of professional services is allocated to the projected increase in service units, over five years (see Figure B1). Qualified professionals must develop the IIP, using generally accepted engineering and planning practices. A qualified professional is defined as "a professional engineer, surveyor, financial analyst or planner providing services within the scope of the person's license, education or experience".

Figure B1: Cost of Professional Services

Necessary Public Service	Cost	Proportionate Share		Service Unit	5-Year Change	Cost per Service Unit
Parks and Recreational	$17,500	Residential	83%	Park Population	1,388	$10.46
		Nonresidential	17%	Jobs	196	$15.17
Police	$18,000	Residential	69%	Police Population	1,113	$11.16
		Nonresidential	31%	Vehicle Trips	916	$6.09
Street	$20,820	All Development	100%	VMT	13,299	$1.56
Total	$56,320					

APPENDIX C: LAND USE DEFINITIONS

RESIDENTIAL DEVELOPMENT

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

Single Family:

1. Single-family detached is a one-unit structure detached from any other house, that is, with open space on all four sides. Such structures are considered detached even if they have an adjoining shed or garage. A one-family house that contains a business is considered detached as long as the building has open space on all four sides.

2. Single-family attached (townhouse) is a one-unit structure that has one or more walls extending from ground to roof separating it from adjoining structures. In row houses (sometimes called townhouses), double houses, or houses attached to nonresidential structures, each house is a separate, attached structure if the dividing or common wall goes from ground to roof.

3. Mobile home includes both occupied and vacant mobile homes, to which no permanent rooms have been added. Mobile homes used only for business purposes or for extra sleeping space and mobile homes for sale on a dealer's lot, at the factory, or in storage are not counted in the housing inventory.

Multi-Family:

3. Includes units in structures containing two or more housing units, further categorized as units in structures with "2, 3 or 4, 5 to 9, 10 to 19, 20 to 49, and 50 or more apartments."

1. Includes any living quarters occupied as a housing unit that does not fit the other categories (e.g., houseboats, railroad cars, campers, and vans). Recreational vehicles, boats, vans, railroad cars, and the like are included only if they are occupied as a current place of residence.

NONRESIDENTIAL DEVELOPMENT

The proposed general nonresidential development categories (defined below) can be used for all new construction. Nonresidential development categories represent general groups of land uses that share similar average weekday vehicle trip generation rates and employment densities (i.e., jobs per thousand square feet of floor area).

Commercial: Establishments primarily selling merchandise, eating/drinking places, and entertainment uses. By way of example, commercial includes shopping centers, supermarkets, pharmacies, restaurants, bars, nightclubs, automobile dealerships, and movie theaters.

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

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

Lodging: Establishments primarily engaged in providing sleeping accommodations and supporting facilities such as restaurants, cocktail lounges, meeting and banquet rooms or convention facilities, limited recreational facilities (pool, fitness room), and/or other retail and service shops.

Office / Other Services: Establishments providing management, administrative, professional, or business services; personal and health care services; and lodging facilities. By way of example, Office and Other services includes banks, business offices; hotels and motels; assisted-living facilities, nursing homes and hospitals.