

**LAND USE ASSUMPTIONS AND  
INFRASTRUCTURE IMPROVEMENTS PLAN FOR  
STREET, FIRE, POLICE AND  
PARKS/RECREATIONAL FACILITIES**

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## INTRODUCTION

Arizona Revised Statutes (ARS) §9-463.05 governs how Development Impact Fees (DIFs) are calculated for municipalities in Arizona. The enabling legislation calls for three integrated products: 1) Land Use Assumptions (LUA) for at least 10 years, 2) Infrastructure Improvements Plan (IIP), and 3) DIFs. Because Arizona requires a two-phase adoption process, the LUA and IIP will be reviewed, refined, and approved before focusing on DIFs.

According to requirements of Arizona’s enabling legislation, DIFs may be only 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 by or on behalf of the municipality:

- ) Water Facilities
- ) Wastewater Facilities
- ) Storm Water, Drainage, and Flood Control Facilities
- ) Library Facilities
- ) Streets Facilities
- ) Fire and Police Facilities
- ) Parks and Recreational Facilities
- ) Any facility that was financed before June 1, 2011 and that meets the following requirements:
  1. DIFs were pledged to repay debt service obligations related to the construction of the facility.
  2. After August 1, 2014, any DIFs 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.

The City of Prescott will use the same population projections for all types of infrastructure (see Technical Memo 2 by Carollo dated October 2018). However, the IIP and DIF for street, fire and police and parks/recreational facilities also require demographic data on nonresidential development. This document contains additional land use assumptions such as jobs and nonresidential floor area within the City of Prescott, along with service units by residential size thresholds applicable for Prescott’s street, fire, police and parks/recreational LUA and IIP.

## Infrastructure Improvements Plan

Development fees must be calculated pursuant to an Infrastructure Improvements Plan (IIP). For each necessary public service that is the subject of a development fee, Subsection 9-463.05(E) requires the following.

1. *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.*
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 as required in subsection B, paragraph 12 of this section.*

### **Qualified Professionals**

Qualified professionals must prepare the LUA, IIP and DIF, using generally-accepted engineering, planning, and financial 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 DIFs, infrastructure funding, user fees, cost of service studies, capital improvement plans, and utility rate studies. Raftelis has approximately 80 professionals located in major urban areas across America. Prescott’s LUA and IIP were prepared by qualified professionals in Denver, CO and Scottsdale, AZ.

## LAND USE ASSUMPTIONS

For municipalities in Arizona, the state enabling legislation requires supporting documentation on LUA, a plan for infrastructure improvements, and DIF calculations. This document contains the land use assumptions for Prescott's 2018 DIF update. The LUA and IIP must be updated every five years, making short-range projections the critical time frame. The IIP is limited to ten years, thus a very long-range "build-out" analysis may not be used to derive DIFs in Arizona.

ARS §9-463.05(T)(7) defines land use assumptions 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."*

Raftelis prepared current demographic **estimates** and future development **projections** for both residential and nonresidential development that are used in the IIP and calculation of DIFs. Current conditions in Fiscal Year (FY) 18-19 (beginning July 1, 2018) are used to document levels-of-service provided to existing development in Prescott. Although long-range projections are necessary for planning infrastructure systems, a ten-year timeframe is critical for the LUA and IIP.

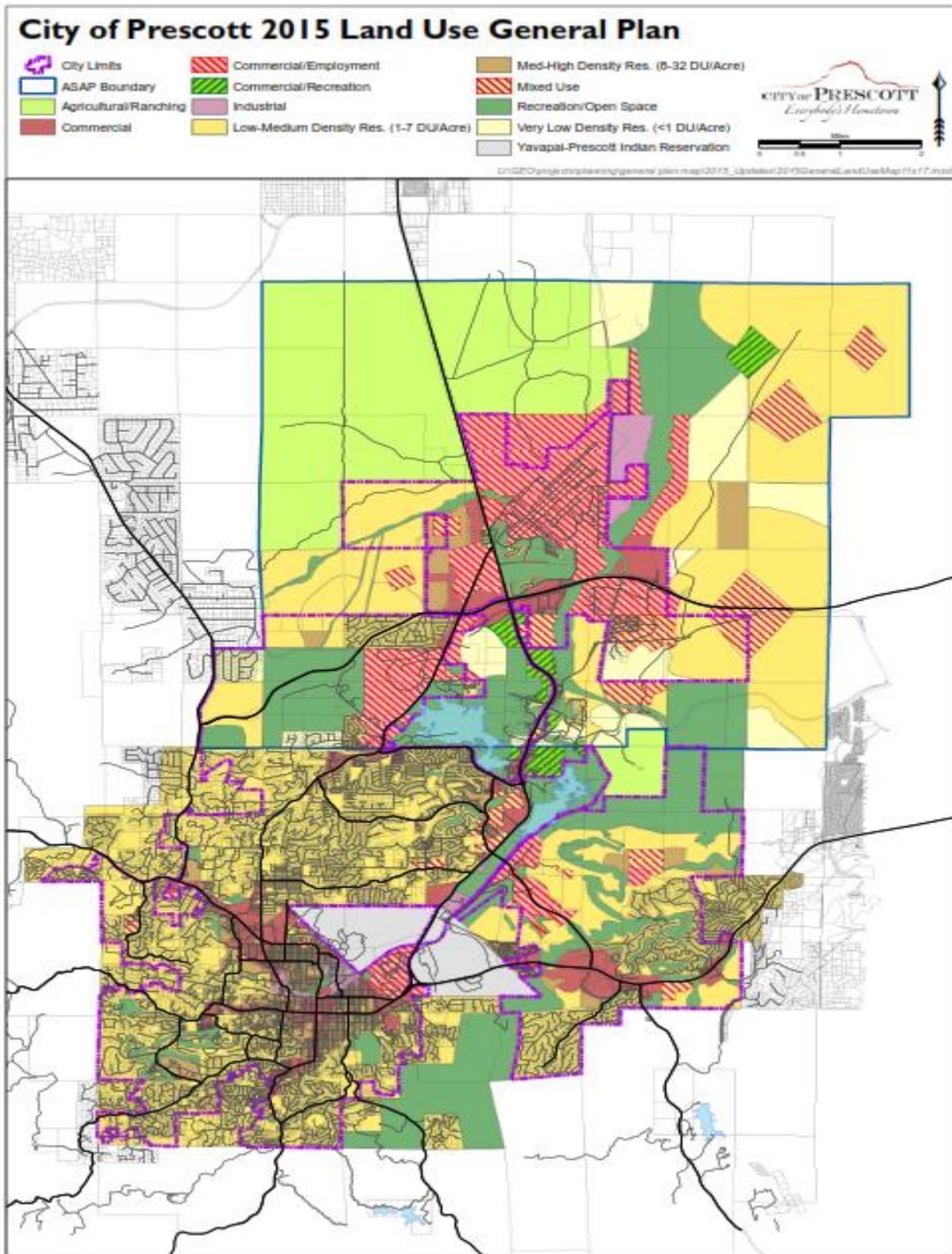
## Service Areas

ARS §9-463.05(T)(9) defines "service area" as:

*"...Any specified area within the boundaries of a municipality in which development will be served by necessary public services or facility expansions and within which a substantial nexus exists between the necessary public services or facility expansions and the development being served as prescribed in the infrastructure improvements plan. "*

A city-wide service area is appropriate for Prescott's streets, fire, police and parks/recreation facilities. Figure 1 indicates land uses, densities, and intensities of development as specified in the General Plan. The service area is defined as all land within the city limits of Prescott, as modified over time.

Figure 1 - Service Area Map



## Summary of Growth Indicators

The population and housing unit projections in Figure 2 were produced by Carollo in 2018 and will be used in the LUA and IIP for all types of infrastructure. The U.S. Census Bureau's estimated 2016 ratio of population to housing units in Prescott (i.e. 1.89 persons per housing unit) declines slightly over time to 1.85 persons per housing unit by 2010.

Projected jobs within Prescott applies a 2.1% average annual increase to estimated jobs in 2015, obtained from the U.S. Census Bureau website "OnTheMap." The projected job growth rate is for Yavapai County from 2016 to 2026 (see Arizona 10-Year Industry Employment Projections by Arizona Office of Economic Opportunity). Given the common practice of providing projections in five or ten-year increments to correspond with decennial census counts, Raftelis extended projected jobs to 2030 using the same annual growth rate. The 2015 job mix by two general categories was held constant through 2030. Jobs were converted to floor area estimates using national averages published by the Institute of Transportation Engineers (ITE). As shown below (see Figure 9), Retail/Restaurants average 427 square feet per job, and All Other Nonresidential average 337 square feet per job. Based on these assumptions, Prescott has approximately nine million square feet of nonresidential floor space in 2018.

