

# DEVELOPMENT IMPACT FEES FOR STREETS, POLICE AND FIRE FACILITIES

*Prepared for:*

*City of Prescott, Arizona*

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## Executive Summary

Arizona's enabling legislation for development fees (ARS § 9-463.05) calls for three integrated products: 1) Land Use Assumptions (LUA) for at least 10 years, 2) Infrastructure Improvements Plan (IIP), and 3) Development Fees (DIF). Given the State's two-phase adoption process, the LUA and IIP are being reviewed, refined, and approved before focusing on the development fees.

In contrast to many General Plans and Master Plans for specific types of infrastructure, the projections of demand for necessary public services or facility expansions required by new service units set forth in the IIP is limited to 10 years. Another important feature in Arizona's impact fee enabling legislation is the requirement that fees be based on the same Level-Of-Service (LOS) provided to existing development. LOS to existing development may increase, but not by means of development fees. A final highlight of the enabling legislation is specific limitations on necessary public services. For example, only 10,000 square feet of a new library may be funded with development fees.

Prescott's 2019 Development Fee Study includes the necessary public services listed below:

- ) Streets
- ) Public Safety Facilities
- ) Water Facilities (in a separate report)
- ) Wastewater Facilities (in a separate report)

Development fees are one-time payments used to construct system improvements needed to accommodate new development. The fees represent future development's proportionate share of infrastructure capacity. Development fees may only be used for capital 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.

## Arizona Development Fee Enabling Legislation

Arizona Revised Statutes § 9-463.05 governs how development fees are calculated for municipalities in Arizona. During the state legislative session of 2011, Senate Bill 1525 (SB 1525) was introduced which significantly amended the development fee enabling legislation. The changes included:

- ) Amending existing development fee programs by January 1, 2012.
- ) Abandoning existing development fee programs by August 1, 2014.
- ) New development fee program structure revolving around Land Use Assumptions and Infrastructure Improvements Plan.
- ) New adoption procedures for the Land Use Assumptions, Infrastructure Improvements Plan, and development fees.
- ) New definitions, including "necessary public services" which specify what categories and types of infrastructure may be funded with development fees.
- ) Time limitations in development fee collections and expenditures.
- ) New requirements for credits, "grandfathering" rules, and refunds.

As documented in this report, the City of Prescott (City) has complied with Arizona's development fee enabling legislation and applicable legal precedents. Development fees are proportionate and reasonably related to the capital improvement demands of new development. Specific costs have been identified using local data and current dollars. With input from City staff, Raftelis determined demand indicators for each type of infrastructure and calculated proportionate share factors to allocate costs by type of development. This report documents the formulas and input variables used to calculate the development fees for each type of public facility. Development fee methodologies also identify the extent to which new

development is entitled to various types of credits to avoid potential double payment of growth-related capital costs.

## Necessary Public Services

Consistent with Arizona's development fee enabling legislation, development fees may be only used for construction, acquisition or expansion of public facilities that are necessary public services. Necessary public facilities must have a life expectancy of three or more years and be owned or operated on behalf of the municipality.

## Evaluation of Credits

New development should not be required to pay twice for the cost of new facilities – once through development fees and again through other taxes or fees that are used to fund the same facilities. To avoid potential double-payment, development fees may be reduced, and such a reduction is referred to as an offset or revenue credit that is incorporated into the development fee calculation. In general, offsets are only required for funding that is dedicated for capacity-expanding improvements of the type addressed by the development fee. A municipality is not required to use general fund revenue to pay for growth-related improvements.

SB 1525 amended the "offset" provision in the state enabling act to add a mandate regarding construction contracting excise tax, as highlighted in the following provision ARS § 9-463.05(B)(12):

*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.*

Because Prescott does not charge a construction excise tax at a rate higher than for other types of business activities, no such offset is required.

