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

Prepared for:

Buckeye, Arizona

October 9, 2024

TischlerBise

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EXECUTIVE SUMMARY

The City of Buckeye, Arizona, contracted with TischlerBise to document land use assumptions, prepare the Infrastructure Improvements Plan (hereinafter referred to as the "IIP"), and update development fees pursuant to Arizona Revised Statutes ("ARS") § 9-463.05 (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 Buckeye's Infrastructure Improvements Plan and associated update to its development fees includes the following necessary public services:

1. Fire Facilities
2. Library Facilities
3. Parks and Recreational Facilities
4. Police Facilities
5. Street Facilities
6. Water Facilities
7. Wastewater Facilities

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

ARIZONA DEVELOPMENT FEE ENABLING LEGISLATION

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

Necessary Public Services

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

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

Infrastructure Improvements Plan

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

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

Qualified Professionals

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

Conceptual Development Fee Calculation

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

Evaluation of Credits/Offsets

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

INTRODUCTION TO DEVELOPMENT FEES

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

1) Fees can only be used to finance capital infrastructure and cannot be used to finance ongoing operations and / or maintenance and rehabilitation costs.
2) Fees cannot be deposited in the General Fund. The funds must be accounted for separately in individual accounts and earmarked for the capital expenses for which they were collected.
3) Fees cannot be used to correct existing infrastructure deficiencies unless there is a funding plan in place to correct the deficiency for all current residents and businesses in the community.

REQUIRED FINDINGS

There are three reasonable relationship requirements for development fees that are closely related to "rational nexus" or "reasonable relationship" requirements enunciated by a number of state courts. Although the term "dual rational nexus" is often used to characterize the standard by which courts evaluate the validity of development fees under the U. S. Constitution, we prefer a more rigorous formulation that recognizes three elements: "impact or need," "benefit," and "proportionality." The dual rational nexus test explicitly addresses only the first two, although proportionality is reasonably implied, and was specifically mentioned by the U.S. Supreme Court in the *Dolan* case. The reasonable relationship language of the statute is considered less strict than the rational nexus standard used by many courts. Individual elements of the nexus standard are discussed further in the following paragraphs.

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

Demonstrating a Benefit. A sufficient benefit relationship requires that development fee revenues be segregated from other funds and expended only on the facilities for which the fees were charged. Fees must be expended in a timely manner and the facilities funded by the fees must serve the development paying the fees. However, nothing in the U.S. Constitution or the State enabling Act authorizing development fees requires that facilities funded with fee revenues be available *exclusively* to development paying the fees. In other words, existing development may benefit from these improvements as well.

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

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

DEVELOPMENT FEE REPORT

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

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

- **Cost Recovery** (past improvements) - The rationale for recoupment, often called cost recovery, is that new development is paying for its share of the useful life and remaining capacity of facilities already built, or land already purchased, from which new growth will benefit. This methodology is often used for utility systems that must provide adequate capacity before new development can take place.
- **Incremental Expansion** (concurrent improvements) - The incremental expansion methodology documents current LOS standards for each type of public facility, using both quantitative and qualitative measures. This approach assumes there are no existing infrastructure deficiencies or surplus capacity in infrastructure. New development is only paying its proportionate share for growth-related infrastructure. Revenue will be used to expand or provide additional facilities, as needed, to accommodate new development. An incremental expansion cost method is best suited for public facilities that will be expanded in regular increments to keep pace with development.
- **Plan-Based** (future improvements) - The plan-based methodology allocates costs for a specified set of improvements to a specified amount of development. Improvements are typically identified in a long-range facility plan and development potential is identified by a land use plan. There are two basic options for determining the cost per demand unit: (1) total cost of a public facility can be divided by total demand units (average cost), or (2) the growth-share of the public facility cost can be divided by the net increase in demand units over the planning timeframe (marginal cost).

DEVELOPMENT FEE COMPONENTS

Shown below, Figure 1 summarizes service areas, methodologies, and infrastructure cost components for the proposed fees related to non-utility necessary public services.

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

Necessary Public Service	Service Area	Cost Recovery	Incremental Expansion	Plan-Based	Cost Allocation
Fire Facilities	Main	N/A	Fire Stations, Fire Facilities, Fire Apparatus	Development Fee Report	Population, Jobs
	Festival Ranch	Fire Stations	Fire Facilities, Fire Apparatus	Development Fee Report	Population, Jobs
	North Star Ranch	Fire Stations	Fire Facilities, Fire Apparatus	Development Fee Report	Population, Jobs
	Tartesso	Fire Stations	Fire Facilities, Fire Apparatus	Development Fee Report	Population, Jobs
	Teravalis	N/A	Fire Facilities, Fire Apparatus	Development Fee Report	Population, Jobs
Library Facilities	North	N/A	Library Facilities	Development Fee Report	Population, Jobs
	South	N/A	Library Facilities	Development Fee Report	Population, Jobs
Parks and Recreational Facilities	North	N/A	Regional Park Amenities, Community Centers	Community Park Amenities, Development Fee Report	Population, Jobs
	South	N/A	Regional Park Amenities, Community Centers, Community Parks	Development Fee Report	Population, Jobs
Police Facilities	Citywide	N/A	Police Facilities, Police Vehicles, Police Equipment	Development Fee Report	Population, Vehicle Trips
Street Facilities	Arterial	N/A	N/A	Arterial Improvements, Interchange ROW, Development Fee Report	VMT
	Street	N/A	N/A	Interchange ROW, Development Fee Report	VMT
	Trip Reduction	N/A	N/A	Interchange ROW, Development Fee Report	VMT

Shown below, Figure 2 summarizes service areas, methodologies, and infrastructure cost components for the proposed fees related to water and wastewater necessary public services.

Figure 2: Proposed Development Fee Service Areas, Methodologies, and Cost Components

Necessary Public Service	Service Area	Cost Recovery	Incremental Expansion	Plan-Based	Cost Allocation
Water Facilities	Central	N/A	N/A	Water Facilities, Development Fee Report	Max Day Gallons
	Tartesso West	Water Facilities	N/A	Development Fee Report	Max Day Gallons
Wastewater Facilities	Central	N/A	N/A	Wastewater Facilities, Development Fee Report	Average Day Gallons
	Sundance	N/A	N/A	Wastewater Facilities, Development Fee Report	Average Day Gallons
	Tartesso West	Wastewater Facilities	N/A	Development Fee Report	Average Day Gallons

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

CURRENT DEVELOPMENT FEES

Non-Utility Development Fees

Buckeye assesses the current non-utility development fees per dwelling unit for residential development and per 1,000 square feet of floor area for nonresidential development.

Figure 3: Current Development Fees

Residential Fees per Unit								
Development Type	Fire			Library	Parks and Recreational		Police	Street
	Main	Festival Ranch	Tartesso		North	South		
Single Family	$1,060	$498	$866	$289	$684	$1,915	$842	$300
Multi-Family	$828	$389	$676	$225	$534	$1,496	$658	$173
Age Restricted	$662	$311	$541	$180	$427	$1,197	$526	$136

Nonresidential Fees per 1,000 Square Feet								
Development Type	Fire			Library	Parks and Recreational		Police	Street
	Main	Festival Ranch	Tartesso		North	South		
Industrial	$170	$83	$135	$14	$37	$83	$92	$26
Commercial	$1,168	$568	$927	$96	$252	$573	$1,323	$337
Office & Other Services	$1,483	$721	$1,176	$121	$320	$727	$517	$146
Institutional	$464	$226	$368	$38	$100	$228	$684	$193

Water Development Fees

Buckeye assesses the current water development fees per meter, by size and type.

Figure 4: Current Development Fees

Development Fees per Meter				
Meter Type and Size (inches)	Buckeye North	Central Buckeye	Sundance	Tartesso West
Age-Restricted	$4,424	$4,799	$4,668	$2,324
Disc Meter 1.0"	$7,076	$7,675	$7,467	$3,717
Disc Meter 1.5"	$12,030	$13,048	$12,694	$6,319
Turbine 1.5"	$20,521	$22,258	$21,654	$10,780
Disc Meter 2.0"	$16,983	$18,421	$17,921	$8,921
Compound 2.0"	$20,521	$22,258	$21,654	$10,780
Turbine 2.0"	$31,136	$33,771	$32,855	$16,356
Compound 3.0"	$45,289	$49,122	$47,789	$23,790
Turbine 3.0"	$50,950	$55,262	$53,762	$26,764
Compound 4.0"	$70,764	$76,753	$74,670	$37,172
Turbine 4.0"	$126,667	$137,388	$133,659	$66,538
Compound 6.0"	$141,527	$153,506	$149,339	$74,344
Turbine 6.0"	$252,626	$274,008	$266,571	$132,704
Compound 8.0"	$455,011	$493,521	$480,126	$239,017
Turbine 8.0"	$455,011	$493,521	$480,126	$239,017

Wastewater Development Fees

Buckeye assesses the current wastewater development fees per meter, by size and type.

Figure 5: Current Development Fees

Development Fees per Meter				
Meter Type and Size (inches)	Central Buckeye	Palo Verde	Sundance	Tartesso West
Age-Restricted	$2,634	$3,933	$3,697	$4,794
Disc Meter 1.0"	$4,214	$6,291	$5,915	$7,670
Disc Meter 1.5"	$7,163	$10,695	$10,056	$13,040
Turbine 1.5"	$12,219	$18,244	$17,154	$22,244
Disc Meter 2.0"	$10,112	$15,099	$14,196	$18,409
Compound 2.0"	$12,219	$18,244	$17,154	$22,244
Turbine 2.0"	$18,540	$27,681	$26,027	$33,750
Compound 3.0"	$26,967	$40,264	$37,857	$49,091
Turbine 3.0"	$30,337	$45,296	$42,589	$55,227
Compound 4.0"	$42,135	$62,912	$59,151	$76,704
Turbine 4.0"	$75,422	$112,612	$105,881	$137,300
Compound 6.0"	$84,271	$125,824	$118,303	$153,408
Turbine 6.0"	$150,423	$224,595	$211,170	$273,833
Compound 8.0"	$270,931	$404,523	$380,344	$493,207
Turbine 8.0"	$270,931	$404,523	$380,344	$493,207

PROPOSED DEVELOPMENT FEES

The proposed fees represent the maximum allowable fees. Buckeye may adopt fees that are less than the amounts shown; however, a reduction in development fee revenue will necessitate an increase in other revenues, a decrease in planned capital improvements, and/or a decrease in level-of-service standards. All costs in the Development Fee Report represent current dollars with no assumed inflation over time. If costs change significantly over time, development fees should be recalculated.

Non-Utility Development Fees

Buckeye will assess the proposed non-utility development fees per dwelling unit for residential development and per 1,000 square feet of floor area for nonresidential development.

Figure 6: Proposed Development Fees

Residential Fees per Unit												
Development Type	Fire					Library	Parks and Recreational		Police	Street		
	Main	Festival Ranch	North Star Ranch	Tartesso	Teravalis		North	South		Arterial	Street	Trip Reduction
Low/Med Density (<8 DU/Acre)	$1,762	$544	$2,568	$875	$544	$605	$1,655	$3,119	$1,657	$1,597	$527	$263
High Density (≥8 DU/Acre)	$1,376	$425	$2,006	$684	$425	$472	$1,293	$2,437	$1,295	$1,142	$377	$188
Age Restricted (≤8 DU/Acre)	$1,101	$340	$1,605	$547	$340	$378	$1,034	$1,950	$1,036	$730	$241	$120

Nonresidential Fees per 1,000 Square Feet												
Development Type	Fire					Library	Parks and Recreational		Police	Street		
	Main	Festival Ranch	North Star Ranch	Tartesso	Teravalis		North	South		Arterial	Street	Trip Reduction
Industrial	$239	$82	$452	$148	$82	$9	$27	$41	$172	$141	$47	$23
Commercial	$1,502	$516	$2,839	$927	$516	$53	$172	$257	$2,444	$2,072	$683	$342
Office & Other Services	$2,302	$791	$4,350	$1,420	$791	$82	$263	$393	$1,085	$895	$295	$148
Institutional	$2,144	$737	$4,049	$1,323	$737	$76	$245	$366	$1,491	$1,231	$406	$203

Water Development Fees

Buckeye will assess the proposed water development fees per dwelling unit to residential development and per meter, by size and type, for nonresidential development. For meters larger than 1.5 inches, Buckeye will assess fees using the cost per gallon for the related service area and max day gallons from (1) City of Buckeye Engineering Standards, (2) a submitted water study, or (3) other estimated water demand. The assessment of the proposed fees to residential development and to meters larger than 1.5 inches differs from Buckeye's current assessment based on meter size and type; however, the change is needed to better align the proposed water development fees with actual costs and demand from these types of development. The proposed fees also include consolidated service areas compared to the current fees. Here's a comparison of the proposed and current water service areas:

- **Central:** South of Interstate 10 and North of the Gila River; includes current Central Buckeye, Sundance, and Westpark service areas.
- **Tartesso West:** Tartesso West development; includes current Tartesso West service area.

Figure 7: Proposed Development Fees

Residential Fees per Unit		
Residential Land Use	Central	Tartesso West
Low/Med Density (<8 DU/acre)	$9,536	$3,723
High Density (≥8 DU/Acre)	$7,450	$2,906
Age Restricted (≤8 DU/Acre)	$5,960	$2,324

Nonresidential Fees per Meter			
Meter Size	Meter Type	Central	Tartesso West
1.0-inch	Disc	$9,536	$3,723
1.5-inch	Disc	$16,212	$6,329
1.5-inch	Turbine	$27,655	$10,796
> 1.5-inch[1]	Cost per Gallon	$17.53	$5.71

1. Meters larger than 1.5 inches calculated using cost per gallon for related service area multiplied by max day gallons from (1) City of Buckeye Engineering Standards, (2) a submitted water study, or (3) other estimated water demand.

Wastewater Development Fees

Buckeye will assess the proposed wastewater development fees per dwelling unit to residential development and per meter, by size and type, for nonresidential development. For meters larger than 1.5 inches, Buckeye will assess fees using the cost per gallon for the related service area and average day gallons from (1) City of Buckeye Engineering Standards, (2) a submitted water study, or (3) other estimated wastewater flow. The assessment of the proposed fees to residential development and to meters larger than 1.5 inches differs from Buckeye's current assessment based on meter size and type; however, the change is needed to better align the proposed wastewater development fees with actual costs and flow from these types of development. The proposed fees also include consolidated service areas compared to the current fees. Here's a comparison of the proposed and current wastewater service areas:

- **Central:** Central Buckeye 208 drainage basin; includes current Central Buckeye and Watson Road CFD service areas.
- **Sundance:** Sundance 208 drainage basin; includes current Sundance service area.
- **Tartesso West:** Tartesso West 208 drainage basin; includes current Tartesso West service area.

Figure 8: Proposed Development Fees

Residential Fees per Unit			
Residential Land Use	Central	Sundance	Tartesso West
Low/Med Density (<8 DU/acre)	$7,524	$5,399	$7,672
High Density (≥8 DU/Acre)	$5,871	$4,213	$5,994
Age Restricted (≤8 DU/Acre)	$4,697	$3,371	$4,795

Nonresidential Fees per Meter				
Meter Size	Meter Type	Central	Sundance	Tartesso West
1.0-inch	Disc	$7,524	$5,399	$7,672
1.5-inch	Disc	$12,790	$9,179	$13,043
1.5-inch	Turbine	$21,819	$15,658	$22,250
> 1.5-inch[1]	Cost per Gallon	$43.49	$31.21	$29.97

1. Meters larger than 1.5 inches calculated using cost per gallon for related service area multiplied by average day gallons from (1) City of Buckeye Engineering Standards, (2) a submitted water study, or (3) other estimated wastewater flow.

Difference Between Proposed and Current Development Fees

Non-Utility Development Fees

The differences between the proposed and current non-utility development fees are displayed below.

Figure 9: Difference Between Proposed and Current Development Fees

Residential Fees per Unit												
Development Type	Fire					Library	Parks and Recreational		Police	Street		
	Main	Festival Ranch	North Star Ranch	Tartesso	Teravalis		North	South		Arterial	Street	Trip Reduction
Low/Med Density (<8 DU/Acre)	$702	$46	$1,508	$9	$544	$316	$971	$1,204	$815	$1,297	$227	($37)
High Density (≥8 DU/Acre)	$548	$36	$1,178	$8	$425	$247	$759	$941	$637	$969	$204	$15
Age Restricted (≤8 DU/Acre)	$439	$29	$943	$6	$340	$198	$607	$753	$510	$594	$105	($16)

Nonresidential Fees per 1,000 Square Feet												
Development Type	Fire					Library	Parks and Recreational		Police	Street		
	Main	Festival Ranch	North Star Ranch	Tartesso	Teravalis		North	South		Arterial	Street	Trip Reduction
Industrial	$69	($1)	$282	$13	$82	($5)	($10)	($42)	$80	$115	$21	($3)
Commercial	$334	($52)	$1,671	$0	$516	($43)	($80)	($316)	$1,121	$1,735	$346	$5
Office & Other Services	$819	$70	$2,867	$244	$791	($39)	($57)	($334)	$568	$749	$149	$2
Institutional	$1,680	$511	$3,585	$955	$737	$38	$145	$138	$807	$1,038	$213	$10

Water Development Fees

The differences between the proposed and current water development fees are shown below. A direct comparison is not possible for high density residential and for meters larger than 1.5 inches since the current fees are assessed per meter, by size and type, and the proposed fees will be assessed per dwelling unit for residential development and per gallon of max day demand for meters larger than 1.5 inches.

Figure 10: Difference Between Proposed and Current Development Fees

Residential Fees per Unit			
Residential Land Use	Central[1]	Central[2]	Tartesso West
Low/Med Density (<8 DU/acre)	$1,861	$2,069	$6
High Density (≥8 DU/Acre)	n/a	n/a	n/a
Age Restricted (≤8 DU/Acre)	$1,161	$1,292	$0

Nonresidential Fees per Meter				
Meter Size	Meter Type	Central[1]	Central[2]	Tartesso West
1.0-inch	Disc	$1,861	$2,069	$6
1.5-inch	Disc	$3,164	$3,518	$10
1.5-inch	Turbine	$5,397	$6,001	$16

1. Difference based on current Central Buckeye fees.
2. Difference based on current Sundance fees.

Wastewater Development Fees

The differences between the proposed and current wastewater development fees are shown below. A direct comparison is not possible for high density residential and for meters larger than 1.5 inches since the current fees are assessed per meter, by size and type, and the proposed fees will be assessed per dwelling unit for residential development and per gallon of average day flow for meters larger than 1.5 inches.

Figure 11: Difference Between Proposed and Current Development Fees

Residential Fees per Unit			
Residential Land Use	Central	Sundance	Tartesso West
Low/Med Density (<8 DU/acre)	$3,310	($516)	$2
High Density (≥8 DU/Acre)	n/a	n/a	n/a
Age Restricted (≤8 DU/Acre)	$2,063	($326)	$1

Nonresidential Fees per Meter				
Meter Size	Meter Type	Central	Sundance	Tartesso West
1.0-inch	Disc	$3,310	($516)	$2
1.5-inch	Disc	$5,627	($877)	$3
1.5-inch	Turbine	$9,600	($1,496)	$6

LAND USE ASSUMPTIONS

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

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

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

SUMMARY OF GROWTH INDICATORS

Key land use assumptions include population, housing units, and employment projections. TischlerBise projects future development using population and employment data published by the Maricopa Association of Governments (MAG) in its 2023 Socioeconomic Projections. MAG provided data by traffic analysis zone (TAZ) so TischlerBise could allocate existing and future development by service area.

Development projections are summarized in Figure LU28 through Figure LU33. These projections are used to estimate fee revenue and to indicate the anticipated need for growth-related infrastructure. However, development fee methodologies are designed to reduce sensitivity to development projections in the determination of the proportionate share fee amounts. If actual development occurs at a slower rate than projected, fee revenue will decline, but so will the need for growth-related infrastructure. In contrast, if development occurs at a faster rate than anticipated, fee revenue will increase, but Buckeye will also need to accelerate infrastructure improvements to keep pace with the actual rate of development. During the next 10 years, residential development projections indicate a population increase of 85,579 persons in 29,507 housing units, and nonresidential development projections indicate an employment increase of 29,390 jobs with approximately 21,435,000 square feet of floor area.

SERVICE AREAS

This section includes service area maps for each necessary public service.

Figure LU1: Fire Facilities Service Area

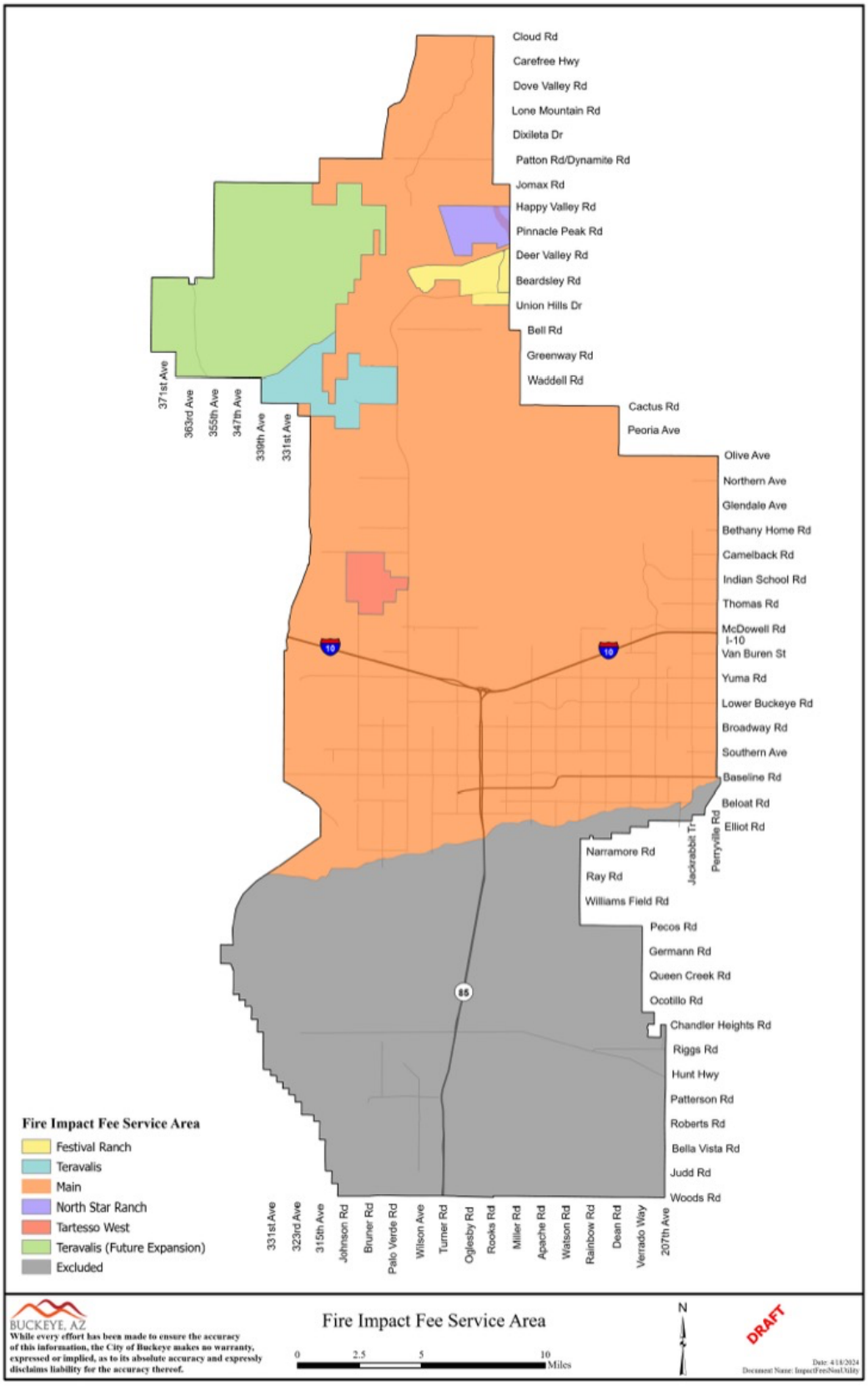

Figure LU2: Library Facilities Service Area

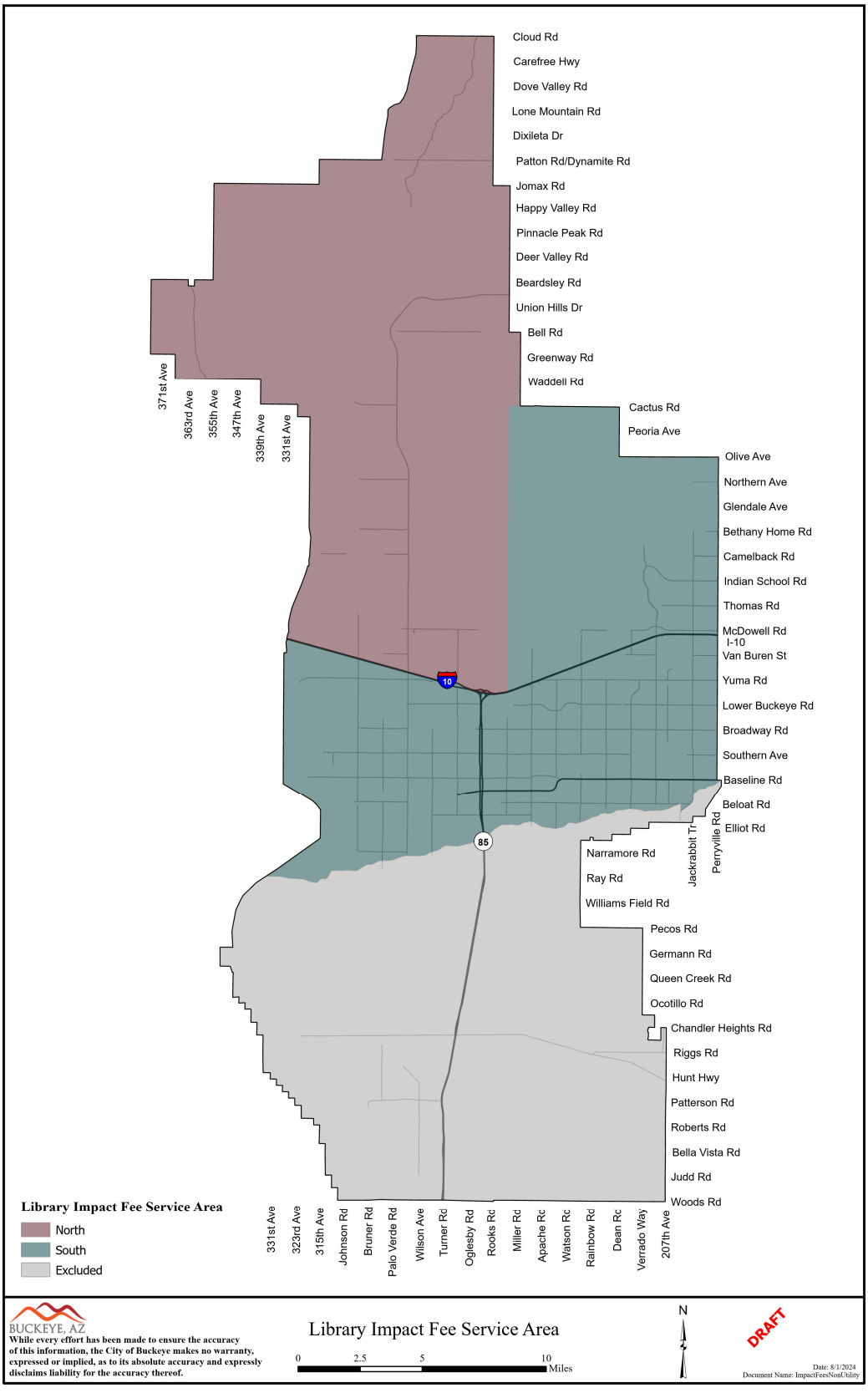

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Figure LU3: Parks and Recreational Facilities Service Area