Development projections and growth rates for FY18-19 through FY30-31 are summarized in Figure 2. These projections will be used to estimate DIF revenue and to indicate the anticipated need for growth-related infrastructure. However, DIF methodologies are designed to reduce sensitivity to accurate development projections in the determination of the proportionate-share fee amounts. If actual development is slower than projected, DIF revenues will also decline, but so will the need for growth-related infrastructure. In contrast, if development is faster than anticipated, the City will receive an increase in DIF revenue and will also accelerate capital improvements to keep pace with development.

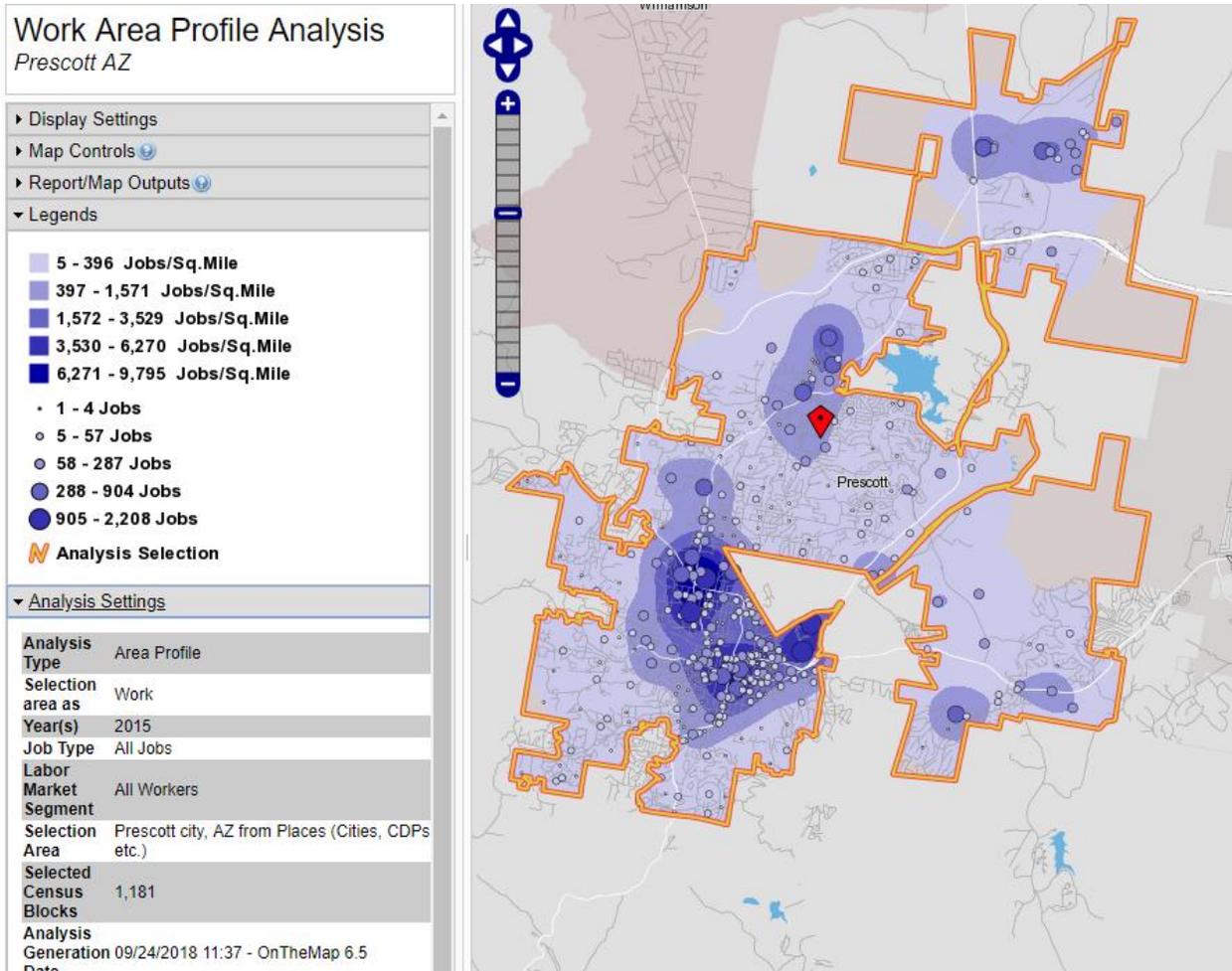
**Figure 2 – Summary of Service Area Projections**

Land Use Assumptions	FY15-16	FY18-19	FY19-20	FY20-21	FY21-22	FY22-23	FY23-24	FY28-29	FY30-31
Prescott, AZ	2015	2018	2019	2020	2021	2022	2023	2028	2030
		Base Yr	1	2	3	4	5	10	12
<b>Total Population</b>									
Prescott (year-round)	41,399	43,479	43,959	44,439	44,919	45,399	45,879	48,279	49,239
Annual Growth Rate		1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	1.0%	1.0%
<b>Housing Units</b>									
Prescott		23,047	23,347	23,647	23,947	24,247	24,547	26,047	26,647
Persons per Housing Unit		1.89	1.88	1.88	1.88	1.87	1.87	1.85	1.85
<b>Jobs (by place of work)</b>									
Retail & Restaurant	4,713	5,010	5,109	5,208	5,307	5,406	5,505	6,000	6,198
All Other Nonresidential	19,023	20,221	20,621	21,020	21,420	21,819	22,219	24,216	25,015
Total Prescott Jobs	23,736	25,231	25,730	26,228	26,727	27,225	27,724	30,216	31,213
Jobs to Housing Ratio	0.57	0.58	0.59	0.59	0.59	0.60	0.60	0.63	0.63
<b>Nonresidential Floor Area (square feet in thousands)</b>									
Retail & Restaurant	2,010	2,140	2,180	2,220	2,260	2,310	2,350	2,560	2,640
All Other Nonresidential	6,410	6,810	6,940	7,080	7,210	7,350	7,480	8,150	8,420
Total Prescott KSF	8,420	8,950	9,120	9,300	9,470	9,660	9,830	10,710	11,060
Avg Sq Ft Per Job	355	355	354	355	354	355	355	354	354

Jobs in 2015 are from the Work Area Profile shown in Figure 3. Retail & Restaurant includes retail trade and accommodation/food services. All Other Nonresidential includes all other industry sectors (note: NAICS means North American Industry Classification System, as used by the federal government).

**Figure 3 – Work Area Profile**

<u>NAICS Industry Sector</u>	2015	
	Count	Share
<u>Agriculture, Forestry, Fishing and Hunting</u>	8	0.0%
<u>Mining, Quarrying, and Oil and Gas Extraction</u>	4	0.0%
<u>Utilities</u>	124	0.5%
<u>Construction</u>	1,294	5.5%
<u>Manufacturing</u>	1,640	6.9%
<u>Wholesale Trade</u>	676	2.8%
<u>Retail Trade</u>	2,604	11.0%
<u>Transportation and Warehousing</u>	127	0.5%
<u>Information</u>	318	1.3%
<u>Finance and Insurance</u>	369	1.6%
<u>Real Estate and Rental and Leasing</u>	288	1.2%
<u>Professional, Scientific, and Technical Services</u>	778	3.3%
<u>Management of Companies and Enterprises</u>	50	0.2%
<u>Administration &amp; Support, Waste Management and Remediation</u>	516	2.2%
<u>Educational Services</u>	2,917	12.3%
<u>Health Care and Social Assistance</u>	7,020	29.6%
<u>Arts, Entertainment, and Recreation</u>	457	1.9%
<u>Accommodation and Food Services</u>	2,109	8.9%
<u>Other Services (excluding Public Administration)</u>	687	2.9%
<u>Public Administration</u>	1,750	7.4%



During the next ten years, Prescott expects to increase by an average of 300 housing units per year (linear average annual growth rate of 1.3%). In comparison, Prescott’s average annual increase was 428 housing units per year during calendar years 2015 through 2017. From 2018 to 2028, Prescott expects to add an average of 176,000 square feet of nonresidential floor area per year (linear growth rate of 2.0% per year).