## Qualified Professionals

Qualified professionals must prepare 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." Raftelis is a financial consulting firm specializing in the cost of growth services and user charges for utilities. Our services include development fees, infrastructure funding, user fees and cost of service studies. Since 1993, Raftelis has provided consulting services for local governments and utilities across the United States. The total cost of professional services for non-utility impact fees, including all meetings with staff, Mayor's Commission and

elected officials, was \$69,500. The cost of professional services was allocated 34% to streets, and 33% each to police and fire facilities.

## Methods

In contrast to project-level improvements, development fees fund growth-related infrastructure that will benefit multiple development projects, or the entire jurisdiction (usually referred to as system improvements). There are three general methods for calculating development fees. The choice of a particular method depends primarily on the timing of infrastructure construction (past, concurrent, or future) and service characteristics of the facility type being addressed. Each method has advantages and disadvantages in a particular situation, and can be used simultaneously for different cost components.

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

- J 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.
- J The incremental expansion method documents current infrastructure standards for each type of public facility, using both quantitative and qualitative measures. By definition there are no existing infrastructure deficiencies or surplus capacity in infrastructure. New development is only paying its proportionate share to maintain current standards for growth-related infrastructure. Fee revenue will be used to expand or provide additional facilities, as needed to keep pace with new development.
- J The plan-based method allocates costs for a specified set of improvements to a specified amount of service units. Improvements are typically identified in a facility master plan and development potential is identified by the land use assumptions. There are two options for determining the cost per service unit: 1) total cost of a public facility can be divided by total demand units (average cost approach), 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 approach).

Figure 1 summarizes the methods and cost components for each type of infrastructure included in Prescott's IIP and DIF study. Arizona's enabling legislation also requires a determination of service areas, within which a substantial nexus exists between public facilities and the development being served. A city-wide service area is appropriate for Prescott's street, fire and police facilities.

**Figure 1 – Development Fee Methods and Cost Components**

<i>Type of Impact Fee</i>	<i>Service Area</i>	<i>Incremental Expansion (current standards)</i>	<i>Plan Based</i>	<i>Cost Allocation</i>
<i>Street Facilities</i>	Citywide		Arterial Lane Miles and Intersection Improvements	Vehicle Miles of Travel
<i>Police Facilities</i>	Citywide	Police Buildings and Vehicles		Calls for Service, Persons per Housing Unit and Inbound Vehicle Trips to Nonresidential Development
<i>Fire Facilities</i>	Citywide	Fire Stations and Apparatus		Calls for Service, Persons per Housing Unit and Job Intensity by Type of Nonresidential Development

## Proposed Development Fees

Proposed fees per residential dwelling are summarized in Figure 2. Residential fees per dwelling unit are shown by three size thresholds, based on climate-controlled space, excluding garages and outdoor patios/porches.

Fees for nonresidential development are listed per square foot of floor area. Proposed fees are provided for three general types of development. Industrial includes all goods production and warehouse development. Office and Other Services includes business service and personal services, such as health care. Retail and Restaurants includes the uses found in a typical shopping center, such as eating/drinking places.

**Figure 2 – Proposed Development Impact Fees**

	<i>Streets</i>	<i>Police</i>	<i>Fire</i>	<i>Total</i>
<b><i>Residential (per dwelling by livable square feet)</i></b>				
1800 or less	\$672	\$212	\$187	<b>\$1,071</b>
1801 to 2600	\$1,040	\$328	\$291	<b>\$1,659</b>
2601 or more	\$1,222	\$388	\$343	<b>\$1,953</b>
<b><i>Nonresidential (per Sq Ft)</i></b>				
Industrial	\$0.51	\$0.14	\$0.19	<b>\$0.84</b>
Office & Other Services	\$1.01	\$0.28	\$0.35	<b>\$1.64</b>
Retail & Restaurants	\$2.33	\$0.72	\$0.28	<b>\$3.33</b>

## Street Facilities

ARS § 9-463.05(T)(7)(e) defines the facilities and assets which can be included in 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.”*

