Infrastructure Improvements Plan and Development Fee Report

Prepared for:

City of Somerton, Arizona

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EXECUTIVE SUMMARY

The City of Somerton, Arizona, contracted with TischlerBise to document land use assumptions, prepare the Infrastructure Improvements Plan (hereinafter referred to as the "IIP"), and update development fees within the Somerton Service Area 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 and Land Use Assumptions. 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 Somerton's Infrastructure Improvements Plan, and associated update to its development fees, includes the following necessary public services:

1. Parks and Recreational Facilities
2. Water Facilities

Somerton's Public Safety and Streets fees are not included in this update.

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 neighborhood 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 improvements.

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.

DEVELOPMENT FEE REPORT

METHODOLOGY

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 method 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 methods for calculating development fees and how those methods 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 method 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 method 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

Figure 1 summarizes service areas, methodology, and infrastructure cost components for each development fee. Because Somerton plans to provide a uniform level of service for all types of infrastructure included in this infrastructure improvements plan, the service area for all fee components is citywide.

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

Necessary Public Service	Service Area	Incremental Expansion	Plan-Based	Cost Recovery	Cost Allocation
Parks and Recreational	Citywide	Park Improvements	Development Fee Report	Park Land	Population and Jobs
Water	Citywide	Distribution Lines	Storage, Treatment, Well, Pump, Development Fee Report	N/A	Gallons

MAXIMUM ALLOWABLE DEVELOPMENT FEES

Maximum allowable Parks and Recreational Facilities development fees for residential development will be assessed per dwelling unit, based on the type of unit. Nonresidential development fees will be assessed per 1,000 square feet of floor area, according to four general types of development.

Figure 2: Maximum Allowable Parks and Recreational Facilities Development Fees

Residential (per unit)

Development Type	Maximum	Current	Difference
Single Unit	$1,323	$724	$599
2+ Units	$992	$547	$445

Nonresidential (per 1,000 square feet)

Development Type	Maximum	Current	Difference
Industrial	$225	$106	$119
Commercial	$492	$231	$261
Institutional	$242	$113	$129
Office & Other Services	$817	$384	$433

Maximum allowable Water Facilities development fees are displayed below in Figure 3. Fees are assessed per meter according to meter size. Somerton discontinued its water development fee in 2014, so the maximum allowable water fees represent an increase when compared to the current fees. When compared to the previous fees (prior to 2014), however, the maximum allowable water fees represent a decrease.

Figure 3: Maximum Allowable Water Facilities Development Fees

Meter Size (Inches)	Maximum	Current	Difference	Previous	Difference
0.75	$2,350	$0	$2,350	$2,398	($48)
1.00	$3,924	$0	$3,924	$5,996	($2,072)
1.50	$7,824	$0	$7,824	$11,991	($4,167)
2.00	$12,523	$0	$12,523	$19,168	($6,645)
3.00	$25,070	$0	$25,070	$35,974	($10,904)

COUNCIL PROPOSED DEVELOPMENT FEES

Somerton's City Council plans to adopt Parks and Recreational Facilities development fees as shown in Figure 4. Council proposed Parks and Recreational Facilities development fees for residential development will be assessed per dwelling unit, based on the type of unit. Nonresidential development fees will be assessed per 1,000 square feet of floor area, according to four general types of development.

Figure 4: Council Proposed Parks and Recreational Facilities Development Fees

Residential (per unit)

Development Type	Proposed	Current	Difference
Single Unit	$1,323	$724	$599
2+ Units	$992	$547	$445

Nonresidential (per 1,000 square feet)

Development Type	Proposed	Current	Difference
Industrial	$225	$106	$119
Commercial	$492	$231	$261
Institutional	$242	$113	$129
Office & Other Services	$817	$384	$433

Somerton's City Council plans to adopt Water Facilities development fees at an amount less than the maximum allowable fees shown in Figure 3. Council proposed Water Facilities development fees are displayed below in Figure 5. Fees are assessed per meter according to meter size. Somerton discontinued its Water Facilities development fees in 2014, so the council proposed water fees represent an increase when compared to the current fees. When compared to the previous fees (prior to 2014), however, the council proposed Water Facilities development fees represent a decrease.

Figure 5: Council Proposed Water Facilities Development Fees

Meter Size (Inches)	Proposed	Current Fees	Difference	Previous	Difference
0.75	$1,500	$0	$1,500	$2,398	($898)
1.00	$2,505	$0	$2,505	$5,996	($3,491)
1.50	$4,994	$0	$4,994	$11,991	($6,997)
2.00	$7,994	$0	$7,994	$19,168	($11,174)
3.00	$16,003	$0	$16,003	$35,974	($19,971)

PARKS AND RECREATIONAL FACILITIES IIP

ARS 9-463.05 (T)(5)(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."*

Parks and recreational development fees include park improvements, park land, and the cost of professional services for preparing the Parks and Recreational Facilities IIP and Development Fee Report. The analysis uses the incremental expansion methodology for park improvements, the cost recovery methodology for park land, and the plan-based methodology for the Development Fee Report.

Service Area

The City of Somerton plans to provide a uniform level of service and equal service for parks and recreational facilities citywide. As described in Somerton's 2010 General Plan Update, the "parks and recreation facilities work in conjunction to provide recreational opportunities for all citizens and visitors." As a result, the service area for the Parks and Recreational Facilities IIP is citywide.

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. As shown in Figure 6, TischlerBise recommends daytime population as a reasonable indicator of the potential demand for Parks and Recreational Facilities from residential and nonresidential development. According to the U.S. Census Bureau web application OnTheMap, there were 1,957 inflow commuters, which is the number of persons who have jobs in Somerton but live elsewhere. The proportionate share is based on cumulative impact days per year with the number of residents potentially impacting Parks and Recreational Facilities 365 days per year. Inflow commuters potentially impact parks and recreational facilities 250 days per year (5 days per week multiplied by 50 weeks a year).

Figure 6: Daytime Population in 2014

		Cumulative Impact Days per Year			Cost Allocation for Parks	
Residents	Inflow Commuters	Residential[1]	Nonresidential[2]	Total	Residential	Nonresidential
15,499	1,957	5,657,135	489,250	6,146,385	92%	8%

1. Days per Year = **365**

2. 5 Days per Week x 50 Weeks per Year = **250**

Source: Arizona Department of Administration 2014 Population Estimate; U.S. Census Bureau, OnTheMap 6.1.1 Application, 2014.

ANALYSIS OF CAPACITY AND USAGE 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 Improvements – Incremental Expansion

Somerton plans to maintain its current level of park improvements over the next ten years. Shown below in Figure 7, Somerton's existing park inventory include 30.74 acres of improved acres.

Figure 7: Existing Park Improvements

Description	Improved Acres
Council Avenue	10.21
Joe Munoz	9.14
Main Street Ball Park	1.99
Perricone	9.40
Total	30.74

Park Improvements Level of Service

To allocate the proportionate share of demand for park improvements to residential and nonresidential development, this analysis uses daytime population shown in Figure 6. Somerton's existing level of service for residential development is approximately 0.00165 improved acres per person (30.74 acres X 92 percent residential share / 17,103 persons). For nonresidential development, the existing level of service is approximately 0.00113 improved acres per job (30.74 acres X 8 percent nonresidential share / 2,180 jobs).

The cost to develop an acre of park land is $163,000. Somerton plans to improve its existing inventory of undeveloped land, so the cost per acre does not include the cost to acquire land. The cost per person for park improvements is $269.70 (0.00165 improved acres per person X $163,100 per acre) and the cost per job is $183.99 (0.00113 improved acres per job X $163,100 per acre).

Figure 8: Existing Level of Service

Cost Allocation Factors	
Existing Acres	30.74
Cost per Acre[1]	$163,100

Level-of-Service (LOS) Standards	
Residential	
Residential Share	92%
2017 Population	17,103
Acres per Person	0.00165
Cost per Person	**$269.70**
Nonresidential	
Nonresidential Share	8%
2017 Jobs	2,180
Acres per Job	0.00113
Cost per Job	**$183.99**

1. Improvement cost per acre in Yuma, Arizona.

Park Land – Cost Recovery

Parks and Recreational Facilities development fees also include a cost component to recover the cost of park land purchased in 2017. The principal portion of the debt was $2,000,000 in 2017 and Somerton expects to retire the debt in 2027. The growth share is based on projected persons and jobs at the end of the bond term. The growth share of the remaining principal is 21.4 percent—this represents future development's share of the total population and jobs in 2027.

To calculate the cost per service unit (persons and jobs), the debt is allocated to residential and nonresidential development using their respective proportionate shares (92 percent for residential and 8 percent for nonresidential). These totals are then multiplied by the growth share. Lastly, these amounts are divided by the increase in persons and jobs to obtain a cost per service unit. This results in a cost per person of $84.62 ($2.0 million X 92 percent residential share X 21.4 percent growth share / 4,653 additional persons) and the cost per job of $57.74 ($2.0 million X 8 percent nonresidential share X 21.4 percent growth share / 593 additional jobs).

Figure 9: Cost Recovery of Park Land

Year of Bond Issue	Year of Final Bond Payment	Purchase Price[1]
2017	2027	$2,000,000

Development Type	Proportionate Share	Proportionate Cost	Growth Share[2]	Growth Cost	10-Year Increase
Residential	92%	$1,840,000	21.4%	$393,760	4,653 persons
Nonresidential	8%	$160,000	21.4%	$34,240	593 jobs

Cost per Person	**$84.62**
Cost per Job	**$57.74**

1. City of Somerton, Arizona.
2. Residential growth share = 1 - (16,249 persons in 2017 / 20,631 persons in 2027)
   Nonresidential growth share = 1 - (2,052 jobs in 2017 / 2,312 jobs in 2027)

IIP and Development Fee Report – Plan-Based

The cost to prepare the Parks and Recreational IIP and Development Fee Report totals $15,000. Somerton plans to update its report every five years. Based on this cost, proportionate share, and five-year projections of future development from the *Land Use Assumptions*, the cost per person is $6.31 and the cost per job is $4.30.

Figure 10: IIP and Development Fee Report

Necessary Public Service	Cost	Proportionate Share		Demand Unit	2017	2022	Change	Cost per Demand Unit
Parks and Recreational	$15,000	Residential	92%	Population	17,103	19,290	2,187	$6.31
		Nonresidential	8%	Jobs	2,180	2,459	279	$4.30
Water	$30,300	All Types	100%	Gallons	2,011,770	2,557,955	546,185	$0.06
Total	$45,300							

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 11 displays the demand indicators for residential and nonresidential land uses. For residential development the table displays the persons per housing unit. For nonresidential development the table displays the number of vehicle trips generated per thousand square feet of floor area.

Figure 11: Parks and Recreational Facilities Ratio of Service Unit to Development Unit

Residential (per unit)

Development Type	Persons per Housing Unit[1]
Single Unit	3.67
2+ Units	2.75

Nonresidential (per 1,000 square feet)

Development Type	Jobs per 1,000 Sq Ft[1]
Industrial	0.92
Commercial	2.00
Institutional	0.98
Office & Other Services	3.32

1. TischlerBise Land Use Assumptions

PROJECTED DEMAND FOR COSTS AND SERVICES

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."*

As shown in Figure 12, the *Land Use Assumptions* projects an additional 4,653 persons and 593 jobs over the next 10 years.