**Figure 4 – Projected Annual Increases within Prescott**

Annual Increase	2018 to 2028					Avg Anl
	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	
Total Population	480	480	480	480	480	480
Housing Units	300	300	300	300	300	300
Jobs	498	498	498	498	498	498
Retail & Restaurant KSF	40	40	40	50	40	42
All Other Nonresidential KSF	130	140	130	140	130	134
Total Nonres KSF/Yr =>	170	180	170	190	170	176

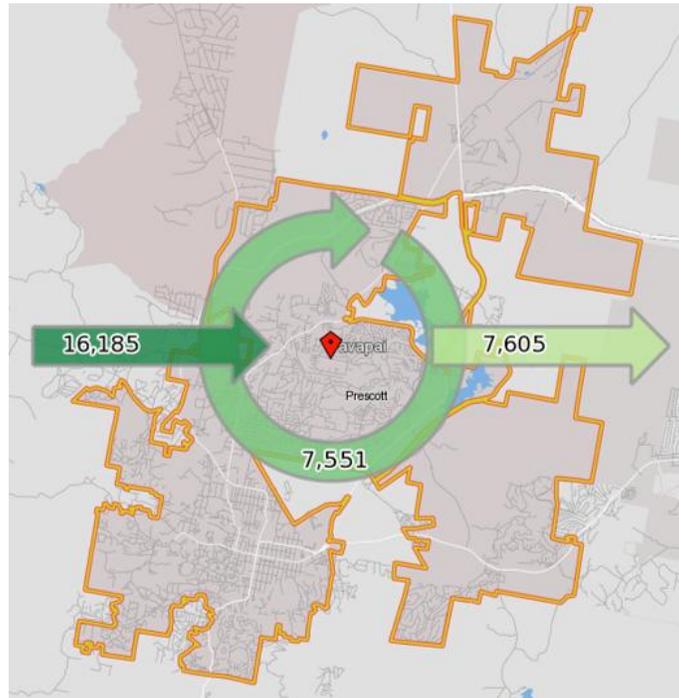
## Proportionate Share Analysis

ARS §9.463.05.B.3 requires DIFs to be proportionate to the cost of necessary public facilities, based on service units, as needed to provide service to development. As stated in ARS §9.463.05.E.4 (quoted below), DIFs must be proportionate to various types of land uses.

*“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.”*

Given these requirements, Raftelis recommends using functional population to allocate capital costs of public safety facilities to residential and nonresidential development. The top of Figure 5 shows the number of commuters coming into the City for work, the number of residents that stay in town for work, and the amount of people that leave the City for work. Since there is a significant net gain of inflow commuters on a typical weekday, Prescott is considered an employment center. In 2015, the U.S. Census Bureau’s commuting data indicates 7,551 persons lived and worked in Prescott, 7,605 outflow commuters went to work outside the city and 16,185 inflow commuters travel to jobs within Prescott. Functional population is like the U.S. Census Bureau’s definition of daytime population (based on people living and working in a jurisdiction), with the addition of weighting factors (i.e. demand hours per day) to account for time spent at residential and nonresidential locations. Residents who don’t work are assigned 20 hours per day to residential development and 4 hours per day to nonresidential development (annualized averages for assumed time spent shopping, dining, obtaining personal services, going to school/church, etc.). Residents who work in Prescott are assigned 14 hours to residential development and 10 hours to nonresidential development. Residents who work outside Prescott are assigned 14 hours to residential development. Inflow commuters are assigned 10 hours to nonresidential development. Based on 2015 population and job data for Prescott, the cost allocation for residential development is 68%, while nonresidential development accounts for 32% of the demand for infrastructure.

Figure 5 - Functional Population



Prescott, Arizona	Demand Units in 2015	Demand Hours/Day	Person Hours
<b>Residential</b>			
Population*	41,399		
63% Residents Not Working	26,243	20	524,860
37% Resident Workers**	15,156		
50% Worked in City**	7,551	14	105,714
50% Outflow Commuters**	7,605	14	106,470
Residential Subtotal			737,044
		<b>Residential Share =&gt;</b>	<b>68%</b>
<b>Nonresidential</b>			
Residents Not Working	26,243	4	104,972
Jobs in Prescott**	23,736		
32% Prescott Workers**	7,551	10	75,510
68% Inflow Commuters	16,185	10	161,850
Nonresidential Subtotal			342,332
		<b>Nonresidential Share =&gt;</b>	<b>32%</b>
<b>TOTAL</b>			<b>1,079,376</b>

\* 2015 U.S. Census Bureau population estimate.

\*\* 2015 Inflow/Outflow Analysis, OnTheMap web application, U.S. Census Bureau data for all jobs.

### Service Units by Size of Residential Development

DIFs must be proportionate to the demand for infrastructure. Because the average number of persons and vehicles available per dwelling unit has a strong and positive correlation to the number of bedrooms per unit, residential fees should correlate to dwelling size. An average fee for all types and sizes of residential development is not proportionate and this approach makes small units less affordable, while essentially subsidizing larger units.

Rather than use national multipliers, custom tabulations of demographic data by bedroom range can be created from individual survey responses provided by the American Community Survey (ACS), in files known as Public Use Microdata Samples (PUMS). PUMS files, for areas of at least 100,000 persons, can be downloaded from the U.S. Census Bureau’s website. In comparison to the national averages provided by the Institute of Transportation Engineers (ITE), Prescott has fewer person and vehicles available per housing unit. The ITE national average is 3.05 persons per housing unit, compared to Prescott’s average of only 1.89. In a similar relationship, the ITE national average is 1.42 vehicles available per housing unit, compared to Prescott’s average of only 0.84. A major reason for the lower demographic factors is the significant number of seasonal housing units in Prescott.

As shown in Figure 6, trip generation rates and average persons per housing unit by bedroom range were derived from unweighted PUMS data. Input variables are the three columns highlighted with yellow shading (i.e., persons, vehicles available, and housing units). The recommend multipliers (shown in bold font) by bedroom range are for all types of housing units, adjusted to control totals for Prescott. Rather than rely on one methodology, the recommended trip generation rates are an average of trip rates based on persons and vehicles available.

**Figure 6 – Service Units by Bedroom Range**

**City of Prescott 2016 Public Use Microdata Sample (PUMS)**

Bedroom Range	Persons (1)	Vehicles Available (1)	Housing Units (1)	Prescott Hsg Mix	Unadjusted Persons/HU	Adjusted Persons/HU (2)	Unadjusted VehAvl/HU	Adjusted VehAvl/HU (2)
0-1	206	144	197	11%	1.05	<b>1.06</b>	0.73	0.45
2	1,091	776	740	41%	1.47	<b>1.49</b>	1.05	0.65
3	1,403	1,046	645	36%	2.18	<b>2.20</b>	1.62	1.01
4+	674	465	225	12%	3.00	<b>3.03</b>	2.07	1.29
Total	3,374	2,431	1,807		1.87	1.89	1.35	0.84

**National Averages (ITE 2017)**

ITE Code	AWVTE per Person	AWVTE per Veh Avl	AWVTE per Dwelling	Prescott Hsg Mix	Persons per Housing Unit	Veh Avl per Housing Unit
220 Apt (2012)	3.31	5.10	6.65	33%	2.01	1.30
210 SFD	2.65	6.36	9.44	67%	3.56	1.48
Wgtd Avg	2.87	5.95	<b>8.53</b>		3.05	1.42