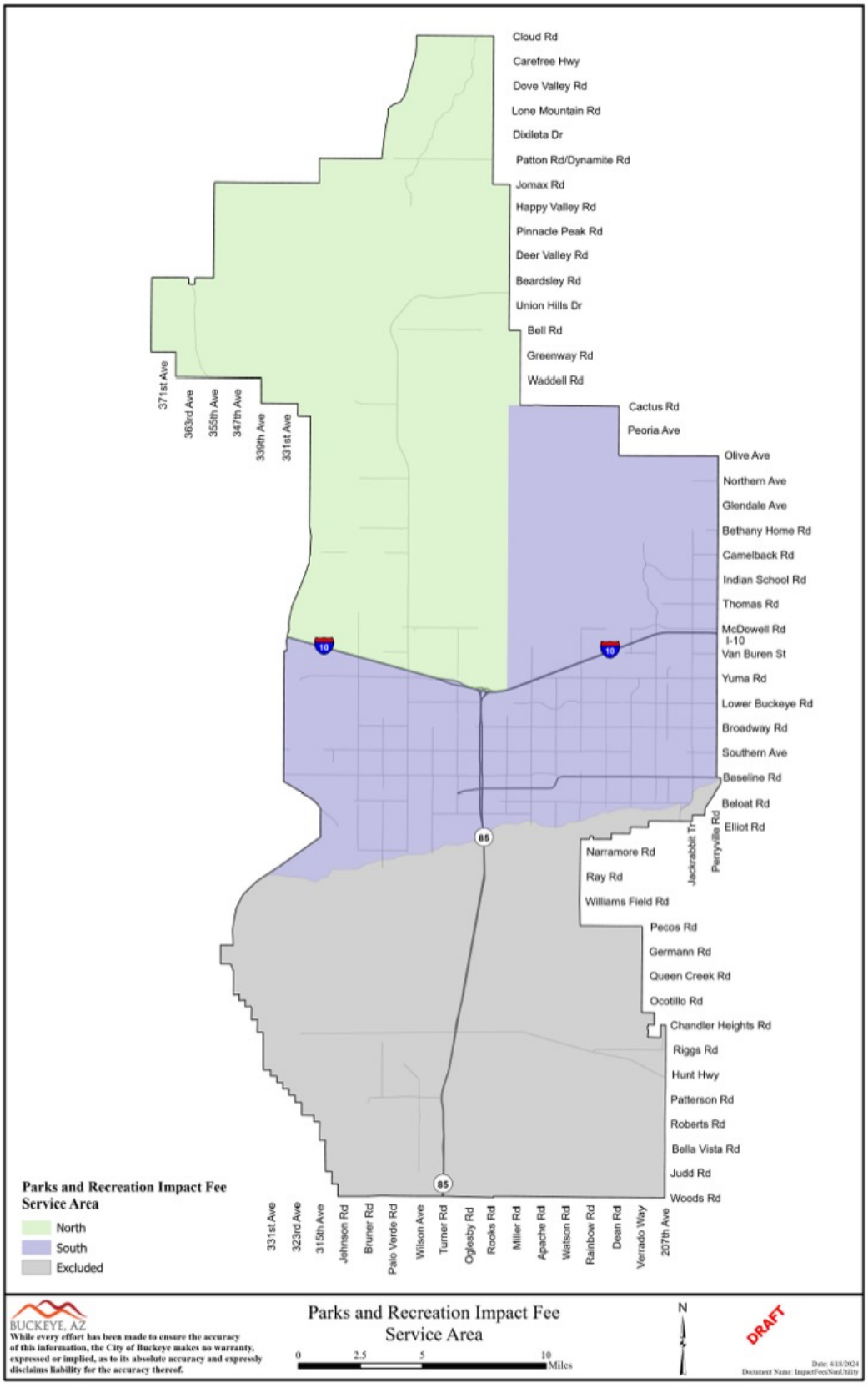

Figure LU4: Police Facilities Service Area

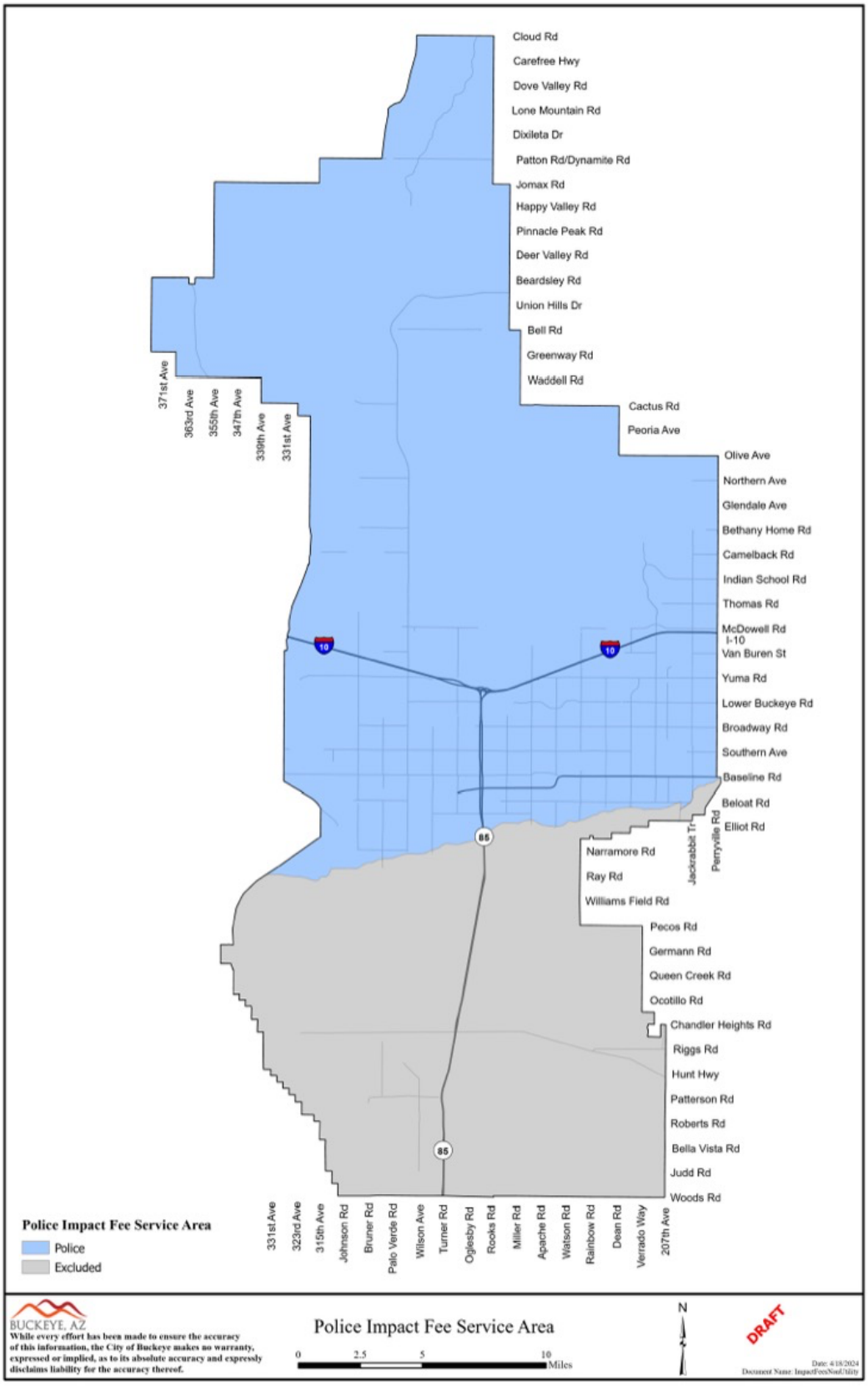

Figure LU5: Street Facilities Service Area

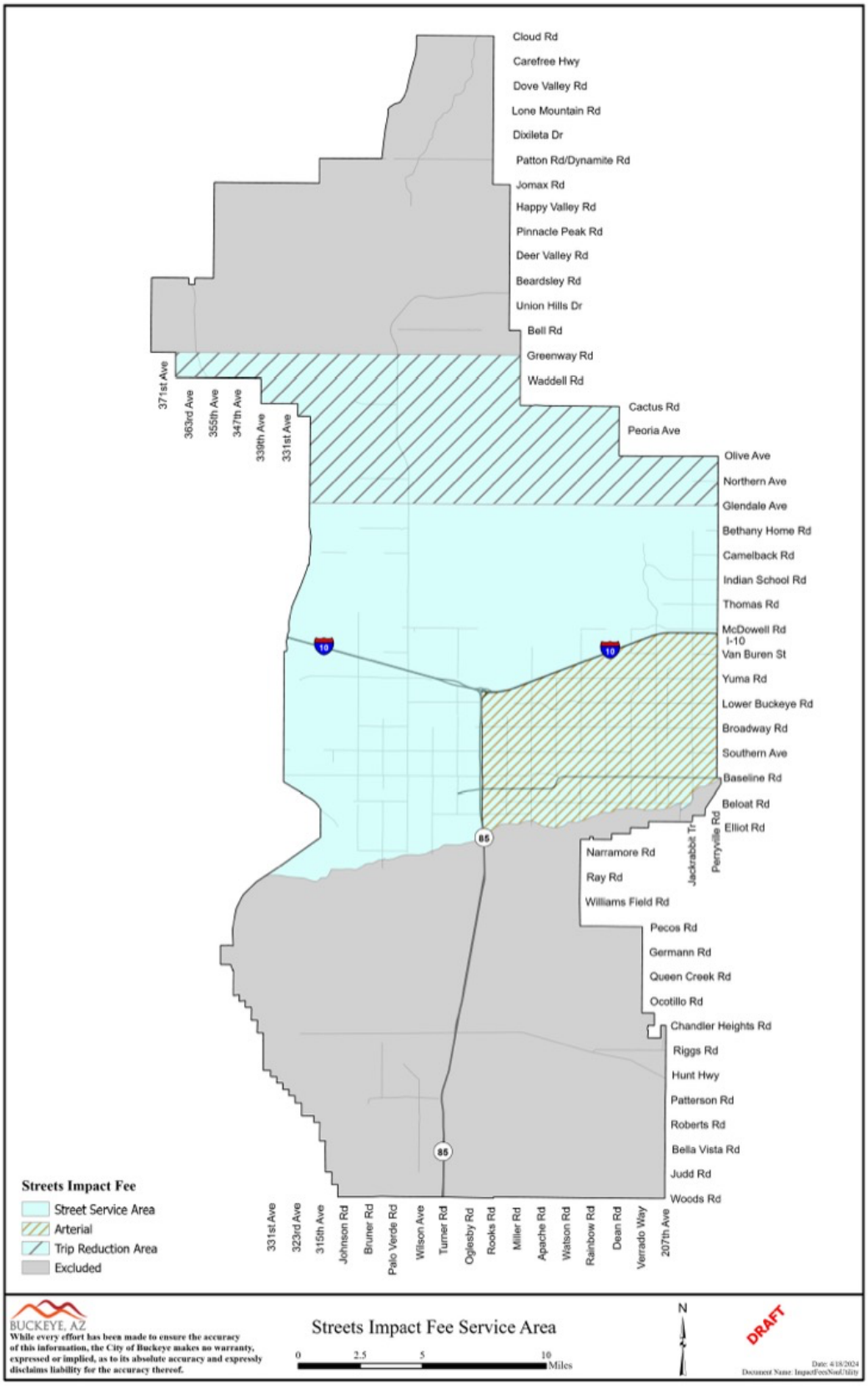

Figure LU6: Water Facilities Service Area

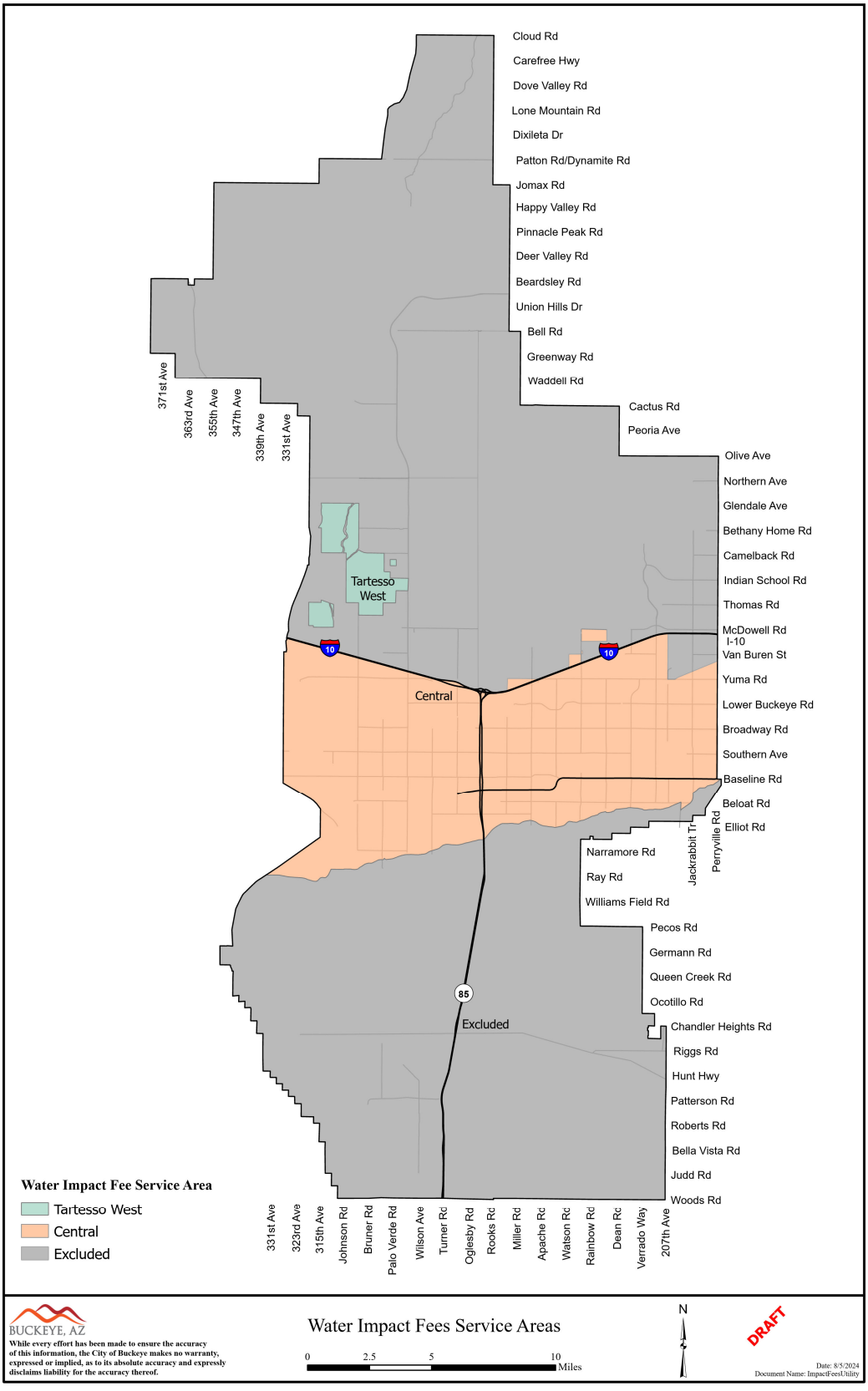

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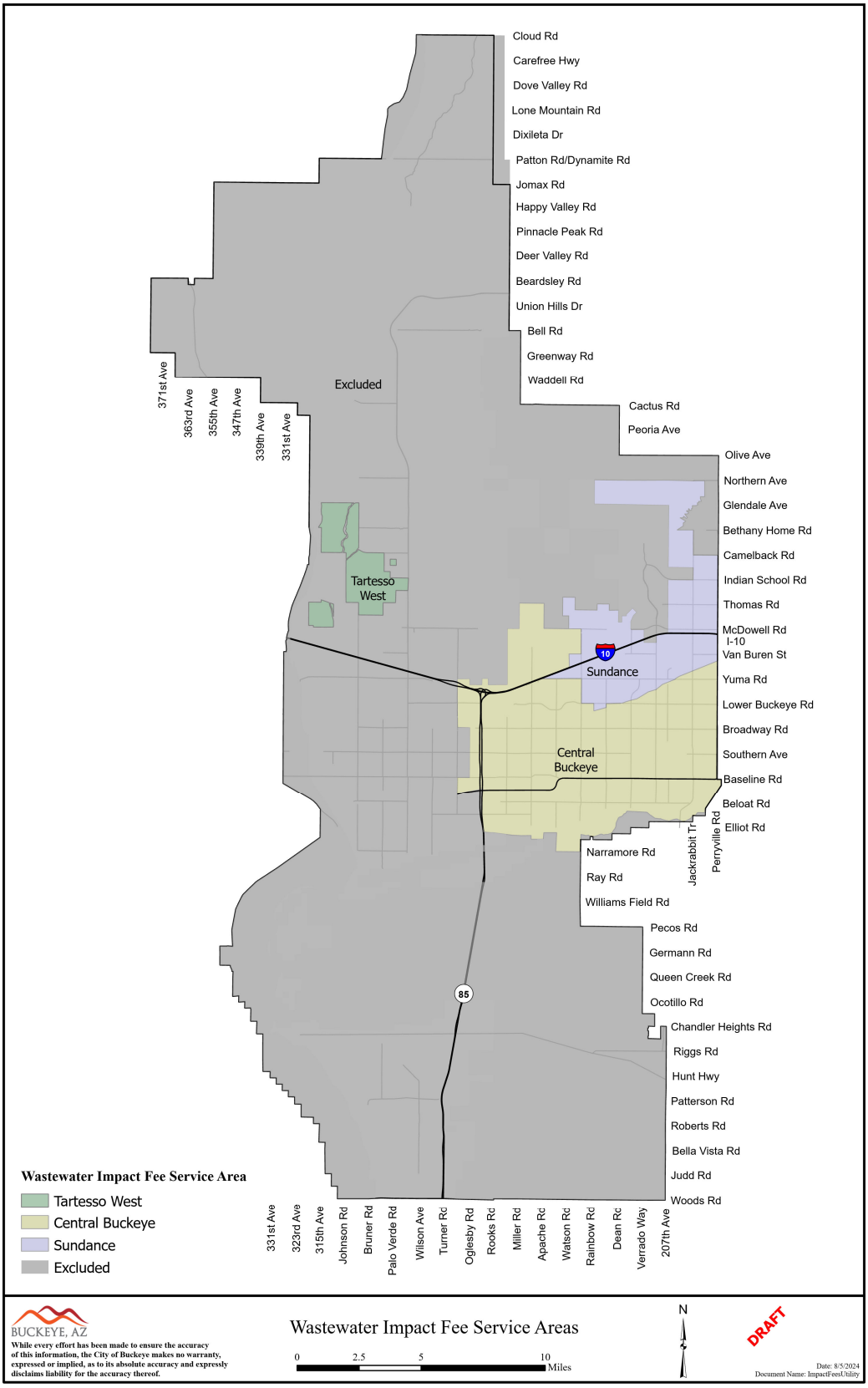
Figure LU7: Wastewater Facilities Service Area



RESIDENTIAL DEVELOPMENT

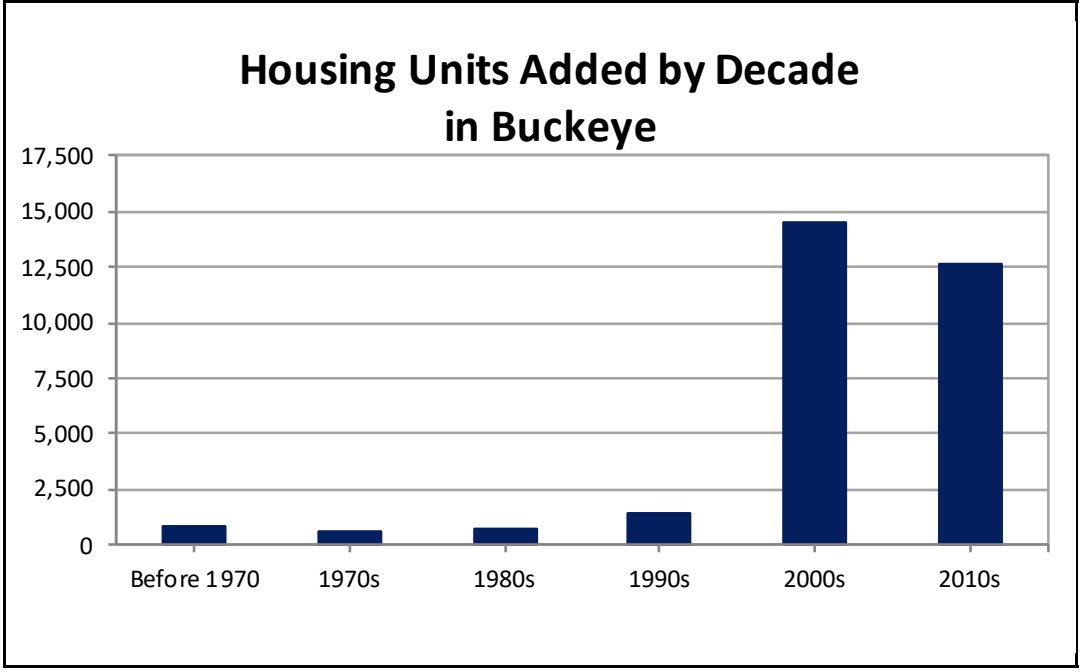
This section details current estimates and future projections of residential development including population and housing units.

Recent Residential Construction

Development fees require an analysis of current levels of service. For residential development, current levels of service are determined using estimates of population and housing units. Shown below, Figure LU8 indicates the estimated number of housing units added by decade according to data obtained from the U.S. Census Bureau. In the previous decade, Buckeye's housing stock grew by an average of 1,265 housing units per year.

Figure LU8: Housing Units by Decade

Census 2010 Housing Units	18,207	Buckeye's housing stock grew by an average of 1,265 housing units per year from 2010 to 2020.
Census 2020 Housing Units	30,860	
New Housing Units 2010 to 2020	12,653	



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

Occupancy Factors

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

Shown below, Figure LU9 includes occupancy factors published in the Buckeye Water Engineering Design Standards. Low and medium density units (less than eight dwelling units per acre) average 3.20 persons per household, high density units (eight or more dwelling units per acre) average 2.50 persons per household, and active adult units (max eight dwelling units per acre) average 2.00 persons per household.

Figure LU9: Occupancy Factors

Residential Land Use	Dwelling Units per Acre	Persons per Dwelling Unit
Low and Medium Density	less than 8	3.20
High Density (includes apartments)	8 or more	2.50
Active Adult	max 8	2.00

Source: Buckeye Water Engineering Design Standards, Section 3-1.202

Residential Estimates

According to estimates published by the U.S. Census Bureau, Buckeye's 2020 population included 91,502 persons living in 30,860 housing units. The Maricopa Association of Governments (MAG) released updated socioeconomic projections in June 2023. According to these projections, Buckeye's projected population in 2023 included 109,729 persons. Using traffic analysis zone (TAZ) data provided by MAG, and occupancy factors shown in Figure LU9, existing residential development in 2024 includes 119,044 persons and 40,080 housing units.

Figure LU10: Residential Estimates

Buckeye, Arizona	2020	2021	2022	2023	2024
	Census[1]	MAG[2]	MAG[2]	MAG[2]	Base Year[3]
Total Population	91,502	101,987	106,316	109,729	119,044
Housing Units	30,860	34,578	36,046	38,295	40,080

1. U.S. Census Bureau, 2020.
2. Municipality Population and Housing Unit Update, Maricopa Association of Governments (MAG) Regional
3. Population from Socioeconomic Projections, MAG, June 2023; housing units calculated by TischlerBise using MAG data and Buckeye Water Engineering Design Standards.

Residential Projections

Citywide Projections

Population and housing unit projections illustrate the possible future pace of service demands, revenues, and expenditures. To the extent these factors change, the projected need for infrastructure will also change. If development occurs at a faster rate than projected, the demand for infrastructure will increase at a corresponding rate. If development occurs at a slower rate than projected, the demand for infrastructure will decrease at a corresponding rate. For this study, the analysis assumes the occupancy factors shown in Figure LU9 will remain constant throughout the 10-year projection period.

Shown below, the analysis uses MAG data to project future single-family development. Projected multi-family units represent multi-family units in the development pipeline. TischlerBise uses occupancy factors shown in Figure LU9 to convert housing units to population. Based on these assumptions, 10-year projections include an increase of 85,579 persons and 29,507 housing units citywide.

Figure LU11: Residential Projections – Citywide

Buckeye, Arizona	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	10-Year
	Base	1	2	3	4	5	6	7	8	9	10	Increase
Population												
Total	**119,044**	**127,641**	**136,098**	**145,534**	**154,458**	**164,182**	**172,763**	**180,018**	**186,973**	**195,848**	**204,623**	**85,579**
Housing Units												
Single-Family	38,782	41,092	43,325	45,739	47,878	50,257	52,380	54,088	55,736	58,062	60,324	21,542
Multi-Family	1,298	1,993	2,689	3,507	4,480	5,454	6,309	7,163	7,863	8,563	9,263	7,965
Total	**40,080**	**43,085**	**46,014**	**49,246**	**52,358**	**55,711**	**58,689**	**61,250**	**63,599**	**66,625**	**69,587**	**29,507**

Service Area Projections

The following figures include residential development projections associated with the service area maps shown at the beginning of this chapter. TischlerBise projects future residential development for each service area using the same methodology as the citywide development projections.

Figure LU12: Residential Projections – Fire Service Area

Fire Service Area	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	10-Year
	Base	1	2	3	4	5	6	7	8	9	10	Increase
Population												
Main	99,396	106,982	113,467	120,453	126,538	133,424	138,589	142,071	145,253	150,035	154,717	55,321
Festival Ranch	9,731	10,299	10,867	11,436	12,004	12,573	13,141	13,653	14,165	14,677	15,189	5,458
North Star Ranch	0	0	0	0	0	0	320	960	2,240	3,840	5,440	5,440
Tartesso West	9,918	10,361	10,803	11,246	11,689	12,131	12,574	13,115	13,656	14,197	14,738	4,820
Teravalis	0	0	960	2,400	4,228	6,055	8,139	10,220	11,660	13,100	14,540	14,540
Total	**119,044**	**127,641**	**136,098**	**145,534**	**154,458**	**164,182**	**172,763**	**180,018**	**186,973**	**195,848**	**204,623**	**85,579**
Housing Units												
Main	30,342	32,925	35,130	37,490	39,575	41,900	43,671	44,923	45,997	47,647	49,235	18,893
Festival Ranch	5,950	6,234	6,518	6,802	7,087	7,371	7,655	7,911	8,167	8,423	8,679	2,729
North Star Ranch	0	0	0	0	0	0	100	300	700	1,200	1,700	1,700
Tartesso West	3,788	3,927	4,065	4,203	4,342	4,480	4,618	4,787	4,957	5,126	5,295	1,506
Teravalis	0	0	300	750	1,355	1,960	2,645	3,329	3,779	4,229	4,679	4,679
Total	**40,080**	**43,085**	**46,014**	**49,246**	**52,358**	**55,711**	**58,689**	**61,250**	**63,599**	**66,625**	**69,587**	**29,507**

Figure LU13: Residential Projections – Library Service Area

Library Service Area	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	10-Year
	Base	1	2	3	4	5	6	7	8	9	10	Increase
Population												
North	22,491	24,101	26,670	29,720	33,157	36,594	40,608	47,126	53,644	60,482	67,319	44,829
South	96,554	100,521	104,489	108,965	113,441	117,917	122,097	125,898	129,700	133,502	137,304	40,750
Total	**119,044**	**124,622**	**131,159**	**138,685**	**146,598**	**154,511**	**162,704**	**173,025**	**183,344**	**193,984**	**204,623**	**85,579**
Housing Units												
North	10,629	11,239	12,149	13,208	14,423	15,637	17,032	19,199	21,332	23,564	25,797	15,168
South	29,451	30,842	32,234	33,812	35,389	36,967	38,426	39,767	41,108	42,449	43,790	14,339
Total	**40,080**	**42,081**	**44,383**	**47,020**	**49,812**	**52,604**	**55,458**	**58,966**	**62,440**	**66,013**	**69,587**	**29,507**

Figure LU14: Residential Projections – Parks and Recreational Service Area

Parks and Recreational Service Area	2024 Base	2025 1	2026 2	2027 3	2028 4	2029 5	2030 6	2031 7	2032 8	2033 9	2034 10	10-Year Increase
Population												
North	22,491	24,101	26,670	29,720	33,157	36,594	40,608	47,126	53,644	60,482	67,319	44,829
South	96,554	100,521	104,489	108,965	113,441	117,917	122,097	125,898	129,700	133,502	137,304	40,750
Total	**119,044**	**124,622**	**131,159**	**138,685**	**146,598**	**154,511**	**162,704**	**173,025**	**183,344**	**193,984**	**204,623**	**85,579**
Housing Units												
North	10,629	11,239	12,149	13,208	14,423	15,637	17,032	19,199	21,332	23,564	25,797	15,168
South	29,451	30,842	32,234	33,812	35,389	36,967	38,426	39,767	41,108	42,449	43,790	14,339
Total	**40,080**	**42,081**	**44,383**	**47,020**	**49,812**	**52,604**	**55,458**	**58,966**	**62,440**	**66,013**	**69,587**	**29,507**

Figure LU15: Residential Projections – Police Service Area

Police Service Area	2024 Base	2025 1	2026 2	2027 3	2028 4	2029 5	2030 6	2031 7	2032 8	2033 9	2034 10	10-Year Increase
Population												
Police	119,044	127,641	136,098	145,534	154,458	164,182	172,763	180,018	186,973	195,848	204,623	85,579
Total	**119,044**	**127,641**	**136,098**	**145,534**	**154,458**	**164,182**	**172,763**	**180,018**	**186,973**	**195,848**	**204,623**	**85,579**
Housing Units												
Police	40,080	43,085	46,014	49,246	52,358	55,711	58,689	61,250	63,599	66,625	69,587	29,507
Total	**40,080**	**43,085**	**46,014**	**49,246**	**52,358**	**55,711**	**58,689**	**61,250**	**63,599**	**66,625**	**69,587**	**29,507**

Figure LU16: Residential Projections – Street Service Area

Street Service Area	2024 Base	2025 1	2026 2	2027 3	2028 4	2029 5	2030 6	2031 7	2032 8	2033 9	2034 10	10-Year Increase
Population												
Street	108,189	115,938	123,546	132,135	140,212	149,088	156,501	162,113	166,785	173,057	179,228	71,040
Total	**108,189**	**115,938**	**123,546**	**132,135**	**140,212**	**149,088**	**156,501**	**162,113**	**166,785**	**173,057**	**179,228**	**71,040**
Housing Units												
Street	33,774	36,408	38,965	41,825	44,566	47,548	50,054	52,006	53,545	55,661	57,714	23,940
Total	**33,774**	**36,408**	**38,965**	**41,825**	**44,566**	**47,548**	**50,054**	**52,006**	**53,545**	**55,661**	**57,714**	**23,940**

NONRESIDENTIAL DEVELOPMENT

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

Nonresidential Demand Factors

TischlerBise uses the term jobs to refer to employment by place of work. In Figure LU17, gray shading indicates the nonresidential development prototypes used to derive employment densities. For nonresidential development, TischlerBise uses data published in Trip Generation, Institute of Transportation Engineers, 11th Edition (2021). The prototype for industrial development is Warehousing (ITE 150) with 2,953 square feet of floor area per employee. For office development, the proxy is General Office (ITE 710) with 307 square feet of floor area per employee. Institutional development uses Government Office (ITE 730) with 330 square feet of floor area per employee. The prototype for commercial development is Shopping Center (ITE 820) with 471 square feet of floor area per employee.