## Development Fees for Streets

Figure S1 indicates key input variables at the top, which are documented in Prescott’s LUA and IIP report. Proposed fees are equal to the Vehicle Miles of Travel (VMT) by development category multiplied by the cost factor of \$47.19 per VMT. For example, the DIF for an average size residential unit is derived from the formula below.

$$5.21 \times 0.58 \times 1.21 \times 6.03 \times \$47.19 = \$1,040 \text{ (truncated)}$$

**Figure S1 – Streets Development Fee Schedule for Prescott**

Average Miles per Trip	6.03			
Ten-Year IIP Growth Share	\$5,437,000			
Professional Services Cost	\$23,630			
Vehicle Miles of Travel Increase Over Ten Years	115,693			
Capital Cost per Additional VMT	\$47.19			
<i>Development Type</i>	<i>Avg Wkdy Veh Trip Ends</i>	<i>Trip Rate Adjustment</i>	<i>Trip Length Adjustment</i>	<i>Streets Fees</i>
<b><i>Residential (per dwelling unit) by Square Feet of Finished Living Space</i></b>				
1800 or less	3.37	58%	121%	\$672
1801 to 2600	5.21	58%	121%	\$1,040
2601 or more	6.12	58%	121%	\$1,222
<b><i>Nonresidential (per Square Foot)</i></b>				
Industrial	0.00496	50%	73%	\$0.51
Office & Other Services	0.00974	50%	73%	\$1.01
Retail & Restaurants	0.03775	33%	66%	\$2.33

## Projected Revenue from Street Fees

The revenue projection shown below assumes implementation of the proposed street fees and that development in the service area over the next ten years is consistent with the land use assumptions. To the extent the rate of development either accelerates or slows down, there will be a corresponding change in the impact fee revenue. The street fee revenue projection in Figure S2 (\$5.4 million over ten years) approximates the growth cost of planned system improvements to be funded with development fees.

**Figure S2 – Projected Street Fee Revenue**

**Ten-Year Growth Cost of Streets Facilities**      **\$5,437,000**

**Ten-Year Projection of Development Fee Revenue for Streets**

		<i>Residential</i> \$1,040 per housing unit	<i>Nonresidential</i> \$1,277 per 1000 Sq Ft
<i>Year</i>		<i>Housing Units</i>	<i>1000 Sq Ft</i>
Base	2018	23,047	8,950
Year 1	2019	23,347	9,120
Year 2	2020	23,647	9,300
Year 3	2021	23,947	9,470
Year 4	2022	24,247	9,660
Year 5	2023	24,547	9,830
Year 6	2024	24,847	10,010
Year 7	2025	25,147	10,180
Year 8	2026	25,447	10,370
Year 9	2027	25,747	10,540
Year 10	2028	26,047	10,710
Ten-Yr Increase =>		3,000	1,760
Fee Revenue =>		\$3,120,000	\$2,247,000
Projected Revenue from Streets DIF =>		<b>\$5,367,000</b>	

## Public Safety Facilities

ARS § 9-463.05(T)(7)(f) defines the police and fire facilities eligible for development fee funding. The City of Prescott will refer to these as “public safety facilities.”

*“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.”*

## Police Development Fees

Input variables for police, as documented in the IIP, are summarized in the upper portion of Figure PS1. The conversion of infrastructure costs per service unit into a cost per development unit is also shown in the table below. For residential development, average number of persons per dwelling provides the necessary conversion. For nonresidential development, trip generation rates by type of development are from the Institute of Transportation Engineers (ITE 2017). To ensure the analysis is based on travel demand associated with nonresidential development within Prescott, trip ends (entering and exiting) are converted to inbound trips using trip adjustment factors. For industrial and office/other services, a basic adjustment of 50% is applied. Because commercial development attracts “pass-by” trips, the adjustment factor for commercial is only 33%, based on the average pass-by factor for shopping centers (ITE 2017). Proposed development fees for police facilities are shown in the column with blue shading.