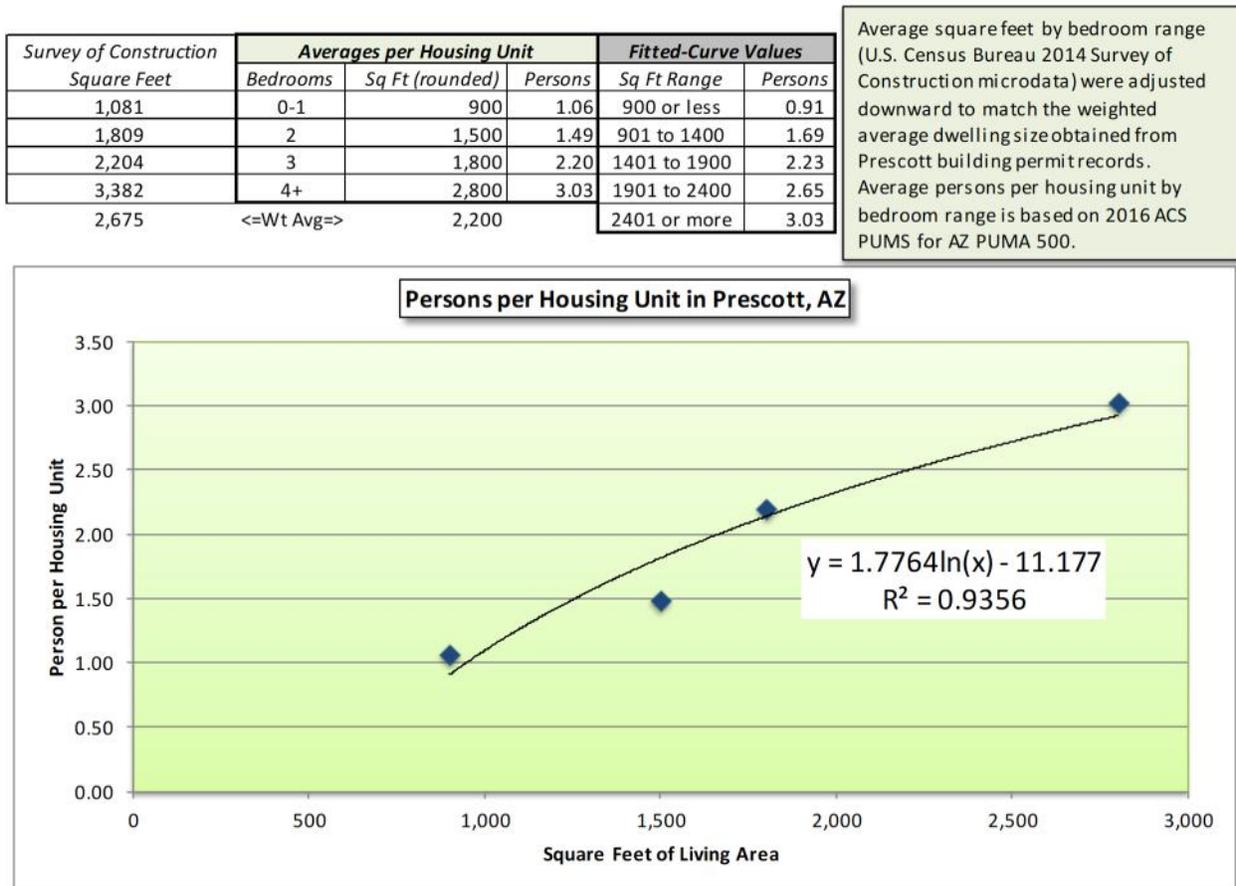
**Recommended AWVTE per Housing Unit**

Bedroom Range	AWVTE per Housing Unit Based on Persons (3)	AWVTE per Housing Unit Based on Veh Avl (4)	AWVTE per Housing Unit (5)
0-1	3.04	2.68	<b>2.86</b>
2	4.28	3.87	<b>4.08</b>
3	6.31	6.01	<b>6.16</b>
4+	8.70	7.68	<b>8.19</b>
Total	5.42	5.00	<b>5.21</b>

(1) American Community Survey, Public Use Microdata Sample for AZ PUMA 500 (2016 One-Year unweighted data).  
 (2) Adjusted multipliers are scaled to make the average PUMS values match control totals, based on American Community Survey 2016 5-year data. Vehicles Available in Prescott is from table B25044.  
 (3) Adjusted persons per housing unit multiplied by national weighted average trip rate per person.  
 (4) Adjusted vehicles available per housing unit multiplied by national weighted average trip rate per vehicle available.  
 (5) Average of trip rates based on persons and vehicles available per housing unit.

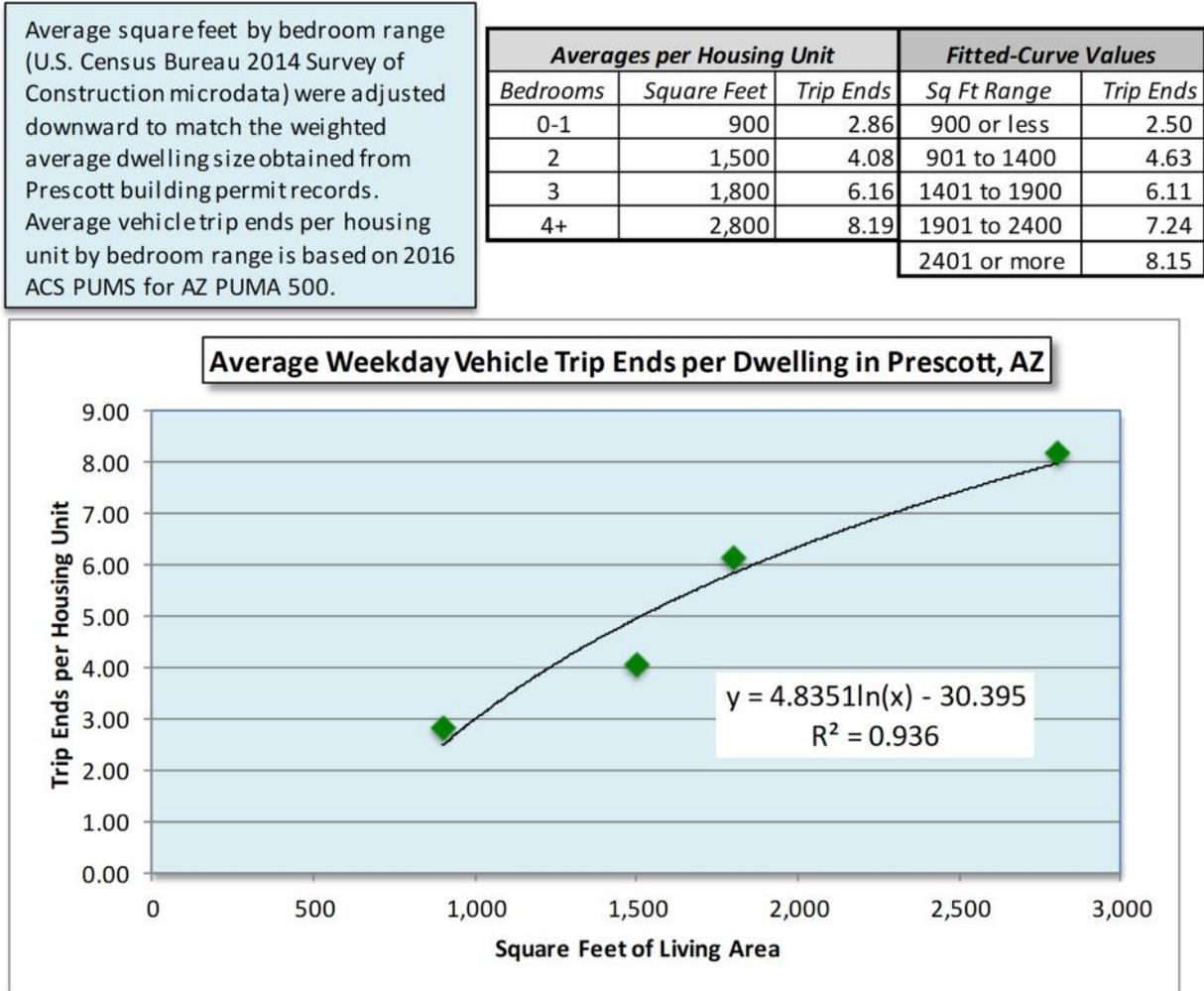
DIFs based on size of dwelling are generally easier to administer when expressed in square feet of finished living space for all types of housing. Basing fees on square footage rather than the number of bedrooms eliminates the need for criteria to make administrative decisions on whether a room qualifies 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 can be adjusted to match current residential development in Prescott. The initial draft of the LUA assumes the average detached house in Prescott contains approximately 2,200 square feet of living space, which is less than the national average of 2,675 square feet. 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 in Figure 7, 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 five size thresholds. For the purpose of DIFs, Raftelis recommends a minimum size threshold of 900 square feet and a maximum size threshold of 2,401 or more square feet.

**Figure 7 – Average Persons per Housing Unit 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 in Figure 8. The logarithmic trend line formula, derived from the four averages in Prescott, is used to derive estimated trip ends by dwelling size, across five size thresholds.

**Figure 8 – Average Weekday Vehicle Trips Ends by Size Threshold**



### Service Units by Type of Nonresidential Development

In addition to data on residential development, the calculation of DIFs requires data on nonresidential development. Raftelis uses the term “jobs” to refer to employment by place of work. In Figure 9, gray shading indicates two nonresidential development prototypes that will be used to allocate costs. The prototype for future commercial development (i.e. retail and eating/drinking places) is an average-size Shopping Center (ITE code 820). For all other nonresidential, General Office (ITE 710) is the prototype for future development. 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).