Figure LU17: Nonresidential Demand Units

ITE Code	Land Use / Size	Demand Unit	Wkdy Trip Ends Per Dmd Unit[1]	Wkdy Trip Ends Per Employee[1]	Employees Per Dmd Unit	Square Feet Per Employee
110	Light Industrial	1,000 Sq Ft	4.87	3.10	1.57	637
130	Industrial Park	1,000 Sq Ft	3.37	2.91	1.16	864
140	Manufacturing	1,000 Sq Ft	4.75	2.51	1.89	528
150	Warehousing	1,000 Sq Ft	1.71	5.05	0.34	2,953
254	Assisted Living	bed	2.60	4.24	0.61	na
310	Hotel	room	7.99	14.34	0.56	na
520	Elementary School	student	2.27	22.50	0.10	na
525	High School	student	1.94	21.95	0.09	na
565	Day Care	student	4.09	21.38	0.19	na
610	Hospital	1,000 Sq Ft	10.77	3.77	2.86	350
620	Nursing Home	bed	3.06	3.31	0.92	na
710	General Office (avg size)	1,000 Sq Ft	10.84	3.33	3.26	307
720	Medical-Dental Office	1,000 Sq Ft	36.00	8.71	4.13	242
730	Government Office	1,000 Sq Ft	22.59	7.45	3.03	330
770	Business Park	1,000 Sq Ft	12.44	4.04	3.08	325
820	Shopping Center (avg size)	1,000 Sq Ft	37.01	17.42	2.12	471

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

Nonresidential Estimates

The Maricopa Association of Governments (MAG) released updated socioeconomic projections in June 2023. According to MAG estimates, site-based employment included 10,597 jobs in 2020. To convert jobs to nonresidential floor area, TischlerBise multiplies the nonresidential demand factors shown in Figure LU17 by the job estimates shown below. For example, 2,378 industrial jobs multiplied by 2,953 square feet per industrial job equals 7,022,749 square feet of industrial development in 2020.

Figure LU18: Nonresidential Estimates

Development Type	2020 Jobs[1]	Percent of Total Jobs	Square Feet per Job[2]	2020 Estimated Floor Area[3]
Industrial[4]	2,378	22%	2,953	7,022,749
Commercial[5]	3,646	34%	471	1,716,112
Office & Other Services[6]	2,315	22%	307	711,158
Institutional[7]	2,258	21%	330	744,670
Total	10,597	100%		10,194,689

1. Socioeconomic Projections, Maricopa Association of Governments (MAG), 2023
2. Trip Generation, Institute of Transportation Engineers (ITE), 11th Edition (2021)
3. TischlerBise calculation (2020 jobs X ITE square feet per job factors)
4. MAG industrial employment
5. MAG retail employment
6. MAG office employment and other employment
7. MAG public employment

To estimate employment and nonresidential floor area in 2024, TischlerBise applies a straight-line projection from MAG 2020 employment estimates to MAG 2030 employment projections. For 2024, projected nonresidential development includes 18,246 jobs and 21,322,567 square feet of nonresidential floor area.

Development Type	2024 Jobs[1]	Percent of Total Jobs	Square Feet per Job[2]	2023 Estimated Floor Area[3]
Industrial[4]	5,540	30%	2,953	16,360,412
Commercial[5]	6,032	33%	471	2,839,253
Office & Other Services[6]	3,459	19%	307	1,062,723
Institutional[7]	3,215	18%	330	1,060,179
Total	18,246	100%		21,322,567

1. Socioeconomic Projections, Maricopa Association of Governments (MAG), 2024
2. Trip Generation, Institute of Transportation Engineers (ITE), 11th Edition (2021)
3. TischlerBise calculation (2024 jobs X ITE square feet per job factors)
4. MAG industrial employment
5. MAG retail employment
6. MAG office employment and other employment
7. MAG public employment

Nonresidential Projections

Citywide

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

Based on the recommendation of Economic Development Department staff, TischlerBise projects industrial, commercial, and office development based on recent development trends. For industrial development, this includes entitled projects from 2025 through 2027, 1.0 million square feet per year in 2028 through 2030, and 750,000 square feet per year from 2031 through 2034. Projected commercial development includes entitled projects for 2025 and 2026 and 400,000 square feet per year from 2027 through 2034. Projected office development includes entitled projects for 2025, 100,000 square feet per year from 2026 through 2030, and 200,000 square feet per year from 2031 through 2034. To convert nonresidential floor area to employment, the analysis divides projected nonresidential floor area by employment density factors shown in Figure LU17.

TischlerBise projects institutional development using employment data published by the Maricopa Association of Governments (MAG). 10-year projections include an increase of 2,933 institutional jobs citywide. To convert institutional employment to nonresidential floor area, the analysis applies the employment density factor shown in Figure LU17 by the institutional employment projections. Projected nonresidential development over the next 10 years includes approximately 21,435,000 square feet and 23,930 jobs.

Figure LU19: Nonresidential Projections – Citywide

Buckeye, Arizona	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	10-Year
	Base	1	2	3	4	5	6	7	8	9	10	Increase
Employment												
Industrial	5,540	6,165	6,790	7,415	7,755	8,207	8,658	9,024	9,390	9,756	10,121	4,581
Commercial	6,032	7,199	8,923	9,899	10,876	11,975	13,094	14,136	15,177	16,218	17,375	11,343
Office & Other Services	3,459	3,865	4,232	4,599	4,967	5,334	5,702	6,409	7,117	7,824	8,532	5,072
Institutional	3,215	3,460	3,705	3,950	4,195	4,439	4,684	5,037	5,389	5,741	6,148	2,933
Total	**18,246**	**20,688**	**23,649**	**25,863**	**27,792**	**29,956**	**32,139**	**34,606**	**37,072**	**39,539**	**42,176**	**23,930**
Nonres. Sq Ft (x1,000)												
Industrial	16,360	18,207	20,053	21,899	22,903	24,236	25,570	26,650	27,730	28,810	29,890	13,530
Commercial	2,839	3,388	4,200	4,659	5,119	5,636	6,163	6,653	7,143	7,634	8,178	5,339
Office & Other Services	1,063	1,187	1,300	1,413	1,526	1,639	1,752	1,969	2,186	2,404	2,621	1,558
Institutional	1,157	1,238	1,318	1,399	1,480	1,561	1,641	1,758	1,874	1,990	2,165	1,008
Total	**21,419**	**24,019**	**26,871**	**29,370**	**31,027**	**33,072**	**35,127**	**37,030**	**38,934**	**40,837**	**42,854**	**21,435**

Service Area

The following figures include nonresidential development projections associated with the service area maps shown at the beginning of this chapter. TischlerBise projects future nonresidential development for each service area using the same methodology as the citywide development projections.

Figure LU20: Nonresidential Projections – Fire Service Area

Fire Service Area	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	10-Year
	Base	1	2	3	4	5	6	7	8	9	10	Increase
Employment												
Main	17,891	20,217	23,063	25,161	26,974	28,787	30,600	32,735	34,870	37,005	39,140	21,249
Festival Ranch	226	309	393	476	560	643	727	810	894	978	1,061	835
North Star Ranch	0	0	0	0	0	0	0	0	0	0	171	171
Tartesso West	130	162	194	226	258	290	342	355	369	382	395	266
Teravalis	0	0	0	0	0	235	470	704	939	1,174	1,409	1,409
Total	**18,246**	**20,688**	**23,649**	**25,863**	**27,792**	**29,956**	**32,139**	**34,606**	**37,072**	**39,539**	**42,176**	**23,930**
Nonres. Sq Ft (x1,000)												
Main	21,204	23,760	26,567	29,022	30,635	32,248	33,861	35,338	36,815	38,291	39,768	18,564
Festival Ranch	76	109	143	177	210	244	278	311	345	379	412	337
North Star Ranch	0	0	0	0	0	0	0	0	0	0	114	114
Tartesso West	139	150	160	171	182	192	212	217	222	228	233	93
Teravalis	0	0	0	0	0	388	776	1,164	1,552	1,940	2,327	2,327
Total	**21,419**	**24,019**	**26,871**	**29,370**	**31,027**	**33,072**	**35,127**	**37,030**	**38,934**	**40,837**	**42,854**	**21,435**

Figure LU21: Nonresidential Projections – Library Service Area

Library Service Area	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	10-Year
	Base	1	2	3	4	5	6	7	8	9	10	Increase
Employment												
North	1,994	2,519	3,044	3,569	4,095	4,855	5,635	6,314	6,993	7,672	8,523	6,529
South	16,252	18,169	20,605	22,294	23,698	25,101	26,504	28,292	30,079	31,866	33,654	17,401
Total	**18,246**	**20,688**	**23,649**	**25,863**	**27,792**	**29,956**	**32,139**	**34,606**	**37,072**	**39,539**	**42,176**	**23,930**
Nonres. Sq Ft (x1,000)												
North	892	1,106	1,319	1,533	1,746	2,348	2,959	3,544	4,130	4,716	5,415	4,523
South	20,527	22,914	25,552	27,837	29,281	30,724	32,168	33,486	34,804	36,121	37,439	16,912
Total	**21,419**	**24,019**	**26,871**	**29,370**	**31,027**	**33,072**	**35,127**	**37,030**	**38,934**	**40,837**	**42,854**	**21,435**

Figure LU22: Nonresidential Projections – Parks and Recreational Service Area

Parks and Recreational Service Area	2024 Base	2025 1	2026 2	2027 3	2028 4	2029 5	2030 6	2031 7	2032 8	2033 9	2034 10	10-Year Increase
Employment												
North	1,994	2,519	3,044	3,569	4,095	4,855	5,635	6,314	6,993	7,672	8,523	6,529
South	16,252	18,169	20,605	22,294	23,698	25,101	26,504	28,292	30,079	31,866	33,654	17,401
Total	**18,246**	**20,688**	**23,649**	**25,863**	**27,792**	**29,956**	**32,139**	**34,606**	**37,072**	**39,539**	**42,176**	**23,930**
Nonres. Sq Ft (x1,000)												
North	892	1,106	1,319	1,533	1,746	2,348	2,959	3,544	4,130	4,716	5,415	4,523
South	20,527	22,914	25,552	27,837	29,281	30,724	32,168	33,486	34,804	36,121	37,439	16,912
Total	**21,419**	**24,019**	**26,871**	**29,370**	**31,027**	**33,072**	**35,127**	**37,030**	**38,934**	**40,837**	**42,854**	**21,435**

Figure LU23: Nonresidential Projections – Police Service Area

Police Service Area	2024 Base	2025 1	2026 2	2027 3	2028 4	2029 5	2030 6	2031 7	2032 8	2033 9	2034 10	10-Year Increase
Employment												
Police	18,246	20,688	23,649	25,863	27,792	29,956	32,139	34,606	37,072	39,539	42,176	23,930
Total	**18,246**	**20,688**	**23,649**	**25,863**	**27,792**	**29,956**	**32,139**	**34,606**	**37,072**	**39,539**	**42,176**	**23,930**
Nonres. Sq Ft (x1,000)												
Police	21,419	24,019	26,871	29,370	31,027	33,072	35,127	37,030	38,934	40,837	42,854	21,435
Total	**21,419**	**24,019**	**26,871**	**29,370**	**31,027**	**33,072**	**35,127**	**37,030**	**38,934**	**40,837**	**42,854**	**21,435**

Figure LU24: Nonresidential Projections – Street Service Area

Street Service Area	2024 Base	2025 1	2026 2	2027 3	2028 4	2029 5	2030 6	2031 7	2032 8	2033 9	2034 10	10-Year Increase
Employment												
Street	17,291	19,467	22,163	24,111	25,774	27,671	29,589	31,853	34,118	36,382	38,646	21,355
Total	**17,291**	**19,467**	**22,163**	**24,111**	**25,774**	**27,671**	**29,589**	**31,853**	**34,118**	**36,382**	**38,646**	**21,355**
Nonres. Sq Ft (x1,000)												
Street	21,048	23,541	26,284	28,676	30,226	32,163	34,110	35,917	37,725	39,532	41,339	20,291
Total	**21,048**	**23,541**	**26,284**	**28,676**	**30,226**	**32,163**	**34,110**	**35,917**	**37,725**	**39,532**	**41,339**	**20,291**

AVERAGE WEEKDAY VEHICLE TRIPS

Components used to determine average weekday vehicle trips (AWVT) include average weekday vehicle trip generation rates, adjustments for commuting patterns, and adjustments for pass-by trips.

Residential Trip Generation Rates

For residential development, TischlerBise uses trip generation rates published in Trip Generation, Institute of Transportation Engineers, 11th Edition (2021). For single-family development, the proxy is Single Family Detached Housing (ITE 210), and this type of development generates 9.43 average weekday vehicle trip ends per unit. For multi-family development, the proxy is Multifamily Housing Low-Rise (ITE 220), and this type of development generates 6.74 average weekday vehicle trip ends per unit. For age restricted development, the proxy is Senior Adult Housing – Single-Family (ITE 251), and this type of development generates 4.31 average weekday vehicle trip ends per unit.

Nonresidential Trip Generation Rates

For nonresidential development, TischlerBise uses trip generation rates published in Trip Generation, Institute of Transportation Engineers, 11th Edition (2021). The prototype for industrial development is Warehousing (ITE 150) which generates 1.71 average weekday vehicle trip ends per 1,000 square feet of floor area. For office & other services development, the proxy is General Office (ITE 710), and it generates 10.84 average weekday vehicle trip ends per 1,000 square feet of floor area. Institutional development uses Government Office (ITE 730) and generates 22.59 average weekday vehicle trip ends per 1,000 square feet of floor area. The prototype for commercial development is Shopping Center (ITE 820) which generates 37.01 average weekday vehicle trips per 1,000 square feet of floor area.

Figure LU25: Average Weekday Vehicle Trip Ends by Land Use

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

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

Trip Rate Adjustments

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

Commuter Trip Adjustment

Residential development has a larger trip adjustment factor of 64 percent to account for commuters leaving Buckeye for work. According to the 2009 National Household Travel Survey (see Table 30) weekday work trips are typically 31 percent of production trips (i.e., all out-bound trips, which are 50 percent of all trip ends). As shown in Figure LU26, the U.S. Census Bureau's OnTheMap web application indicates 92 percent of resident workers traveled outside of Buckeye for work in 2020. In combination, these factors (0.31 x 0.50 x 0.92 = 0.14) support the additional 14 percent allocation of trips to residential development.

Figure LU26: Commuter Trip Adjustment

Trip Adjustment Factor for Commuters	
Employed Residents	36,902
Residents Living and Working in Buckeye	2,870
Residents Commuting Outside Buckeye for Work	34,032
Percent Commuting out of Buckeye	92%
Additional Production Trips[1]	14%
Standard Trip Rate Adjustment	50%
Residential Trip Adjustment Factor	64%

Source: U.S. Census Bureau, OnTheMap Application (version 6.23.1) and LEHD Origin-Destination Employment Statistics, 2020.

1. According to the National Household Travel Survey (2009)*, published in December 2011 (see Table 30), home-based work trips are typically 30.99 percent of "production" trips, in other words, out-bound trips (which are 50 percent of all trip ends). Also, LED OnTheMap data from 2020 indicate that 92 percent of Buckeye's workers travel outside the city for work. In combination, these factors (0.3099 x 0.50 x .92 = 0.143) account for 14 percent of additional production trips. The total adjustment factor for residential includes attraction trips (50 percent of trip ends) plus the journey-to-work commuting adjustment (14 percent of production trips) for a total of 64 percent.
*http://nhts.ornl.gov/publications.shtml ; Summary of Travel Trends - Table "Daily Travel Statistics by Weekday vs. Weekend"

Adjustment for Pass-By Trips

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

Average Weekday Vehicle Trips

Shown below in Figure LU27, multiplying average weekday vehicle trip ends and trip adjustment factors (discussed on the previous page) by Buckeye's existing development units provides the average weekday vehicle trips generated by existing development. As shown below, Buckeye's existing citywide development generates 302,706 vehicle trips on an average weekday.

Figure LU27: Average Weekday Vehicle Trips by Land Use – Citywide

Development Type	Development Unit	ITE Code	Avg Wkday VTE	Trip Adjustment	2024 Dev Units	2024 Veh Trips
Single Family	HU	210	9.43	64%	38,782	234,060
Multi-Family	HU	220	6.74	64%	1,298	5,598
Industrial	KSF	150	1.71	50%	16,360	13,988
Commercial	KSF	820	37.01	33%	2,839	34,677
Office & Other Services	KSF	710	10.84	50%	1,063	5,760
Institutional	KSF	730	22.59	33%	1,157	8,623
Total						302,706

DEVELOPMENT PROJECTIONS

Citywide

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

Figure LU28: Development Projections Summary

Buckeye, Arizona	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	10-Year
	Base	1	2	3	4	5	6	7	8	9	10	Increase
Population												
Total	**119,044**	**127,641**	**136,098**	**145,534**	**154,458**	**164,182**	**172,763**	**180,018**	**186,973**	**195,848**	**204,623**	**85,579**
Housing Units												
Single-Family	38,782	41,092	43,325	45,739	47,878	50,257	52,380	54,088	55,736	58,062	60,324	21,542
Multi-Family	1,298	1,993	2,689	3,507	4,480	5,454	6,309	7,163	7,863	8,563	9,263	7,965
Total	**40,080**	**43,085**	**46,014**	**49,246**	**52,358**	**55,711**	**58,689**	**61,250**	**63,599**	**66,625**	**69,587**	**29,507**
Employment												
Industrial	5,540	6,165	6,790	7,415	7,755	8,207	8,658	9,024	9,390	9,756	10,121	4,581
Commercial	6,032	7,199	8,923	9,899	10,876	11,975	13,094	14,136	15,177	16,218	17,375	11,343
Office & Other Services	3,459	3,865	4,232	4,599	4,967	5,334	5,702	6,409	7,117	7,824	8,532	5,072
Institutional	3,215	3,460	3,705	3,950	4,195	4,439	4,684	5,037	5,389	5,741	6,148	2,933
Total	**18,246**	**20,688**	**23,649**	**25,863**	**27,792**	**29,956**	**32,139**	**34,606**	**37,072**	**39,539**	**42,176**	**23,930**
Nonres. Sq Ft (x1,000)												
Industrial	16,360	18,207	20,053	21,899	22,903	24,236	25,570	26,650	27,730	28,810	29,890	13,530
Commercial	2,839	3,388	4,200	4,659	5,119	5,636	6,163	6,653	7,143	7,634	8,178	5,339
Office & Other Services	1,063	1,187	1,300	1,413	1,526	1,639	1,752	1,969	2,186	2,404	2,621	1,558
Institutional	1,157	1,238	1,318	1,399	1,480	1,561	1,641	1,758	1,874	1,990	2,165	1,008
Total	**21,419**	**24,019**	**26,871**	**29,370**	**31,027**	**33,072**	**35,127**	**37,030**	**38,934**	**40,837**	**42,854**	**21,435**

Fire Service Area

TischlerBise uses these projections to calculate fire facilities development fees.

Figure LU29: Development Projections Summary

Fire Service Area	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	10-Year
	Base	1	2	3	4	5	6	7	8	9	10	Increase
Population												
Main	99,396	106,982	113,467	120,453	126,538	133,424	138,589	142,071	145,253	150,035	154,717	55,321
Festival Ranch	9,731	10,299	10,867	11,436	12,004	12,573	13,141	13,653	14,165	14,677	15,189	5,458
North Star Ranch	0	0	0	0	0	0	320	960	2,240	3,840	5,440	5,440
Tartesso West	9,918	10,361	10,803	11,246	11,689	12,131	12,574	13,115	13,656	14,197	14,738	4,820
Teravalis	0	0	960	2,400	4,228	6,055	8,139	10,220	11,660	13,100	14,540	14,540
Total	**119,044**	**127,641**	**136,098**	**145,534**	**154,458**	**164,182**	**172,763**	**180,018**	**186,973**	**195,848**	**204,623**	**85,579**
Housing Units												
Main	30,342	32,925	35,130	37,490	39,575	41,900	43,671	44,923	45,997	47,647	49,235	18,893
Festival Ranch	5,950	6,234	6,518	6,802	7,087	7,371	7,655	7,911	8,167	8,423	8,679	2,729
North Star Ranch	0	0	0	0	0	0	100	300	700	1,200	1,700	1,700
Tartesso West	3,788	3,927	4,065	4,203	4,342	4,480	4,618	4,787	4,957	5,126	5,295	1,506
Teravalis	0	0	300	750	1,355	1,960	2,645	3,329	3,779	4,229	4,679	4,679
Total	**40,080**	**43,085**	**46,014**	**49,246**	**52,358**	**55,711**	**58,689**	**61,250**	**63,599**	**66,625**	**69,587**	**29,507**
Employment												
Main	17,891	20,217	23,063	25,161	26,974	28,787	30,600	32,735	34,870	37,005	39,140	21,249
Festival Ranch	226	309	393	476	560	643	727	810	894	978	1,061	835
North Star Ranch	0	0	0	0	0	0	0	0	0	0	171	171
Tartesso West	130	162	194	226	258	290	342	355	369	382	395	266
Teravalis	0	0	0	0	0	235	470	704	939	1,174	1,409	1,409
Total	**18,246**	**20,688**	**23,649**	**25,863**	**27,792**	**29,956**	**32,139**	**34,606**	**37,072**	**39,539**	**42,176**	**23,930**
Nonres. Sq Ft (x1,000)												
Main	21,204	23,760	26,567	29,022	30,635	32,248	33,861	35,338	36,815	38,291	39,768	18,564
Festival Ranch	76	109	143	177	210	244	278	311	345	379	412	337
North Star Ranch	0	0	0	0	0	0	0	0	0	0	114	114
Tartesso West	139	150	160	171	182	192	212	217	222	228	233	93
Teravalis	0	0	0	0	0	388	776	1,164	1,552	1,940	2,327	2,327
Total	**21,419**	**24,019**	**26,871**	**29,370**	**31,027**	**33,072**	**35,127**	**37,030**	**38,934**	**40,837**	**42,854**	**21,435**

Library Service Area

TischlerBise uses these projections to calculate library facilities development fees.

Figure LU30: Development Projections Summary

Library Service Area	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	10-Year
	Base	1	2	3	4	5	6	7	8	9	10	Increase
Population												
North	22,491	24,101	26,670	29,720	33,157	36,594	40,608	47,126	53,644	60,482	67,319	44,829
South	96,554	100,521	104,489	108,965	113,441	117,917	122,097	125,898	129,700	133,502	137,304	40,750
Total	**119,044**	**124,622**	**131,159**	**138,685**	**146,598**	**154,511**	**162,704**	**173,025**	**183,344**	**193,984**	**204,623**	**85,579**
Housing Units												
North	10,629	11,239	12,149	13,208	14,423	15,637	17,032	19,199	21,332	23,564	25,797	15,168
South	29,451	30,842	32,234	33,812	35,389	36,967	38,426	39,767	41,108	42,449	43,790	14,339
Total	**40,080**	**42,081**	**44,383**	**47,020**	**49,812**	**52,604**	**55,458**	**58,966**	**62,440**	**66,013**	**69,587**	**29,507**
Employment												
North	1,994	2,519	3,044	3,569	4,095	4,855	5,635	6,314	6,993	7,672	8,523	6,529
South	16,252	18,169	20,605	22,294	23,698	25,101	26,504	28,292	30,079	31,866	33,654	17,401
Total	**18,246**	**20,688**	**23,649**	**25,863**	**27,792**	**29,956**	**32,139**	**34,606**	**37,072**	**39,539**	**42,176**	**23,930**
Nonres. Sq Ft (x1,000)												
North	892	1,106	1,319	1,533	1,746	2,348	2,959	3,544	4,130	4,716	5,415	4,523
South	20,527	22,914	25,552	27,837	29,281	30,724	32,168	33,486	34,804	36,121	37,439	16,912
Total	**21,419**	**24,019**	**26,871**	**29,370**	**31,027**	**33,072**	**35,127**	**37,030**	**38,934**	**40,837**	**42,854**	**21,435**

Parks and Recreational Service Area

TischlerBise uses these projections to calculate parks and recreational facilities development fees.

Figure LU31: Development Projections Summary

Parks and Recreational Service Area	2024 Base	2025 1	2026 2	2027 3	2028 4	2029 5	2030 6	2031 7	2032 8	2033 9	2034 10	10-Year Increase
Population												
North	22,491	24,101	26,670	29,720	33,157	36,594	40,608	47,126	53,644	60,482	67,319	44,829
South	96,554	100,521	104,489	108,965	113,441	117,917	122,097	125,898	129,700	133,502	137,304	40,750
Total	**119,044**	**124,622**	**131,159**	**138,685**	**146,598**	**154,511**	**162,704**	**173,025**	**183,344**	**193,984**	**204,623**	**85,579**
Housing Units												
North	10,629	11,239	12,149	13,208	14,423	15,637	17,032	19,199	21,332	23,564	25,797	15,168
South	29,451	30,842	32,234	33,812	35,389	36,967	38,426	39,767	41,108	42,449	43,790	14,339
Total	**40,080**	**42,081**	**44,383**	**47,020**	**49,812**	**52,604**	**55,458**	**58,966**	**62,440**	**66,013**	**69,587**	**29,507**
Employment												
North	1,994	2,519	3,044	3,569	4,095	4,855	5,635	6,314	6,993	7,672	8,523	6,529
South	16,252	18,169	20,605	22,294	23,698	25,101	26,504	28,292	30,079	31,866	33,654	17,401
Total	**18,246**	**20,688**	**23,649**	**25,863**	**27,792**	**29,956**	**32,139**	**34,606**	**37,072**	**39,539**	**42,176**	**23,930**
Nonres. Sq Ft (x1,000)												
North	892	1,106	1,319	1,533	1,746	2,348	2,959	3,544	4,130	4,716	5,415	4,523
South	20,527	22,914	25,552	27,837	29,281	30,724	32,168	33,486	34,804	36,121	37,439	16,912
Total	**21,419**	**24,019**	**26,871**	**29,370**	**31,027**	**33,072**	**35,127**	**37,030**	**38,934**	**40,837**	**42,854**	**21,435**

Police Service Area

TischlerBise uses these projections to calculate police facilities development fees.