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."*

Somerton plans to maintain its current park improvements level of service over the next 10 years. Based on a projected population increase of 4,653 persons, Somerton's future residential development demands 7.69 additional acres of park improvements (4,653 additional persons X 0.00165 developed acres per person). Future nonresidential development demands 0.67 additional acres of park improvements (593 additional jobs X 0.00113 developed acres per job) over the next 10 years. Future development demands approximately 8 additional acres of park improvements over the next ten years at a cost of approximately $1.36 million.

Figure 12: Projected Demand for Park Improvements

Type of Infrastructure	Level of Service	Demand Unit	Cost per Acre
Park Improvements	0.0017 Improved Acres	per Person	$163,100
	0.0011 Improved Acres	per Job	

Need for Park Improvements					
Year	Population	Jobs	Residential Acres	Nonresidential Acres	Total Acres
2017	17,103	2,180	28.28	2.46	30.74
2018	17,520	2,233	28.97	2.52	31.49
2019	17,946	2,288	29.67	2.58	32.26
2020	18,383	2,344	30.40	2.64	33.04
2021	18,831	2,401	31.14	2.71	33.85
2022	19,290	2,459	31.90	2.77	34.67
2023	19,759	2,519	32.67	2.84	35.51
2024	20,241	2,580	33.47	2.91	36.38
2025	20,734	2,643	34.28	2.98	37.27
2026	21,239	2,708	35.12	3.05	38.17
2027	21,756	2,773	35.97	3.13	39.10
10-Yr Increase	4,653	593	7.69	0.67	8.36

Growth-Related Expenditures	**$1,254,892**	**$109,105**	**$1,363,997**

PARKS AND RECREATIONAL FACILITIES DEVELOPMENT FEES

Revenue Credit/Offset

A revenue credit/offset is not necessary for Parks and Recreational Facilities development fees, because costs generated by projected development exceed revenues generated by projected development.

Proposed Parks and Recreational Facilities Development Fees

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 13 provides a summary of the costs per demand unit used to calculate the Parks and Recreational Facilities development fees. As previously discussed, parks fees are calculated for residential and nonresidential land uses. The total cost per residential demand unit is $360.63 and the total cost per nonresidential demand unit is $246.03. The proposed fee for a single-family unit is $1,323 ($360.63 X 3.67 persons per housing unit). The proposed fee per 1,000 square feet of commercial development is $492 ($246.03 X 2.00 jobs per 1,000 square feet).

Figure 13: Schedule of Parks and Recreational Development Fees

Fee Component	Cost per Person	Cost per Job
Park Improvements	$269.70	$183.99
Park Land	$84.62	$57.74
Development Fee Report	$6.31	$4.30
Total	$360.63	$246.03

Residential (per unit)

Development Type	Persons per Housing Unit[1]	Proposed Fees	Current Fees	Increase / Decrease
Single Unit	3.67	**$1,323**	$724	$599
2+ Units	2.75	**$992**	$547	$445

Nonresidential (per 1,000 square feet)

Development Type	Jobs per 1,000 Sq Ft[1]	Proposed Fees	Current Fees	Increase / Decrease
Industrial	0.92	**$225**	$106	$119
Commercial	2.00	**$492**	$231	$261
Institutional	0.98	**$242**	$113	$129
Office & Other Services	3.32	**$817**	$384	$433

1. TischlerBise Land Use Assumptions

PROJECTED 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)).

Projected Parks and Recreational Facilities Development Fee Revenue

In accordance with state law, this report includes an IIP for park infrastructure needed to accommodate new development. Projected fee revenue shown in Figure 14 is based on the development projections in the *Land Use Assumptions* and the updated development fees for parks and recreational facilities. To the extent these assumptions change, the projected fee revenue will change correspondingly. 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 is projected, the demand for infrastructure will also decrease, along with development fee revenue. Anticipated development fee revenue over the next 10 years of $1.8 million is approximately equal to the projected growth-related cost of parks and recreational facilities. Existing development's share of debt related to park land needs to be funded with other sources of revenue.

Figure 14: Projected Parks and Recreational Development Fee Revenue

Fee Component	Growth Share	Existing Share	Total Cost
Park Improvements	$1,363,997	$0	$1,363,997
Park Land	$428,000	$1,572,000	$2,000,000
Development Fee Report	$15,000	$0	$15,000
Total	$1,806,997	$1,572,000	$3,378,997

		Single Unit $1,323 per unit	2+ Units $992 per unit	Industrial $225 per 1,000 SF	Commercial $492 per 1,000 SF	Institutional $242 per 1,000 SF	Office $817 per 1,000 SF
Year		Hsg Units	Hsg Units	KSF	KSF	KSF	KSF
Base	2017	4,094	751	128	125	881	286
Year 1	2018	4,194	769	131	128	902	293
Year 2	2019	4,296	788	134	131	924	300
Year 3	2020	4,401	807	137	134	946	307
Year 4	2021	4,508	827	140	137	969	315
Year 5	2022	4,618	847	143	141	992	323
Year 6	2023	4,729	868	146	145	1,016	331
Year 7	2024	4,845	889	149	149	1,040	339
Year 8	2025	4,964	910	152	153	1,065	347
Year 9	2026	5,084	933	156	157	1,091	355
Year 10	2027	5,208	955	160	161	1,117	363
Ten-Year Increase		1,114	204	32	36	236	77
Projected Revenue		$1,460,710	$200,437	$7,138	$17,542	$56,500	$62,367

Projected Revenue	$1,804,694
Projected Expenditures	$3,378,997
Existing Development's Share	$1,574,303

WATER FACILITIES IIP

ARS 9-463.05 (T)(5)(a) defines the facilities and assets which can be included in the Water Facilities IIP:

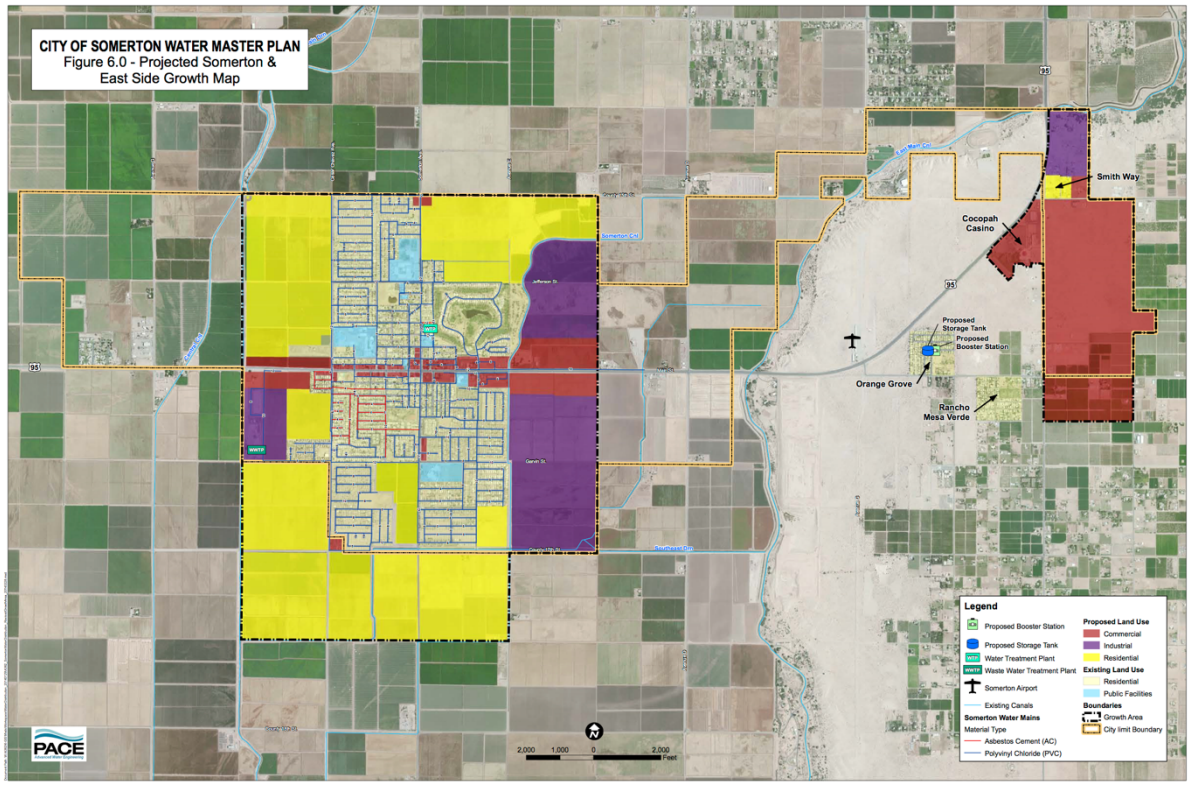
> *"water facilities, including the supply, transportation, treatment, purification and distribution of water, and any appurtenances for those facilities"*

The Water Facilities IIP includes components for storage, treatment, wells, pumps, distribution lines, and the cost of professional services for preparing the Water Facilities IIP and Development Fee Report. The analysis uses the incremental expansion methodology for distribution lines and the plan-based methodology for all other components.

Service Area

The service area for the Water Facilities IIP, as described in Somerton's Water Master Plan Update, is shown below in Figure 15. The Growth Area, where Somerton will focus development over the next 20-year planning horizon, lays from W County 15th Street to W County 17 1⁄2 St, and from the quarter section line between S Avenue D and S Avenue E, to the quarter section line between S Ave F and S Ave G. Since 2005 the City has incorporated areas to the east along Hwy 95 to W County 15th Street to the north Smith Way and to the south along the east side of Avenue B to W County 16th Street. The study area of the Master Plan consists of the Somerton Growth Area, newly incorporated areas, unincorporated areas of Yuma County (Orange Grove and Rancho Mesa Verde), and Cocopah Casino.

Figure 15: Water Service Area



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 provide necessary public services to the development. The Water Facilities IIP and development fees are assessed on both residential and nonresidential development as both types of development create a burden for additional water facilities. In fiscal year 2017, approximately 98 percent of water customers in Somerton were residents, accounting for 96 percent of the average day demand. Approximately two percent of water customers were nonresidential customers, accounting for four percent of the average day demand.

ANALYSIS OF CAPACITY AND USAGE 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."*

Existing Capacity and Usage

In 2014, PACE Engineers completed an update to Somerton's 2008 Water System Master Plan. Through its analysis, PACE inventoried Somerton's existing water facilities and evaluated the system's overall capacity. Shown in Figure 16, water storage facilities have an actual capacity of 2,000,000 gallons. Somerton sizes its water storage facilities based on peak demand plus two hours of fire flow at 1,500 gallons per minute (gpm)—leaving 59,701 gallons of capacity (2,000,000 gallons of storage - 1,760,299 peak gallons – 180,000 gallons of fire flow).