**Figure 9 – Nonresidential Trip Rates and Jobs by Type of Development**

ITE Code	Land Use / Size	Demand Unit	Wkdy Trip Ends Per Dmd Unit*	Wkdy Trip Ends Per Employee*	Emp Per Dmd Unit	Sq Ft Per Emp
110	Light Industrial	1,000 Sq Ft	4.96	3.05	1.63	615
140	Manufacturing	1,000 Sq Ft	3.93	2.47	1.59	628
150	Warehousing	1,000 Sq Ft	1.74	5.05	0.34	2,902
520	Elementary School	1,000 Sq Ft	19.52	21.00	0.93	1,076
530	High School	1,000 Sq Ft	14.07	22.25	0.63	1,581
610	Hospital	1,000 Sq Ft	10.72	3.79	2.83	354
620	Nursing Home	1,000 Sq Ft	6.64	2.91	2.28	438
710	General Office	1,000 Sq Ft	9.74	3.28	2.97	337
760	Research & Dev Center	1,000 Sq Ft	11.26	3.29	3.42	292
770	Business Park	1,000 Sq Ft	12.44	4.04	3.08	325
820	Shopping Center (avg size)	1,000 Sq Ft	37.75	16.11	2.34	427
857	Discount Club	1,000 Sq Ft	41.80	32.21	1.30	771

\* *Trip Generation*, Institute of Transportation Engineers, 10th Edition (2017).

## STREET FACILITIES IIP

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.”*

Prescott’s IIP is based on improvements to arterial streets needed to accommodate vehicular travel within the metropolitan area, plus the cost of preparing the Street Facilities IIP and development fees. The streets fee is derived from trip generation rates, trip rate adjustment factors, average trip length weighting factors, and lane capacity. Each component is described below.

Development fees in Prescott exclude costs to upgrade, update, improve, expand, correct or replace necessary public services to meet existing needs and usage and stricter safety, efficiency, environmental or regulatory standards. The City’s comprehensive CIP will address the cost of these excluded items.

### Existing Infrastructure

Lane miles of arterials and improved intersections are used to document existing infrastructure standards in Prescott. A lane mile is a rectangular area that is one travel lane wide and a mile long. Prescott currently has 14 improved intersections, where an arterial street crosses another arterial street. Also, Prescott currently has 101.4 arterial lane miles within city limits.

### Forecast of Service Units

Prescott will use average weekday Vehicle Miles of Travel (VMT) as the service units for documenting existing infrastructure standards and allocating the cost of future improvements. Raftelis created an aggregate travel model to convert development units within Prescott to vehicle trips and vehicle miles of travel. The top portion of Figure S1 summarizes the input variables for the travel model. Trip generation rates, expressed as average weekday Vehicle Trip Ends (VTE), are from the Institute of Transportation Engineers (ITE), with the residential rate customized based on demographic data for Prescott (see the Land Use Assumptions for additional information). HU is an abbreviation for housing unit. KSF is an abbreviation for square feet of nonresidential floor area, expressed in thousands. Each input variable is described further below.

Currently, there are 101.4 lane miles of arterials in Prescott. All local and collector streets are project-level improvements. The City will continue to require project level improvements, such as turn lanes and signals for ingress/egress, during the development review and approval process. A typical vehicle trip, such as a person leaving their home and traveling to work, generally begins on a local street that connects to a collector street, which connects to an arterial road and eventually to a state or interstate highway. This progression of travel up and down the functional classification chain limits the average trip length determination, for the purpose of development fees, to the following question, “What is the average vehicle trip length on system improvements (i.e. facilities funded by development fees)?”

With 101.4 lane miles of arterial streets in Prescott and a lane capacity standard of 7,500 vehicles per lane per day, existing major streets have approximately 760,500 vehicle miles of capacity (i.e. 7,500 vehicles per lane over the entire 101.4 lane miles). To derive the average utilization (i.e., average trip length expressed in miles) of arterial streets, we divide vehicle miles of capacity by vehicle trips attracted to development in Prescott. As shown below, development in Prescott currently attracts 129,467 average weekday vehicle trips. Dividing 760,500 vehicle miles of capacity by existing average weekday vehicle

trips yields an un-weighted average trip length of approximately 5.87 miles. However, the calibration of average trip length includes the same adjustment factors used in the development fee calculations (i.e. journey-to-work commuting, commercial pass-by adjustment, and average trip length adjustment by type of land use). With these refinements, the weighted-average trip length is 6.03 miles.

**Figure S1 – Travel Demand Model**

Prescott, Arizona		ITE Code	Dev Type	Weekday VTE	Dev Unit	Trip Adj	Trip Length Wt Factor	VMT per Dev Unit	Service Unit Index
		210 & 220	Housing Units	5.21	HU	58%	1.21	22.05	1.00
		820	Retail&Restaur	37.75	KSF	33%	0.66	49.58	2.25
		710	AllOtherNonres	9.74	KSF	50%	0.73	21.44	0.97
Avg Trip Length (miles)		6.03							
Capacity Per Lane		7,500							
Year->		Base	1	2	3	4	5	10	10-Year Increase
<b>Prescott, AZ</b>		2018	2019	2020	2021	2022	2023	2028	
	Housing Units	23,047	23,347	23,647	23,947	24,247	24,547	26,047	3,000
	Retail&Restaurant KSF	2,140	2,180	2,220	2,260	2,310	2,350	2,560	420
	AllOtherNonresidential KSF	6,810	6,940	7,080	7,210	7,350	7,480	8,150	1,340
	Residential Trips	69,643	70,550	71,457	72,363	73,270	74,176	78,709	
	Retail&Restaurant Trips	26,659	27,157	27,656	28,154	28,777	29,275	31,891	
	AllOtherNonresidential Trips	33,165	33,798	34,480	35,113	35,795	36,428	39,691	
	Total Vehicle Trips	129,467	131,505	133,592	135,630	137,841	139,879	150,291	
	Vehicle Miles of Travel (VMT)	760,225	771,609	783,208	794,592	806,687	818,071	875,917	115,693
	LANE MILES	101.4	102.9	104.4	106.0	107.6	109.1	116.8	15.4
	Lane Miles per 10,000 VMT	1.33	1.33	1.33	1.33	1.33	1.33	1.33	
	IMPROVED INTERSECTIONS	14.0	14.2	14.4	14.6	14.9	15.1	16.1	2.1
	Intersections per 10,000 VMT	0.18	0.18	0.18	0.18	0.18	0.18	0.18	