Figure LU32: Development Projections Summary

Police Service Area	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	10-Year
	Base	1	2	3	4	5	6	7	8	9	10	Increase
Population												
Police	119,044	127,641	136,098	145,534	154,458	164,182	172,763	180,018	186,973	195,848	204,623	85,579
Total	**119,044**	**127,641**	**136,098**	**145,534**	**154,458**	**164,182**	**172,763**	**180,018**	**186,973**	**195,848**	**204,623**	**85,579**
Housing Units												
Police	40,080	43,085	46,014	49,246	52,358	55,711	58,689	61,250	63,599	66,625	69,587	29,507
Total	**40,080**	**43,085**	**46,014**	**49,246**	**52,358**	**55,711**	**58,689**	**61,250**	**63,599**	**66,625**	**69,587**	**29,507**
Employment												
Police	18,246	20,688	23,649	25,863	27,792	29,956	32,139	34,606	37,072	39,539	42,176	23,930
Total	**18,246**	**20,688**	**23,649**	**25,863**	**27,792**	**29,956**	**32,139**	**34,606**	**37,072**	**39,539**	**42,176**	**23,930**
Nonres. Sq Ft (x1,000)												
Police	21,419	24,019	26,871	29,370	31,027	33,072	35,127	37,030	38,934	40,837	42,854	21,435
Total	**21,419**	**24,019**	**26,871**	**29,370**	**31,027**	**33,072**	**35,127**	**37,030**	**38,934**	**40,837**	**42,854**	**21,435**

Street Service Area

TischlerBise uses these projections to calculate street facilities development fees.

Figure LU33: Development Projections Summary

Street Service Area	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	10-Year
	Base	1	2	3	4	5	6	7	8	9	10	Increase
Population												
Interchange	39,360	41,783	44,206	46,630	49,053	51,476	53,900	57,403	60,906	64,410	67,913	28,553
Trip Reduction	39	49	1,019	2,469	4,306	6,143	8,237	10,708	12,538	14,369	16,199	16,160
Arterial	68,790	74,106	78,321	83,037	86,853	91,469	94,364	94,002	93,340	94,278	95,116	26,327
Total	**108,189**	**115,938**	**123,546**	**132,135**	**140,212**	**149,088**	**156,501**	**162,113**	**166,785**	**173,057**	**179,228**	**71,040**
Housing Units												
Interchange	15,003	15,778	16,554	17,311	18,069	18,827	19,584	20,679	21,774	22,869	23,964	8,960
Trip Reduction	12	15	318	771	1,380	1,988	2,676	3,482	4,054	4,626	5,198	5,185
Arterial	18,759	20,614	22,093	23,743	25,118	26,734	27,794	27,845	27,718	28,167	28,553	9,794
Total	**33,774**	**36,408**	**38,965**	**41,825**	**44,566**	**47,548**	**50,054**	**52,006**	**53,545**	**55,661**	**57,714**	**23,940**
Employment												
Interchange	4,665	5,177	5,689	6,201	6,714	7,226	7,758	9,173	10,588	12,003	13,418	8,753
Trip Reduction	6	8	9	11	12	248	485	749	1,014	1,278	1,543	1,537
Arterial	12,620	14,282	16,465	17,899	19,048	20,197	21,346	21,931	22,516	23,101	23,685	11,065
Total	**17,291**	**19,467**	**22,163**	**24,111**	**25,774**	**27,671**	**29,589**	**31,853**	**34,118**	**36,382**	**38,646**	**21,355**
Nonres. Sq Ft (x1,000)												
Interchange	2,497	2,715	2,933	3,151	3,369	3,587	3,814	4,512	5,210	5,908	6,606	4,109
Trip Reduction	3	4	4	5	6	394	783	1,180	1,578	1,975	2,373	2,370
Arterial	18,548	20,822	23,347	25,521	26,851	28,182	29,513	30,225	30,937	31,649	32,361	13,813
Total	**21,048**	**23,541**	**26,284**	**28,676**	**30,226**	**32,163**	**34,110**	**35,917**	**37,725**	**39,532**	**41,339**	**20,291**

FIRE FACILITIES IIP

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

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

The Fire Facilities IIP includes components for fire stations, fire facilities, fire apparatus, fire equipment, and the cost of preparing the Fire Facilities IIP and related Development Fee Report. The incremental expansion methodology is used for fire stations (Main service area), fire facilities, fire apparatus, and fire equipment. The cost recovery methodology is used for fire stations in the Festival Ranch, North Star Ranch, and Tartesso service areas. The plan-based methodology is used for the development fee report.

PROPORTIONATE SHARE

ARS § 9-463.05 (B)(3) states that the development fee shall not exceed a proportionate share of the cost of necessary public services needed to accommodate new development. The Fire Facilities IIP and development fees will allocate the cost of fire services between residential and nonresidential development based on calls for service data from 2020 through 2022 provided by Buckeye Fire Department. Based on calls for service from 2020 through 2022, residential development accounts for approximately 82 percent of proportionate share and nonresidential development accounts for the remaining 18 percent.

Figure F1: Proportionate Share

Call Type	2020	2021	2022	Total
Residential	5,706	6,257	4,953	16,916
Nonresidential	1,143	1,440	1,049	3,632
Total	6,849	7,697	6,002	20,548

Call Type	2020	2021	2022	Total
Residential	83%	81%	83%	82%
Nonresidential	17%	19%	17%	18%
Total	100%	100%	100%	100%

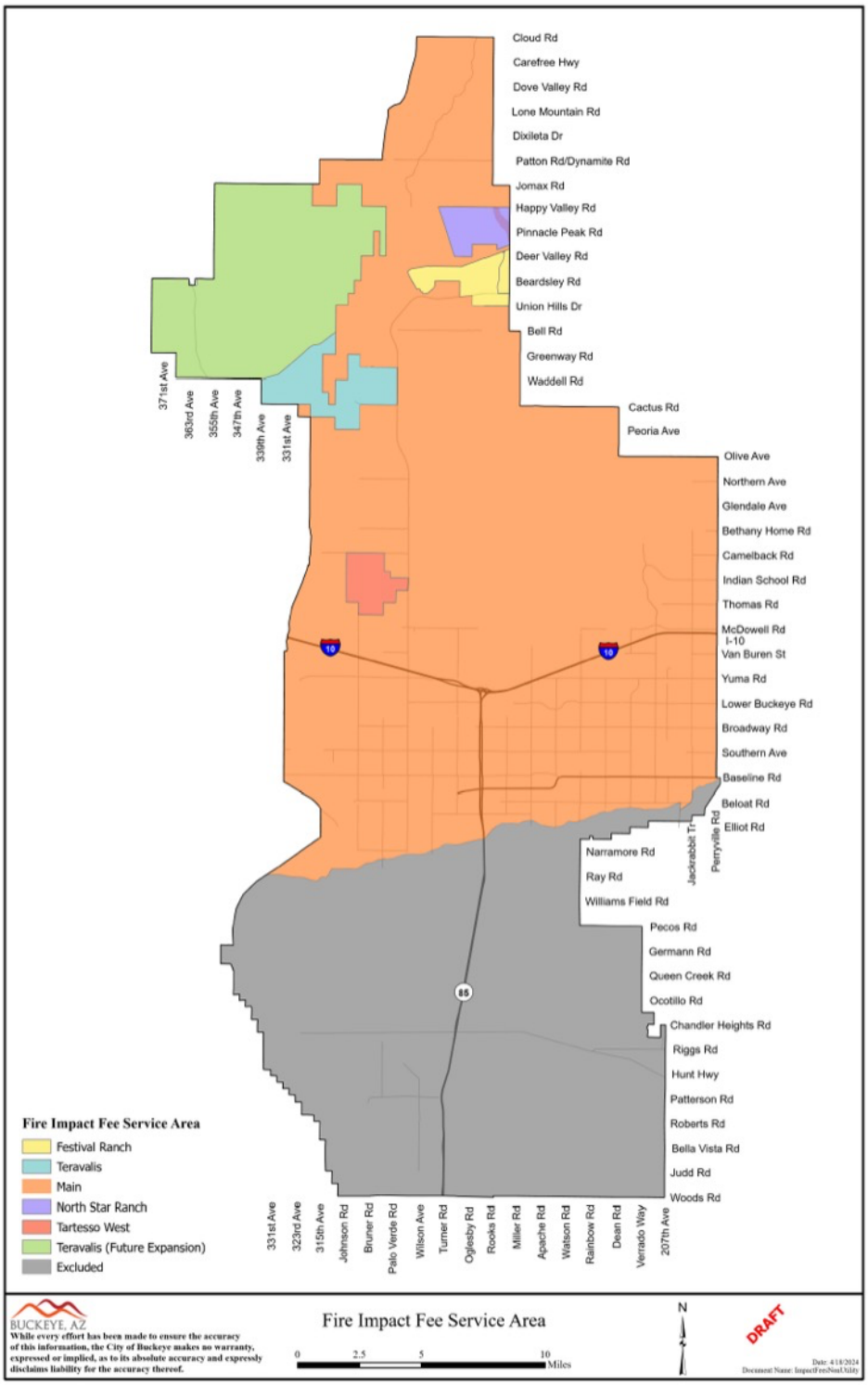
Source: Buckeye Fire Department

The proportionate share of costs attributable to residential development will be allocated to population and then converted to an appropriate amount by type of housing unit. Since nonresidential calls for service were unavailable by specific nonresidential use, TischlerBise recommends using jobs as the demand indicator for nonresidential demand for fire services. Employment density is highest for office development and lowest for industrial development. Commercial and institutional densities fall between the other two categories. This ranking of employment densities is consistent with the relative demand for fire services from nonresidential development in Buckeye.

SERVICE AREA

Figure F2 includes the service area for the Fire Facilities IIP. Fire facilities, fire apparatus, and fire equipment use a citywide service area, and fire stations use the services areas shown in Figure F2.

Figure F2: Fire Facilities Service Area



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 F3 displays the demand indicators for residential and nonresidential land uses. For residential development, the table displays the number of persons per housing unit. For nonresidential development, the table displays the number of jobs per thousand square feet of floor area.

Figure F3: Ratio of Service Unit to Development Unit

Residential Development per Housing Unit	
Development Type	Persons per Housing Unit[1]
Low/Med Density (<8 DU/Acre)	3.20
High Density (≥8 DU/Acre)	2.50
Age Restricted (≤8 DU/Acre)	2.00

Nonresidential Development	
Development Type	Jobs per 1,000 Sq Ft[1]
Industrial	0.34
Commercial	2.12
Office & Other Services	3.26
Institutional	3.03

1. See Land Use Assumptions

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

ARS § 9-463.05(E)(1) requires:

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

ARS § 9-463.05(E)(2) requires:

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

Fire Stations

This section includes the level-of-service analysis and cost factors for fire stations in each service area.

Main – Incremental Expansion

Buckeye currently provides 35,484 permanent square feet of fire stations to existing development in the main service area, and Buckeye plans to construct additional fire stations to serve future development. To allocate the proportionate share of demand for fire stations to residential and nonresidential development, this analysis uses the proportionate share shown in Figure F1. Buckeye's existing level of service for residential development is 0.2927 square feet per person (35,484 square feet X 82 percent residential share / 99,396 persons). The nonresidential level of service is 0.3570 square feet per job (35,484 square feet X 18 percent nonresidential share / 17,891 jobs).

Based on recent and planned construction costs provided by the Buckeye Fire Department, the construction cost for fire stations is $1,300 per square foot. The analysis uses this cost as a proxy for future growth-related fire station costs, and Buckeye may use development fees to expand or construct fire stations needed to serve future development. For fire stations in the main service area, the cost is $380.56 per person (0.2927 square feet per person X $1,300 per square foot) and $464.11 per job (0.3570 square feet per job X $1,300 per square foot).

Figure F4: Existing Level of Service

Description	Total Sq Ft	Permanent Sq Ft
701 - Downtown	8,000	8,000
702 - Sundance	12,200	12,200
703 - Verrado	15,284	15,284
706 - Westpark	1,913	0
Total	37,397	35,484

Cost Factors	
Cost per Square Foot	$1,300

Level-of-Service (LOS) Standards	
Existing Square Feet (Permanent)	35,484
Residential	
Residential Share	82%
2024 Population (Main)	99,396
Square Feet per Person	0.2927
Cost per Person	$380.56
Nonresidential	
Nonresidential Share	18%
2024 Jobs (Main)	17,891
Square Feet per Job	0.3570
Cost per Job	$464.11

Source: Buckeye Fire Department

Festival Ranch – Cost Recovery

Buckeye currently provides 11,870 square feet of fire stations to existing development in the Festival Ranch service area, and the fire station is designed to serve buildout of the service area equal to 30,312 persons and 1,061 jobs. A developer constructed Fire Station 704 as required by the development agreement, and Buckeye provides a development fee credit related to Fire Station 704. To allocate the proportionate share of demand for fire stations to total residential and nonresidential development at buildout, this analysis makes an adjustment to calls for service data shown in Figure F1. Applying the 2020-2022 average of calls per person and calls per job to projected buildout population and jobs provides projected calls for service at buildout. Based on this calculation, the proportionate share is 94 percent residential and six percent nonresidential. Buckeye's planned level of service for residential development is 0.3681 square feet per person (11,870 square feet X 94 percent residential share / 30,312 persons). The nonresidential planned level of service is 0.6712 square feet per job (11,870 square feet X six percent nonresidential share / 1,061 jobs).

The cost to construct Fire Station 704 was $6,800,000, so the analysis uses $573 per square foot in the fee calculation. For fire stations in the Festival Ranch service area, the cost is $210.87 per person (0.3681 square feet per person X $573 per square foot) and $384.50 per job (0.6712 square feet per job X $573 per square foot).

Figure F5: Planned Level of Service

Description	Square Feet	Cost	Cost per Sq Ft
704 - Sun City Festival	11,870	$6,800,000	$573
Total	11,870	$6,800,000	$573

Cost Factors	
Cost per Square Foot	$573

Level-of-Service (LOS) Standards	
Existing Square Feet	11,870
Residential	
Residential Share	94%
Projected Population[1]	30,312
Square Feet per Person	0.3681
Cost per Person	$210.87
Nonresidential	
Nonresidential Share	6%
Projected Jobs[1]	1,061
Square Feet per Job	0.6712
Cost per Job	$384.50

Source: Buckeye Fire Department

1. Based on Festival Ranch CMP, Planning Units E and F

North Star Ranch – Cost Recovery

Fire Station 710 will provide 12,500 square feet to serve buildout of the North Star Ranch service area equal to 29,958 persons and 912 jobs. A developer will construct Fire Station 710 as required by the development agreement, and Buckeye will reimburse the developer with development fees generated within the service area. To allocate the proportionate share of demand for fire stations to total residential and nonresidential development at buildout, this analysis makes an adjustment to calls for service data shown in Figure F1. Applying the 2020-2022 average of calls per person and calls per job to projected buildout population and jobs provides projected calls for service at buildout. Based on this calculation, the proportionate share is 95 percent residential and five percent nonresidential. Buckeye's planned level of service for residential development is 0.3964 square feet per person (12,500 square feet X 95 percent residential share / 29,958 persons). The nonresidential planned level of service is 0.6849 square feet per job (12,500 square feet X five percent nonresidential share / 912 jobs).

Based on a construction cost estimate of $19,950,000 provided by the Buckeye Fire Department, the construction cost for Fire Station 710 is $1,596 per square foot. For fire stations in the North Star Ranch service area, the cost is $632.63 per person (0.3964 square feet per person X $1,596 per square foot) and $1,093.17 per job (0.6849 square feet per job X $1,596 per square foot).

Figure F6: Planned Level of Service

Description	Square Feet	Cost	Cost per Sq Ft
710 - North Star Ranch	12,500	$16,250,000	$1,300
Land (3 acres)	n/a	$700,000	n/a
Communication Tower	n/a	$3,000,000	n/a
Total	12,500	$19,950,000	$1,596

Cost Factors	
Cost per Square Foot	$1,596

Level-of-Service (LOS) Standards	
Planned Square Feet	12,500
Residential	
Residential Share	95%
Projected Population[1]	29,958
Square Feet per Person	0.3964
Cost per Person	$632.63
Nonresidential	
Nonresidential Share	5%
Projected Jobs[1]	912
Square Feet per Job	0.6849
Cost per Job	$1,093.17

Source: Buckeye Fire Department

1. Based on North Star Ranch CMP

Tartesso – Cost Recovery

Buckeye currently provides 13,300 square feet of fire stations to existing development in the Tartesso service area, and the fire station is designed to serve buildout of the service area equal to 40,986 persons and 6,205 jobs. A developer constructed Fire Station 705 as required by the development agreement, and Buckeye will reimburse the developer with development fees generated within the service area. To allocate the proportionate share of demand for fire stations to total residential and nonresidential development at buildout, this analysis makes an adjustment to calls for service data shown in Figure F1. Applying the 2020-2022 average of calls per person and calls per job to projected buildout population and jobs provides projected calls for service at buildout. Based on this calculation, the proportionate share is 78 percent residential and 22 percent nonresidential. Buckeye's planned level of service for residential development is 0.2531 square feet per person (13,300 square feet X 78 percent residential share / 40,986 persons). The nonresidential planned level of service is 0.4715 square feet per job (6,205 square feet X 22 percent nonresidential share / 6,205 jobs).

The cost to construct Fire Station 704 was $5,446,683, so the analysis uses $410 per square foot in the calculation. The Tartesso service area fire station cost is $103.66 per person (0.2531 square feet per person X $410 per square foot) and $193.11 per job (0.4715 square feet per job X $410 per square foot).

Figure F7: Planned Level of Service

Description	Square Feet	Cost	Cost per Sq Ft
705 - Tartesso	13,300	$5,446,683	$410
Total	13,300	$5,446,683	$410

Cost Factors	
Cost per Square Foot	$410

Level-of-Service (LOS) Standards	
Existing Square Feet	13,300
Residential	
Residential Share	78%
Projected Population[1]	40,986
Square Feet per Person	0.2531
Cost per Person	$103.66
Nonresidential	
Nonresidential Share	22%
Projected Jobs[1]	6,205
Square Feet per Job	0.4715
Cost per Job	$193.11

Source: Buckeye Fire Department

1. Based on Tartesso West CMP, Villages 1-3, 5

Teravalis – Excluded

Fire Station 709 will provide 17,500 square feet of fire stations to serve buildout of the Teravalis service area. A developer will fund construction of Fire Station 709 without development fee reimbursement, so there is no development fee cost for fire stations within this service area.

Fire Facilities – Incremental Expansion

Buckeye currently provides 5,081 square feet of fire facilities (not including fire stations) to existing development citywide, and Buckeye plans to construct additional fire facilities to serve future development. To allocate the proportionate share of demand for fire facilities to residential and nonresidential development, this analysis uses proportionate share shown in Figure F1. Buckeye's existing level of service for residential development is 0.0350 square feet per person (5,081 square feet X 82 percent residential share / 119,044 persons). The nonresidential level of service is 0.0501 square feet per job (5,081 square feet X 18 percent nonresidential share / 18,246 jobs).

The analysis uses the Fire Resource (Support) Building cost of $750 per square foot ($15,000,000 / 20,000 square feet) as a proxy for future growth-related fire facilities costs. Buckeye may use development fees to construct a portion of the Fire Resource (Support) Building or to construct other fire facilities (not including fire stations) needed to serve future development. For fire facilities, the cost is $26.25 per person (0.0350 square feet per person X $750 per square foot) and $37.59 per job (0.0501 square feet per job X $750 per square foot).

Figure F8: Existing Level of Service

Description	Square Feet
Fire Administration	5,081
Total	5,081

Cost Factors	
Resource (Support) Building	$15,000,000
Square Feet	20,000
Cost per Square Foot	$750

Level-of-Service (LOS) Standards	
Existing Square Feet	5,081
Residential	
Residential Share	82%
2024 Population	119,044
Square Feet per Person	0.0350
Cost per Person	$26.25
Nonresidential	
Nonresidential Share	18%
2024 Jobs	18,246
Square Feet per Job	0.0501
Cost per Job	$37.59

Source: Buckeye Fire Department

Fire Apparatus – Incremental Expansion

Buckeye currently serves existing development with 12 fire apparatus, and Buckeye plans to acquire additional fire apparatus to serve future development. The replacement cost of the existing fleet is $17,200,000. To allocate the proportionate share of demand for fire apparatus to residential and nonresidential development, this analysis uses proportionate share outlined in Figure F1. Buckeye's existing level of service for residential development is 0.00008 units per person (12 units X 82 percent residential share / 119,044 persons). The nonresidential level of service is 0.00012 units per job (12 units X 18 percent nonresidential share / 18,246 jobs).

The weighted average cost of Buckeye's existing fire apparatus is $1,433,333 per unit ($17,200,000 total cost / 12 units), and the analysis uses this cost as a proxy for future growth-related fire apparatus costs. Buckeye may use development fees to expand its fire apparatus fleet. For fire apparatus, the cost is $118.48 per person (0.00008 units per person X $1,433,333 per unit) and $169.68 per job (0.00012 units per job X $1,433,333 per unit).

Figure F9: Existing Level of Service

Description	Units	Unit Cost	Total Cost
Pumper	10	$1,250,000	$12,500,000
Ladder Truck	2	$2,350,000	$4,700,000
Total	12	$1,433,333	$17,200,000

Cost Factors	
Weighted Average per Unit	$1,433,333

Level-of-Service (LOS) Standards	
Existing Units	12
Residential	
Residential Share	82%
2024 Population	119,044
Units per Person	0.00008
Cost per Person	$118.48
Nonresidential	
Nonresidential Share	18%
2024 Jobs	18,246
Units per Job	0.00012
Cost per Job	$169.68

Source: Buckeye Fire Department

Fire Equipment – Incremental Expansion

Buckeye currently serves existing development with 14 units of fire equipment, and Buckeye plans to acquire additional equipment to serve future development. The replacement cost of the existing inventory is $3,583,466. To allocate the proportionate share of demand for fire equipment to residential and nonresidential development, this analysis uses proportionate share outlined in Figure F1. Buckeye's existing level of service for residential development is 0.00010 units per person (14 units X 82 percent residential share / 119,044 persons). The nonresidential level of service is 0.00014 units per job (14 units X 18 percent nonresidential share / 18,246 jobs).

The weighted average cost of Buckeye's existing fire equipment is $255,962 per unit ($3,583,466 total cost / 14 units), and the analysis uses this cost as a proxy for future growth-related fire equipment costs. Buckeye may use development fees to expand its fire equipment inventory. For fire equipment, the cost is $24.68 per person (0.00010 units per person X $255,962 per unit) and $35.35 per job (0.00014 units per job X $255,962 per unit).

Figure F10: Existing Level of Service

Description	Units	Unit Cost	Total Cost
Haz Mat Truck	1	$1,500,000	$1,500,000
Small Pickup Truck	10	$72,000	$720,000
Air and Light Trailer	1	$82,000	$82,000
Heavy Duty Pickup Truck	1	$100,000	$100,000
Regional Wireless (Fire Share)	1	$1,181,466	$1,181,466
Total	14	$255,962	$3,583,466

Cost Factors	
Weighted Average per Unit	$255,962

Level-of-Service (LOS) Standards	
Existing Units	14
Residential	
Residential Share	82%
2024 Population	119,044
Units per Person	0.00010
Cost per Person	$24.68
Nonresidential	
Nonresidential Share	18%
2024 Jobs	18,246
Units per Job	0.00014
Cost per Job	$35.35

Source: Buckeye Fire Department

Development Fee Report – Plan-Based

The cost to prepare the Fire Facilities IIP and related development fee report equals $27,500. Buckeye 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* document, the cost is $0.50 per person and $0.42 per job.

Figure F11: IIP and Development Fee Report

Necessary Public Service	Cost	Proportionate Share		Service Unit	5-Year Change	Cost per Service Unit
Fire	$27,500	Residential	82%	Population	45,138	$0.50
		Nonresidential	18%	Jobs	11,709	$0.42
Library	$9,000	Residential	98%	Population	35,466	$0.25
		Nonresidential	2%	Jobs	11,709	$0.02
Parks and Recreational	$18,400	Residential	98%	Population	35,466	$0.51
		Nonresidential	2%	Jobs	11,709	$0.03
Police	$27,500	Residential	83%	Population	45,138	$0.51
		Nonresidential	17%	Vehicle Trips	47,030	$0.10
Street	$27,500	All Development	100%	VMT	631,502	$0.04
Water	$39,840	All Development	100%	Max Day Gallons	10,846,001	$0.01
Wastewater	$33,640	All Development	100%	Avg Day Gallons	2,285,458	$0.01
Total	$183,380					

Projected Demand for Services and Costs

ARS § 9-463.05(E)(5) requires:

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

ARS § 9-463.05(E)(6) requires:

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

As shown in the *Land Use Assumptions* document, projected development during the next 10 years includes population growth of 85,579 persons and employment growth of 23,930 jobs. To maintain the existing level of service, Buckeye will need to construct approximately 4,195 square feet of fire facilities, acquire approximately 10 fire apparatus, and acquire approximately 12 units of equipment over the next 10 years. The following pages include a more detailed projection of demand for services and costs for the Fire Facilities IIP, including fire stations.

Fire Stations

This section includes projected demand for fire stations in each service area.

Main – Incremental Expansion

Buckeye plans to maintain its level of service for fire stations in the main service area over the next 10 years. Based on a projected population increase of 55,321 persons, future residential development demands approximately 16,195 square feet of fire stations (55,321 additional persons X 0.2927 square feet per person). With projected employment growth of 21,249 jobs, future nonresidential development demands approximately 7,586 square feet of fire stations (21,249 additional jobs X 0.3570 square feet per job). Future development demands approximately 23,781 square feet of fire stations at a cost of $30,914,720 (23,780.6 square feet X $1,300 per square foot). Buckeye may use development fees to construct additional fire stations in the main service area.

Figure F12: Projected Demand

Type of Infrastructure	Level of Service	Demand Unit	Cost per Unit
Fire Stations	0.2927 Square Feet	per Person	$1,300
	0.3570 Square Feet	per Job	

Demand for Fire Stations					
Year	Population (Main)	Jobs (Main)	Square Feet		
			Residential	Nonresidential	Total
2024	99,396	17,891	29,096.9	6,387.1	35,484.0
2025	106,982	20,217	31,317.4	7,217.5	38,534.9
2026	113,467	23,063	33,216.0	8,233.6	41,449.6
2027	120,453	25,161	35,260.9	8,982.7	44,243.6
2028	126,538	26,974	37,042.3	9,630.0	46,672.3
2029	133,424	28,787	39,058.0	10,277.2	49,335.2
2030	138,589	30,600	40,570.1	10,924.5	51,494.6
2031	142,071	32,735	41,589.4	11,686.7	53,276.1
2032	145,253	34,870	42,520.9	12,448.8	54,969.8
2033	150,035	37,005	43,920.8	13,211.0	57,131.8
2034	154,717	39,140	45,291.4	13,973.2	59,264.6
10-Yr Increase	55,321	21,249	16,194.5	7,586.1	23,780.6

Growth-Related Expenditures	$21,052,850	$9,861,870	$30,914,720

Festival Ranch – Cost Recovery

Buckeye will provide a development fee credit to the developer for costs associated with Fire Station 704. Based on a projected population increase of 5,458 persons, future residential development during the next 10 years demands approximately 2,009 square feet of the existing fire station (5,458 additional persons X 0.3681 square feet per person). With projected nonresidential growth of 835 jobs, future nonresidential development during the next 10 years demands approximately 561 square feet of the existing fire station (835 additional jobs X 0.6712 square feet per job). Future development during the next 10 years demands approximately 2,570 square feet of the existing fire station with a projected development fee credit of $1,472,240 (2,569.9 square feet X $573 per square foot).