Somerton uses two water treatment plants to treat groundwater pumped from two wells. The first treatment plant was constructed in 1979 and has 1,000 gpm capacity, and the second plant was constructed in 1986 and also has 1,000 gpm capacity. Each water treatment plant consists of four identically-sized greensand filter vessels. Design flow of each vessel is 250 gpm, so the combined capacity of the filtration is 2,000 gpm (2.88 MGD). The treatment capacity with one of the eight filtration units out of service is 1,750 gpm (2.52 MGD), which represents an excess capacity of 508,230 gallons.

The well capacity of the system is sized to supply the max day demand (MDD) with the largest well out of service. The MDD for the City of Somerton is approximately 2.01 MGD, so the Somerton system has an excess well production capacity of 580,230 gallons with Wells No. 3 or No. 4 out of service.

Somerton's water is supplied by one booster station withdrawing water from Storage Tank No. 1. The booster station consists of five booster pumps located beside Storage Tank No. 1. Under current conditions, Pump No. 2, No. 4, and No. 5 are in operation. Pump No. 2 is used only for low flows (typically during the night). Closed water system booster stations are the sole source of supply for the area they service and must be sized to supply MDD plus fire flow or PHD, whichever is larger. Somerton's pumping facilities consist of a single closed booster station with capacity of approximately 4,000 gpm (5.76 MGD). Using MDD (2.01 MGD) plus fire flow (2.16 MGD), remaining booster pump capacity totals 1.59 MGD.

Figure 16: Existing Usage of Water Facilities

Storage

Description	Design Capacity (Gallons)	Actual Capacity (Gallons)	Required Fire Flow (Gallons)[1]	Peak Day (Gallons)	Remaining Capacity (Gallons)
Tank #1	1,000,000	1,000,000	180,000	1,760,299	59,701
Tank #2	1,000,000	1,000,000			
Total	2,000,000	2,000,000			

Treatment

Description	Design Capacity (GPM)	Actual Capacity (GPM)	System Sizing (GPD)[2]	Max Day (GPD)	Remaining Capacity (GPD)
WTP #1	1,000	1,000	1,080,000	2,011,770	508,230
WTP #2	1,000	1,000	1,440,000		
Total	2,000	2,000	2,520,000		

Wells

Description	Design Capacity (GPM)	Actual Capacity (GPM)	System Sizing (GPD)[3]	Max Day (GPD)	Remaining Capacity (GPD)
Well #3	2,000	1,800	0	2,011,770	580,230
Well #4	2,000	1,800	2,592,000		
Total	4,000	3,600	2,592,000		

Pumps

Description	Design Capacity (GPM)	Actual Capacity (GPM)	Required Fire Flow (GPD)[4]	Max Day (GPD)	Remaining Capacity (GPD)
Pump #2	1,000	1,000	2,160,000	2,011,770	1,588,230
Pump #4	1,000	1,000			
Pump #5	2,000	2,000			
Total	4,000	4,000			

1. Required fire flow storage is 1,500 gpm for 2 hours (1,500 gpm X 60 min X 2 hours).
2. Represents system treatment capacity with one filtration unit out of service.
3. Represents system supply with the largest well out of service. Must meet MDD.
4. Required fire flow is 1,500 gpm (1,500 gpm X 60 min X 24 hours).

Average Day Demand

The water level of service is based on average day gallons per connection per day for fiscal year 2017 and totals 1,257,356 gallons per day. The current level of service for residential development is 314 gallons per connection per day. For nonresidential connections, water demand averages 624 gallons per day and each nonresidential water connection averaged 24.8 jobs (2,180 jobs / 88 connections). The projected increase in jobs drives the demand for water capacity from nonresidential development.

Figure 17: Water Level of Service—Average Day Demand

Development Type	Annual Consumption	Average Gallons per Day[1]	Connections[1]	Gallons per Connection per Day
Residential	438,896,000	1,202,455	3,824	314
Nonresidential	20,039,000	54,901	88	624
Total	458,935,000	1,257,356	3,912	321

1. Public Works Department, City of Somerton, Arizona, FY 2016-2017.

Max Day Demand

Max day demand, shown in Figure 18, includes a peaking factor of 1.6 times average day demand and totals 2,011,770 gallons per day for fiscal year 2017. Residential development demands 503 gallons per connection per max day and nonresidential development demands 998 gallons per connection per max day. Somerton sizes its water infrastructure using max day demand, so the analysis uses max day demand for water facilities fees.

Figure 18: Water Level of Service—Max Day Demand

Development Type	Max GPM	Max Gallons per Day[1]	Connections[1]	Gallons per Connection per Day
Residential	1,336	1,923,928	3,824	503
Nonresidential	61	87,842	88	998
Total	1,397	2,011,770	3,912	514

1. Maximum Day Demand is 1.6 times greater than Average Day Demand, 2014 Somerton Water Master Plan.

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."*

Residential Water Facilities development fees are assessed on a per unit basis, based on max day gallons per connection. Development fees assume a residential unit in a multi-unit structure with a single meter would be served by a 3/4" meter. If not, then the corresponding meter size and capacity ratio shown below would be used to establish a ratio of service unit to land use.

For nonresidential Water Facilities development fees, capacity ratios by meter size are the appropriate demand indicator for water facilities. Capacity ratios equate 5/8" and 3/4" meters to the max day gallons per single-family residential unit. Utilizing max day gallons is the most efficient way to show a direct relationship between development units, usage, and system capacity. The nonresidential Water Facilities development fees are calculated by multiplying the number of gallons per residential unit by the capacity ratio for the corresponding size and type of water meter, which are provided by the American Water Works Association (2012) and shown in below.

Figure 19: Water Facilities Ratio of Service Unit to Development Unit

Meter Size (Inches)		Capacity Ratio
0.75	Displacement	1.00
1.00	Displacement	1.67
1.50	Displacement	3.33
2.00	Compound	5.33

Source: AWWA, M6 Water Meters - Selection, Installation, Testing and Maintenance, Fifth Edition, 2012.

PROJECTED DEMAND AND COSTS FOR SERVICES

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."*

Based on Somerton's *Land Use Assumptions* and current level-of-service factors, projected water customers increase by 2,031 residential connections and 17 nonresidential connections over the next 15 years, as shown in Figure 20. The increase in max day water customers will demand an additional 1,385,912 gallons per max day over the next 15 years. Projected max day demand includes a new high school in 2021 and new elementary schools in 2022 and 2027.

Figure 20: Projected Services Units—Max Day Demand

Year		Max Gallons per Day	Residential Connections	Nonresidential Connections	Total Connections	Annual Increase		Cumulative Increase	
						Connections	Max Gallons per Day	Connections	Max Gallons per Day
Base	2017	2,011,770	3,824	88	3,912				
1	2018	2,073,271	3,942	90	4,032	120	61,501	120	61,501
2	2019	2,182,316	4,063	92	4,155	123	109,045	243	170,546
3	2020	2,246,957	4,187	95	4,282	126	64,641	370	235,187
4	2021	2,477,855	4,314	97	4,411	129	230,898	499	466,085
5	2022	2,557,955	4,444	101	4,545	134	80,100	633	546,185
6	2023	2,626,781	4,576	104	4,680	134	68,827	768	615,011
7	2024	2,744,118	4,713	106	4,819	139	117,336	907	732,348
8	2025	2,817,090	4,853	109	4,962	143	72,972	1,050	805,320
9	2026	2,891,652	4,996	111	5,107	146	74,562	1,195	879,883
10	2027	2,980,084	5,142	114	5,256	149	88,432	1,344	968,314
11	2028	3,051,004	5,278	116	5,394	139	70,920	1,482	1,039,234
12	2029	3,169,930	5,418	119	5,537	143	118,926	1,625	1,158,160
13	2030	3,243,909	5,560	121	5,681	145	73,979	1,769	1,232,139
14	2031	3,320,021	5,706	124	5,830	149	76,112	1,918	1,308,251
15	2032	3,397,682	5,855	127	5,982	152	77,662	2,070	1,385,912

Source: TischlerBise calculation, using Max Day Demand factors and projected development shown in the Land Use Assumptions.

Somerton's plans to construct water facilities for future development are outlined in the Water Master Plan Update (2014). Within the next 10 years, Somerton plans to build a storage tank, a water treatment plant, a well, a pump, and distribution lines. Theses planned improvements are outlined below.

Storage – Plan Based

The planned storage tank has a capacity of 1.25 MG and a cost of $920,000. To calculate the cost per service unit (gallons), the costs of planned improvements are allocated to the additional capacity of each water facility. For the planned storage tank, this results in a cost of $0.74 per gallon. Based on a projected demand increase of 1.39 MGD over the next 15 years, development fee revenue will cover approximately 100 percent of storage costs within 13 years.

Figure 21: Storage Cost per Gallon of Capacity

Description	Capacity	Cost
Tank #3 (1.25 MG)	1,250,000	$920,000

Total Cost	$920,000
Gallons of Capacity	1,250,000
Cost per Gallon of Capacity	**$0.74**

13-Year Demand Increase	1,232,139
13-Year Share of Cost	$911,783

Treatment – Plan Based

Somerton plans to construct a new water treatment plant within the next 10 years to serve future development. The planned water treatment plant is expected to cost $2,875,000 and provide additional capacity of 2.16 MGD—a cost of $1.33 per gallon. Based on a projected demand increase of 1.39 MGD, development fee revenue will cover 64 percent of treatment costs over the next 15 years.

Figure 22: Treatment Cost per Gallon of Capacity

Description	Capacity	Cost
Water Treatment Plant #3 (1,500 GPM)	2,160,000	$2,875,000

Total Cost	$2,875,000
Gallons of Capacity	2,160,000
Cost per Gallon of Capacity	**$1.33**

15-Year Demand Increase	1,385,912
15-Year Share of Cost	$1,843,263

Well – Plan Based

Somerton plans to construct an additional well within the next 10 years to serve future development. The planned well is expected to cost $575,000 and provide additional capacity of 1.62 MGD—a cost of $0.35 per gallon. Based on a projected demand increase of 1.39 MGD, development fee revenue will cover 84 percent of well costs over the next 15 years.

Figure 23: Well Cost per Gallon of Capacity

Description	Capacity	Cost
Well #5 (1,500 GPM)	1,620,000	$575,000

Total Cost	$575,000
Gallons of Capacity	1,620,000
Cost per Gallon of Capacity	**$0.35**
15-Year Demand Increase	1,385,912
15-Year Share of Cost	$485,069

Pump – Plan Based

Somerton plans to construct a new pump within the next 10 years to serve future development. The planned pump is expected to cost $115,000 and provide additional capacity of 1.44 MGD—a cost of $0.08 per gallon. Based on a projected demand increase of 1.39 MGD, development fee revenue will cover approximately 96 percent of pump costs within 15 years.

Figure 24: Pump Cost per Gallon of Capacity

Description	Capacity	Cost
Pump #6 (1,000 GPM)	1,440,000	$115,000

Total Cost	$115,000
Gallons of Capacity	1,440,000
Cost per Gallon of Capacity	**$0.08**
15-Year Demand Increase	1,385,912
15-Year Share of Cost	$110,873

Distribution Lines – Incremental Expansion

As shown in Appendix D, Somerton's Water Master Plan Update (2014) includes plans to construct additional water distribution lines in order to form a water distribution grid. The planned distribution grid assumes the "future backbones" of the grid include pipes of at least 10 inches, and construction of this grid will allow future development access to Somerton's water facilities. The planned grid does not include distribution lines within individual developments, since that is the responsibility of the developer/builder.