**Figure PS1 – Police Service Units and Fees per Development Unit**

Ten-Year IIP Growth Cost	\$1,648,000		
Professional Services Cost	\$22,935		
<i>Cost Allocation</i>			
Residential	59%		
Nonresidential	41%		
<i>Allocated Cost by Land Use</i>			
Residential	\$985,852		
Nonresidential	\$685,083		
<i>Growth 2018 to 2028</i>		<b>Cost per Service Unit</b>	
Residential (persons)	4,800	\$174	
Nonresidential (vehicle trips)	11,758	\$58	
<b>Residential (per housing unit)</b>			
<i>Livable Square Feet</i>	<i>Persons per Hsg Unit</i>	<i>Police Fee</i>	
1800 or less	1.22	\$212	
1801 to 2600	1.89	\$328	
2601 or more	2.23	\$388	
<b>Nonresidential (per square foot)</b>			
<i>Type</i>	<i>AWVTE* per Square Foot</i>	<i>Trip Adjustment Factors</i>	<i>Police Fee</i>
Industrial	0.00496	50%	\$0.14
Office & Other Services	0.00974	50%	\$0.28
Retail & Restaurants	0.03775	33%	\$0.72

\* Average Weekday Vehicle Trip Ends

## Projected Revenue from Police Fees

The revenue projection shown below assumes implementation of the proposed police fees and that development in the service area over the next ten years is consistent with the land use assumptions. To the extent the rate of development either accelerates or slows down, there will be a corresponding change in the impact fee revenue. The police fee revenue projection in Figure PS2 (\$1.67 million over ten years) approximates the growth cost of planned system improvements to be funded with development fees.

### Figure PS2 – Police Fee Revenue Projection

**Ten-Year Growth Cost of Police Facilities**      **\$1,671,000**

**Ten-Year Projection of Development Fee Revenue for Police**

		<i>Residential</i> \$328 per housing unit	<i>Nonresidential</i> \$387 per 1000 Sq Ft
<i>Year</i>		<i>Housing Units</i>	<i>1000 Sq Ft</i>
Base	2018	23,047	8,950
Year 1	2019	23,347	9,120
Year 2	2020	23,647	9,300
Year 3	2021	23,947	9,470
Year 4	2022	24,247	9,660
Year 5	2023	24,547	9,830
Year 6	2024	24,847	10,010
Year 7	2025	25,147	10,180
Year 8	2026	25,447	10,370
Year 9	2027	25,747	10,540
Year 10	2028	26,047	10,710
Ten-Yr Increase =>		3,000	1,760
Fee Revenue =>		\$984,000	\$681,000
Projected Revenue from Streets DIF =>		<b>\$1,665,000</b>	

## Fire Development Fees

Input variables for fire facilities, documented in the IIP, are summarized in the upper portion of Figure PS3. The conversion of costs per service unit into a cost per development unit is also shown in the table below. For residential development, average number of persons per housing unit provides the necessary conversion. For nonresidential development, average jobs per square foot of floor area are derived from trip generation rates by type of development, published by the Institute of Transportation Engineers (ITE 2017). Additional details on nonresidential prototypes are provided in the LUA report. Proposed development fees for fire facilities are shown in the column with light orange shading.