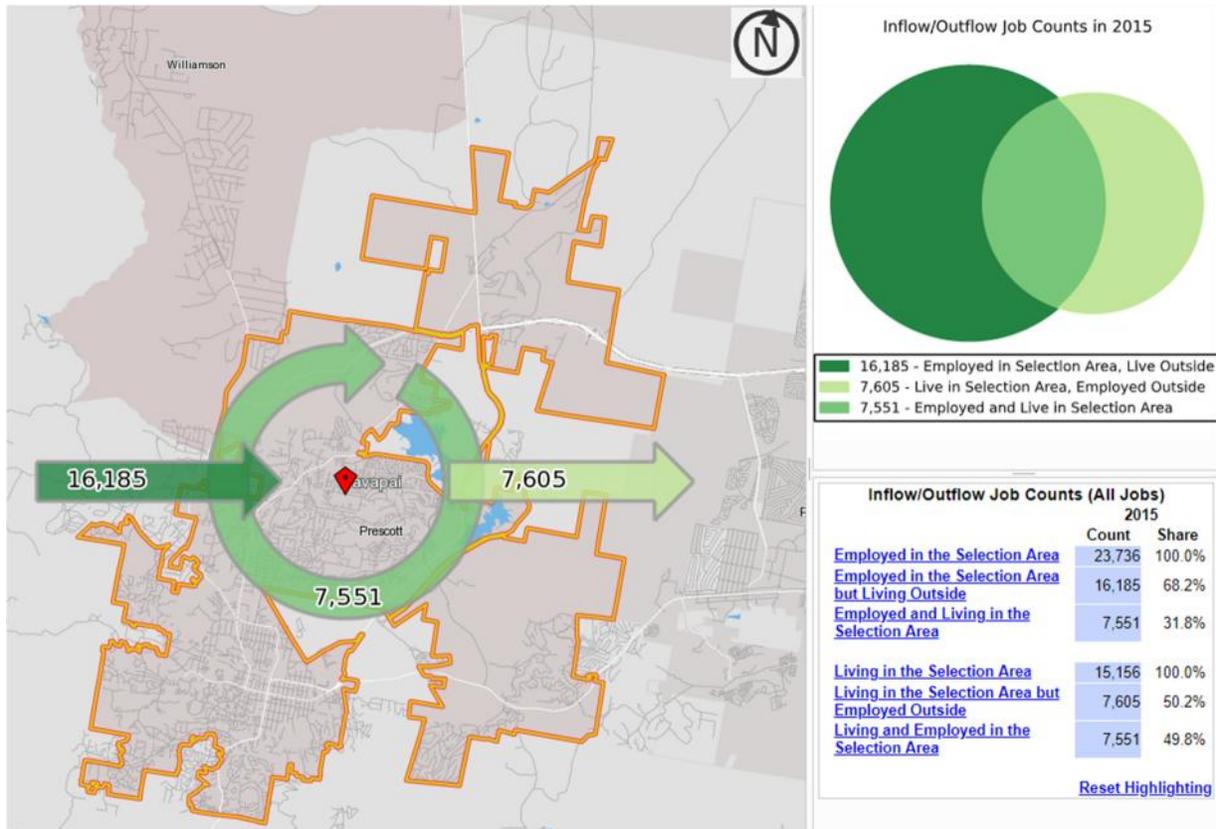
**Trip Generation Rates**

Prescott development fees for streets are derived using average weekday VTE. Trip generation rates are from the reference book Trip Generation published by the Institute of Transportation Engineers (ITE 2017). A VTE represents a vehicle either entering or exiting a development (as if a traffic counter were placed across a driveway). To calculate street 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%. As discussed further below, the fee methodology includes additional adjustments to make the fees proportionate to the infrastructure demand for particular types of development.

**Adjustments for Commuting Patterns and Pass-By Trips**

Residential development has a larger trip adjustment factor of 58% to account for commuters leaving Prescott for work. In other words, residential development is assigned all inbound trips plus 8% of outbound trips to account for job locations outside of Prescott, calculated as follows. According to the National Household Travel Survey weekday work trips are typically 31% of production trips (i.e., all outbound trips). As shown in Figure S2, the Census Bureau’s web application OnTheMap indicates that approximately 50% of resident workers traveled outside the jurisdiction for work in 2015. In combination, these factors (0.31 x 0.50 x 0.50 = 0.08) support the additional 8% allocation of trips to residential development.

**Figure S2 - Inflow/Outflow Analysis**



For commercial development, the trip adjustment factor is less than 50% because retail development attracts vehicles as they pass by on arterial 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 an average shopping center, ITE data indicate 34% of the vehicles that enter are passing by on their way to some other primary destination. The remaining 66% of attraction trips have the commercial site as their primary destination. Because attraction trips are half of all trips, the trip adjustment factor is 66% multiplied by 50%, or approximately 33% of the trip ends.

**Trip Length Weighting Factor by Type of Land Use**

The streets fee methodology includes a percentage adjustment, or weighting factor, to account for trip length variation by type of land use. As documented in the National Household Travel Survey, vehicle trips from residential development are approximately 121% 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 66% of the average trip length while other nonresidential development typically accounts for trips that are 73% of the average for all trips.

**Lane Capacity**

According to a technical memorandum on service volumes prepared for Maricopa County Department of Transportation (Jacobs Engineering 2014) principal arterials in urban areas average 7,500 vehicles per lane per day.

### Infrastructure Improvements Plan for Streets

Prescott Public Works staff provided the list of improvements and planning-level cost estimates in Figure S3. The need for improvements is based on traffic studies by the Metropolitan Planning Organization and quantitative measures, like volume to capacity ratios. Recommended improvements are located in areas expected to experience congestion problems. The ten-year plan for street improvements will benefit citywide development because vehicles flow from larger travel sheds to congestion areas where improvements are needed to eliminate bottlenecks.

As shown in Figure S3, the IIP for Prescott includes improvements at five intersections, including capacity expansion of the connecting arterial segments (i.e. turn lanes). The total ten-year cost of street facilities is \$24.47 million, with 60% to be funded by future development fees. The remaining \$9.75 million will be paid from other City revenues, such as the dedicated sales tax.

**Figure S3 – Ten-Year Plan for Street Improvements**

	<i>Project Description</i>	<i>Location</i>	<i>Additional Lane Miles</i>	<i>Total Cost</i>	<i>Growth Share</i>	<i>Growth Cost Funded by Impact Fees</i>	<i>Funded by Other Revenues</i>
1	SR 89 Widening (2 to 4 lanes)	Willow Lake Rd to Phippen Trail	4.20	\$8,620,000	50%	\$4,310,000	\$4,310,000
2	Construct Phippen Trail (4-lanes)	Larry Caldwell Dr to Granite Dells Pkwy	0.70	\$6,700,000	100%	\$6,700,000	\$0
3	Turn Lanes on Willow Lake Rd	SR 89 to Willow Lake Rd	0.00	\$3,090,000	25%	\$772,500	\$2,317,500
4	Construct Granite Creek Crossing (4 lanes)	Phippen Trail	0.15	\$1,900,000	100%	\$1,900,000	\$0
5	Intersection Improvements	Willow Creek Rd & Willow Lake Rd	0.00	\$1,580,000	25%	\$395,000	\$1,185,000
6	Roundabout or Signalization with turn lanes	Four Points	0.00	\$1,320,000	25%	\$330,000	\$990,000
7	Intersection Improvements	Prescott Lakes Pkwy & Willow Lake Rd	0.00	\$600,000	25%	\$150,000	\$450,000
8	Intersection Improvements	Prescott Lakes Pkwy & Sundog Ranch Rd)	0.00	\$400,000	25%	\$100,000	\$300,000
9	Traffic Signal Coordination	Willow Creek Rd (Pioneer Pkwy to Four Points)	0.00	\$262,000	25%	\$65,500	\$196,500
		<b>Total</b>	<b>5.05</b>	<b>\$24,472,000</b>	<b>60%</b>	<b>\$14,723,000</b>	<b>\$9,749,000</b>

## PUBLIC SAFETY FACILITIES IIP

### Description of Service

ARS § 9-463.05(T)(7)(f) defines the fire and police 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.”*

### Fee Calculation Methodology

The City of Prescott used a plan-based cost method to derive development impact fees for both police and fire departments. Public safety development fees in Prescott exclude costs to upgrade, update, improve, expand, correct or replace necessary public services to meet existing needs and usage and stricter safety, efficiency, environmental or regulatory standards. The City’s comprehensive Capital Improvement Plan (CIP) addresses the cost of these excluded items. Also excluded from the Prescott development fees are public safety vehicles and equipment used to provide administrative services.

### Service Area

To hasten response times, public safety responders are typically dispatched from the closest facility, with multiple locations responding if warranted. Prescott has several police buildings and six existing fire stations, with a dispatch system that assigns calls to secondary responders, if needed. Therefore, all developed areas within the City of Prescott are served by an integrated public safety system. Prescott’s service area for public safety development fees includes the entire City limits, as discussed previously in the Land Use Assumption section.

### Proportionate Share

ARS § 9-463.05(B)(3) states the development fee shall not exceed a proportionate share of the cost of necessary public services needed to serve new development. In Prescott, public safety (i.e. police and fire) infrastructure standards, projected needs, and development fees are based on both residential and nonresidential development. Raftelis used calls for service, provided by City’s IT department, to derive the average proportionate share factors shown in Figure PS1. The percent of calls to residential units was 59% of the average of these four years. Nonresidential calls averaged 41% of all calls to developed places. The analysis excludes calls for traffic accidents and undeveloped properties (e.g. brush fires).

**Figure PS1 – Public Safety Calls for Service**

Year	Residential	Nonresidential
2015	57.1%	42.9%
2016	60.2%	39.8%
2017	59.0%	41.0%
2018	59.4%	40.6%
Average	59%	41%

Source: City of Prescott

### Current Use and Available Capacity

In Prescott, public safety facilities are fully utilized and there is no surplus capacity for future development. Prescott has determined that police building space will require expansion to accommodate future development. A joint public safety building is planned with other agencies. The City Police Department wants to relocate their headquarters, evidence storage, and vehicles to this facility.

### Police Facilities

Police development fees in Prescott are based on the same level of service provided to existing development. Figure PS2 inventories police buildings in Prescott. Because some buildings used by the Police Department include other functions, floor areas were reduced to indicate the portion of each building used by Prescott police.