Somerton's inventory includes 33,400 linear feet of 10" distribution lines. Based on 2017 max day gallons, the existing level of service is 0.01660 linear feet per gallon (33,400 linear feet / 2,011,770 gallons). Somerton's Public Works Department provided a cost of $118 per linear foot for 10" distribution lines. The cost for distribution lines is $1.96 per gallon (0.01660 linear feet per gallon X $118 per linear foot).

Based on a projected demand increase of 1.39 MGD, future development will demand approximately 23,000 additional linear feet of distribution lines over the next 15 years to maintain the current level of service. The 15-year cost of distribution lines is approximately $2.7 million (1.39 million gallons X $1.96 per gallon) and fee revenue will cover 100 percent of growth-related costs for distribution lines.

Figure 25: Distribution Line Cost per Gallon of Capacity

Cost Allocation Factors	
Cost per Linear Foot[1]	$118

Level-of-Service (LOS) Standards	
Linear Feet of 10" Distribution Lines	33,400
2017 Max Day Gallons	2,011,770
Linear Feet per Gallon	0.01660
Cost per Gallon	**$1.96**

1. Somerton Public Works Department

15-Year Demand Increase	1,385,912
15-Year Distribution Line Need (LF)	23,009
15-Year Cost of Distribution Lines	$2,716,388

IIP and Development Fee Report – Plan-Based

The cost to prepare the Water Facilities IIP and Development Fee Report totals $30,300. Somerton 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 per gallon is $0.06.

Figure 26: IIP and Development Fee Report

Necessary Public Service	Cost	Proportionate Share		Demand Unit	2017	2022	Change	Cost per Demand Unit
Parks and Recreational	$15,000	Residential	92%	Population	17,103	19,290	2,187	$6.31
		Nonresidential	8%	Jobs	2,180	2,459	279	$4.30
Water	$30,300	All Types	100%	Gallons	2,011,770	2,557,955	546,185	$0.06
Total	$45,300							

WATER FACILITIES DEVELOPMENT FEES

Revenue Credit/Offset

A revenue credit/offset is not necessary for the Water Facilities development fees, because costs generated by projected development exceed revenues generated by projected development.

Proposed Water Facilities Development Fees

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."*

Infrastructure components and cost factors for Water Facilities are summarized in the upper portion of Figure 27. The cost per service unit is $4.52 per gallon. Figure 27 displays the ratio of a service unit to various types of land uses for residential and nonresidential development.

Residential Water Facilities development fees are assessed on a per unit basis, based on max day demand – approximately 503 gallons per unit. Development fees assume a residential unit in a multi-unit structure with a single meter would be served by a 3/4" meter. If not, then the corresponding meter size and capacity ratio shown below would be used to establish a ratio of service unit to land use. The single-family fee of $2,274 is calculated using a cost per service unit of $4.52 per gallon multiplied by max day demand per residential unit of 503 gallons.

For nonresidential Water Facilities development fees, capacity ratios by meter size are the appropriate demand indicator for Water Facilities. Capacity ratios equate 5/8" and 3/4" meters to the max day demand per residential unit. Utilizing max day demand is the most efficient way to show a direct relationship between development units, usage, and system capacity. The nonresidential Water Facilities development fees are calculated by multiplying the max day demand per residential unit by the capacity ratio for the corresponding size and type of water meter, which are provided by the American Water Works Association (2017) and shown in below. The fee for a 1.0" meter, $3,798, is calculated using a cost per service unit of $4.52 per gallon multiplied by max day demand per residential unit of approximately 503 gallons, multiplied by the capacity ratio of 1.67.

Figure 27: Schedule of Water Facilities Development Fees

Demand Indicators	
Gallons per Max Day	503
Cost Factors per Gallon of Capacity	
Storage	$0.74
Treatment	$1.33
Well	$0.35
Pump	$0.08
Distribution Lines	$1.96
Development Fee Report	$0.06
Capital Cost per Gallon	$4.52

Residential (per meter)

Unit Type	Proposed Fees	Previous Fees	Increase / Decrease
Single Family	**$2,274**	$2,398	($124)

All Other Development (per meter)

Meter Size (Inches)	Capacity Ratio[1]	Proposed Fees	Previous Fees	Increase / Decrease
0.75	1.00	**$2,274**	$2,398	($124)
1.00	1.67	**$3,798**	$5,996	($2,198)
1.50	3.33	**$7,573**	$11,991	($4,418)
2.00	5.33	**$12,121**	$19,168	($7,047)
3.00	10.67	**$24,265**	$35,974	($11,709)

1. AWWA Manual of Water Supply Practices M-1, 7th Edition.

PROJECTED WATER FACILITIES DEVELOPMENT FEE REVENUE

Appendix A contains the forecast of revenues required by Arizona's enabling legislation (ARS 9-463.05(E)(7)).

Projected Water Facilities Development Fee Revenue

Projected fee revenue shown in Figure 28 is based on the development projections in the *Land Use Assumptions* document and the updated Water Facilities development fees. If development occurs at a faster rate than projected, the demand for infrastructure will increase along with development fee revenue. If development occurs at a slower rate than projected, the demand for infrastructure will decrease and development fee revenue will decrease at a similar rate. Anticipated development fee revenue of approximately $6.2 million over the next 15 years is approximately 97 percent of the projected cost of water facilities ($6.4 million).

Figure 28: Projected Water Facilities Development Fee Revenue

Fee Component	Growth Share
Storage	$920,000
Treatment	$2,875,000
Well	$575,000
Pump	$115,000
Distribution Lines	$1,897,896
Development Fee Report	$30,300
Total	$6,413,196

		$4.52 per gallon
Year		Gallons
Base	2017	2,011,770
Year 1	2018	2,073,271
Year 2	2019	2,182,316
Year 3	2020	2,246,957
Year 4	2021	2,477,855
Year 5	2022	2,557,955
Year 6	2023	2,626,781
Year 7	2024	2,744,118
Year 8	2025	2,817,090
Year 9	2026	2,891,652
Year 10	2027	2,980,084
Year 15	2032	3,397,682
15-Year Increase		1,385,912
Projected Revenue		$6,213,940

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."*

Somerton does not have a higher than normal construction excise tax rate; therefore, the required offset described above is not applicable. The required forecast of non-development fee revenue from identified sources that can be attributed to new development over the next five years is summarized in Figure A1. These funds are available for capital investments; however, the City of Somerton directs these revenues to non-development fee eligible capital needs including maintenance, repair, and replacement.

Only revenue generated by future development that is dedicated to growth-related capital improvements needs to be considered in determining the extent of the burden imposed by future development. Offsets against development fees are warranted in the following cases: (1) new development will be paying taxes or fees used to retire debt on existing facilities serving existing development; (2) new development will be paying taxes or fees used to fund an existing deficiency, or (3) new development will be paying taxes or fees that are dedicated for growth-related improvements. The analysis provided in the individual sections of this report identified no need for offsets against the proposed development fees.

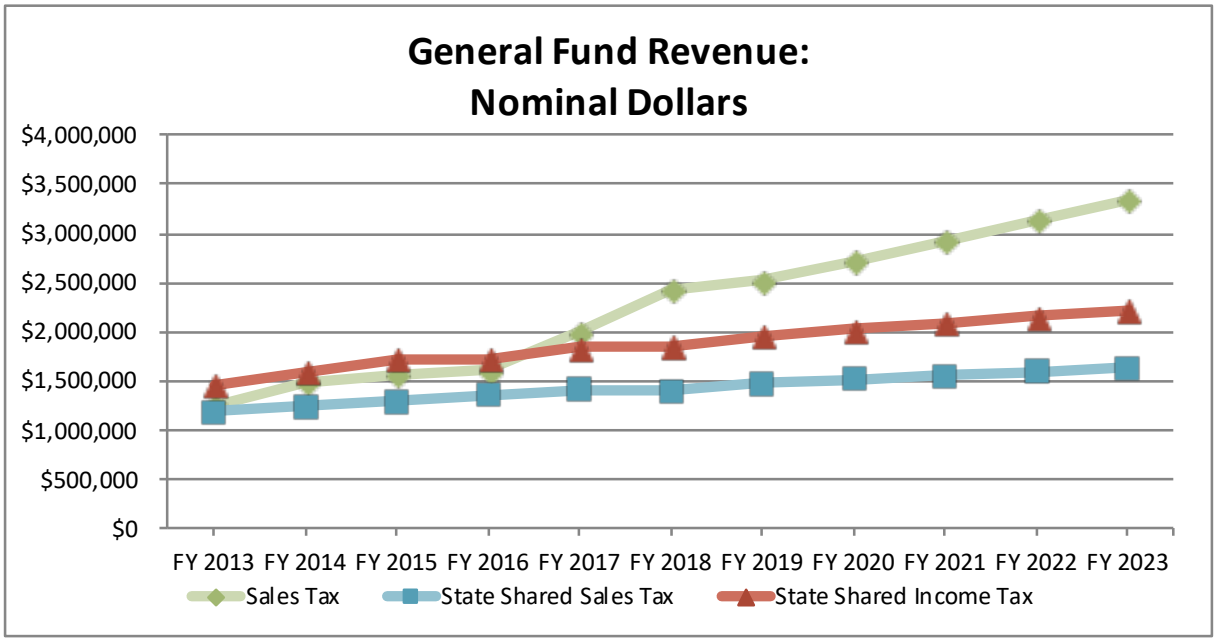
Figure A1: Revenue Projections

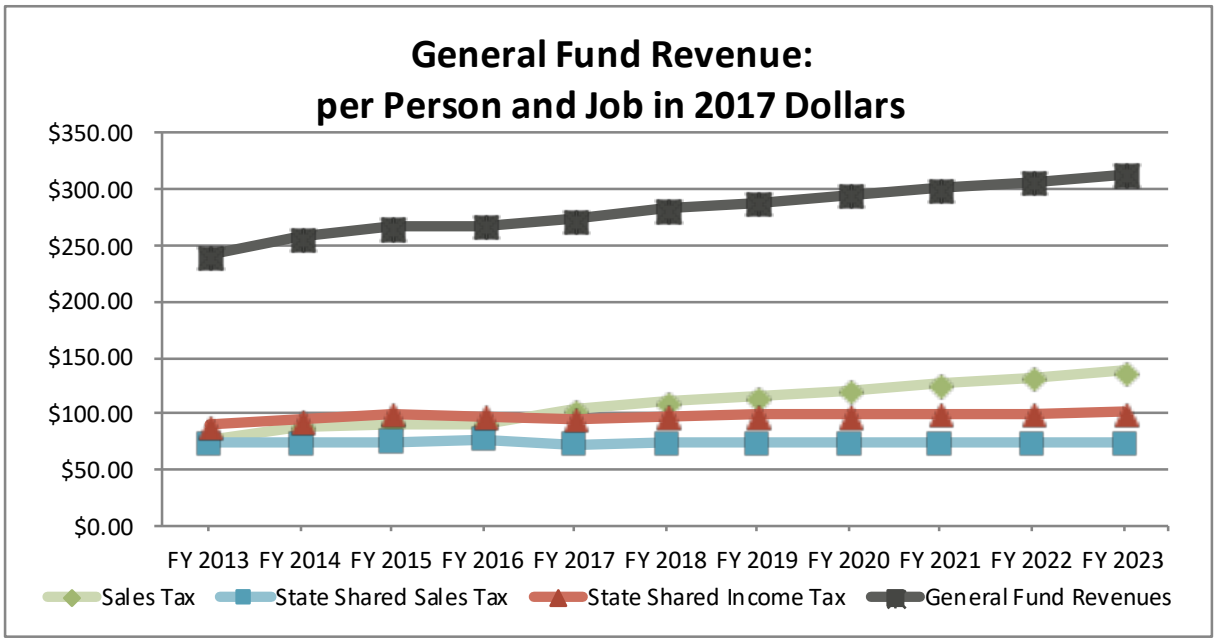
Source	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Sales Tax	$2,438,214	$2,527,830	$2,724,936	$2,926,840	$3,133,541	$3,345,040
State Shared Sales Tax	$1,403,974	$1,475,305	$1,514,097	$1,553,833	$1,594,513	$1,636,137
State Shared Income Tax	$1,853,977	$1,957,927	$2,021,461	$2,086,542	$2,153,169	$2,221,342
General Fund Revenues	$5,696,165	$5,961,063	$6,260,495	$6,567,215	$6,881,223	$7,202,520