**Figure PS3 – Fire Service Units and Fees per Development Unit**

Ten-Year IIP Growth Cost	\$1,455,000	
Professional Services Cost	\$22,935	
<i>Cost Allocation</i>		
Residential	59%	
Nonresidential	41%	
<i>Allocated Cost by Land Use</i>		
Residential	\$871,982	
Nonresidential	\$605,953	
<i>Growth 2018 to 2028</i>		<b>Cost per Service Unit</b>
Residential (persons)	4,800	\$154
Nonresidential (jobs)	4,985	\$121
<b><i>Residential (per housing unit)</i></b>		
<i>Livable Square Feet</i>	<i>Persons per Hsg Unit</i>	<i>Fire Fee</i>
1800 or less	1.22	\$187
1801 to 2600	1.89	\$291
2601 or more	2.23	\$343
<b><i>Nonresidential (per square foot)</i></b>		
<i>Type</i>	<i>Jobs per Square Foot</i>	<i>Fire Fee</i>
Industrial	0.00163	\$0.19
Office & Other Services	0.00297	\$0.35
Retail & Restaurants	0.00234	\$0.28

## Projected Revenue for Fire Facilities

Fire development fee revenue is expected to match the growth cost of fire infrastructure, which has a ten-year total cost of approximately \$1.48 million (see the upper portion of Figure PS4). The table below indicates Prescott should receive approximately \$1.47 million in fire development fee revenue, if actual development matches the land use assumptions. To the extent the rate of development either accelerates or slows down, there will be a corresponding change in the need for infrastructure and development fee revenue.

**Figure PS4 – Fire Development Fee Revenue**

**Ten-Year Growth Cost of Fire Facilities** \$1,478,000

**Ten-Year Projection of Fee Revenue for Fire Facilities**

		<i>Residential</i> \$291 per housing unit	<i>Nonresidential</i> \$341 per 1000 Sq Ft
<i>Year</i>		<i>Housing Units</i>	<i>1000 Sq Ft</i>
Base	2018	23,047	8,950
Year 1	2019	23,347	9,120
Year 2	2020	23,647	9,300
Year 3	2021	23,947	9,470
Year 4	2022	24,247	9,660
Year 5	2023	24,547	9,830
Year 6	2024	24,847	10,010
Year 7	2025	25,147	10,180
Year 8	2026	25,447	10,370
Year 9	2027	25,747	10,540
Year 10	2028	26,047	10,710
Ten-Yr Increase =>		3,000	1,760
Fee Revenue =>		\$873,000	\$600,000
Projected Revenue from Streets DIF =>		\$1,473,000	

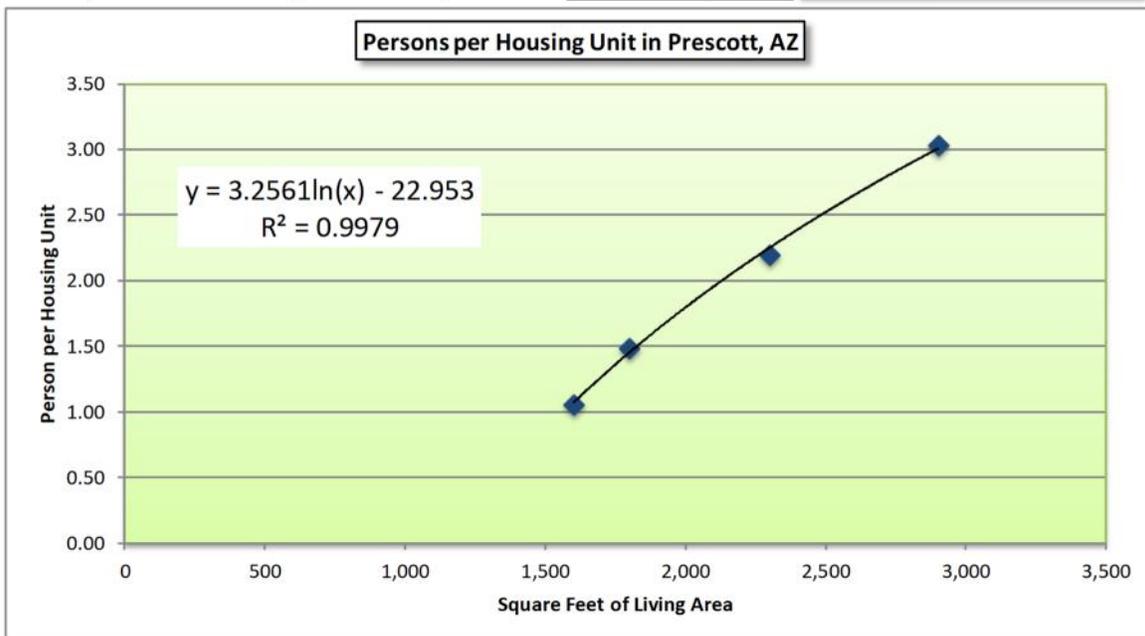
## Updated Persons per Housing Unit by Size Threshold