For residential development, Raftelis utilized the growth in population from 2018 to 2028 to document current police infrastructure standards. For nonresidential development, Raftelis used inbound vehicle trips to nonresidential development within Prescott. Figure PS2 indicates the allocation of police building space to residential and nonresidential development, along with 2018 service units in Prescott.

For police development fees, Prescott will continue to use the 2009 cost factor of \$350 per square foot. The recommended cost factor includes design, land, and site costs. Based on 2018 service units, the standard in Prescott is 536 square feet of police building per 1,000 residents. For nonresidential development, Prescott’s standard is 271 square feet of police building per 1,000 average weekday vehicle trips to nonresidential development. To maintain the current infrastructure standard over the next ten years, Prescott will need to add approximately 5,800 square feet of police building space, at an estimated cost of \$2.02 million.

**Figure PS2 – Existing Police Buildings, Standards and Growth Needs**

<i>Police Facilities</i>	<i>Square Feet</i>
Police Headquarters	22,293
Inspectors Officer and Motor Area	10,271
Property and Evidence Storage	4,000
Prescott Regional Comm. Center	2,952
Total	39,516
Average Cost Per Sq. Ft. [1]	\$350
<i>[1] Source 2009 LUA</i>	
<b>Police Building Space Needs</b>	
Residential Share	59%
Population in 2018	43,479
Facility Sq. Ft. per 1,000 People	536
Nonresidential Share	41%
Vehicle Trips to Nonresidential Development in 2018	59,824
Facility Sq. Ft. per 1,000 Inbound Vehicle Trips	271
Growth Need Over 10 Years (Square Feet)	<b>5,758</b>
Growth Cost Over 10 years	<b>\$2,020,000</b>

Development fees will be used to expand the fleet of police vehicles and purchase additional equipment that has a useful life of at least three years. Figure PS3 lists the City’s current police vehicles. SUVs account for most of the line items. After excluding administrative, community service and SWAT vehicles, Prescott current LOS is based on a fleet of 53 vehicles. The City Police Department has estimated that a new fully fitted, marked patrol vehicle costs approximately \$83,000.

The current number of police vehicles were allocated to residential and nonresidential development in Prescott. Every 1,000 persons will require Prescott to purchase 0.71 additional police vehicles. Every 1,000 average weekday vehicle trips to nonresidential development will require Prescott to purchase 0.37 additional police vehicles. To maintain the current infrastructure standard over the next ten years, Prescott will need to expand the police fleet by eight vehicles, at an estimated cost of \$664,000.

**Figure PS3 – Existing Police Vehicles, Standards and Growth Needs**

Row Labels	Count of Vehicle
ANIMAL CONTROL	2
INVESTIGATIONS	11
PATROL	32
TRAFFIC ENFORCEMENT	8
<b>Grand Total</b>	<b>53</b>

Source: City of Prescott Police Department

**Allocation Factors and LOS for Police Vehicles**

Residential Share	59%
Population in 2018	43,479
Vehicles per 1,000 People	0.71
Nonresidential Share	41%
Vehicle Trips to Nonresidential Dev. in 2018	59,824
Vehicles per 1,000 Inbound Vehicle Trips	0.37
Police Vehicles Need Over 10 Years	<b>8</b>
Cost Per Vehicle	<b>\$83,000</b>
Growth Cost Over 10 years	<b>\$664,000</b>

**Police Infrastructure Improvements**

Arizona’s development fee enabling legislation requires jurisdictions to convert land use assumptions into service units and the corresponding need for additional infrastructure over the next ten years. As shown in Figure PS4, projected population and nonresidential vehicle trips drive the need for police buildings and vehicles. Prescott will need approximately 5,758 additional square feet of police buildings in order to maintain the existing level of service. The maximum growth-related capital cost for police buildings that can be recovered by development impact fees is approximately \$2,010,000. The projected capital expenditure on additional police vehicles is \$660,000 over the next ten years. The number of vehicles may be adjusted when operating costs are considered. In combination, Prescott anticipates capital costs of approximately \$2,670,000 for growth-related police infrastructure over the next ten years.

**Figure PS4 – Ten-Year Plan for Police Facilities**

Description	Infrastructure Units	Growth Quantity Over Ten Years	Requested Quantity	Growth Share	Cost Factor	Total Cost (rounded)	Growth Cost (rounded)
Police Buildings [1]	square feet	5,758	12,157	47%	\$350	\$4,250,000	\$2,010,000
Additional Police Vehicles	count	8	8	100%	\$83,000	\$660,000	\$660,000
Total =>						\$4,910,000	\$2,670,000

Funded by Other Revenues => \$2,240,000

[1] Square feet of new police headquarters is based on from Otwell Associates Architects (2014) and the police building cost factor is from 2009 LUA.

**Fire Facilities**

Figure PS5 inventories the current fire stations and other buildings in Prescott. For residential development, Prescott will use the growth in population from 2018 to 2028 in the City to derive fire infrastructure standards. For nonresidential development, Prescott will use the growth in jobs from 2018 to 2028 as the service units. Figure PS5 also indicates the allocation of fire building space to residential and nonresidential development, along with the growth in population and jobs. The City can justify 0.52 sq. ft. per person and 0.63 sq. ft. per job for a total of approximately 5,600 square feet of fire building space over the next ten years. Prescott plans to spend \$320 per square foot to construct future Fire Department buildings.

**Figure PS5 – Existing Fire Buildings, Standards and Growth Needs**

Fire Stations	Square Feet
Station 71	14,458
Station 72	9,335
Station 73	3,000
Station 74	2,891
Station 75	6,510
Fire Butler Building	2,400

Total 38,594

Estimated Cost Per Sq. Ft. [1] \$320

[1] City of Prescott

Fire Building Space Needed to Accommodate Growth	
Residential Share	59%
Population in 2018	43,479
Sq. Ft. per person	0.52
Nonresidential Share	41%
Jobs in 2018	25,231
Sq. Ft. per job	0.63
Growth Need Over 10 Years (Sq. Ft.)	5,636
Growth Cost Over 10 years	\$1,803,520

Development fees will be used to expand the fleet of fire vehicles and purchase additional equipment that has a useful life of at least three years. Figure PS6 lists fire vehicles and equipment currently used by the

Prescott Fire Department that has an initial purchase price of at least \$25,000. Expensive fire apparatus accounts for most of the total cost. In 2018, Prescott has 27 vehicles, with a capital cost of approximately \$3.7 million, which is a weighted average cost of approximately \$137,000 per item.

Following the same methodology used for fire buildings, the total count of fire vehicles and equipment was allocated to residential and nonresidential development in Prescott. As shown in Figure PS6, every 1,000 persons will require Prescott to purchase 0.37 additional fire vehicles. Every 1,000 jobs require 0.44 additional fire vehicles.

**Figure PS6 – Existing Fire Vehicles, Standards and Growth Needs**

<i>Fire Vehicle</i>	<i>Vehicle Type</i>	<i>Count</i>	<i>Total Cost</i>	<i>Average Cost</i>
Fire Truck	FT	12	\$3,065,257	\$255,438
Pasenger Vehicle/Sedan	PV	4	113,320	28,330
Truck	TK	9	342,811	38,090
Small Utility	SM	1	136,992	136,992
Trailer/Accessory	TR	1	45,000	45,000
		27	\$3,703,379	\$137,000

**Allocation Factors and LOS for Fire Vehicles**

Residential Share	59%
Population in 2018	43,479
Vehicles per 1,000 people	0.37
Nonresidential Share	41%
Jobs in 2018	25,231
Vehicles per 1,000 jobs	0.44
<b>Fire Vehicles Needed Over 10 Years</b>	<b>4</b>
Cost Per Vehicle [1]	\$137,000
<b>Growth Cost over 10 years</b>	<b>\$548,000</b>

[1] City of Prescott

**Fire Infrastructure Improvements**

Fire development fees in Prescott are based on the same level of service that will be provided to existing development. Using impact fee funding over the next ten years, Figure PS7 indicates that Prescott will relocate and expand FS-73 from approximately 3,000 to 10,000 square feet. Prescott will also purchase additional fire apparatus costing approximately \$550,000. The total cost for these projects is approximately \$3.75 million, with new development accounting for \$2.34 million.