Figure F13: Projected Demand

Type of Infrastructure	Level of Service	Demand Unit	Cost per Sq Ft
Fire Stations	0.3681 Square Feet	per Person	$573
	0.6712 Square Feet	per Job	

Demand for Fire Stations					
Year	Population	Jobs	Square Feet		
			Residential	Nonresidential	Total
2024	9,731	226	3,581.8	151.5	3,733.3
2025	10,299	309	3,791.0	207.6	3,998.6
2026	10,867	393	4,000.3	263.6	4,263.9
2027	11,436	476	4,209.5	319.7	4,529.2
2028	12,004	560	4,418.7	375.8	4,794.5
2029	12,573	643	4,628.0	431.9	5,059.8
2030	13,141	727	4,837.2	487.9	5,325.1
2031	13,653	810	5,025.6	544.0	5,569.6
2032	14,165	894	5,214.1	600.1	5,814.2
2033	14,677	978	5,402.6	656.1	6,058.7
2034	15,189	1,061	5,591.0	712.2	6,303.2
10-Yr Increase	5,458	835	2,009.2	560.7	2,569.9

Growth-Related Expenditures	$1,151,032	$321,208	$1,472,240

North Star Ranch – Cost Recovery

Buckeye will use development fees to reimburse developer costs associated with construction of Fire Station 710. Based on a projected population increase of 5,440 persons, future residential development during the next 10 years demands approximately 2,156 square feet of the planned fire station (5,440 persons X 0.3964 square feet per person). With projected nonresidential growth of 171 jobs, future nonresidential development during the next 10 years demands approximately 117 square feet of the planned fire station (171 jobs X 0.6849 square feet per job). Future development during the next 10 years demands approximately 2,273 square feet of the planned fire station and projected development fee revenue equals $3,628,397 (2,273.4 square feet X $1,596 per square foot). Full reimbursement of Fire Station 710 costs will occur beyond the 10-year study timeframe.

Figure F14: Projected Demand

Type of Infrastructure	Level of Service	Demand Unit	Cost per Sq Ft
Fire Stations	0.3964 Square Feet	per Person	$1,596
	0.6849 Square Feet	per Job	

Demand for Fire Stations					
Year	Population	Jobs	Square Feet		
			Residential	Nonresidential	Total
2024	0	0	0.0	0.0	0.0
2025	0	0	0.0	0.0	0.0
2026	0	0	0.0	0.0	0.0
2027	0	0	0.0	0.0	0.0
2028	0	0	0.0	0.0	0.0
2029	0	0	0.0	0.0	0.0
2030	320	0	126.8	0.0	126.8
2031	960	0	380.5	0.0	380.5
2032	2,240	0	887.9	0.0	887.9
2033	3,840	0	1,522.1	0.0	1,522.1
2034	5,440	171	2,156.3	117.1	2,273.4
10-Yr Increase	5,440	171	2,156.3	117.1	2,273.4

Growth-Related Expenditures	$3,441,504	$186,893	$3,628,397

Tartesso – Cost Recovery

Buckeye will use development fees to reimburse developer costs associated with construction of Fire Station 705. Based on a projected population increase of 4,820 persons, future residential development during the next 10 years demands approximately 1,220 square feet of the existing fire station (4,820 additional persons X 0.2531 square feet per person). With projected nonresidential growth of 266 jobs, future nonresidential development during the next 10 years demands approximately 125 square feet of the existing fire station (266 additional jobs X 0.4715 square feet per job). Future development during the next 10 years demands approximately 1,345 square feet of the existing fire station and projected development fee revenue equals $550,890 (1,345.2 square feet X $410 per square foot). Full reimbursement of Fire Station 705 costs will occur beyond the 10-year study timeframe.

Figure F15: Projected Demand

Type of Infrastructure	Level of Service	Demand Unit	Cost per Sq Ft
Fire Stations	0.2531 Square Feet	per Person	$410
	0.4715 Square Feet	per Job	

Demand for Fire Stations					
Year	Population	Jobs	Square Feet		
			Residential	Nonresidential	Total
2024	9,918	130	2,510.3	61.1	2,571.4
2025	10,361	162	2,622.4	76.2	2,698.6
2026	10,803	194	2,734.4	91.3	2,825.8
2027	11,246	226	2,846.5	106.5	2,952.9
2028	11,689	258	2,958.5	121.6	3,080.1
2029	12,131	290	3,070.6	136.7	3,207.3
2030	12,574	342	3,182.6	161.3	3,343.9
2031	13,115	355	3,319.5	167.5	3,487.1
2032	13,656	369	3,456.4	173.8	3,630.2
2033	14,197	382	3,593.3	180.1	3,773.4
2034	14,738	395	3,730.2	186.4	3,916.6
10-Yr Increase	4,820	266	1,219.9	125.2	1,345.2
Growth-Related Expenditures			$499,597	$51,292	$550,890

Fire Facilities – Incremental Expansion

Buckeye plans to maintain the existing level of service for fire facilities (not including fire stations) over the next 10 years. Based on a projected population increase of 85,579 persons, future residential development demands approximately 2,995 square feet of fire facilities (85,579 additional persons X 0.0350 square feet per person). With projected employment growth of 23,930 jobs, future nonresidential development demands approximately 1,200 square feet of fire facilities (23,930 additional jobs X 0.0501 square feet per job). Future development demands approximately 4,195 square feet of fire facilities at a cost of $3,145,979 (4,194.6 square feet X $750 per square foot). Buckeye may use development fees to expand existing fire facilities or to construct additional fire facilities.

Figure F16: Projected Demand

Type of Infrastructure	Level of Service	Demand Unit	Cost per Sq Ft
Fire Facilities	0.0350 Square Feet	per Person	$750
	0.0501 Square Feet	per Job	

Demand for Fire Facilities					
Year	Population	Jobs	Square Feet		
			Residential	Nonresidential	Total
2024	119,044	18,246	4,166.4	914.6	5,081.0
2025	127,641	20,688	4,467.3	1,037.0	5,504.3
2026	136,098	23,649	4,763.3	1,185.4	5,948.7
2027	145,534	25,863	5,093.5	1,296.4	6,389.9
2028	154,458	27,792	5,405.9	1,393.1	6,798.9
2029	164,182	29,985	5,746.2	1,503.0	7,249.2
2030	172,763	32,139	6,046.5	1,611.0	7,657.4
2031	180,018	34,606	6,300.4	1,734.6	8,035.0
2032	186,973	37,072	6,543.9	1,858.2	8,402.1
2033	195,848	39,539	6,854.5	1,981.9	8,836.3
2034	204,623	42,176	7,161.6	2,114.1	9,275.6
10-Yr Increase	85,579	23,930	2,995.2	1,199.5	4,194.6

Growth-Related Expenditures	$2,246,369	$899,611	$3,145,979

Fire Apparatus – Incremental Expansion

Buckeye plans to maintain its existing level of service for fire apparatus over the next 10 years. Based on a projected population increase of 85,579 persons, future residential development demands 7.1 fire apparatus (85,579 additional persons X 0.00008 units per person). With projected nonresidential growth of 23,930 jobs, future nonresidential development demands 2.8 fire apparatus (23,930 additional jobs X 0.00012 units per job). Future development demands approximately 10 fire apparatus at a cost of $14,199,526 (9.9 units X $1,433,333 per unit). Buckeye may use development fees to expand its fleet of fire apparatus.

Figure F17: Projected Demand

Type of Infrastructure	Level of Service	Demand Unit	Cost per Unit
Fire Apparatus	0.00008 Units	per Person	$1,433,333
	0.00012 Units	per Job	

Demand for Fire Apparatus					
Year	Population	Jobs	Units		
			Residential	Nonresidential	Total
2024	119,044	18,246	9.8	2.2	12.0
2025	127,641	20,688	10.6	2.4	13.0
2026	136,098	23,649	11.2	2.8	14.0
2027	145,534	25,863	12.0	3.1	15.1
2028	154,458	27,792	12.8	3.3	16.1
2029	164,182	29,985	13.6	3.5	17.1
2030	172,763	32,139	14.3	3.8	18.1
2031	180,018	34,606	14.9	4.1	19.0
2032	186,973	37,072	15.5	4.4	19.8
2033	195,848	39,539	16.2	4.7	20.9
2034	204,623	42,176	16.9	5.0	21.9
10-Yr Increase	85,579	23,930	7.1	2.8	9.9

Growth-Related Expenditures	$10,139,091	$4,060,436	$14,199,526

Fire Equipment – Incremental Expansion

Buckeye plans to maintain its existing level of service for fire equipment over the next 10 years. Based on a projected population increase of 85,579 persons, future residential development demands 8.3 units of equipment (85,579 additional persons X 0.00010 units per person). With projected nonresidential growth of 23,930 jobs, future nonresidential development demands 3.3 units of equipment (23,930 additional jobs X 0.00014 units per job). Future development demands approximately 12 units of equipment at a cost of $2,958,344 (11.6 units X $255,962 per unit). Buckeye may use development fees to expand its fire equipment inventory.

Figure F18: Projected Demand

Type of Infrastructure	Level of Service	Demand Unit	Cost per Unit
Fire Equipment	0.00010 Units	per Person	$255,962
	0.00014 Units	per Job	

Demand for Fire Equipment					
Year	Population	Jobs	Units		
			Residential	Nonresidential	Total
2024	119,044	18,246	11.5	2.5	14.0
2025	127,641	20,688	12.3	2.9	15.2
2026	136,098	23,649	13.1	3.3	16.4
2027	145,534	25,863	14.0	3.6	17.6
2028	154,458	27,792	14.9	3.8	18.7
2029	164,182	29,956	15.8	4.1	20.0
2030	172,763	32,139	16.7	4.4	21.1
2031	180,018	34,606	17.4	4.8	22.1
2032	186,973	37,072	18.0	5.1	23.2
2033	195,848	39,539	18.9	5.5	24.3
2034	204,623	42,176	19.7	5.8	25.6
10-Yr Increase	85,579	23,930	8.3	3.3	11.6

Growth-Related Expenditures	$2,112,389	$845,955	$2,958,344

FIRE FACILITIES DEVELOPMENT FEES

Revenue Credit/Offset

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

Fire Facilities Development Fees

Main Service Area

Figure F19 includes infrastructure components and cost factors for fire facilities development fees in the main service area. The cost per service unit is $550.47 per person and $707.15 per job.

Fire facilities development fees for residential development are assessed according to the number of persons per housing unit. The fee of $1,762 for a low/medium density unit is calculated using a cost per service unit of $550.47 per person multiplied by a demand unit of 3.20 persons per housing unit.

Nonresidential development fees are calculated using jobs as the service unit. The fee of $239 per 1,000 square feet of industrial development is calculated using a cost per service unit of $707.15 per job multiplied by a demand unit of 0.34 jobs per 1,000 square feet.

Figure F19: Fire Facilities Development Fees

Fee Component	Cost per Person	Cost per Job
Fire Stations	$380.56	$464.11
Fire Facilities	$26.25	$37.59
Fire Apparatus	$118.48	$169.68
Fire Equipment	$24.68	$35.35
Development Fee Report	$0.50	$0.42
Total	$550.47	$707.15

Residential Fees per Unit				
Development Type	Persons per Housing Unit[1]	Proposed Fees	Current Fees	Difference
Low/Med Density (<8 DU/Acre)	3.20	$1,762	$1,060	$702
High Density (≥8 DU/Acre)	2.50	$1,376	$828	$548
Age Restricted (≤8 DU/Acre)	2.00	$1,101	$662	$439

Nonresidential Fees per 1,000 Square Feet				
Development Type	Jobs per 1,000 Sq Ft[1]	Proposed Fees	Current Fees	Difference
Industrial	0.34	$239	$170	$69
Commercial	2.12	$1,502	$1,168	$334
Office & Other Services	3.26	$2,302	$1,483	$819
Institutional	3.03	$2,144	$464	$1,680

1. See Land Use Assumptions

Festival Ranch Service Area

Figure F20 includes infrastructure components and cost factors for fire facilities development fees in the Festival Ranch service area. The cost per service unit is $169.91 per person and $243.04 per job.

Fire facilities development fees for residential development are assessed according to the number of persons per housing unit. The fee of $544 for a low/medium density unit is calculated using a cost per service unit of $169.91 per person multiplied by a demand unit of 3.20 persons per housing unit.

Nonresidential development fees are calculated using jobs as the service unit. The fee of $82 per 1,000 square feet of industrial development is calculated using a cost per service unit of $243.04 per job multiplied by a demand unit of 0.34 jobs per 1,000 square feet.

Figure F20: Fire Facilities Development Fees

Fee Component	Cost per Person	Cost per Job
Fire Stations	$210.87	$384.50
Fire Stations Credit	($210.87)	($384.50)
Fire Facilities	$26.25	$37.59
Fire Apparatus	$118.48	$169.68
Fire Equipment	$24.68	$35.35
Development Fee Report	$0.50	$0.42
Total	$169.91	$243.04

Residential Fees per Unit				
Development Type	Persons per Housing Unit[1]	Proposed Fees	Current Fees	Difference
Low/Med Density (<8 DU/Acre)	3.20	$544	$498	$46
High Density (≥8 DU/Acre)	2.50	$425	$389	$36
Age Restricted (≤8 DU/Acre)	2.00	$340	$311	$29

Nonresidential Fees per 1,000 Square Feet				
Development Type	Jobs per 1,000 Sq Ft[1]	Proposed Fees	Current Fees	Difference
Industrial	0.34	$82	$83	($1)
Commercial	2.12	$516	$568	($52)
Office & Other Services	3.26	$791	$721	$70
Institutional	3.03	$737	$226	$511

1. See Land Use Assumptions

North Star Ranch Service Area

Figure F21 includes infrastructure components and cost factors for fire facilities development fees in the North Star Ranch service area. The cost per service unit is $802.54 per person and $1,336.21 per job.

Fire facilities development fees for residential development are assessed according to the number of persons per housing unit. The fee of $2,568 for a low/medium density unit is calculated using a cost per service unit of $802.54 per person multiplied by a demand unit of 3.20 persons per housing unit.

Nonresidential development fees are calculated using jobs as the service unit. The fee of $452 per 1,000 square feet of industrial development is calculated using a cost per service unit of $1,336.21 per job multiplied by a demand unit of 0.34 jobs per 1,000 square feet.

Figure F21: Fire Facilities Development Fees

Fee Component	Cost per Person	Cost per Job
Fire Stations	$632.63	$1,093.17
Fire Facilities	$26.25	$37.59
Fire Apparatus	$118.48	$169.68
Fire Equipment	$24.68	$35.35
Development Fee Report	$0.50	$0.42
Total	$802.54	$1,336.21

Residential Fees per Unit				
Development Type	Persons per Housing Unit[1]	Proposed Fees	Current Fees	Difference
Low/Med Density (<8 DU/Acre)	3.20	$2,568	$1,060	$1,508
High Density (≥8 DU/Acre)	2.50	$2,006	$828	$1,178
Age Restricted (≤8 DU/Acre)	2.00	$1,605	$662	$943

Nonresidential Fees per 1,000 Square Feet				
Development Type	Jobs per 1,000 Sq Ft[1]	Proposed Fees	Current Fees	Difference
Industrial	0.34	$452	$170	$282
Commercial	2.12	$2,839	$1,168	$1,671
Office & Other Services	3.26	$4,350	$1,483	$2,867
Institutional	3.03	$4,049	$464	$3,585

1. See Land Use Assumptions

Tartesso Service Area

Figure F22 includes infrastructure components and cost factors for fire facilities development fees in the Tartesso service area. The cost per service unit is $273.57 per person and $436.15 per job.

Fire facilities development fees for residential development are assessed according to the number of persons per housing unit. The fee of $875 for a low/medium density unit is calculated using a cost per service unit of $273.57 per person multiplied by a demand unit of 3.20 persons per housing unit.

Nonresidential development fees are calculated using jobs as the service unit. The fee of $148 per 1,000 square feet of industrial development is calculated using a cost per service unit of $436.15 per job multiplied by a demand unit of 0.34 jobs per 1,000 square feet.

Figure F22: Fire Facilities Development Fees

Fee Component	Cost per Person	Cost per Job
Fire Stations	$103.66	$193.11
Fire Facilities	$26.25	$37.59
Fire Apparatus	$118.48	$169.68
Fire Equipment	$24.68	$35.35
Development Fee Report	$0.50	$0.42
Total	$273.57	$436.15

Residential Fees per Unit				
Development Type	Persons per Housing Unit[1]	Proposed Fees	Current Fees	Difference
Low/Med Density (<8 DU/Acre)	3.20	$875	$866	$9
High Density (≥8 DU/Acre)	2.50	$684	$676	$8
Age Restricted (≤8 DU/Acre)	2.00	$547	$541	$6

Nonresidential Fees per 1,000 Square Feet				
Development Type	Jobs per 1,000 Sq Ft[1]	Proposed Fees	Current Fees	Difference
Industrial	0.34	$148	$135	$13
Commercial	2.12	$927	$927	$0
Office & Other Services	3.26	$1,420	$1,176	$244
Institutional	3.03	$1,323	$368	$955

1. See Land Use Assumptions

Teravalis Service Area

Figure F23 includes infrastructure components and cost factors for fire facilities development fees in the Teravalis service area. The cost per service unit is $169.91 per person and $243.04 per job.

Fire facilities development fees for residential development are assessed according to the number of persons per housing unit. The fee of $544 for a low/medium density unit is calculated using a cost per service unit of $169.91 per person multiplied by a demand unit of 3.20 persons per housing unit.

Nonresidential development fees are calculated using jobs as the service unit. The fee of $82 per 1,000 square feet of industrial development is calculated using a cost per service unit of $243.04 per job multiplied by a demand unit of 0.34 jobs per 1,000 square feet.

Figure F23: Fire Facilities Development Fees

Fee Component	Cost per Person	Cost per Job
Fire Stations	$0.00	$0.00
Fire Facilities	$26.25	$37.59
Fire Apparatus	$118.48	$169.68
Fire Equipment	$24.68	$35.35
Development Fee Report	$0.50	$0.42
Total	$169.91	$243.04

Residential Fees per Unit				
Development Type	Persons per Housing Unit[1]	Proposed Fees	Current Fees	Difference
Low/Med Density (<8 DU/Acre)	3.20	$544	$0	$544
High Density (≥8 DU/Acre)	2.50	$425	$0	$425
Age Restricted (≤8 DU/Acre)	2.00	$340	$0	$340

Nonresidential Fees per 1,000 Square Feet				
Development Type	Jobs per 1,000 Sq Ft[1]	Proposed Fees	Current Fees	Difference
Industrial	0.34	$82	$0	$82
Commercial	2.12	$516	$0	$516
Office & Other Services	3.26	$791	$0	$791
Institutional	3.03	$737	$0	$737

1. See Land Use Assumptions

Fire Facilities Development Fee Revenue

Appendix A contains the forecast of revenues required by Arizona's enabling legislation (ARS § 9-463.05(E)(7)). In accordance with state law, this report includes an IIP for fire facilities needed to accommodate future development.

Main Service Area

Projected fee revenue shown below is based on the development projections in the *Land Use Assumptions* document and the updated fire facilities development fees. If development occurs at a more rapid rate than projected, the demand for infrastructure will increase and development fee revenue will increase at a corresponding rate. If development occurs at a slower rate than projected, the demand for infrastructure will also decrease, along with development fee revenue. Projected development fee revenue in the main service area equals $41,036,030 and projected expenditures equal $45,463,774.

Figure F24: Fire Facilities Development Fee Revenue

Fee Component	Growth Share	Existing Share	Total
Fire Stations	$30,914,720	$0	$30,914,720
Fire Facilities	$2,250,957	$0	$2,250,957
Fire Apparatus	$10,159,803	$0	$10,159,803
Fire Equipment	$2,116,704	$0	$2,116,704
Development Fee Report	$21,590	$0	$21,590
Total	$45,463,774	$0	$45,463,774

		Low/Med Res $1,762 per unit	High Res $1,376 per unit	Industrial $239 per 1,000 sq ft	Commercial $1,502 per 1,000 sq ft	Office & Other $2,302 per 1,000 sq ft	Institutional $2,144 per 1,000 sq ft
Year		Hsg Unit	Hsg Unit	KSF	KSF	KSF	KSF
Base	2024	22,026	1,213	16,277	2,539	1,005	806
Year 1	2025	23,699	1,828	18,119	3,045	1,121	868
Year 2	2026	24,996	2,443	19,962	3,814	1,225	930
Year 3	2027	26,261	3,261	21,804	4,230	1,330	991
Year 4	2028	27,250	4,080	22,804	4,647	1,434	1,053
Year 5	2029	28,481	4,898	23,804	5,064	1,538	1,115
Year 6	2030	29,275	5,598	24,804	5,481	1,643	1,177
Year 7	2031	29,668	6,298	25,554	5,883	1,850	1,279
Year 8	2032	29,884	6,998	26,304	6,284	2,056	1,382
Year 9	2033	30,676	7,698	27,054	6,686	2,263	1,484
Year 10	2034	31,405	8,398	27,804	7,087	2,470	1,587
10-Year Increase		9,379	7,185	11,527	4,549	1,465	781
Projected Revenue		$16,516,468	$9,883,442	$2,759,550	$6,832,278	$3,370,643	$1,673,648

Projected Fee Revenue	$41,036,030
Verrado Deficit	$4,427,744
Total Expenditures	$45,463,774

Festival Ranch Service Area

Projected fee revenue shown below is based on the development projections in the *Land Use Assumptions* document and the updated fire facilities development fees. If development occurs at a more rapid rate than projected, the demand for infrastructure will increase and development fee revenue will increase at a corresponding rate. If development occurs at a slower rate than projected, the demand for infrastructure will also decrease, along with development fee revenue. Projected development fee revenue in the Festival Ranch service area equals $1,128,702 and projected expenditures equal $1,128,986.

Figure F25: Fire Facilities Development Fee Revenue

Fee Component	Growth Share	Existing Share	Total
Fire Stations	$1,472,240	$0	$1,472,240
Fire Stations Credit	($1,472,240)	$0	($1,472,240)
Fire Facilities	$174,683	$0	$174,683
Fire Apparatus	$788,442	$0	$788,442
Fire Equipment	$164,265	$0	$164,265
Development Fee Report	$1,596	$0	$1,596
Total	$1,128,986	$0	$1,128,986

		Low/Med Res $544 per unit	High Res $425 per unit	Age Restricted $340 per unit	Industrial $82 per 1,000 sq ft	Commercial $516 per 1,000 sq ft	Office & Other $791 per 1,000 sq ft	Institutional $737 per 1,000 sq ft
Year		Hsg Unit		Hsg Unit	KSF	KSF	KSF	KSF
Base	2024	0	0	5,950	0	8	16	51
Year 1	2025	0	0	6,234	0	30	21	58
Year 2	2026	0	0	6,518	0	52	26	65
Year 3	2027	0	0	6,802	0	73	31	72
Year 4	2028	0	0	7,087	0	95	36	79
Year 5	2029	0	0	7,371	0	117	41	86
Year 6	2030	0	0	7,655	0	138	46	93
Year 7	2031	0	0	7,911	0	160	51	100
Year 8	2032	0	0	8,167	0	182	56	107
Year 9	2033	0	0	8,423	0	203	61	114
Year 10	2034	0	0	8,679	0	225	66	121
10-Year Increase		0	0	2,729	0	217	50	70
Projected Revenue		$0	$0	$926,129	$0	$111,841	$39,524	$51,209

Projected Fee Revenue	$1,128,702
Total Expenditures	$1,128,986

North Star Ranch Service Area

Projected fee revenue shown below is based on the development projections in the *Land Use Assumptions* document and the updated fire facilities development fees. If development occurs at a more rapid rate than projected, the demand for infrastructure will increase and development fee revenue will increase at a corresponding rate. If development occurs at a slower rate than projected, the demand for infrastructure will also decrease, along with development fee revenue. Projected development fee revenue in the North Star Ranch service area equals $4,756,412 and projected expenditures equal $20,913,068. Full reimbursement of Fire Station 710 costs will occur beyond the 10-year study timeframe.

Figure F26: Fire Facilities Development Fee Revenue

Fee Component	Growth Share	Existing Share	Total
Fire Stations	$3,628,397	$0	$19,950,000
Fire Facilities	$149,223	$0	$149,223
Fire Apparatus	$673,523	$0	$673,523
Fire Equipment	$140,322	$0	$140,322
Development Fee Report	$0	$0	$0
Total	$4,591,465	$0	$20,913,068

		Low/Med Res $2,568 per unit	High Res $2,006 per unit	Industrial $452 per 1,000 sq ft	Commercial $2,839 per 1,000 sq ft	Office & Other $4,350 per 1,000 sq ft	Institutional $4,049 per 1,000 sq ft
Year		Hsg Unit	Hsg Unit	KSF	KSF	KSF	KSF
Base	2024	0	0	0	0	0	0
Year 1	2025	0	0	0	0	0	0
Year 2	2026	0	0	0	0	0	0
Year 3	2027	0	0	0	0	0	0
Year 4	2028	0	0	0	0	0	0
Year 5	2029	0	0	0	0	0	0
Year 6	2030	100	0	0	0	0	0
Year 7	2031	300	0	0	0	0	0
Year 8	2032	700	0	0	0	0	0
Year 9	2033	1,200	0	0	0	0	0
Year 10	2034	1,700	0	0	55	0	59
10-Year Increase		1,700	0	0	55	0	59
Projected Revenue		$4,363,098	$0	$0	$155,301	$0	$238,014

Projected Fee Revenue	$4,756,412
Total Expenditures	$20,913,068

Tartesso Service Area

Projected fee revenue shown below is based on the development projections in the *Land Use Assumptions* document and the updated fire facilities development fees. If development occurs at a more rapid rate than projected, the demand for infrastructure will increase and development fee revenue will increase at a corresponding rate. If development occurs at a slower rate than projected, the demand for infrastructure will also decrease, along with development fee revenue. Projected development fee revenue in the Tartesso service area equals $1,432,888 and projected expenditures equal $1,433,028.

Figure F27: Fire Facilities Development Fee Revenue

Fee Component	Growth Share	Existing Share	Total
Fire Stations	$550,890	$0	$550,890
Fire Facilities	$136,501	$0	$136,501
Fire Apparatus	$616,103	$0	$616,103
Fire Equipment	$128,360	$0	$128,360
Development Fee Report	$1,174	$0	$1,174
Total	$1,433,028	$0	$1,433,028

		Low/Med Res $875 per unit	High Res $684 per unit	Industrial $148 per 1,000 sq ft	Commercial $927 per 1,000 sq ft	Office & Other $1,420 per 1,000 sq ft	Institutional $1,323 per 1,000 sq ft
Year		Hsg Unit	Hsg Unit	KSF	KSF	KSF	KSF
Base	2024	3,788	0	0	0	0	139
Year 1	2025	3,927	0	0	0	0	150
Year 2	2026	4,065	0	0	0	0	160
Year 3	2027	4,203	0	0	0	0	171
Year 4	2028	4,342	0	0	0	0	182
Year 5	2029	4,480	0	0	0	0	192
Year 6	2030	4,618	0	0	9	0	203
Year 7	2031	4,787	0	0	12	0	205
Year 8	2032	4,957	0	0	14	0	208
Year 9	2033	5,126	0	0	17	0	211
Year 10	2034	5,295	0	0	19	0	213
10-Year Increase		1,506	0	0	19	0	74
Projected Revenue		$1,317,086	$0	$0	$17,952	$0	$97,850

Projected Fee Revenue	$1,432,888
Total Expenditures	$1,433,028

Teravalis Service Area

Projected fee revenue shown below is based on the development projections in the *Land Use Assumptions* document and the updated fire facilities development fees. If development occurs at a more rapid rate than projected, the demand for infrastructure will increase and development fee revenue will increase at a corresponding rate. If development occurs at a slower rate than projected, the demand for infrastructure will also decrease, along with development fee revenue. Projected development fee revenue in the Teravalis service area equals $2,808,091 and projected expenditures equal $2,808,091. This does not include reimbursement of Fire Station 709 costs since the developer will fund construction of the station without development fees.

Figure F28: Fire Facilities Development Fee Revenue

Fee Component	Growth Share	Existing Share	Total
Fire Stations	$0	$0	$0
Fire Facilities	$434,615	$0	$434,615
Fire Apparatus	$1,961,656	$0	$1,961,656
Fire Equipment	$408,693	$0	$408,693
Development Fee Report	$3,126	$0	$3,126
Total	$2,808,091	$0	$2,808,091

	Low/Med Res $544 per unit	High Res $425 per unit	Industrial $82 per 1,000 sq ft	Commercial $516 per 1,000 sq ft	Office & Other $791 per 1,000 sq ft	Institutional $737 per 1,000 sq ft
Year	Hsg Unit	Hsg Unit	KSF	KSF	KSF	KSF
Base 2024	0	0	0	0	0	0
Year 1 2025	0	0	0	0	0	0
Year 2 2026	300	0	0	0	0	0
Year 3 2027	750	0	0	0	0	0
Year 4 2028	1,200	155	0	0	0	0
Year 5 2029	1,650	310	330	58	0	0
Year 6 2030	2,180	465	660	116	0	0
Year 7 2031	2,710	619	990	174	0	0
Year 8 2032	3,160	619	1,320	232	0	0
Year 9 2033	3,610	619	1,650	290	0	0
Year 10 2034	4,060	619	1,980	348	0	0
10-Year Increase	4,060	619	1,980	348	0	0
Projected Revenue	$2,203,614	$262,549	$162,697	$179,231	$0	$0

Projected Fee Revenue	$2,808,091
Total Expenditures	$2,808,091

LIBRARY FACILITIES IIP

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

> *"library facilities of up to ten thousand square feet that provide a direct benefit to development, not including equipment, vehicles or appurtenances."*

The Library Facilities IIP includes components for library facilities and the cost of preparing the Library Facilities IIP and related Development Fee Report. The incremental expansion methodology is used for library facilities, and the plan-based methodology is used for the Development Fee Report.