Source	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Water Enterprise Revenue	$1,326,992	$1,465,091	$1,536,459	$1,609,564	$1,684,407	$1,760,986

The graph at the top of Figure A2 gives the impression that all General Fund revenues are expected to increase over the next five years. When nominal dollars are converted to constant 2017 dollars, to account for inflation, and then divided by population and jobs, the results are somewhat different. As shown in the lower portion of Figure A2, state-shared revenue, in constant 2017 dollars, is projected to decline relative to population and job growth. Sales tax revenue, in constant 2017 dollars, is projected to increase slightly. These funds are available for capital investments; however, the City of Somerton directs these revenues to non-development fee eligible capital needs including maintenance, repair, and replacement.

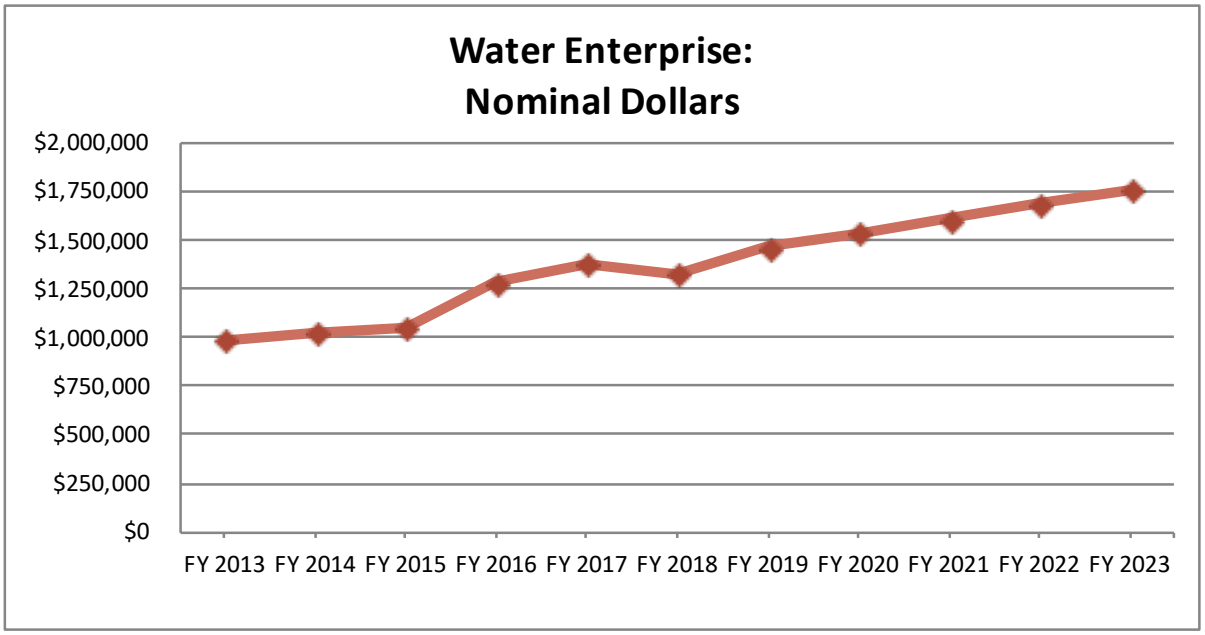
Figure A2: General Fund Revenues

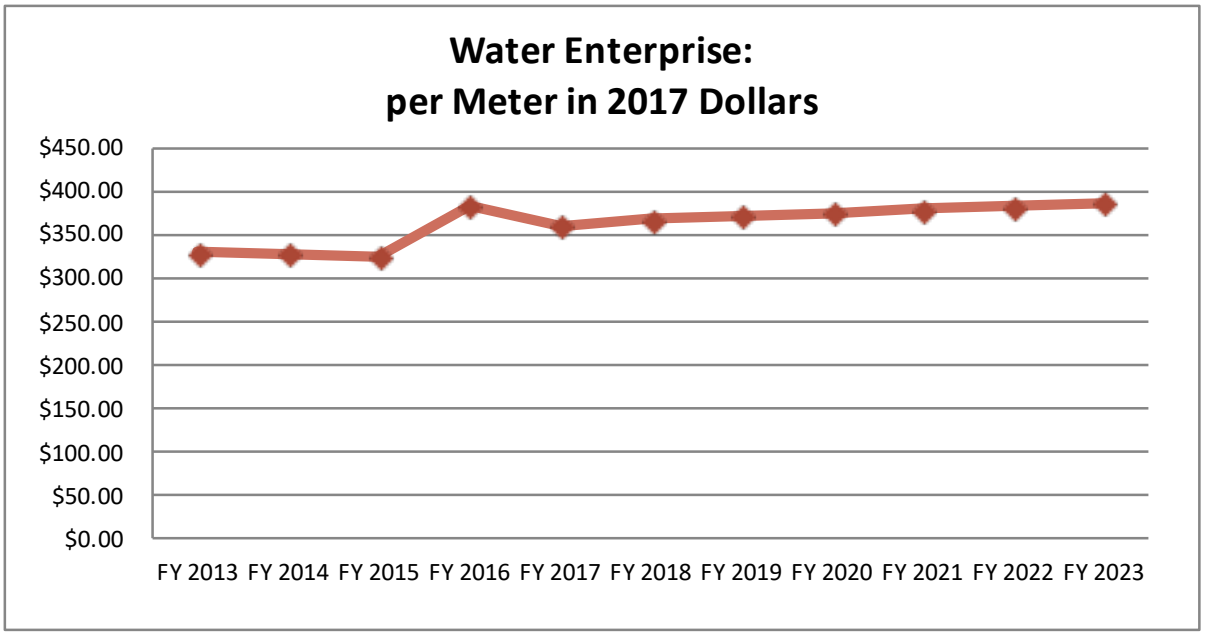




Finally, the top of Figure A3 displays historical and projected revenues from the Water Enterprise Funds in nominal dollars – this excludes transfers from other funds or use of the Water Enterprise Fund balance. Revenues include connection fees, water sales, grants, and miscellaneous revenues. The bottom part of Figure A3 shows the revenue per meter in 2017 dollars, which results in a projected increase per meter. These funds are available for capital investments; however, the City of Somerton directs these revenues to non-development fee eligible capital needs including maintenance, repair, and replacement.

Figure A3: Water Enterprise Revenues





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 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		Demand Unit	2017	2022	Change	Cost per Demand Unit
Parks and Recreational	$15,000	Residential	92%	Population	17,103	19,290	2,187	$6.31
		Nonresidential	8%	Jobs	2,180	2,459	279	$4.30
Water	$30,300	All Types	100%	Gallons	2,011,770	2,557,955	546,185	$0.06
Total	$45,300							

APPENDIX C: IMPLEMENTATION AND ADMINISTRATION

As specified in ARS 9-463.05, there are certain accounting requirements that must be met by the City:

> *Monies received from development fees assessed pursuant to this section shall be placed in a separate fund and accounted for separately and may only be used for the purposes authorized by this section. Monies received from a development fee identified in an infrastructure improvements plan adopted or updated pursuant to subsection D of this section shall be used to provide the same category of necessary public services or facility expansions for which the development fee was assessed and for the benefit of the same service area, as defined in the infrastructure improvements plan, in which the development fee was assessed. Interest earned on monies in the separate fund shall be credited to the fund.*

All costs in the development fee calculations are given in current dollars with no assumed inflation rate over time. If cost estimates change significantly the City should update the fee calculations.

RESIDENTIAL DEVELOPMENT

As discussed below, residential development categories are based on data from the U.S. Census Bureau, American Community Survey. Somerton will collect development fees from all new residential units, including mobile homes and Recreational Vehicles (RV). For a parcel intended for occupancy by multiple mobile homes and/or RVs, the landowner will pay a development fee for each site than can accommodate a residential unit. One-time development fees are determined by site capacity (i.e. number of residential units) and will not be imposed on replacement units.

Single Unit: includes Single-Family and Mobile Home

Single-Family: includes fully detached, semi-detached (semi-attached, side-by-side), row houses, and townhouses. In the case of attached units, each must be separated from the adjacent unit by a ground-to-roof wall in order to be classified as a single-family structure. Also, these units must not share heating/air-conditioning systems or utilities.

Mobile Home: includes both occupied and vacant mobile homes, to which no permanent rooms have been added, are counted in this category. 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.

2+ Unit: includes Multi-Family and All Other Types

Multi-Family: includes residential buildings containing units built one on top of another and those built side-by-side which do not have a ground-to-roof wall and/or have common facilities (i.e., attic, basement, heating plant, plumbing, etc.).

All Other Types: includes boats, RVs, vans, etc., occupied as a housing unit or units that do not fit into the other categories. 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 in Somerton. 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.

Institutional: Establishments providing educational, social assistance, or religious services. By way of example, *Institutional* includes schools, universities, churches, daycare facilities, government buildings, and prisons.

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

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.

APPENDIX D: WATER DISTRIBUTION LINES

Existing Distribution Lines

The Water Facilities IIP includes existing 10" distribution lines, shown below, from Somerton's Water Master Plan Update (2014).

Figure 5-2: Geographic Distribution of Pipe Diameters

Planned Distribution Lines

Somerton's Water Master Plan Update (2014) includes plans to create "future backbones" to the water distribution system. This provides future development with access to Somerton's water distribution system by forming a grid of water distribution lines, but it does not include distribution lines within a development (generally the responsibility of the developer).