**Figure PS7 – Ten-Year Plan for Fire Facilities**

<i>Description</i>	<i>Infrastructure Units</i>	<i>Growth Quantity</i>	<i>Requested Quantity</i>	<i>Growth Share</i>	<i>Cost Factor</i>	<i>Total Cost</i>	<i>Growth Cost (rounded)</i>
Relocate FS-73	square feet	5,600	10,000	56%	\$320	\$3,200,000	\$1,790,000
Vehicles	count	4	4	100%	\$137,000	\$550,000	\$550,000

Total => \$3,750,000 \$2,340,000

Funded by Other Revenues => \$1,410,000

## PARKS AND RECREATIONAL FACILITIES IIP

ARS § 9-463.05(T)(7)(g) defines the facilities and assets which 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 infrastructure improvements plan includes components for citywide park improvements and trailheads. Development fees in Prescott exclude costs to upgrade, update, improve, expand, correct or replace necessary public services to meet existing needs and usage and stricter safety, efficiency, environmental or regulatory standards.

### Proportionate Share for Parks and Recreation Facilities

ARS § 9-463.05(B)(3) requires development fees to not exceed a proportionate share of the cost of necessary public services needed to serve new development. As shown in Figure PR1, Raftelis recommends daytime population as a reasonable indicator of the potential demand for parks and recreational facilities, from both residential and nonresidential development. According to the U.S. Census Bureau web application OnTheMap, there were 16,185 inflow commuters traveling to Prescott for work in 2015. The proportionate share is based on cumulative impact days per year with the number of residents potentially impacting parks and recreation facilities 365 days per year. Inflow commuters potentially impact parks and recreation facilities 100 days per year per person, assuming a utilization of 2 days per week multiplied by 50 weeks per year.

**Figure PR1 – Daytime Population**

Description	2015 Service Units [1]	Potential Impact Days per Year [2]	Cumulative Impact Days per Year	Allocation
Residents	41,399	365	15,110,635	90%
Inflow Commuters	16,185	100	1,618,500	10%
		Total	16,729,135	100%

[1] Source: U.S. Census Bureau.

[2] Residential assumes park/recreational facilities can be utilized 365 days per year. Nonresidential assumes utilization is 2 days per week over 50 weeks per year.

### Citywide Parks

As specified in ARS § 9-463.05(B)(4), development fees in Prescott are based on the same level of service provided to existing development. Figure PR2 inventories existing parks in Prescott that are roughly the same size and function as planned future parks that will be funded with development fees. Consistent

with Arizona’s enabling legislation, regional parks are excluded from development fees. Also, Prescott excluded small parks that did not contain sports facilities like those the City will construct over the next ten years. The City also excluded large water bodies and large natural areas from the inventory of total park acreage shown below. Prescott will limit development fee funding to larger parks that attract patrons from the entire service area, while providing direct benefit to fee payers by providing ballfields for citywide leagues. Smaller neighborhood-scale parks are project-level improvements.

For residential development, Prescott will use population and job growth to derive current infrastructure standards for parks and trailheads. Figure PR2 indicates Prescott has an average of 3.5 acres of improved parks for every thousand residents and 0.7 acres for every 1,000 jobs within the service area. Multiplying by the number of projected new residents and jobs by the current infrastructure standards indicates a need for an additional 20.1 acres of improved parks over the next ten years.

**Figure PR2 – Existing Citywide Parks, Standards and Growth Needs**

<i>Existing Parks</i>	<i>Improved Acres</i>
Ken Lindley Complex	4.6
Roughrider Park/Bill Valley Field	7.2
Jim McCasland Willow Creek Park	8.4
Vista Park	10.0
Community Nature Center	18.0
A.C. Williams Granite Creek Park	21.0
Goldwater Lake Park	25.0
Watson Lake Park	40.0
Heritage Park [1]	11.4
Pioneer Park	23.2
Total	168.8
Average Acres per Park	16.9

[1] Included only usable space.

**Allocation Factors and Acreage Standards**

Residential Share	90%
Allocated Existing Acres	151.9
Population in 2018	43,479
Acres per 1,000 people	3.5
Nonresidential Share	10%
Allocated Existing Acres	16.9
Jobs in 2018	25,231
Acres per 1,000 jobs	0.7
Growth Need Over 10 Years (Acres)	20.1
Cost Per Acre (\$)	\$295,000
Growth Cost Over 10 years	\$5,929,500

### Trailhead Improvements

Figure PR3 inventories existing trailheads in Prescott. Residential accounts for 90% and nonresidential development 10% of the demand for growth-related recreational facilities. The existing level of service standard is 0.23 trailheads per 1,000 residents and 0.04 trailheads per 1,000 jobs.

**Figure PR3 – Existing Trailheads, Standards and Growth Needs**

<i>Existing Trailheads</i>	<i>Count</i>	<i>Improved Acres</i>
Willow Creek Park Trailhead	1.0	0.97
Peavine North Trailhead	1.0	0.55
Granite Gardens	1.0	0.11
Nature Center	1.0	0.25
Peavine South Trailhead	1.0	0.70
HWY 89/Watson Overlook	1.0	0.24
Acker Park Trailhead	1.0	0.34
Flume Trailhead	1.0	0.10
Constellation Trailhead	1.0	0.34
Pioneer Park Trailhead	1.0	0.70
Centennial Trailhead	1.0	0.22

Total 11 4.52

Average Acres per Trailhead 0.41

**Trailhead Standards and Needs**

Residential Share	90%
Population in 2018	43,479
Trailheads per 1,000 people	0.23
Nonresidential Share	10%
Jobs in 2018	25,231
Trailheads per 1,000 jobs	0.04
Trailheads Needed Over 10 Years	1.3
Cost Per Trailhead (\$)	\$400,000
Growth Cost Over 10 years	\$520,000

**Infrastructure Improvements for Parks and Trailheads**

To maintain current standards, Prescott needs 1.3 trailheads over the next ten years. According to City staff, the estimated cost of one trailhead improvement is \$400,000. Additionally, Prescott will construct a 25-acre baseball/softball complex with impact fee funds. The IIP for parks and recreational facilities is summarized in Figure PR4.

**Figure PR4 – Ten-Year Plan for Improvements**

<i>Description</i>	<i>Infrastructure Units</i>	<i>Growth Quantity Over Ten Years</i>	<i>Requested Quantity</i>	<i>Growth Share</i>	<i>Cost Factor per Unit</i>	<i>Total Cost (rounded)</i>	<i>Growth Cost (rounded)</i>
Heritage Park 4-plex field with synthetic turf	acres	20.1	25	80%	\$295,000	\$7,380,000	\$5,930,000
Trailhead parking lot with restrooms	count	1.3	1	100%	\$400,000	\$400,000	\$400,000
Total =>						\$7,780,000	\$6,330,000

Funded by Other Revenues => \$1,450,000

## APPENDIX A – FORECAST OF REVENUES

Arizona’s enabling legislation mandates a “required offset” for “excess” construction contracting excise taxes, as stated in 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.*

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

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.”*

Raftelis will develop this revenue forecast for the final version of the IIP report. It will include revenues from the city’s sales tax and other General Fund revenue sources, such as property taxes, that could be used for capital improvements.

The required forecast of non-development fee revenue that might be used for growth-related capital costs is shown in Figure A1. General Fund revenues are highlighted in light purple and Highway User Taxes are highlighted light grey. The forecast of revenues was derived from a linear regression analysis. Historical revenue data for the past ten years, obtained from the Comprehensive Annual Financial Report, were correlated to the growth in population and jobs in Prescott. Projected population plus jobs, from the land use assumptions, is the independent variable that drives each revenue forecast.

### Figure A1 – Five-Year Revenue Projections

TO BE PROVIDED IN NEXT DRAFT

The graph at the top of Figure A2 gives the impression that General Fund revenues are expected to increase over the next five years. When nominal dollars are converted to constant 2018 dollars, to account for inflation, and then divided by persons plus jobs in Prescott, to “normalize” the amounts for population and job growth, the results are very different. As shown in the lower portion of Figure A2, projected revenues in constant 2018 dollars are projected to decline relative to population and job growth. In other words, there is no General Fund fiscal surplus available for growth-related capital improvements. The projected increase in General Fund revenue will be offset by an increase in operating, maintenance, and replacement capital costs.

### **Figure A2 – Graph of General Fund Revenues**

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The methodology described above was also applied to Highway User Tax revenue, with the results graphed in Figure A3. The “gas tax” funding pattern in Prescott has shown a consistent decline, when measured in constant dollars and normalized by the increase in population and jobs. Essentially, Prescott has increasing traffic but decreasing dollars that are used for maintenance of existing street facilities.

### **Figure A3 – Graph of Highway User Fund Revenue**

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