PROPORTIONATE SHARE

ARS § 9-463.05 (B)(3) states that the development fee shall not exceed a proportionate share of the cost of necessary public services needed to accommodate new development. The Library Facilities IIP and development fees allocate the cost of necessary public services between residential and nonresidential development based on functional population. The Arizona Office of Economic Opportunity estimates Buckeye's 2020 population equal to 91,502 persons. Based on 2020 estimates from the U.S. Census Bureau's OnTheMap web application, 8,282 inflow commuters traveled to Buckeye for work in 2020. The proportionate share is based on cumulative impact hours per year with a resident potentially impacting library facilities 8,760 hours per year and an inflow commuter potentially impacting library facilities 1,600 hours per year. For library facilities, residential development generates 98 percent of demand and nonresidential development generates the remaining two percent of demand.

Figure L1: Proportionate Share

Development Type	2020 Service Units	Impact Hours per Year	Total Impact Hours per Year	Proportionate Share
Residential	91,502 residents	8,760 hours	801,557,520	98%
Nonresidential	8,282 inflow commuters	1,600 hours	13,251,200	2%
Total			814,808,720	100%

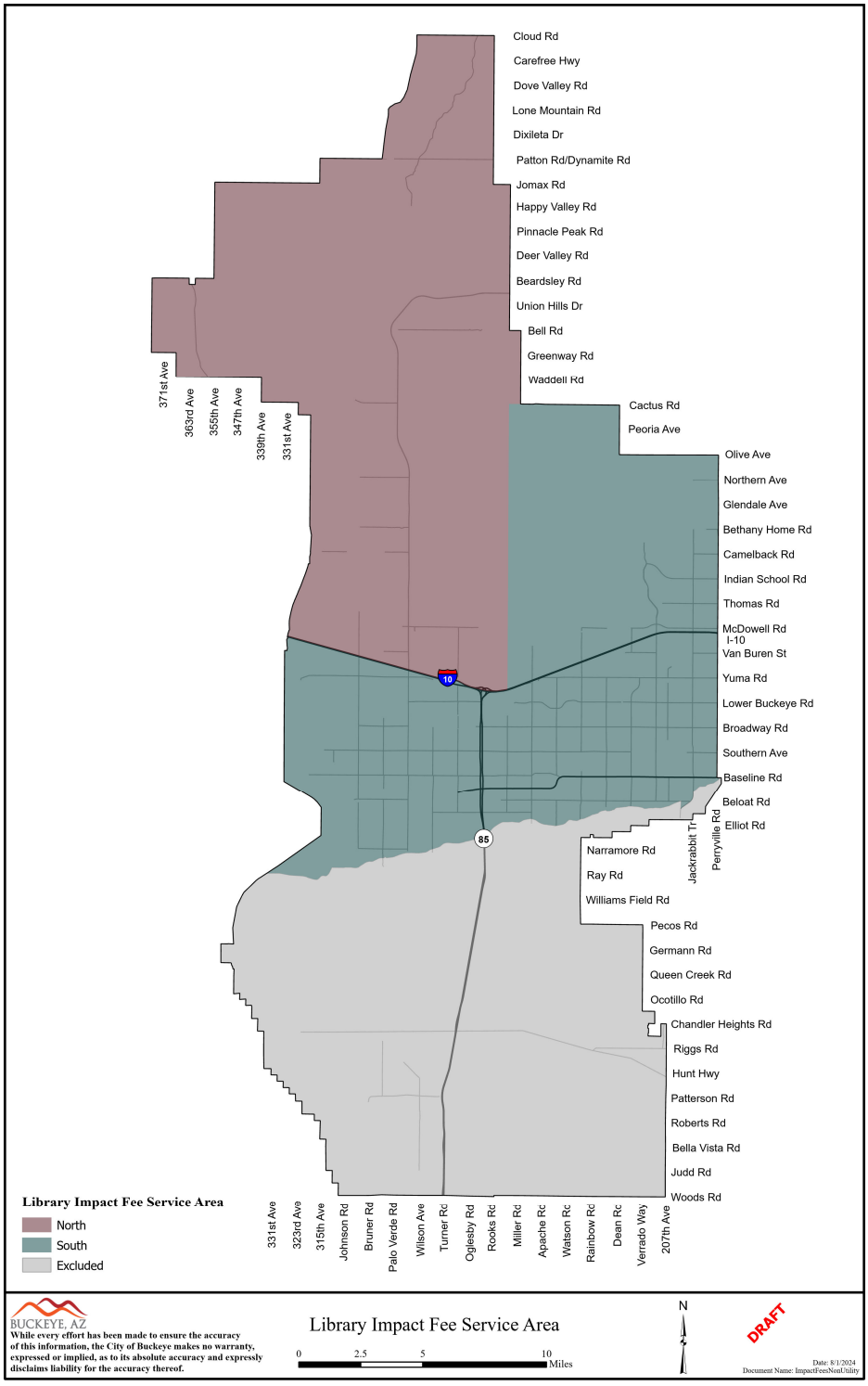
Residential Impact: 8,760 hours per year (24 hours per day X 365 days per year)

Nonresidential Impact: 1,600 hours per year (8 hours per day X 4 days per week X 50 weeks per year)

SERVICE AREA

Buckeye provides library services to all development within the city limits. Shown below, there are two service areas for the Library Facilities IIP.

Figure L2: Library Facilities Service Area



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 L3 displays the demand indicators for residential and nonresidential land uses. For residential development, the table displays the number of persons per housing unit. For nonresidential development, the table displays the number of employees per thousand square feet of floor area.

Figure L3: Ratio of Service Unit to Development Unit

Residential Development per Housing Unit	
Development Type	Persons per Housing Unit[1]
Low/Med Density (<8 DU/Acre)	3.20
High Density (≥8 DU/Acre)	2.50
Age Restricted (≤8 DU/Acre)	2.00

Nonresidential Development	
Development Type	Jobs per 1,000 Sq Ft[1]
Industrial	0.34
Commercial	2.12
Office & Other Services	3.26
Institutional	3.03

1. See Land Use Assumptions

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

ARS § 9-463.05(E)(1) requires:

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

ARS § 9-463.05(E)(2) requires:

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

Library Facilities – Incremental Expansion

The Enabling Legislation limits library facilities to "ten thousand square feet that provide a direct benefit to development." The City of Buckeye has two libraries with a total floor area of 22,602 square feet, but the analysis includes 16,370 eligible square feet to comply with the Enabling Legislation. To allocate the proportionate share of demand for library facilities to residential and nonresidential development, this analysis uses the proportionate share shown in Figure L1. Buckeye's eligible level of service for residential development is 0.1348 eligible square feet per person (16,370 eligible square feet X 98 percent residential share / 119,044 persons). The nonresidential level of service is 0.0179 eligible square feet per job (16,370 eligible square feet X two percent nonresidential share / 18,246 jobs).

Buckeye's Community Services Department provided a construction cost of $1,400 per square foot, and the analysis uses this cost as a proxy for future library facilities needed to serve future development. For library facilities, the cost is $188.67 per person (0.1348 eligible square feet per person X $1,400 per square foot) and $25.15 per job (0.0179 eligible square feet per job X $1,400 per square foot).

Figure L4: Existing Level of Service

Description	Total Square Feet	Eligible Square Feet
Coyote Branch	16,232	10,000
Downtown Library	6,370	6,370
Total	22,602	16,370

Cost Factors	
Cost per Square Foot	$1,400

Level-of-Service (LOS) Standards	
Eligible Square Feet	16,370
Residential	
Residential Share	98%
2024 Population	119,044
Eligible Square Feet per Person	0.1348
Cost per Person	$188.67
Nonresidential	
Nonresidential Share	2%
2024 Jobs	18,246
Eligible Square Feet per Job	0.0179
Cost per Job	$25.12

Source: Buckeye Community Services Department

Development Fee Report – Plan-Based

The cost to prepare the Library Facilities IIP and development fees equals $9,000. Buckeye 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* document, the cost is $0.25 per person and $0.02 per job.

Figure L5: IIP and Development Fee Report

Necessary Public Service	Cost	Proportionate Share		Service Unit	5-Year Change	Cost per Service Unit
Fire	$27,500	Residential	82%	Population	45,138	$0.50
		Nonresidential	18%	Jobs	11,709	$0.42
Library	$9,000	Residential	98%	Population	35,466	$0.25
		Nonresidential	2%	Jobs	11,709	$0.02
Parks and Recreational	$18,400	Residential	98%	Population	35,466	$0.51
		Nonresidential	2%	Jobs	11,709	$0.03
Police	$27,500	Residential	83%	Population	45,138	$0.51
		Nonresidential	17%	Vehicle Trips	47,030	$0.10
Street	$27,500	All Development	100%	VMT	631,502	$0.04
Water	$39,840	All Development	100%	Max Day Gallons	10,846,001	$0.01
Wastewater	$33,640	All Development	100%	Avg Day Gallons	2,285,458	$0.01
Total	$183,380					

Projected Demand for Services and Costs

ARS § 9-463.05(E)(5) requires:

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

ARS § 9-463.05(E)(6) requires:

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

As shown in the *Land Use Assumptions* document, projected development during the next 10 years includes population growth of 85,579 persons and employment growth of 23,930 jobs. Projected development in the north service area includes population growth of 44,829 persons and employment growth of 6,529 jobs during the next 10 years. To maintain the existing eligible level of service, Buckeye needs to construct approximately 6,158 square feet of library facilities during the next 10 years. In the south service area, projected development includes population growth of 40,750 persons and employment growth of 17,401 jobs during the next 10 years. To maintain the existing eligible level of service, Buckeye needs to construct approximately 5,804 square feet of library facilities during the next 10 years. The following page includes a more detailed projection of demand for services and costs for the Library Facilities IIP.

North Service Area

Library Facilities – Incremental Expansion

Buckeye plans to maintain its eligible level of service for library facilities in the north service area over the next 10 years. Based on a projected population increase of 44,829 persons, future residential development demands approximately 6,041 square feet of library facilities (44,829 additional persons X 0.1348 eligible square feet per person). With projected employment growth of 6,529 jobs, future nonresidential development demands approximately 117 square feet of library facilities (6,529 additional jobs X 0.0179 eligible square feet per job). Future development demands approximately 6,158 square feet of library facilities at a cost of $8,621,628 (6,158.3 square feet X $1,400 per square foot). Buckeye may use development fees to construct additional library facilities.

Figure L6: Projected Demand

Type of Infrastructure	Level of Service	Demand Unit	Cost per Unit
Library Facilities	0.1348 Square Feet	per Person	$1,400
	0.0179 Square Feet	per Job	

Demand for Library Facilities					
Year	Population (North)	Jobs (North)	Eligible Square Feet		
			Residential	Nonresidential	Total
2024	22,491	1,994	3,030.9	35.8	3,066.7
2025	24,101	2,519	3,247.8	45.2	3,293.0
2026	26,670	3,044	3,594.1	54.6	3,648.7
2027	29,720	3,569	4,005.1	64.0	4,069.1
2028	33,157	4,095	4,468.3	73.5	4,541.8
2029	36,594	4,855	4,931.5	87.1	5,018.6
2030	40,608	5,635	5,472.3	101.1	5,573.4
2031	47,126	6,314	6,350.8	113.3	6,464.1
2032	53,644	6,993	7,229.1	125.5	7,354.6
2033	60,482	7,672	8,150.6	137.7	8,288.3
2034	67,319	8,523	9,072.0	152.9	9,225.0
10-Yr Increase	44,829	6,529	6,041.2	117.2	6,158.3

Growth-Related Expenditures	$8,457,617	$164,011	$8,621,628

South Service Area

Library Facilities – Incremental Expansion

Buckeye plans to maintain its eligible level of service for library facilities in the south service area over the next 10 years. Based on a projected population increase of 40,750 persons, future residential development demands approximately 5,492 square feet of library facilities (40,750 additional persons X 0.1348 eligible square feet per person). With projected employment growth of 17,401 jobs, future nonresidential development demands approximately 312 square feet of library facilities (17,401 additional jobs X 0.0179 eligible square feet per job). Future development demands approximately 5,804 square feet of library facilities at a cost of $8,125,313 (5,803.8 square feet X $1,400 per square foot). Buckeye may use development fees to construct additional library facilities.

Figure L7: Projected Demand

Type of Infrastructure	Level of Service	Demand Unit	Cost per Unit
Library Facilities	0.1348 Square Feet	per Person	$1,400
	0.0179 Square Feet	per Job	

Demand for Library Facilities					
Year	Population (South)	Jobs (South)	Eligible Square Feet		
			Residential	Nonresidential	Total
2024	96,554	16,252	13,011.7	291.6	13,303.3
2025	100,521	18,169	13,546.4	326.0	13,872.4
2026	104,489	20,605	14,081.1	369.7	14,450.8
2027	108,965	22,294	14,684.2	400.0	15,084.3
2028	113,441	23,698	15,287.4	425.2	15,712.6
2029	117,917	25,101	15,890.6	450.4	16,341.0
2030	122,097	26,504	16,453.9	475.6	16,929.5
2031	125,898	28,292	16,966.3	507.7	17,473.9
2032	129,700	30,079	17,478.6	539.7	18,018.3
2033	133,502	31,866	17,990.9	571.8	18,562.7
2034	137,304	33,654	18,503.3	603.9	19,107.1
10-Yr Increase	40,750	17,401	5,491.6	312.2	5,803.8

Growth-Related Expenditures	$7,688,180	$437,133	$8,125,313

LIBRARY FACILITIES DEVELOPMENT FEES

Revenue Credit/Offset

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

Library Facilities Development Fees

Figure L8 includes infrastructure components and cost factors for library facilities development fees. The cost per service unit is $188.92 per person and $25.14 per job.

Library facilities fees for residential development are assessed according to the number of persons per housing unit. The fee of $605 for a low/medium density unit is calculated using a cost per service unit of $188.92 per person multiplied by a demand unit of 3.20 persons per housing unit.

Nonresidential development fees are calculated using jobs as the service unit. The fee of $9 per 1,000 square feet of industrial development is derived from a cost per service unit of $25.14 per job multiplied by a demand unit of 0.34 jobs per 1,000 square feet.

Figure L8: Library Facilities Development Fees

Fee Component	Cost per Person	Cost per Job
Library Facilities	$188.67	$25.12
Development Fee Report	$0.25	$0.02
Total	$188.92	$25.14

Residential Fees per Unit				
Development Type	Persons per Housing Unit[1]	Proposed Fees	Current Fees	Difference
Low/Med Density (<8 DU/Acre)	3.20	$605	$289	$316
High Density (≥8 DU/Acre)	2.50	$472	$225	$247
Age Restricted (≤8 DU/Acre)	2.00	$378	$180	$198

Nonresidential Fees per 1,000 Square Feet				
Development Type	Jobs per 1,000 Sq Ft[1]	Proposed Fees	Current Fees	Difference
Industrial	0.34	$9	$14	($5)
Commercial	2.12	$53	$96	($43)
Office & Other Services	3.26	$82	$121	($39)
Institutional	3.03	$76	$38	$38

1. See Land Use Assumptions

Library Facilities Development Fee Revenue

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

North Service Area

In accordance with state law, this report includes an IIP for library facilities needed to accommodate new development in the north service area. Projected fee revenue shown in Figure L9 is based on the development projections in the *Land Use Assumptions* document and the updated library facilities development fees shown in Figure L8. If development occurs at a more rapid rate than projected, the demand for infrastructure will increase and development fee revenue will increase at a corresponding rate. If development occurs at a slower rate than projected, the demand for infrastructure will also decrease, along with development fee revenue. Projected development fee revenue in the north service area equals $8,625,193 and projected expenditures equal $8,625,211.

Figure L9: Library Facilities Development Fee Revenue

Fee Component	Growth Share	Existing Share	Total
Library Facilities	$8,621,628	$0	$8,621,628
Development Fee Report	$3,583	$0	$3,583
Total	$8,625,211	$0	$8,625,211

Year		Low/Med Res $605 per unit Hsg Unit	High Res $472 per unit Hsg Unit	Age Restricted $378 per unit Hsg Unit	Industrial $9 per 1,000 sq ft KSF	Commercial $53 per 1,000 sq ft KSF	Office & Other $82 per 1,000 sq ft KSF	Institutional $76 per 1,000 sq ft KSF
Base	2024	4,680	0	5,950	0	502	164	226
Year 1	2025	5,005	0	6,234	0	647	207	252
Year 2	2026	5,630	0	6,518	0	792	249	279
Year 3	2027	6,406	0	6,802	0	937	291	305
Year 4	2028	7,181	155	7,087	0	1,082	333	331
Year 5	2029	7,957	310	7,371	330	1,285	375	358
Year 6	2030	8,912	465	7,655	660	1,498	417	384
Year 7	2031	10,669	619	7,911	1,016	1,658	458	412
Year 8	2032	12,546	619	8,167	1,373	1,818	500	439
Year 9	2033	14,522	619	8,423	1,730	1,978	541	467
Year 10	2034	16,499	619	8,679	2,086	2,193	582	553
10-Year Increase		11,820	619	2,729	2,086	1,692	418	327
Projected Revenue		$7,135,412	$292,161	$1,030,471	$17,746	$90,308	$34,180	$24,915

Projected Fee Revenue	$8,625,193
Total Expenditures	$8,625,211

South Service Area

In accordance with state law, this report includes an IIP for library facilities needed to accommodate new development in the south service area. Projected fee revenue shown in Figure L10 is based on the development projections in the *Land Use Assumptions* document and the updated library facilities development fees shown in Figure L8. If development occurs at a more rapid rate than projected, the demand for infrastructure will increase and development fee revenue will increase at a corresponding rate. If development occurs at a slower rate than projected, the demand for infrastructure will also decrease, along with development fee revenue. Projected development fee revenue in the south service area equals $6,730,518 and projected expenditures equal $8,130,831.

Figure L10: Library Facilities Development Fee Revenue

Fee Component	Growth Share	Existing Share	Total
Library Facilities	$8,125,313	$0	$8,125,313
Development Fee Report	$5,518	$0	$5,518
Total	$8,130,831	$0	$8,130,831

	Low/Med Res $605 per unit	High Res $472 per unit	Age Restricted $378 per unit	Industrial $9 per 1,000 sq ft	Commercial $53 per 1,000 sq ft	Office & Other $82 per 1,000 sq ft	Institutional $76 per 1,000 sq ft
Year	Hsg Unit	Hsg Unit	Hsg Unit	KSF	KSF	KSF	KSF
Base 2024	21,134	1,213	0	16,277	2,045	856	771
Year 1 2025	21,617	1,828	0	18,119	2,428	935	824
Year 2 2026	22,100	2,443	0	19,962	3,073	1,003	877
Year 3 2027	22,582	3,261	0	21,804	3,367	1,070	930
Year 4 2028	23,065	4,080	0	22,804	3,660	1,137	983
Year 5 2029	23,547	4,898	0	23,804	3,953	1,205	1,036
Year 6 2030	24,030	5,598	0	24,804	4,247	1,272	1,089
Year 7 2031	24,513	6,298	0	25,527	4,570	1,442	1,173
Year 8 2032	24,995	6,998	0	26,251	4,894	1,613	1,258
Year 9 2033	25,478	7,698	0	26,974	5,217	1,783	1,342
Year 10 2034	25,960	8,398	0	27,698	5,541	1,954	1,427
10-Year Increase	4,826	7,185	0	11,421	3,496	1,097	656
Projected Revenue	$2,915,635	$3,391,288	$0	$97,195	$186,649	$89,754	$49,997

Projected Fee Revenue	$6,730,518
Verrado Deficit	$1,400,313
Total Expenditures	$8,130,831

PARKS AND RECREATIONAL FACILITIES IIP

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

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

The Parks and Recreational Facilities IIP includes components for regional park amenities, community centers, community park amenities (north only), community park land and amenities (south only), and the cost of preparing the Parks and Recreational Facilities IIP and related Development Fee Report. The incremental expansion methodology is used for regional park amenities, community centers, and community parks (south only). The plan-based methodology is used for community parks amenities (north only) and the Development Fee Report.

PROPORTIONATE SHARE

ARS § 9-463.05 (B)(3) states that the development fee shall not exceed a proportionate share of the cost of necessary public services needed to accommodate new development. The Parks and Recreational Facilities IIP and development fees allocate the cost of necessary public services between residential and nonresidential development based on functional population. The Arizona Office of Economic Opportunity estimates Buckeye's 2020 population equal to 91,502 persons. Based on 2020 estimates from the U.S. Census Bureau's OnTheMap web application, 8,282 inflow commuters traveled to Buckeye for work in 2020. The proportionate share is based on cumulative impact hours per year with a resident potentially impacting parks and recreational facilities 8,760 hours per year and an inflow commuter potentially impacting parks and recreational facilities 1,600 hours per year. For parks and recreational facilities, residential development generates 98 percent of demand and nonresidential development generates the remaining two percent of demand.

Figure PR1: Proportionate Share

Development Type	2020 Service Units	Impact Hours per Year	Total Impact Hours per Year	Proportionate Share
Residential	91,502 residents	8,760 hours	801,557,520	98%
Nonresidential	8,282 inflow commuters	1,600 hours	13,251,200	2%
Total			814,808,720	100%

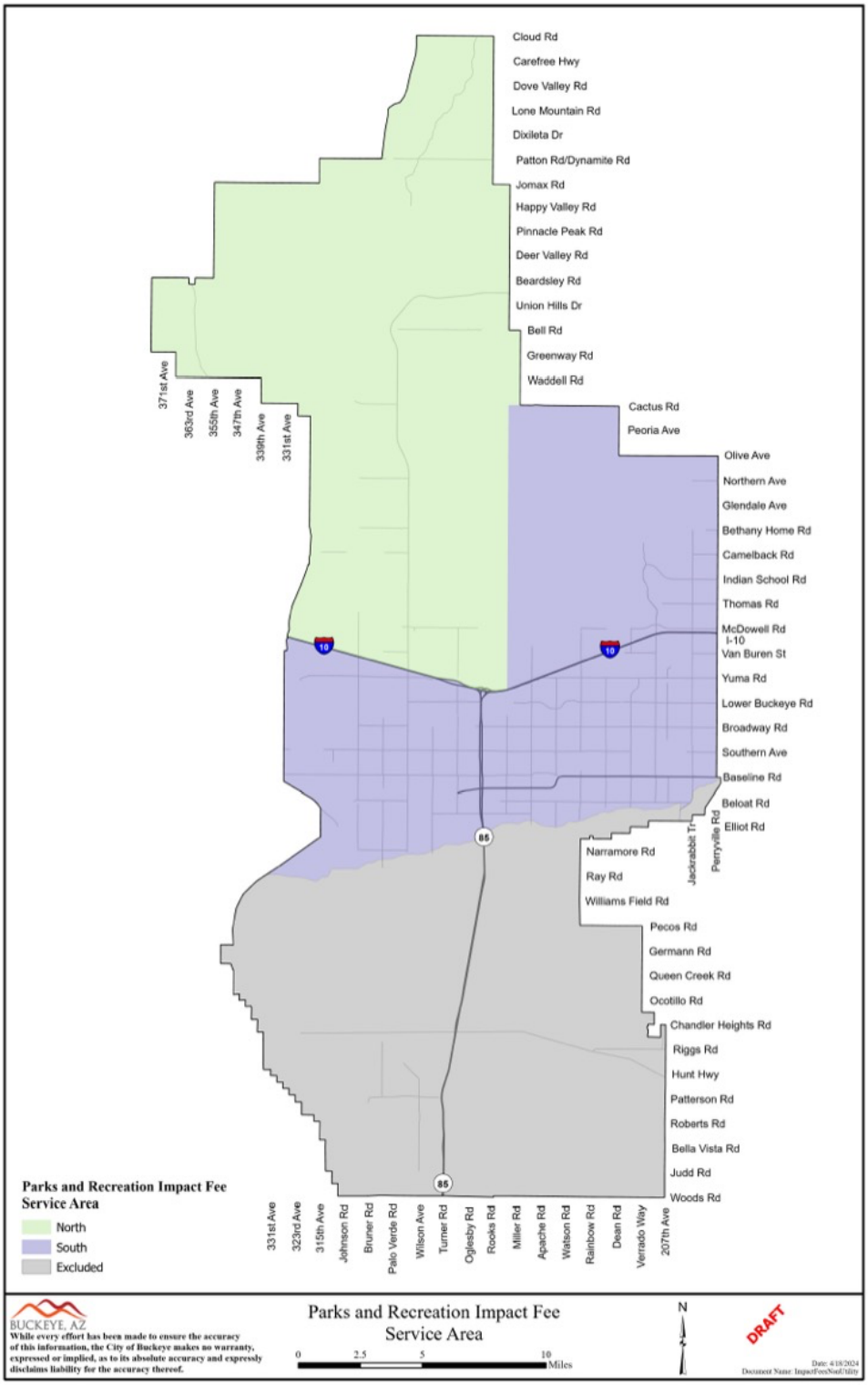
Residential Impact: 8,760 hours per year (24 hours per day X 365 days per year)

Nonresidential Impact: 1,600 hours per year (8 hours per day X 4 days per week X 50 weeks per year)

SERVICE AREA

Due to different levels of service, there are two service areas for the Parks and Recreational Facilities IIP.

Figure PR2: Parks and Recreational Facilities Service Area



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 PR3 displays the demand indicators for residential and nonresidential land uses. For residential development, the table displays the number of persons per housing unit. For nonresidential development, the table displays the number of employees per thousand square feet of floor area.

Figure PR3: Ratio of Service Unit to Development Unit

Residential Development per Housing Unit	
Development Type	Persons per Housing Unit[1]
Low/Med Density (<8 DU/Acre)	3.20
High Density (≥8 DU/Acre)	2.50
Age Restricted (≤8 DU/Acre)	2.00

Nonresidential Development	
Development Type	Jobs per 1,000 Sq Ft[1]
Industrial	0.34
Commercial	2.12
Office & Other Services	3.26
Institutional	3.03

1. See Land Use Assumptions

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

ARS § 9-463.05(E)(1) requires:

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

ARS § 9-463.05(E)(2) requires:

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

Citywide Service Area

This section includes parks and recreational facilities included in both the north and south service areas.

Regional Park Amenities – Incremental Expansion

Buckeye currently provides 8,675 total acres of regional parks; however, the analysis uses 15 acres of improved regional parks to calculate the level of service. Buckeye does not plan to acquire additional regional park land, but Buckeye plans to construct additional regional park improvements to serve future development. To allocate the proportionate share of demand for regional park amenities to residential and nonresidential development, this analysis uses the proportionate share shown in Figure PR1. Buckeye's existing LOS for residential development is 0.00012 improved acres per person (15 improved acres X 98 percent residential share / 119,044 persons). For nonresidential development, the existing LOS is 0.00002 improved acres per job (15 improved acres X two percent nonresidential share / 18,246 jobs).

The City of Buckeye provided a cost for regional park amenities of $1,000,000 per acre, and the analysis uses this cost as a proxy for future regional park amenities needed to serve future development. For regional park amenities, the cost is $123.48 per person (0.00012 improved acres per person X $1,000,000 per acre) and $16.44 per job (0.00002 improved acres per job X $1,000,000 per acre).

Figure PR4: Existing Level of Service

Description	Total Acres	Improved Acres
Skyline Regional Park	8,675.0	15.0
Total	8,675.0	15.0

Cost Factors	
Cost per Acre - Land Acquisition	$0
Cost per Acre - Amenities	$1,000,000
Cost per Acre - Total	$1,000,000

Level-of-Service (LOS) Standards	
Improved Acres	15.0
Residential	
Residential Share	98%
2024 Population	119,044
Improved Acres per Person	0.00012
Cost per Person	$123.48
Nonresidential	
Nonresidential Share	2%
2024 Jobs	18,246
Improved Acres per Job	0.00002
Cost per Job	$16.44

Source: Buckeye Community Services Department

Community Centers – Incremental Expansion

Buckeye currently provides 20,103 square feet of community centers and plans to construct additional community centers to serve future development. The Enabling Legislation limits community centers to "three thousand square feet of floor area." To comply with the Enabling Legislation, Buckeye will use 9,000 eligible square feet in the level-of-service standards.