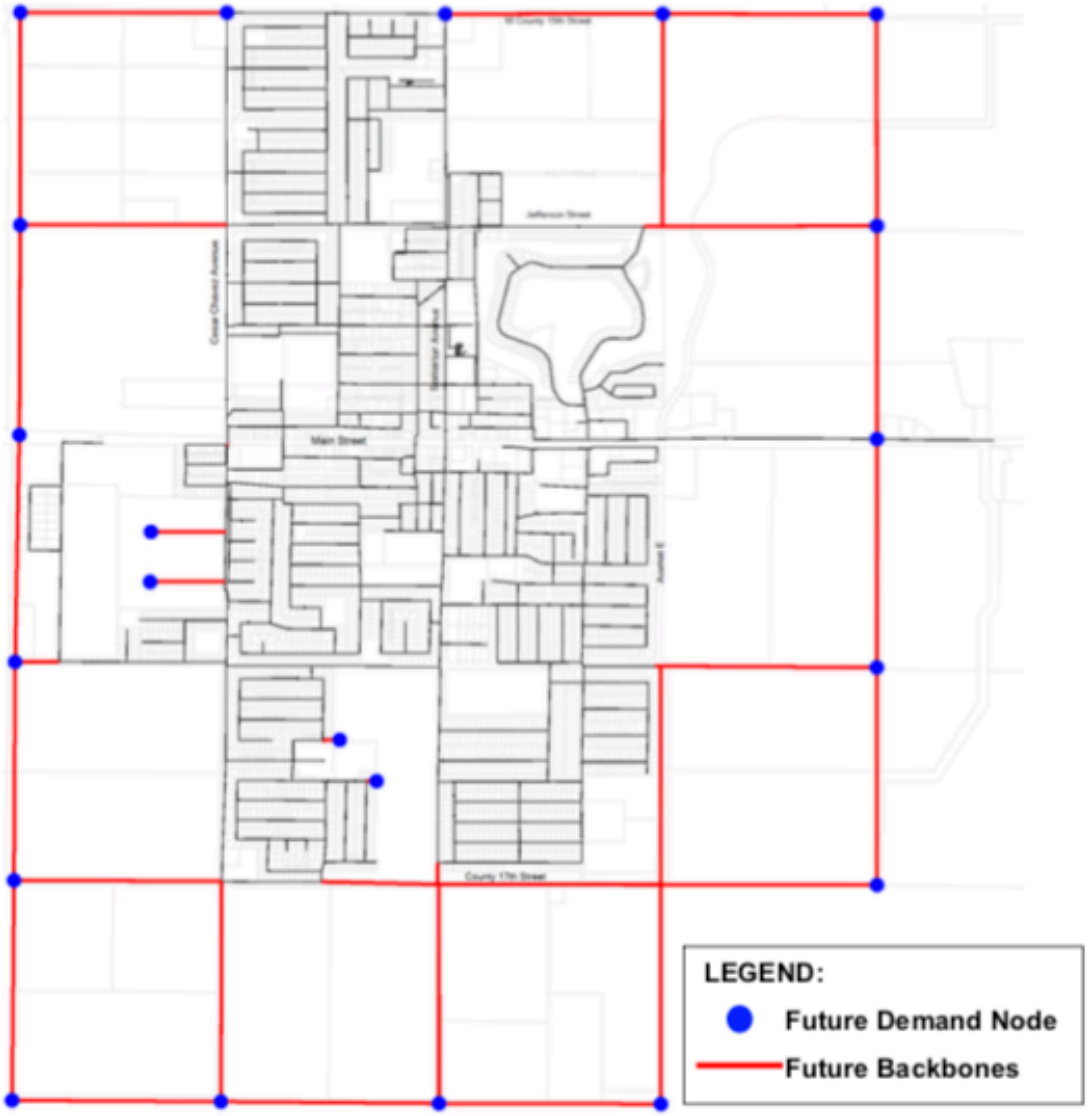


Figure 6-1: Modifications to the Hydraulic Model for Future System Analysis

APPENDIX E: LAND USE ASSUMPTIONS

Arizona Revised Statutes (ARS) 9-463.05 (T)(7) requires the preparation of a *Land Use Assumptions* document, which shows:

> *"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."*

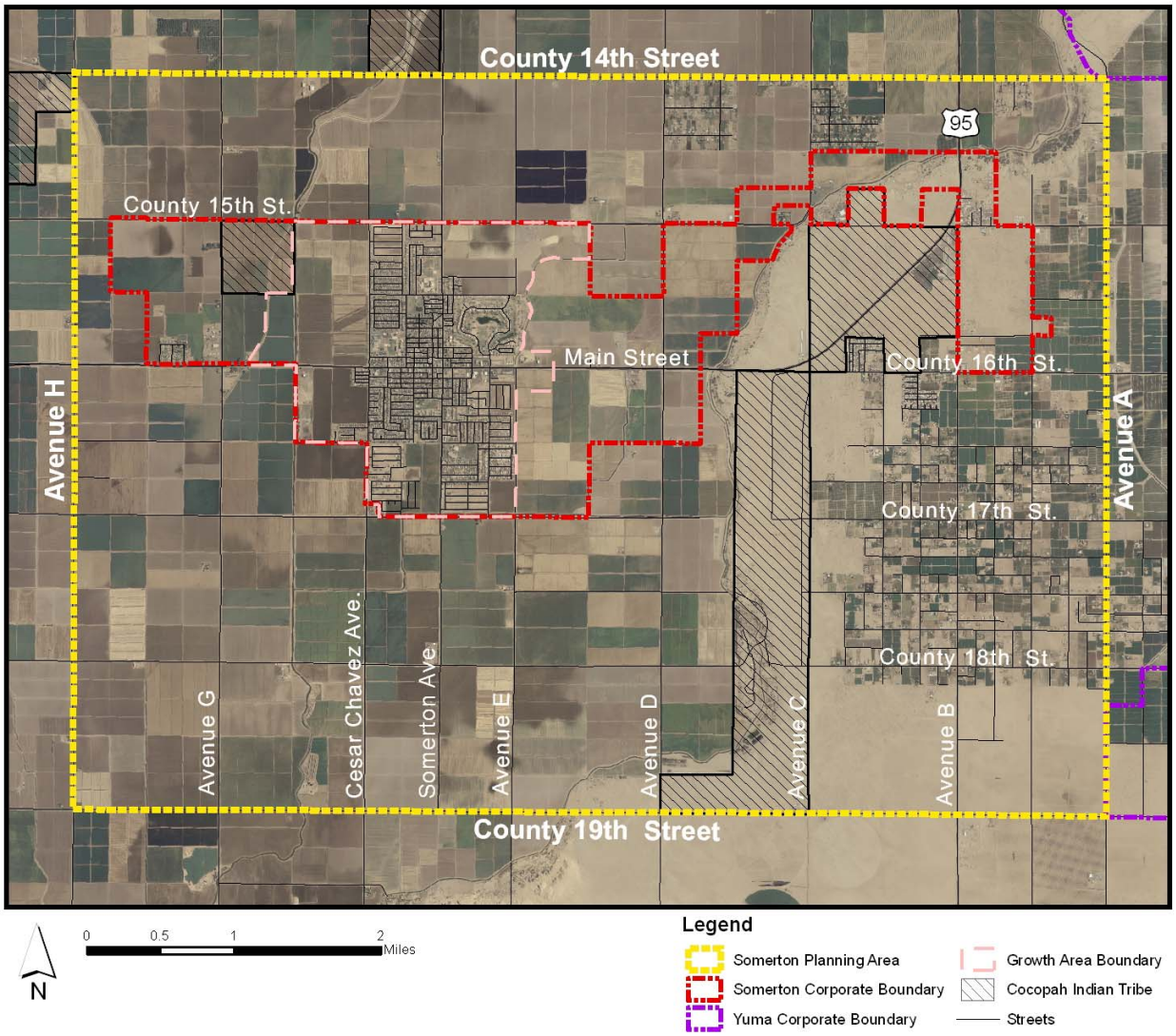
TischlerBise prepared current demographic estimates and future development projections for both residential and nonresidential development that will be used in the Infrastructure Improvements Plan (IIP) and calculation of the development fees. Current demographic data estimates for 2017 are used in calculating levels of service (LOS) provided to existing development in the City of Somerton. Although long-range projections are necessary for planning infrastructure systems, a shorter time frame of five to ten years is critical for the development fee analysis.

Arizona's Development Fee Act requires fees to be updated at least every five years and limits the IIP to a maximum of ten years. Therefore, the use of a very long-range "build-out" analysis is no longer acceptable for deriving development fees in Arizona municipalities.

SERVICE AREA

The estimates and projections of residential and nonresidential development in this *Land Use Assumptions* document are for areas within the boundaries of the City of Somerton. The map below, from the 2010 General Plan Update, illustrates the area within Somerton's boundaries.

Figure E1: City of Somerton Service Area



SUMMARY OF GROWTH INDICATORS

Development fee methodologies are designed to reduce sensitivity to accurate development projections in the determination of the proportionate-share fee amounts. If actual development is slower than projected, development fee 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 development fee revenue, but will also need to accelerate the capital improvements program to keep pace with development.

Development projections are summarized in Figure E2. Somerton-specific base data for the demographic analysis and development projections include 2010 U.S. Census calculations of population and housing units, 2011-2015 American Community Survey 5-Year Estimates, and 2017 population estimates from the Arizona Department of Administration. The projected increase in population is based on growth rates of 2.4 percent (2017-2027) and 2.2 percent (2027-2032), projected by Arizona Department of Administration 2016-2050 Sub-County Population Projections. Projected population is converted to housing units using the 2010 average of 3.53 year-round residents per housing unit. The Arizona Revised Statutes (ARS) 9-463.05 requires that "a municipality shall update the land use assumptions and infrastructure improvements plan at least every five years." Therefore, the development fee study did not vary the persons per housing unit ratio over time, nor assume any change to the residential vacancy rate in Somerton.

For nonresidential development, the development fee study assumes a fixed relationship between jobs and housing units to align with development projections of City of Somerton staff. Projected jobs within Somerton are converted to nonresidential floor area using average square-feet-per-employee multipliers provided by the Institute of Transportation Engineers.

Figure E2: Development Projections

	2017	2018	2019	2020	2021	2022	2027	2032	15-Year
	Base Yr	1	2	3	4	5	10	15	Increase
Population	**17,103**	**17,520**	**17,946**	**18,383**	**18,831**	**19,290**	**21,756**	**24,272**	**7,169**
Housing Units									
Single-Family Units	4,094	4,194	4,296	4,401	4,508	4,618	5,208	5,810	**1,716**
Multi-Family Units	751	769	788	807	827	847	955	1,066	**315**
Total Housing Units	**4,845**	**4,963**	**5,084**	**5,208**	**5,335**	**5,465**	**6,163**	**6,876**	**2,031**
Jobs									
Industrial	117	120	123	126	129	132	149	166	**49**
Commercial	248	254	260	266	272	279	314	351	**103**
Institutional	865	886	908	930	953	976	1,101	1,229	**364**
Office and Other Services	949	972	996	1,020	1,045	1,070	1,206	1,345	**396**
Total Jobs	**2,180**	**2,233**	**2,288**	**2,344**	**2,401**	**2,459**	**2,773**	**3,094**	**914**
Nonresidential Floor Area (x 1,000)									
Industrial KSF	128	131	134	137	140	143	160	177	**49**
Commercial KSF	125	128	131	134	137	141	161	181	**56**
Institutional KSF	881	902	924	946	969	992	1,117	1,245	**364**
Office and Other Services KSF	286	293	300	307	315	323	363	405	**119**
Total Nonresidential KSF	**1,420**	**1,454**	**1,489**	**1,524**	**1,561**	**1,599**	**1,801**	**2,008**	**588**

RESIDENTIAL DEVELOPMENT

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

Housing Unit Size

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 in areas with relatively few residents. For development fees in Somerton, detached units, attached units (commonly known as townhouses), and manufactured units are included in the "Single-Family Unit" category. The second residential category includes duplexes, structures with two or more units, and all other units. This category is referred to as "Multi-Family Unit." (Note: housing unit estimates from ACS will not equal decennial census counts of units. These data are used only to derive the custom PPHU factors for each type of unit).