DIFs based on size of dwelling are generally easier to administer when expressed in square feet of finished living space for all types of housing. Basing fees on square footage rather than the number of bedrooms eliminates the need for criteria to make administrative decisions on whether a room qualifies as a bedroom. To translate dwelling size by number of bedrooms into square feet of living space, Raftelis used the U.S. Census Bureau's 2014 Survey of Construction microdata to obtain average square feet for two, three, and four or more bedrooms. The Census Bureau also publishes summary tables on the size of multifamily housing units constructed in 2014 by census region, which is the source for the average size one-bedroom dwelling.

Average dwelling sizes by bedroom range was adjusted to match current residential development in Prescott, as determined using building permit records provided by City staff. The LUA assumes the average detached house in Prescott contains approximately 2,300 square feet of living space. Raftelis recommends that DIFs for residential development be imposed based on finished square feet of living space, excluding garages, patios and porches that are not climate-controlled. Average floor area and number of persons by bedroom range are plotted below, with a logarithmic trend line fitted to the Prescott data. Using the trend line formula shown in the chart, Raftelis derived the estimated average number of persons, by dwelling size, using three size thresholds.

Survey of Construction Square Feet	Averages per Housing Unit			Fitted-Curve Values	
	Bedrooms	Sq Ft (rounded)	Persons	Sq Ft Range	Persons
1,081	0-1	1,600	1.06		
1,809	2	1,800	1.49	1800 or less	1.45
2,204	3	2,300	2.20	1801 to 2600	2.25
3,382	4+	2,900	3.03	2601 or more	2.65
2,675	<=Wt Avg=>		2,300		

Source: Average square feet by bedroom range is from U.S. Census Bureau 2014 Survey of Construction microdata. Average persons per housing unit by bedroom range is based on 2016 ACS PUMS for AZ PUMA 500.



The fitted-curve values for persons per housing unit (shown above) were reduced by the ratio of 1.89 divided 2.25, to make the values used in the fee calculations align with the overall average for Prescott (i.e., 1.89 persons per housing unit as documented in Figure 6 of the Land Use Assumptions report dated 2/14/19).

## Updated Trips Ends by Size Threshold

To derive Average Weekday Vehicle Trip Ends (AWVTE) by dwelling size, Raftelis matched trip generation rates and average floor area, by bedroom range, as shown below. The logarithmic trend line formula, derived from the four averages in Prescott, was used to derive estimated trip ends by dwelling size, across three size thresholds.

The fitted-curve values for trip ends per housing unit (shown below) were reduced by the ratio of 5.21 divided 6.16, to make the values used in the fee calculations align with the overall average for Prescott (i.e., 5.21 AWVTE per housing unit as documented in Figure 6 of the Land Use Assumptions report dated 2/14/19).

Source: Average square feet by bedroom range is from U.S. Census Bureau 2014 Survey of Construction microdata. Average vehicle trip ends per housing unit by bedroom range is based on 2016 ACS PUMS for AZ PUMA 500.	Averages per Housing Unit			Fitted-Curve Values	
	Bedrooms	Square Feet	Trip Ends	Sq Ft Range	Trip Ends
	0-1	1,600	2.86		
	2	1,800	4.08	1800 or less	3.98
	3	2,300	6.16	1801 to 2600	6.16
4+	2,900	8.19	2601 or more	7.24	