To allocate the proportionate share of demand for community centers to residential and nonresidential development, this analysis uses proportionate share shown in Figure PR1. Buckeye's eligible level of service for residential development is 0.0741 eligible square feet per person (9,000 eligible square feet X 98 percent residential share / 119,044 persons). The nonresidential level of service is 0.0099 eligible square feet per job (9,000 eligible square feet X two percent nonresidential share / 18,246 jobs).

The City of Buckeye provided a construction cost of $1,400 per square foot, and the analysis uses this cost as a proxy for future community centers needed to serve future development. For community centers, the cost is $103.73 per person (0.0741 eligible square feet per person X $1,400 per square foot) and $13.81 per job (0.0099 eligible square feet per job X $1,400 per square foot).

Figure PR5: Existing Level of Service

Description	Total Sq Ft	Eligible Sq Ft
Buckeye Community Center	7,976	3,000
Dr. Saide Community Center	8,013	3,000
Sundance Recreation Center	4,114	3,000
Total	20,103	9,000

Cost Factors	
Cost per Square Foot	$1,400

Level-of-Service (LOS) Standards	
Eligible Square Feet	9,000
Residential	
Residential Share	98%
2024 Population	119,044
Eligible Square Feet per Person	0.0741
Cost per Person	$103.73
Nonresidential	
Nonresidential Share	2%
2024 Jobs	18,246
Eligible Square Feet per Job	0.0099
Cost per Job	$13.81

Source: Buckeye Community Services Department

Development Fee Report – Plan-Based

The cost to prepare the Parks and Recreational Facilities IIP and development fees equals $18,400. Buckeye plans to update its report every five years. Based on this cost, proportionate share, and five-year projections of new development from the *Land Use Assumptions* document, the cost is $0.51 per person and $0.03 per job.

Figure PR6: IIP and Development Fee Report

Necessary Public Service	Cost	Proportionate Share		Service Unit	5-Year Change	Cost per Service Unit
Fire	$27,500	Residential	82%	Population	45,138	$0.50
		Nonresidential	18%	Jobs	11,709	$0.42
Library	$9,000	Residential	98%	Population	35,466	$0.25
		Nonresidential	2%	Jobs	11,709	$0.02
Parks and Recreational	$18,400	Residential	98%	Population	35,466	$0.51
		Nonresidential	2%	Jobs	11,709	$0.03
Police	$27,500	Residential	83%	Population	45,138	$0.51
		Nonresidential	17%	Vehicle Trips	47,030	$0.10
Street	$27,500	All Development	100%	VMT	631,502	$0.04
Water	$39,840	All Development	100%	Max Day Gallons	10,846,001	$0.01
Wastewater	$33,640	All Development	100%	Avg Day Gallons	2,285,458	$0.01
Total	$183,380					

North Service Area

This section includes parks and recreational facilities included in the north service area.

Community Park Amenities – Plan-Based

Buckeye recently acquired land for a community park in the north service area and plans to improve 30 acres of community park land at a total cost of $30,000,000. Buckeye does not currently provide community park amenities to existing development in the north service area, so the analysis allocates the planned cost of community park amenities to total projected development in 2039. To allocate the proportionate share of demand for community park amenities to residential and nonresidential development, this analysis uses the proportionate share shown in Figure PR1. Buckeye's planned LOS for residential development is 0.00029 improved acres per person (30 improved acres X 98 percent residential share / 101,551 persons). For nonresidential development, the planned LOS is 0.00005 improved acres per job (30 improved acres X two percent nonresidential share / 11,843 jobs).

The City of Buckeye provided a cost of $30,000,000 to construct 30 acres of community park amenities ($1,000,000 per acre) to serve existing and future development in the north service area. For community park amenities, the cost is $289.51 per person (0.00029 improved acres per person X $1,000,000 per acre) and $50.66 per job (0.00005 improved acres per job X $1,000,000 per acre).

Figure PR7: Planned Level of Service

Description	Improved Acres	Unit Cost	Total Cost
Community Services Campus	30.0	$1,000,000	$30,000,000
Total	30.0	$1,000,000	$30,000,000

Cost Factors	
Cost per Acre - Land Acquisition	$0
Cost per Acre - Amenities	$1,000,000
Cost per Acre - Total	$1,000,000

Level-of-Service (LOS) Standards	
Improved Acres (Planned)	30.0
Residential	
Residential Share	98%
2039 Population (North)	101,551
Improved Acres per Person	0.00029
Cost per Person	$289.51
Nonresidential	
Nonresidential Share	2%
2039 Jobs (North)	11,843
Improved Acres per Job	0.00005
Cost per Job	$50.66

Source: Buckeye Community Services Department

South Service Area

This section includes parks and recreational facilities included in the south service area.

Community Parks – Incremental Expansion

Buckeye currently provides 102 total acres of community parks in the south service area and plans to provide additional community parks to serve future development. The Enabling Legislation limits community parks to "up to thirty acres in area." To comply with the Enabling Legislation, Buckeye uses 64 eligible acres in the level-of-service standards. To allocate the proportionate share of demand for community parks to residential and nonresidential development, this analysis uses the proportionate share shown in Figure PR1. Buckeye's existing LOS for residential development is 0.00065 eligible acres per person (64 eligible acres X 98 percent residential share / 96,554 persons). For nonresidential development, the existing LOS is 0.00008 eligible acres per job (64 eligible acres X two percent nonresidential share / 16,252 jobs).

The City of Buckeye provided a cost of $150,000 per acre for land acquisition and $1,000,000 per acre to construct park amenities. The analysis uses $1,150,000 per acre as a proxy for future community parks needed to serve future development. For community parks, the cost is $747.03 per person (0.00065 eligible acres per person X $1,150,000 per acre) and $90.57 per job (0.00008 eligible acres per job X $1,150,000 per acre).

Figure PR8: Existing Level of Service

Description	Total Acres	Eligible Acres
Earl Edgar Park	26.0	26.0
Town Park	8.0	8.0
Sundance Park	68.0	30.0
Total	102.0	64.0

Cost Factors	
Cost per Acre - Land Acquisition	$150,000
Cost per Acre - Amenities	$1,000,000
Cost per Acre - Total	$1,150,000

Level-of-Service (LOS) Standards	
Eligible Acres	64.0
Residential	
Residential Share	98%
2024 Population (South)	96,554
Eligible Acres per Person	0.00065
Cost per Person	$747.03
Nonresidential	
Nonresidential Share	2%
2024 Jobs (South)	16,252
Eligible Acres per Job	0.00008
Cost per Job	$90.57

Source: Buckeye Community Services Department

PROJECTED DEMAND FOR SERVICES AND COSTS

ARS § 9-463.05(E)(5) requires:

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

ARS § 9-463.05(E)(6) requires:

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

As shown in the *Land Use Assumptions* document, projected development during the next 10 years includes population growth of 85,579 persons and employment growth of 23,930 jobs. To maintain the existing levels of service citywide, Buckeye needs to construct approximately 11 acres of regional park amenities and approximately 6,577 square feet of community centers during the next 10 years.

Buckeye plans to improve 30 acres of community parks in the north service area to serve existing and future development through 2039. Projected development in the north service area includes population growth of 79,060 persons and employment growth of 9,850 jobs during the next 15 years.

In the south service area, projected development includes population growth of 40,750 persons and employment growth of 17,401 jobs during the next 10 years. To maintain the existing level of service, Buckeye needs to construct approximately 28 acres of community parks during the next 10 years.

The following pages include a more detailed projection of demand for services and costs for the Parks and Recreational Facilities IIP.

Citywide Service Area

Regional Park Amenities – Incremental Expansion

Buckeye plans to maintain its existing level of service for regional park amenities during the next 10 years. Based on a projected population increase of 85,579 persons, future residential development demands an additional 10.6 acres of regional park amenities (85,579 additional persons X 0.00012 improved acres per person). With projected employment growth of 23,930 jobs, future nonresidential development demands an additional 0.4 acres of regional park amenities (23,930 additional jobs X 0.00002 improved acres per job). Future development demands approximately 11.0 additional acres of regional park amenities at a cost of $10,960,997 (11.0 acres X $1,000,000 per acre). Buckeye may use development fees to construct additional regional park amenities.

Figure PR9: Projected Demand

Type of Infrastructure	Level of Service	Demand Unit	Cost per Acre
Regional Park Amenities	0.00012 Improved Acres	per Person	$1,000,000
	0.00002 Improved Acres	per Job	

Demand for Regional Park Amenities					
Year	Population	Jobs	Improved Acres		
			Residential	Nonresidential	Total
2024	119,044	18,246	14.7	0.3	15.0
2025	124,622	20,688	15.4	0.3	15.7
2026	131,159	23,649	16.2	0.4	16.6
2027	138,685	25,863	17.1	0.4	17.6
2028	146,598	27,792	18.1	0.5	18.6
2029	154,511	29,956	19.1	0.5	19.6
2030	162,704	32,139	20.1	0.5	20.6
2031	173,025	34,606	21.4	0.6	21.9
2032	183,344	37,072	22.6	0.6	23.2
2033	193,984	39,539	24.0	0.7	24.6
2034	204,623	42,176	25.3	0.7	26.0
10-Yr Increase	85,579	23,930	10.6	0.4	11.0

Growth-Related Expenditures	$10,567,544	$393,453	$10,960,997

Community Centers – Incremental Expansion

Buckeye plans to maintain its eligible level of service for community centers over the next 10 years. Based on a projected population increase of 85,579 persons, future residential development demands 6,340.5 square feet of community centers (85,579 additional persons X 0.0741 eligible square feet per person). With projected employment growth of 23,930 jobs, future nonresidential development demands 236.1 square feet of community centers (23,930 additional jobs X 0.0099 eligible square feet per job). Future development demands approximately 6,577 square feet of community centers at a cost of $9,207,237 (6,576.6 square feet X $1,400 per square foot). Buckeye may use development fees to construct additional community centers.

Figure PR10: Projected Demand

Type of Infrastructure	Level of Service	Demand Unit	Cost per Unit
Community Centers	0.0741 Eligible Sq Feet	per Person	$1,400
	0.0099 Eligible Sq Feet	per Job	

Demand for Community Centers					
Year	Population	Jobs	Eligible Square Feet		
			Residential	Nonresidential	Total
2024	119,044	18,246	8,820.0	180.0	9,000.0
2025	124,622	20,688	9,233.2	204.1	9,437.3
2026	131,159	23,649	9,717.6	233.3	9,950.9
2027	138,685	25,863	10,275.1	255.1	10,530.3
2028	146,598	27,792	10,861.4	274.2	11,135.6
2029	154,511	29,985	11,447.7	295.8	11,743.5
2030	162,704	32,139	12,054.8	317.1	12,371.8
2031	173,025	34,606	12,819.4	341.4	13,160.8
2032	183,344	37,072	13,584.0	365.7	13,949.7
2033	193,984	39,539	14,372.2	390.1	14,762.3
2034	204,623	42,176	15,160.5	416.1	15,576.6
10-Yr Increase	85,579	23,930	6,340.5	236.1	6,576.6

Growth-Related Expenditures	$8,876,737	$330,501	$9,207,237

North Service Area

Community Park Amenities – Plan-Based

Buckeye plans to spend $30,000,000 to construct 30 acres of community park amenities in the north service area. Based on a projected population increase of 79,060 persons, future residential development demands 22.9 improved acres (79,060 additional persons X 0.00029 improved acres per person). With projected employment growth of 9,850 jobs, future nonresidential development demands an additional 0.5 improved acres (9,850 additional jobs X 0.00005 improved acres per job). Future development demands approximately 23.4 acres of planned community park amenities at a cost of $23,387,688 (23.4 improved acres X $1,000,000 per acre). Buckeye will fund existing development's share of $6,612,312 ($30,000,000 total cost - $23,387,688 growth-related cost) with non-development fee revenue.

Figure PR11: Projected Demand

Type of Infrastructure	Level of Service	Demand Unit	Cost per Unit
Community Park Amenities	0.00029 Improved Acres	per Person	$1,000,000
	0.00005 Improved Acres	per Job	

Demand for Community Park Amenities					
Year	Population (North)	Jobs (North)	Improved Acres		
			Residential	Nonresidential	Total
2024	22,491	1,994	6.5	0.1	6.6
2025	24,101	2,519	7.0	0.1	7.1
2026	26,670	3,044	7.7	0.2	7.9
2027	29,720	3,569	8.6	0.2	8.8
2028	33,157	4,095	9.6	0.2	9.8
2029	36,594	4,855	10.6	0.2	10.8
2030	40,608	5,635	11.8	0.3	12.0
2031	47,126	6,314	13.6	0.3	14.0
2032	53,644	6,993	15.5	0.4	15.9
2033	60,482	7,672	17.5	0.4	17.9
2034	67,319	8,523	19.5	0.4	19.9
2035	74,347	9,433	21.5	0.5	22.0
2036	81,374	10,051	23.6	0.5	24.1
2037	88,402	10,670	25.6	0.5	26.1
2038	95,109	11,289	27.5	0.6	28.1
2039	101,551	11,843	29.4	0.6	30.0
15-Yr Increase	79,060	9,850	22.9	0.5	23.4

Growth-Related Expenditures	$22,888,692	$498,996	$23,387,688
Non-Growth Expenditures	$6,511,308	$101,004	$6,612,312
Total Expenditures	$29,400,000	$600,000	$30,000,000

South Service Area

Community Parks – Incremental Expansion

Buckeye plans to maintain its existing level of service for community parks in the south service area over the next 10 years. Based on a projected population increase of 40,750 persons, future residential development demands an additional 26.5 acres (40,750 additional persons X 0.00065 eligible acres per person). With projected employment growth of 17,401 jobs, future nonresidential development demands approximately 1.4 acres (17,401 additional jobs X 0.00008 eligible acres per job). Future development demands 27.8 additional acres of community parks at a cost of $32,017,478 (27.8 acres X $1,150,000 per acre). Buckeye may use development fees to expand existing community parks or to construct additional community parks.

Figure PR12: Projected Demand

Type of Infrastructure	Level of Service	Demand Unit	Cost per Acre
Community Parks	0.00065 Eligible Acres	per Person	$1,150,000
	0.00008 Eligible Acres	per Job	

Demand for Community Parks					
Year	Population (South)	Jobs (South)	Eligible Acres		
			Residential	Nonresidential	Total
2024	96,554	16,252	62.7	1.3	64.0
2025	100,521	18,169	65.3	1.4	66.7
2026	104,489	20,605	67.9	1.6	69.5
2027	108,965	22,294	70.8	1.8	72.5
2028	113,441	23,698	73.7	1.9	75.6
2029	117,917	25,101	76.6	2.0	78.6
2030	122,097	26,504	79.3	2.1	81.4
2031	125,898	28,292	81.8	2.2	84.0
2032	129,700	30,079	84.3	2.4	86.6
2033	133,502	31,866	86.7	2.5	89.2
2034	137,304	33,654	89.2	2.7	91.8
10-Yr Increase	40,750	17,401	26.5	1.4	27.8

Growth-Related Expenditures	$30,441,438	$1,576,040	$32,017,478

PARKS AND RECREATIONAL FACILITIES DEVELOPMENT FEES

Revenue Credit/Offset

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

Parks and Recreational Facilities Development Fees

North Service Area

Figure PR13 includes infrastructure components and cost factors for parks and recreational facilities fees in the north service area. The cost per service unit is $517.23 per person and $80.94 per job.

Parks and recreational facilities fees for residential development are assessed according to the number of persons per housing unit. The fee of $1,655 for a low/medium density unit is calculated using a cost per service unit of $517.23 per person multiplied by a demand unit of 3.20 persons per housing unit.

Nonresidential development fees are calculated using jobs as the service unit. The fee of $27 per 1,000 square feet of industrial development is calculated using a cost per service unit of $80.94 per job multiplied by a demand unit of 0.34 jobs per 1,000 square feet.

Figure PR13: Parks and Recreational Facilities Development Fees

Fee Component	Cost per Person	Cost per Job
Community Park Amenities	$289.51	$50.66
Regional Park Amenities	$123.48	$16.44
Community Centers	$103.73	$13.81
Development Fee Report	$0.51	$0.03
Total	$517.23	$80.94

Residential Fees per Unit				
Development Type	Persons per Housing Unit[1]	Proposed Fees	Current Fees	Difference
Low/Med Density (<8 DU/Acre)	3.20	$1,655	$684	$971
High Density (≥8 DU/Acre)	2.50	$1,293	$534	$759
Age Restricted (≤8 DU/Acre)	2.00	$1,034	$427	$607

Nonresidential Fees per 1,000 Square Feet				
Development Type	Jobs per 1,000 Sq Ft[1]	Proposed Fees	Current Fees	Difference
Industrial	0.34	$27	$37	($10)
Commercial	2.12	$172	$252	($80)
Office & Other Services	3.26	$263	$320	($57)
Institutional	3.03	$245	$100	$145

1. See Land Use Assumptions

South Service Area

Figure PR14 includes infrastructure components and cost factors for parks and recreational facilities fees in the south service area. The cost per service unit is $974.75 per person and $120.85 per job.

Parks and recreational facilities fees for residential development are assessed according to the number of persons per housing unit. The fee of $3,119 for a low/medium density unit is calculated using a cost per service unit of $974.75 per person multiplied by a demand unit of 3.20 persons per housing unit.

Nonresidential development fees are calculated using jobs as the service unit. The fee of $41 per 1,000 square feet of industrial development is calculated using a cost per service unit of $120.85 per job multiplied by a demand unit of 0.34 jobs per 1,000 square feet.

Figure PR14: Parks and Recreational Facilities Development Fees

Fee Component	Cost per Person	Cost per Job
Community Parks	$747.03	$90.57
Regional Park Amenities	$123.48	$16.44
Community Centers	$103.73	$13.81
Development Fee Report	$0.51	$0.03
Total	$974.75	$120.85

Residential Fees per Unit				
Development Type	Persons per Housing Unit[1]	Proposed Fees	Current Fees	Difference
Low/Med Density (<8 DU/Acre)	3.20	$3,119	$1,915	$1,204
High Density (≥8 DU/Acre)	2.50	$2,437	$1,496	$941
Age Restricted (≤8 DU/Acre)	2.00	$1,950	$1,197	$753

Nonresidential Fees per 1,000 Square Feet				
Development Type	Jobs per 1,000 Sq Ft[1]	Proposed Fees	Current Fees	Difference
Industrial	0.34	$41	$83	($42)
Commercial	2.12	$257	$573	($316)
Office & Other Services	3.26	$393	$727	($334)
Institutional	3.03	$366	$228	$138

1. See Land Use Assumptions

PARKS AND RECREATIONAL FACILITIES DEVELOPMENT FEE REVENUE

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

North Service Area

In accordance with state law, this report includes an IIP for parks and recreational facilities needed to accommodate future development in the north service area. Projected fee revenue shown in Figure PR15 is based on the development projections in the *Land Use Assumptions* document and the updated development fees for parks and recreational facilities shown in Figure PR13. If development occurs at a more rapid rate than projected, the demand for infrastructure will increase and development fee revenue will increase at a corresponding rate. If development occurs at a slower rate than projected, the demand for infrastructure will also decrease, along with development fee revenue. Projected development fee revenue during the next 10 years equals $23,699,221 and projected expenditures equal $40,390,250. Projected fee revenue related to community park amenities generated beyond the 10-year IIP timeline equals approximately $10,000,000. Buckeye will fund existing development's share of projected expenditures with non-development fee revenue.

Figure PR15: Parks and Recreational Facilities Development Fee Revenue

Fee Component	Growth Share	Existing Share	Total
Community Park Amenities	$23,387,688	$6,612,312	$30,000,000
Regional Park Amenities	$5,642,919	$0	$5,642,919
Community Centers	$4,740,052	$0	$4,740,052
Development Fee Report	$7,279	$0	$7,279
Total	$33,777,938	$6,612,312	$40,390,250

Year		Low/Med Res $1,655 per unit	High Res $1,293 per unit	Age Restricted $1,034 per unit	Industrial $27 per 1,000 sq ft	Commercial $172 per 1,000 sq ft	Office & Other $263 per 1,000 sq ft	Institutional $245 per 1,000 sq ft
		Hsg Unit	Hsg Unit	Hsg Unit	KSF	KSF	KSF	KSF
Base	2024	4,680	0	5,950	0	502	164	226
Year 1	2025	5,005	0	6,234	0	647	207	252
Year 2	2026	5,630	0	6,518	0	792	249	279
Year 3	2027	6,406	0	6,802	0	937	291	305
Year 4	2028	7,181	155	7,087	0	1,082	333	331
Year 5	2029	7,957	310	7,371	330	1,285	375	358
Year 6	2030	8,912	465	7,655	660	1,498	417	384
Year 7	2031	10,669	619	7,911	1,016	1,658	458	412
Year 8	2032	12,546	619	8,167	1,373	1,818	500	439
Year 9	2033	14,522	619	8,423	1,730	1,978	541	467
Year 10	2034	16,499	619	8,679	2,086	2,193	582	553
10-Year Increase		11,820	619	2,729	2,086	1,692	418	327
Projected Revenue		$19,549,042	$800,019	$2,821,707	$57,154	$287,913	$110,069	$73,317

Projected Fee Revenue	$23,699,221
Total Expenditures	$40,390,250

South Service Area

In accordance with state law, this report includes an IIP for parks and recreational facilities needed to accommodate future development in the south service area. Projected fee revenue shown in Figure PR16 is based on the development projections in the *Land Use Assumptions* document and the updated development fees for parks and recreational facilities shown in Figure PR14. If development occurs at a more rapid rate than projected, the demand for infrastructure will increase and development fee revenue will increase at a corresponding rate. If development occurs at a slower rate than projected, the demand for infrastructure will also decrease, along with development fee revenue. Projected development fee revenue equals $34,590,764 and projected expenditures equal $41,813,862.

Figure PR16: Parks and Recreational Facilities Development Fee Revenue

Fee Component	Growth Share	Existing Share	Total
Community Parks	$32,017,478	$0	$32,017,478
Regional Park Amenities	$5,318,077	$0	$5,318,077
Community Centers	$4,467,185	$0	$4,467,185
Development Fee Report	$11,121	$0	$11,121
Total	$41,813,862	$0	$41,813,862

		Low/Med Res $3,119 per unit	High Res $2,437 per unit	Industrial $41 per 1,000 sq ft	Commercial $257 per 1,000 sq ft	Office & Other $393 per 1,000 sq ft	Institutional $366 per 1,000 sq ft
Year		Hsg Unit	Hsg Unit	KSF	KSF	KSF	KSF
Base	2024	21,134	1,213	16,277	2,045	856	771
Year 1	2025	21,617	1,828	18,119	2,428	935	824
Year 2	2026	22,100	2,443	19,962	3,073	1,003	877
Year 3	2027	22,582	3,261	21,804	3,367	1,070	930
Year 4	2028	23,065	4,080	22,804	3,660	1,137	983
Year 5	2029	23,547	4,898	23,804	3,953	1,205	1,036
Year 6	2030	24,030	5,598	24,804	4,247	1,272	1,089
Year 7	2031	24,513	6,298	25,527	4,570	1,442	1,173
Year 8	2032	24,995	6,998	26,251	4,894	1,613	1,258
Year 9	2033	25,478	7,698	26,974	5,217	1,783	1,342
Year 10	2034	25,960	8,398	27,698	5,541	1,954	1,427
10-Year Increase		4,826	7,185	11,421	3,496	1,097	656
Projected Revenue		$15,049,509	$17,504,484	$467,307	$897,512	$431,617	$240,335

Projected Fee Revenue	$34,590,764
Verrado Deficit	$7,223,098
Total Expenditures	$41,813,862

POLICE FACILITIES IIP

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

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

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

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 future development. The Police Facilities IIP and development fees use functional population to allocate the cost of police infrastructure between residential and nonresidential development. Functional population is similar to what the U.S. Census Bureau calls "daytime population." It accounts for people living and working in a jurisdiction, but it also considers commuting patterns and time spent at home and at nonresidential locations. The functional population approach allocates the cost of the police infrastructure to residential and nonresidential development based on the activity of residents and workers through the 24 hours in a day.

Residents that do not work are assigned 20 hours per day to residential development and four hours per day to nonresidential development (annualized averages). Residents that work in Buckeye are assigned 14 hours to residential development and 10 hours to nonresidential development. Residents that work outside Buckeye are assigned 14 hours to residential development, the remaining 10 hours in the day are assumed to be spent working outside of Buckeye. Inflow commuters are assigned 10 hours to nonresidential development. Based on 2020 functional population data, residential development equals 83 percent of the functional population and nonresidential development equals 17 percent.

Figure P1: Functional Population

Demand Units in 2020					
Residential				Demand Hours/Day	Person Hours
	Population	91,502			
	Residents Not Working		54,600	20	1,092,000
	Employed Residents		36,902		
	Employed in Buckeye		2,870	14	40,180
	Employed outside Buckeye		34,032	14	476,448
				Residential Subtotal	1,608,628
				Residential Share	**83%**
Nonresidential					
	Non-working Residents		54,600	4	218,400
	Jobs Located in Buckeye		11,152		
	Residents Employed in Buckeye		2,870	10	28,700
	Non-Resident Workers (inflow commuters)		8,282	10	82,820
				Nonresidential Subtotal	329,920
				Nonresidential Share	**17%**
				Total	1,938,548

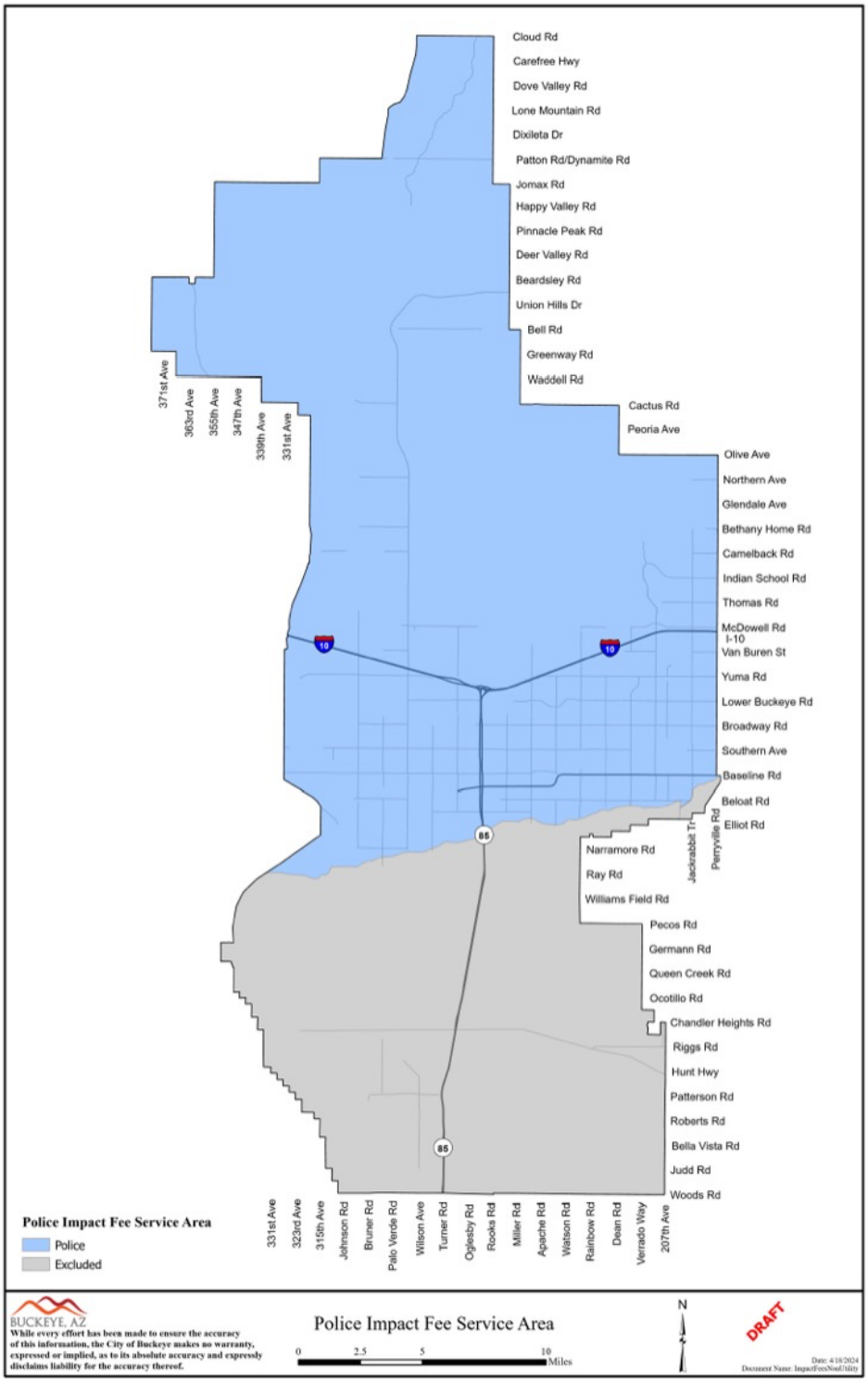
Source: U.S. Census Bureau (population), U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics, Version 6.23.1 (employment).