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 PPHU is used in the fee calculations, infrastructure standards are derived using year-round population. When PPH is used 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 that development impact fees for residential development in Somerton be imposed according to the number of persons per housing unit to account for the impacts of year-round population. As shown in the bottom of Figure E3, census data indicate Somerton had 4,052 housing units and a population of 14,287 in 2010 – average persons per housing unit of 3.53 citywide. Single-family units averaged 3.67 persons per housing unit (12,562 persons / 3,425 single-family units) and multi-family units averaged 2.75 persons per housing unit (1,725 persons / 627 multi-family units).

Figure E3: Persons per Housing Unity by Type of Unit

2011-2015 American Community Survey

Units in Structure	Persons	Households	Persons per Household	Housing Units	Persons per Housing Unit	Housing Mix	Vacancy Rate
Single-Family Unit[1]	13,053	3,740	3.49	4,002	3.26	84.5%	7%
Multi-Family Unit[2]	1,792	669	2.68	732	2.45	15.5%	9%
Total	14,845	4,409	3.37	4,734	3.14	100.0%	7%

2010 U.S. Census

Units in Structure	Persons	Households	Persons per Household	Housing Units	Persons per Housing Unit	Housing Mix	Vacancy Rate
Single-Family Unit[1]	12,562	3,216	3.91	3,425	3.67	84.5%	6%
Multi-Family Unit[2]	1,725	575	3.00	627	2.75	15.5%	8%
Total	14,287	3,791	3.77	4,052	3.53	100.0%	6%

Source: TischlerBise analysis and calculation based on U.S. Census Bureau, 2010 Census.

1. Includes detached, attached (townhouse), and manufactured units.

2. Includes duplexes, structures with two or more units, and all other units.

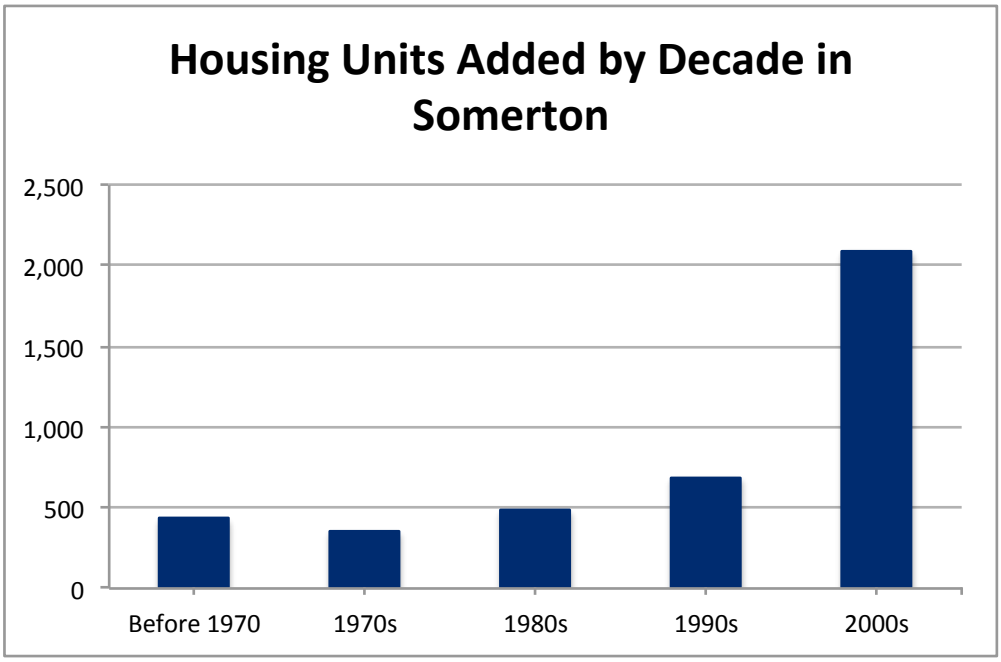
Recent Residential Construction

From 2000-2010, Somerton's housing stock increased by an average of 209 housing units per year. The chart at the bottom of Figure E4 indicates the estimated number of housing units added by decade in Somerton. Housing units per decade saw a large increase during the 2000s, with most of the growth during the first half of the decade.

Figure E4: Housing Units by Decade

Census 2010 Population	14,287
Census 2010 Housing Units	4,052
Census 2000 Housing Units	1,967
New Housing Units 2000 to 2010	2,085

Somerton added an average of 209 housing units per year from 2000 to 2010.



Source: U.S. Census Bureau, Census 2010 Summary File 1, Census 2000 Summary File 1, 2011-2015 5-Year American Community Survey (for 1990s and earlier, adjusted to yield total units in 2000).

Residential Building Permits

Based on residential building permit data, the City of Somerton issued 67 permits in 2014, 122 permits in 2015, and 113 permits in 2016. This results in a three-year weighted average of approximately 101 residential permits annually.

Figure E5: Residential Building Permits

Permit Type	2014	2015	2016	Average
Residential	67	122	113	101

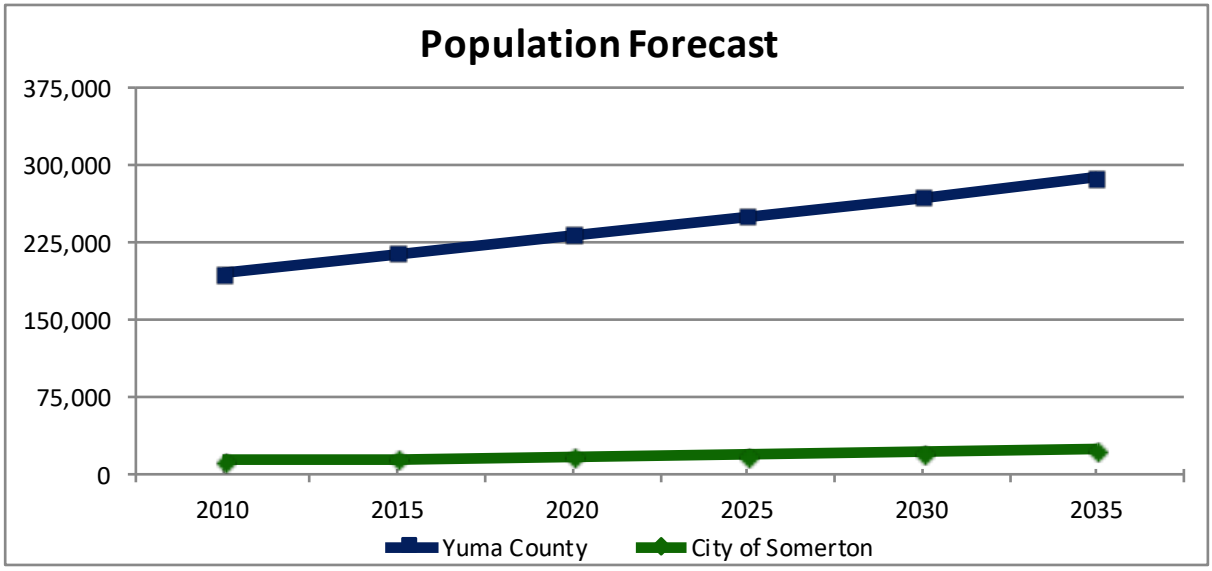
Source: City of Somerton, Arizona.

Population Forecast

To more accurately project future population, TischlerBise analyzed recent population and housing growth trends and reviewed Arizona Department of Administration population projections. In 2015, the Arizona Department of Administration released sub-county population projections for 2016-2050 based on its medium series county population projections. Shown in Figure E6 below, Somerton's estimated population was 15,759 in 2015 with a projected population of 24,618 in 2035. The Arizona Department of Administration projects Somerton's population to reach 8.5 percent of Yuma County's total population by 2035.

Figure E6: City of Somerton Population Share

Area	2010	2015	2020	2025	2030	2035
Yuma County	195,751	214,991	232,773	251,130	269,702	288,699
City of Somerton	14,287	15,759	17,670	19,929	22,530	24,618
Somerton Share	7.3%	7.3%	7.6%	7.9%	8.4%	8.5%



Source: Arizona Department of Administration, 2016-2050 Sub-County Population Projections.

Residential Projections

In 2017, the Arizona Department of Administration released updated population estimates for 2017 – Somerton's 2017 population estimate was 17,103. Using the 2017 estimate, TischlerBise projects population through 2027 using an exponential growth rate of 2.4 percent. From 2027 through 2032, the final year of the study's timeline, population projections use an exponential growth rate of 2.2 percent. For this study, it is assumed that housing unit size will remain constant; therefore, population projections for Somerton assume 3.53 persons per housing unit.

Demographic data shown in Figure E7 provide key inputs for updating development fees in the City of Somerton. Cumulative data are shown at the top and projected annual increases are shown at the bottom of the table. Over the next 15 years, Somerton's population is projected to increase from 17,103 in the 2017 base year to 24,272 in 2032. Projected population growth results in the need for 2,031 additional housing units during the same period – an average annual increase of 135 housing units per year. This estimate is similar to residential building permit activity shown in Figure E5.

Figure E7: Residential Projections

	2017	2018	2019	2020	2021	2022	2027	2032	15-Year
	Base Yr	1	2	3	4	5	10	15	Increase
Population	**17,103**	**17,520**	**17,946**	**18,383**	**18,831**	**19,290**	**21,756**	**24,272**	**7,169**
Housing Units									
Single-Family Units	4,094	4,194	4,296	4,401	4,508	4,618	5,208	5,810	**1,716**
Multi-Family Units	751	769	788	807	827	847	955	1,066	**315**
Total Housing Units	**4,845**	**4,963**	**5,084**	**5,208**	**5,335**	**5,465**	**6,163**	**6,876**	**2,031**

	2017-18	2018-19	2019-20	2020-21	2021-22	2026-27	2031-32	15-Year Avg Annual
Population	**417**	**426**	**437**	**448**	**459**	**517**	**526**	**478**
Housing Units								
Single-Family Units	100	102	105	107	110	124	126	114
Multi-Family Units	18	19	19	20	20	22	23	21
Total Housing Units	**118**	**121**	**124**	**127**	**130**	**146**	**149**	**135**

NONRESIDENTIAL DEVELOPMENT

In addition to data on residential development, the calculation of development impact fees requires data on nonresidential development. TischlerBise uses the term jobs to refer to employment by place of work. In Figure E8, gray shading indicates the four nonresidential development prototypes used by TischlerBise to estimate nonresidential floor area. Current floor area estimates for industrial, commercial, institutional, and office and other services are documented in the next section.

For future industrial development, Warehousing (ITE 150) is a reasonable proxy with an average of 1,093 square feet per job. The prototype for future commercial development (i.e. retail and eating/drinking places) is an average-size Shopping Center (ITE 820) with 500 square feet per job. Institutional development uses an Elementary School (ITE 520) as the prototype with 1,018 square feet per job. For office and other services, General Office (ITE 710) is the prototype for future development, with an average of 301 square feet per job.

Figure E8: Employee and Building Area Ratios

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	6.97	3.02	2.31	433
130	Industrial Park	1,000 Sq Ft	6.83	3.34	2.04	489
140	Manufacturing	1,000 Sq Ft	3.82	2.13	1.79	558
150	**Warehousing**	**1,000 Sq Ft**	**3.56**	**3.89**	**0.92**	**1,093**
254	Assisted Living	bed	2.66	3.93	0.68	na
320	Motel	room	5.63	12.81	0.44	na
520	**Elementary School**	**1,000 Sq Ft**	**15.43**	**15.71**	**0.98**	**1,018**
530	High School	1,000 Sq Ft	12.89	19.74	0.65	1,531
540	Community College	student	1.23	15.55	0.08	na
550	University/College	student	1.71	8.96	0.19	na
565	Day Care	student	4.38	26.73	0.16	na
610	Hospital	1,000 Sq Ft	13.22	4.50	2.94	340
620	Nursing Home	1,000 Sq Ft	7.60	3.26	2.33	429
710	**General Office (average size)**	**1,000 Sq Ft**	**11.03**	**3.32**	**3.32**	**301**
760	Research & Dev Center	1,000 Sq Ft	8.11	2.77	2.93	342
770	Business Park	1,000 Sq Ft	12.44	4.04	3.08	325
820	**Shopping Center (average size)**	**1,000 Sq Ft**	**42.70**	**na**	**2.00**	**500**

1. Trip Generation, Institute of Transportation Engineers, 9th Edition (2012).

Jobs and Floor Area by Type of Development

Figure E9 indicates 2016 estimates of jobs and nonresidential floor area located in Somerton. According to Esri's Business Summary, Somerton's 2016 employment estimate includes 2,208 jobs – the largest categories include office and institutional employment. Using ITE prototypes discussed above, 2016 employment estimates are converted to nonresidential floor area. Industrial floor area, for example, is estimated by multiplying estimated industrial employment by the ITE square feet per job factor (109 jobs X 1,093 square feet per job = 119,137 square feet). This is repeated for each nonresidential prototype and results in approximately 1.32 million square feet of nonresidential floor area.

Figure E9: Jobs and Floor Area Estimates

Nonresidential Category	2016 Jobs[1]	Percent of Total Jobs	Sq. Ft. per Job[2]	2016 Estimated Floor Area[3]	Jobs per 1,000 Sq. Ft.[2]
Industrial[4]	109	5.4%	1,093	119,137	0.92
Commercial[5]	231	11.4%	500	115,500	2.00
Institutional[6]	805	39.7%	1,018	819,608	0.98
Office and Other Services[7]	883	43.5%	301	265,783	3.32
Total	2,028	100.0%		1,320,028	

1. Esri Business Summary for Somerton, Arizona, 2016.
2. Trip Generation, Institute of Transportation Engineers, 9th Edition (2012).
3. TischlerBise analysis and calculation.
4. Major sectors are Warehousing and Manufacturing.
5. Major sectors are Retail Trade and Food Services.
6. Major sectors are Educational Services and Public Administration.
5. Major sectors are Health Care and Administrative Services.

Nonresidential Projections

Over the next 15 years, Somerton can expect continued employment growth. Based on data from Somerton's General Plan, projections from the Yuma Metropolitan Planning Organization, historical relationships between employment and population, and input from staff, employment projections assume a growth rate equal to housing unit growth – the relationship between jobs and housing units will remain fixed throughout the study period. Employment estimates assume the overall employment share, by type of employment, remains stable during the study period. Shown in Figure E10, the base year job estimate is 2,180. By 2032, projected employment in Somerton is projected to equal 3,094 jobs.

Using industrial development as an example, the annual square footage by industry type is calculated as follows: 117 (2017 industrial jobs) X 1,093 square feet per employee = 128 KSF (127,881 square feet). This calculation is repeated for each industry type and for each year of the study period. To keep pace with employment growth, Somerton should expect to add roughly 588,000 square feet of nonresidential development over the next 15 years.

Figure E10: Nonresidential Projections

	2017	2018	2019	2020	2021	2022	2027	2032	15-Year
	Base Yr	1	2	3	4	5	10	15	Increase
Jobs									
Industrial	117	120	123	126	129	132	149	166	**49**
Commercial	248	254	260	266	272	279	314	351	**103**
Institutional	865	886	908	930	953	976	1,101	1,229	**364**
Office and Other Services	949	972	996	1,020	1,045	1,070	1,206	1,345	**396**
Total Jobs	**2,180**	**2,233**	**2,288**	**2,344**	**2,401**	**2,459**	**2,773**	**3,094**	**914**
Nonresidential Floor Area (x 1,000)									
Industrial KSF	128	131	134	137	140	143	160	177	**49**
Commercial KSF	125	128	131	134	137	141	161	181	**56**
Institutional KSF	881	902	924	946	969	992	1,117	1,245	**364**
Office and Other Services KSF	286	293	300	307	315	323	363	405	**119**
Total Nonresidential KSF	**1,420**	**1,454**	**1,489**	**1,524**	**1,561**	**1,599**	**1,801**	**2,008**	**588**

	2017-18	2018-19	2019-20	2020-21	2021-22	2026-27	2031-32	15-Year Avg Annual
Jobs								
Industrial	3	3	3	3	3	4	4	**3**
Commercial	6	6	6	6	7	7	8	**7**
Institutional	21	22	22	23	23	26	27	**24**
Office and Other Services	23	24	24	25	25	28	29	**26**
Total Jobs	**53**	**55**	**56**	**57**	**58**	**65**	**67**	**61**
Nonresidential Floor Area (x 1,000)								
Industrial KSF	3	3	3	3	3	4	4	**3**
Commercial KSF	3	3	3	3	4	4	4	**4**
Institutional KSF	21	22	22	23	23	26	27	**24**
Office and Other Services KSF	7	7	7	8	8	8	9	**8**
Total Nonresidential KSF	**34**	**35**	**35**	**37**	**38**	**42**	**44**	**39**

DETAILED DEVELOPMENT PROJECTIONS

Demographic data shown below provide key inputs for updating development fees in the City of Somerton. Cumulative data are shown at the top and projected annual increases by type of development are shown at the bottom of the table.

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	15-Year
	Base Yr	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Increase
Population	**17,103**	**17,520**	**17,946**	**18,383**	**18,831**	**19,290**	**19,759**	**20,241**	**20,734**	**21,239**	**21,756**	**22,237**	**22,729**	**23,232**	**23,746**	**24,272**	**7,169**
Housing Units																	
Single-Family Units	4,094	4,194	4,296	4,401	4,508	4,618	4,729	4,845	4,964	5,084	5,208	5,323	5,441	5,561	5,684	5,810	**1,716**
Multi-Family Units	751	769	788	807	827	847	868	889	910	933	955	976	998	1,020	1,043	1,066	**315**
Total Housing Units	**4,845**	**4,963**	**5,084**	**5,208**	**5,335**	**5,465**	**5,597**	**5,734**	**5,874**	**6,017**	**6,163**	**6,299**	**6,439**	**6,581**	**6,727**	**6,876**	**2,031**
Jobs																	
Industrial	117	120	123	126	129	132	135	138	141	145	149	152	155	158	162	166	**49**
Commercial	248	254	260	266	272	279	286	293	300	307	314	321	328	335	343	351	**103**
Institutional	865	886	908	930	953	976	1,000	1,024	1,049	1,075	1,101	1,126	1,151	1,176	1,202	1,229	**364**
Office and Other Services	949	972	996	1,020	1,045	1,070	1,096	1,123	1,150	1,178	1,206	1,233	1,260	1,287	1,316	1,345	**396**
Total Jobs	**2,180**	**2,233**	**2,288**	**2,344**	**2,401**	**2,459**	**2,519**	**2,580**	**2,643**	**2,708**	**2,773**	**2,835**	**2,898**	**2,961**	**3,027**	**3,094**	**914**
Nonresidential Floor Area (x 1,000)																	
Industrial KSF	128	131	134	137	140	143	146	149	152	156	160	163	166	169	173	177	**49**
Commercial KSF	125	128	131	134	137	141	145	149	153	157	161	165	169	173	177	181	**56**
Institutional KSF	881	902	924	946	969	992	1,016	1,040	1,065	1,091	1,117	1,142	1,167	1,192	1,218	1,245	**364**
Office and Other Services KSF	286	293	300	307	315	323	331	339	347	355	363	371	379	387	396	405	**119**
Total Nonresidential KSF	**1,420**	**1,454**	**1,489**	**1,524**	**1,561**	**1,599**	**1,638**	**1,677**	**1,717**	**1,759**	**1,801**	**1,841**	**1,881**	**1,921**	**1,964**	**2,008**	**588**

	2017-18	2018-19	2019-20	2020-21	2021-22	2021-22	2022-23	2023-24	2024-25	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	15-Year Avg Annual
Population	**417**	**426**	**437**	**448**	**459**	**469**	**482**	**493**	**505**	**517**	**481**	**492**	**503**	**514**	**526**	**478**
Housing Units																
Single-Family Units	100	102	105	107	110	111	116	119	120	124	115	118	120	123	126	114
Multi-Family Units	18	19	19	20	20	21	21	21	23	22	21	22	22	23	23	21
Total Housing Units	**118**	**121**	**124**	**127**	**130**	**132**	**137**	**140**	**143**	**146**	**136**	**140**	**142**	**146**	**149**	**135**
Jobs																
Industrial	3	3	3	3	3	3	3	3	4	4	3	3	3	4	4	**3**
Commercial	6	6	6	6	7	7	7	7	7	7	7	7	7	8	8	**7**
Institutional	21	22	22	23	23	24	24	25	26	26	25	25	25	26	27	**24**
Office and Other Services	23	24	24	25	25	26	27	27	28	28	27	27	27	29	29	**26**
Total Jobs	**53**	**55**	**56**	**57**	**58**	**60**	**61**	**63**	**65**	**65**	**62**	**63**	**63**	**66**	**67**	**61**
Nonresidential Floor Area (x 1,000)																
Industrial KSF	3	3	3	3	3	3	3	3	4	4	3	3	3	4	4	**3**
Commercial KSF	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	**4**
Institutional KSF	21	22	22	23	23	24	24	25	26	26	25	25	25	26	27	**24**
Office and Other Services KSF	7	7	7	8	8	8	8	8	8	8	8	8	8	9	9	**8**
Total Nonresidential KSF	**34**	**35**	**35**	**37**	**38**	**39**	**39**	**40**	**42**	**42**	**40**	**40**	**40**	**43**	**44**	**39**