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

SERVICE AREA

Buckeye's Police Department strives to provide a uniform response time within the city limits; therefore, there is a single service area for the Police Facilities IIP.

Figure P2: Police Facilities Service Area



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 P3 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 per thousand square feet of floor area.

Figure P3: Ratio of Service Unit to Development Unit

Residential Development per Housing Unit	
Development Type	Persons per Housing Unit[1]
Low/Med Density (<8 DU/Acre)	3.20
High Density (≥8 DU/Acre)	2.50
Age Restricted (≤8 DU/Acre)	2.00

Nonresidential Development per 1,000 Square Feet			
Development Type	AWVTE per 1,000 Sq Ft[1]	Trip Rate Adjustment[1]	AWVT per 1,000 Sq Ft
Industrial	1.71	50%	0.86
Commercial	37.01	33%	12.21
Office & Other Services	10.84	50%	5.42
Institutional	22.59	33%	7.45

1. See Land Use Assumptions

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

ARS § 9-463.05(E)(1) requires:

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

ARS § 9-463.05(E)(2) requires:

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

Police Facilities – Incremental Expansion

Buckeye currently provides 73,676 square feet of police facilities to existing development, and Buckeye plans to construct additional police facilities to serve future development. Arizona's Enabling Legislation excludes "a facility that is used for training officers from more than one station or substation." The Training and Vehicle Facility includes 21,468 total square feet, but the analysis excludes 10,734 square feet related to the ineligible training facility. Shown below, Figure P4 includes 62,942 eligible square feet of police facilities.

Figure P4: Existing Police Facilities

Description	Total Square Feet	Eligible Square Feet
PD Headquarters	9,700	9,700
Sundance Crossings	15,400	15,400
Criminal Investigations	4,600	4,600
Sun City Festival Substation	3,992	3,992
Evidence Building	17,316	17,316
Training and Vehicle Facility[1]	21,468	10,734
Communication Center	600	600
Tartesso Report Writing	600	600
Total	73,676	62,942

Source: Buckeye Police Department

1. Training portion excluded from eligible square feet

Buckeye plans to construct additional police facilities to serve future development. The Buckeye Police Department provided construction costs for 72,000 square feet of future police facilities equal to $55,000,000. The weighted average cost of these facilities is $764 per square foot ($55,000,000 / 72,000 square feet), and the analysis uses $764 per square foot as a proxy for future growth-related police facilities costs. Buckeye may use development fees to construct these projects or to construct other growth-related police facilities.

Figure P5: Construction Cost Factors

Description	Square Feet	Cost	Cost per Sq Ft
Communication Center	12,000	$19,000,000	$1,583
PD Headquarters	60,000	$36,000,000	$600
Total	72,000	$55,000,000	$764

Source: Buckeye Police Department

To allocate the proportionate share of demand for police facilities to residential and nonresidential development, this analysis uses functional population shown in Figure P1. Buckeye's existing level of service for residential development is 0.4388 eligible square feet per person (62,942 eligible square feet X 83 percent residential share / 119,044 persons). The nonresidential level of service is 0.1697 eligible square feet per trip (62,942 eligible square feet X 17 percent nonresidential share / 63,048 vehicle trips). For police facilities, the cost is $335.23 per person (0.4388 eligible square feet per person X $764 per square foot) and $129.64 per vehicle trip (0.1697 eligible square feet per trip X $764 per square foot).

Figure P6: Existing Level of Service

Cost Factors	
Cost per Square Foot	$764

Level-of-Service (LOS) Standards	
Eligible Square Feet	62,942
Residential	
Residential Share	83%
2024 Population	119,044
Square Feet per Person	0.4388
Cost per Person	$335.23
Nonresidential	
Nonresidential Share	17%
2024 Vehicle Trips	63,048
Square Feet per Vehicle Trip	0.1697
Cost per Vehicle Trip	$129.64

Source: Buckeye Police Department

Police Vehicles – Incremental Expansion

Buckeye provides 205 police vehicles with a total cost of $16,395,000, and Buckeye plans to acquire additional police vehicles to serve future development. To allocate the proportionate share of demand for police vehicles to residential and nonresidential development, this analysis uses functional population outlined in Figure P1. Buckeye's existing level of service for residential development is 0.0014 units per person (205 units X 83 percent residential share / 119,044 persons). The nonresidential level of service is 0.0006 units per vehicle trip (205 units X 17 percent nonresidential share / 63,048 vehicle trips).

The weighted average cost of Buckeye's existing fleet of police vehicles is $79,976 per unit ($16,395,000 total cost / 205 units), and the analysis uses this cost as a proxy for future growth-related police vehicle costs. Buckeye may use development fees to expand its police vehicle fleet. For police vehicles, the cost is $114.31 per person (0.0014 units per person X $79,976 per unit) and $44.21 per vehicle trip (0.0006 units per vehicle trip X $79,976 per unit).

Figure P7: Existing Level of Service

Description	Units	Unit Cost	Total Cost
Patrol	116	$85,000	$9,860,000
Patrol - Reserve	38	$85,000	$3,230,000
Detective	25	$65,000	$1,625,000
Detective - Reserve	8	$65,000	$520,000
City Code Truck	2	$35,000	$70,000
Prisoner Transport Van	2	$90,000	$180,000
Bearcat	1	$450,000	$450,000
DUI Van	1	$100,000	$100,000
Volunteer	4	$30,000	$120,000
Property and Evidence	3	$30,000	$90,000
Community Program	5	$30,000	$150,000
Total	205	$79,976	$16,395,000

Cost Factors	
Weighted Average per Unit	$79,976

Level-of-Service (LOS) Standards	
Existing Units	205
Residential	
Residential Share	83%
2024 Population	119,044
Units per Person	0.0014
Cost per Person	$114.31
Nonresidential	
Nonresidential Share	17%
2024 Vehicle Trips	63,048
Units per Vehicle Trip	0.0006
Cost per Vehicle Trip	$44.21

Source: Buckeye Police Department

Police Equipment – Incremental Expansion

Buckeye provides 761 units of police equipment with a total cost of $9,732,842, and Buckeye plans to acquire additional units to serve future development. The weighted average cost of Buckeye's existing police equipment is $12,790 per unit ($9,732,842 total cost / 761 units), and the analysis uses this cost as a proxy for future growth-related police equipment costs.

Figure P8: Existing Police Equipment

Description	Units	Unit Cost	Total Cost
Regional Wireless (Police Share)	1	$3,858,755	$3,858,755
Equipment per Sworn Officer	116	$7,248	$840,768
Portable Radio	178	$10,000	$1,780,000
Vehicle Radio	147	$10,000	$1,470,000
Dispatch Console	6	$90,117	$540,701
Automated Fingerprint System	1	$46,629	$46,629
Cisco Phone System	1	$14,375	$14,375
Mobile Data Terminal	140	$5,200	$728,000
Pole Cam	2	$13,288	$26,576
Desktops	52	$1,000	$52,000
Tablet	16	$1,000	$16,000
Laptop	41	$1,300	$53,300
Accident Trailer	1	$36,240	$36,240
Message Board	2	$20,000	$40,000
Radar Trailer	4	$15,000	$60,000
Automated Ext. Defibrillator	50	$2,174	$108,720
Interview Room Equipment	2	$20,000	$40,000
Contraband Inspection Kit	1	$20,778	$20,778
Total	761	$12,790	$9,732,842

Source: Buckeye Police Department

To allocate the proportionate share of demand for police equipment to residential and nonresidential development, this analysis uses functional population outlined in Figure P1. Buckeye's existing level of service for residential development is 0.0053 units per person (761 units X 83 percent residential share / 119,044 persons). The nonresidential level of service is 0.0021 units per vehicle trip (761 units X 17 percent nonresidential share / 63,048 vehicle trips).

The weighted average cost of Buckeye's existing police equipment is $12,790 per unit ($9,732,842 total cost / 761 units), and the analysis uses this cost as a proxy for future growth-related police equipment costs. Buckeye may use development fees to acquire additional police equipment to serve future development. For police equipment, the cost is $67.86 per person (0.0053 units per person X $12,790 per unit) and $26.24 per vehicle trip (0.0021 units per vehicle trip X $12,790 per unit).

Figure P9: Existing Level of Service

Cost Factors	
Weighted Average per Unit	$12,790

Level-of-Service (LOS) Standards	
Existing Units	761
Residential	
Residential Share	83%
2024 Population	119,044
Units per Person	0.0053
Cost per Person	$67.86
Nonresidential	
Nonresidential Share	17%
2024 Vehicle Trips	63,048
Units per Vehicle Trip	0.0021
Cost per Vehicle Trip	$26.24

Source: Buckeye Police Department

Development Fee Report – Plan-Based

The cost to prepare the Police Facilities IIP and related Development Fee Report totals $27,500. Buckeye plans to update its report every five years. Based on this cost, proportionate share, and five-year projections of new residential and nonresidential development from the *Land Use Assumptions* document, the cost is $0.51 per person and $0.10 per vehicle trip.

Figure P10: IIP and Development Fee Report

Necessary Public Service	Cost	Proportionate Share		Service Unit	5-Year Change	Cost per Service Unit
Fire	$27,500	Residential	82%	Population	45,138	$0.50
		Nonresidential	18%	Jobs	11,709	$0.42
Library	$9,000	Residential	98%	Population	35,466	$0.25
		Nonresidential	2%	Jobs	11,709	$0.02
Parks and Recreational	$18,400	Residential	98%	Population	35,466	$0.51
		Nonresidential	2%	Jobs	11,709	$0.03
Police	$27,500	Residential	83%	Population	45,138	$0.51
		Nonresidential	17%	Vehicle Trips	47,030	$0.10
Street	$27,500	All Development	100%	VMT	631,502	$0.04
Water	$39,840	All Development	100%	Max Day Gallons	10,846,001	$0.01
Wastewater	$33,640	All Development	100%	Avg Day Gallons	2,285,458	$0.01
Total	$183,380					

Projected Demand for Services and Costs

ARS § 9-463.05(E)(5) requires:

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

ARS § 9-463.05(E)(6) requires:

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

As shown in the *Land Use Assumptions* document, projected development during the next 10 years includes population growth of 85,579 persons and nonresidential vehicle trip growth of 92,736 vehicle trips. To maintain the existing levels of service, Buckeye needs to construct approximately 53,294 square feet of police facilities, expand the fleet of police vehicles by approximately 174 units, and acquire approximately 644 units of police equipment during the next 10 years. The following pages include a more detailed projection of demand for services and costs for the Police Facilities IIP.

Police Facilities – Incremental Expansion

Buckeye plans to maintain its existing level of service for police facilities over the next 10 years. Based on a projected population increase of 85,579 persons, future residential development demands approximately 37,556 square feet (85,579 additional persons X 0.4388 eligible square feet per person). With projected nonresidential growth of 92,736 vehicle trips, future nonresidential development demands approximately 15,739 square feet (92,736 additional vehicle trips X 0.1697 eligible square feet per vehicle trip). Future development demands approximately 53,294 square feet of police facilities at a cost of $40,710,910 (53,294.3 square feet X $764 per square foot). Buckeye may use development fees to expand existing police facilities or to construct additional police facilities.

Figure P11: Projected Demand

Type of Infrastructure	Level of Service	Demand Unit	Cost per Unit
Police Facilities	0.4388 Square Feet	per Person	$764
	0.1697 Square Feet	per Vehicle Trip	

Demand for Police Facilities					
Year	Population	Vehicle Trips	Eligible Square Feet		
			Residential	Nonresidential	Total
2024	119,044	63,048	52,241.9	10,700.1	62,942.0
2025	127,641	72,608	56,014.4	12,322.6	68,337.0
2026	136,098	85,312	59,725.5	14,478.7	74,204.3
2027	145,534	93,718	63,866.7	15,905.2	79,771.9
2028	154,458	101,403	67,783.0	17,209.5	84,992.5
2029	164,182	110,311	72,050.4	18,721.4	90,771.8
2030	172,763	118,867	75,815.7	20,173.5	95,989.2
2031	180,018	127,820	78,999.9	21,692.8	100,692.7
2032	186,973	136,772	82,052.0	23,212.2	105,264.2
2033	195,848	145,725	85,946.7	24,731.6	110,678.3
2034	204,623	155,784	89,797.5	26,438.8	116,236.3
10-Yr Increase	85,579	92,736	37,555.7	15,738.6	53,294.3

Growth-Related Expenditures	$28,688,348	$12,022,562	$40,710,910

Police Vehicles – Incremental Expansion

Buckeye plans to maintain its existing level of service for police vehicles over the next 10 years. Based on a projected population increase of 85,579 persons, future residential development demands an additional 122.3 units (85,579 additional persons X 0.0014 units per person). With projected nonresidential growth of 92,736 vehicle trips, future nonresidential development demands an additional 51.3 units (92,736 additional vehicle trips X 0.0006 units per vehicle trip). Future development demands approximately 174 police vehicles at a cost of $13,881,983 (173.6 units X $79,976 per unit). Buckeye may use development fees to expand its fleet of police vehicles.

Figure P12: Projected Demand

Type of Infrastructure	Level of Service	Demand Unit	Cost per Unit
Police Vehicles	0.0014 Units	per Person	$79,976
	0.0006 Units	per Vehicle Trip	

Demand for Police Vehicles					
Year	Population	Vehicle Trips	Units		
			Residential	Nonresidential	Total
2024	119,044	63,048	170.2	34.9	205.0
2025	127,641	72,608	182.4	40.1	222.6
2026	136,098	85,312	194.5	47.2	241.7
2027	145,534	93,718	208.0	51.8	259.8
2028	154,458	101,403	220.8	56.1	276.8
2029	164,182	110,078	234.7	60.8	295.5
2030	172,763	118,867	246.9	65.7	312.6
2031	180,018	127,820	257.3	70.7	328.0
2032	186,973	136,772	267.2	75.6	342.8
2033	195,848	145,725	279.9	80.5	360.5
2034	204,623	155,784	292.5	86.1	378.6
10-Yr Increase	85,579	92,736	122.3	51.3	173.6

Growth-Related Expenditures	$9,782,418	$4,099,564	$13,881,983

Police Equipment – Incremental Expansion

Buckeye plans to maintain its existing level of service for police equipment over the next 10 years. Based on a projected population increase of 85,579 persons, future residential development demands an additional 454.1 units (85,579 additional persons X 0.0053 units per person). With projected nonresidential growth of 92,736 vehicle trips, future nonresidential development demands an additional 190.3 units (92,736 additional vehicle trips X 0.0021 units per vehicle trip). Future development demands approximately 644 units of police equipment at a cost of $8,240,997 (644.4 units X $12,790 per unit).

Figure P13: Projected Demand

Type of Infrastructure	Level of Service	Demand Unit	Cost per Unit
Police Equipment	0.0053 Units	per Person	$12,790
	0.0021 Units	per Vehicle Trip	

Demand for Police Equipment					
Year	Population	Vehicle Trips	Units		
			Residential	Nonresidential	Total
2024	119,044	63,048	631.6	129.4	761.0
2025	127,641	72,608	677.2	149.0	826.2
2026	136,098	85,312	722.1	175.1	897.2
2027	145,534	93,718	772.2	192.3	964.5
2028	154,458	101,403	819.5	208.1	1,027.6
2029	164,182	110,311	871.1	226.4	1,097.5
2030	172,763	118,867	916.6	243.9	1,160.6
2031	180,018	127,820	955.1	262.3	1,217.4
2032	186,973	136,772	992.0	280.6	1,272.7
2033	195,848	145,725	1,039.1	299.0	1,338.2
2034	204,623	155,784	1,085.7	319.7	1,405.4
10-Yr Increase	85,579	92,736	454.1	190.3	644.4

Growth-Related Expenditures	$5,807,303	$2,433,694	$8,240,997

Police Facilities Development Fees

Revenue Credit/Offset

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

Police Facilities Development Fees

Figure P14 includes infrastructure components and cost factors for police facilities development fees. The cost per service unit is $517.91 per person and $200.19 per trip.

Police facilities fees for residential development are assessed according to the number of persons per housing unit. The fee of $1,657 for low/medium density unit is calculated using a cost per service unit of $517.91 per person multiplied by a demand unit of 3.20 persons per housing unit.

Nonresidential development fees are calculated using vehicle trips as the service unit. The fee of $172 per 1,000 square feet of industrial development is derived from a cost per service unit of $200.19 per trip multiplied by a demand unit of 0.86 vehicle trips per 1,000 square feet.

Figure P14: Police Facilities Development Fees

Fee Component	Cost per Person	Cost per Trip
Police Facilities	$335.23	$129.64
Police Vehicles	$114.31	$44.21
Police Equipment	$67.86	$26.24
Development Fee Report	$0.51	$0.10
Total	$517.91	$200.19

Residential Fees per Unit				
Development Type	Persons per Housing Unit[1]	Proposed Fees	Current Fees	Difference
Low/Med Density (<8 DU/Acre)	3.20	$1,657	$842	$815
High Density (≥8 DU/Acre)	2.50	$1,295	$658	$637
Age Restricted (≤8 DU/Acre)	2.00	$1,036	$526	$510

Nonresidential Fees per 1,000 Square Feet				
Development Type	AWVT per 1,000 Sq Ft[1]	Proposed Fees	Current Fees	Difference
Industrial	0.86	$172	$92	$80
Commercial	12.21	$2,444	$1,323	$1,121
Office & Other Services	5.42	$1,085	$517	$568
Institutional	7.45	$1,491	$684	$807

1. See Land Use Assumptions

Police Facilities Development Fee Revenue

Appendix A contains revenue forecasts required by Arizona's Enabling Legislation (ARS § 9-463.05(E)(7)). Projected fee revenue shown in Figure P15 is based on the development projections in the *Land Use Assumptions* document and the updated police facilities development fees. If development occurs faster than projected, the demand for infrastructure will increase along with development fee revenue. If development occurs slower than projected, the demand for infrastructure will decrease and development fee revenue will decrease at a similar rate. Projected development fee revenue equals $58,610,030 and projected expenditures equal $62,861,389.

Figure P15: Police Facilities Development Fee Revenue

Fee Component	Growth Share	Existing Share	Total
Police Facilities	$40,710,910	$0	$40,710,910
Police Vehicles	$13,881,983	$0	$13,881,983
Police Equipment	$8,240,997	$0	$8,240,997
Development Fee Report	$27,500	$0	$27,500
Total	$62,861,389	$0	$62,861,389

		Low/Med Res $1,657 per unit	High Res $1,295 per unit	Age Restricted $1,036 per unit	Industrial $172 per 1,000 sq ft	Commercial $2,444 per 1,000 sq ft	Office & Other $1,085 per 1,000 sq ft	Institutional $1,491 per 1,000 sq ft
Year		Hsg Unit	Hsg Unit	Hsg Unit	KSF	KSF	KSF	KSF
Base	2024	25,814	1,213	5,950	16,277	2,547	1,021	997
Year 1	2025	27,626	1,828	6,234	18,119	3,075	1,142	1,076
Year 2	2026	29,361	2,443	6,518	19,962	3,865	1,251	1,155
Year 3	2027	31,214	3,261	6,802	21,804	4,304	1,361	1,235
Year 4	2028	32,792	4,235	7,087	22,804	4,742	1,470	1,314
Year 5	2029	34,611	5,208	7,371	24,134	5,239	1,580	1,394
Year 6	2030	36,173	6,063	7,655	25,464	5,744	1,689	1,473
Year 7	2031	37,466	6,917	7,911	26,544	6,228	1,901	1,585
Year 8	2032	38,700	7,617	8,167	27,624	6,712	2,113	1,697
Year 9	2033	40,611	8,317	8,423	28,704	7,196	2,324	1,809
Year 10	2034	42,460	9,017	8,679	29,784	7,734	2,536	1,980
10-Year Increase		16,646	7,804	2,729	13,507	5,187	1,515	983
Projected Revenue		$27,574,181	$10,099,568	$2,825,626	$2,324,869	$12,676,414	$1,643,480	$1,465,892

Projected Fee Revenue	$58,610,030
Verrado Deficit	$4,251,359
Total Expenditures	$62,861,389

STREET FACILITIES IIP

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

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

The Street Facilities IIP includes components for arterial improvements, interchange right-of-way, and the cost of preparing the Street Facilities IIP and related Development Fee Report. The plan-based methodology is used for all components.

PROPORTIONATE SHARE

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

SERVICE AREA

Figure S1 includes the service area map for the Street Facilities IIP.

Street Service Area

The street service area includes areas south of Greenway Road and north of the Gila River. Buckeye will assess development fees related to interchange ROW and the cost of preparing the Street Facilities IIP and related Development Fee Report within this service area. There are two subareas within the street service area.

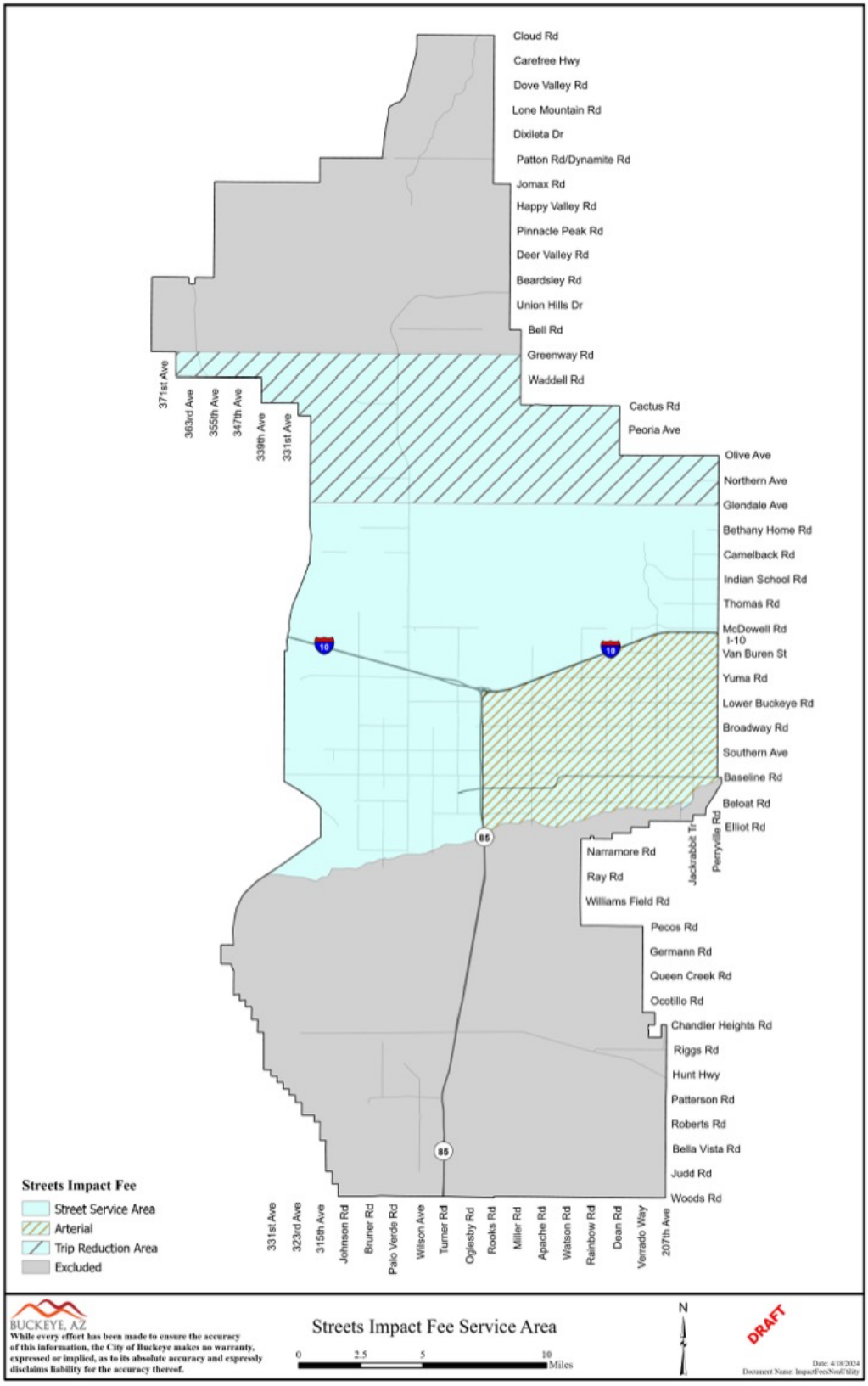
Trip Reduction Service Area

The trip reduction service area is located within the street service area and includes areas south of Greenway Road and north of Glendale Avenue. Development within the trip reduction service area receives a trip adjustment of 50 percent to account for alternative travel patterns that may reduce the amount of vehicle trips using future Interstate 10 interchanges.

Arterial Service Area

The arterial service area is located within the street service area and includes areas north of the Gila River, east of State Route 85, south of Interstate 10, and west of Perryville Road. In addition to development fees related to interchange ROW and the cost of preparing the Street Facilities IIP and related Development Fee Report, Buckeye will assess development fees related to arterial improvements within the arterial service area.

Figure S1: Street Facilities Service Area



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."*

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

Residential Trip Generation Rates

For residential development, TischlerBise uses trip generation rates published in Trip Generation, Institute of Transportation Engineers, 11th Edition (2021). For single-family development, the proxy is Single Family Detached Housing (ITE 210), and this type of development generates 9.43 average weekday vehicle trip ends per unit. For multi-family development, the proxy is Multifamily Housing Low-Rise (ITE 220), and this type of development generates 6.74 average weekday vehicle trip ends per unit. For age restricted development, the proxy is Senior Adult Housing – Single-Family (ITE 251), and this type of development generates 4.31 average weekday vehicle trip ends per unit.

Nonresidential Trip Generation Rates

For nonresidential development, TischlerBise uses trip generation rates published in Trip Generation, Institute of Transportation Engineers, 11th Edition (2021). The prototype for industrial development is Warehousing (ITE 150) which generates 1.71 average weekday vehicle trip ends per 1,000 square feet of floor area. For office & other services development, the proxy is General Office (ITE 710), and it generates 10.84 average weekday vehicle trip ends per 1,000 square feet of floor area. Institutional development uses Government Office (ITE 730) and generates 22.59 average weekday vehicle trip ends per 1,000 square feet of floor area. The prototype for commercial development is Shopping Center (ITE 820) which generates 37.01 average weekday vehicle trips per 1,000 square feet of floor area.

Figure S2: Average Weekday Vehicle Trip Ends by Land Use

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

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

Trip Rate Adjustments

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

Commuter Trip Adjustment

Residential development has a larger trip adjustment factor of 64 percent to account for commuters leaving Buckeye for work. According to the 2009 National Household Travel Survey (see Table 30) weekday work trips are typically 31 percent of production trips (i.e., all out-bound trips, which are 50 percent of all trip ends). As shown in Figure S3, the U.S. Census Bureau's OnTheMap web application indicates 92 percent of resident workers traveled outside of Buckeye for work in 2020. In combination, these factors (0.31 x 0.50 x 0.92 = 0.14) support the additional 14 percent allocation of trips to residential development.

Figure S3: Commuter Trip Adjustment

Trip Adjustment Factor for Commuters	
Employed Residents	36,902
Residents Living and Working in Buckeye	2,870
Residents Commuting Outside Buckeye for Work	34,032
Percent Commuting out of Buckeye	92%
Additional Production Trips[1]	14%
Standard Trip Rate Adjustment	50%
Residential Trip Adjustment Factor	64%

Source: U.S. Census Bureau, OnTheMap Application (version 6.23.1) and LEHD Origin-Destination Employment Statistics, 2020.

1. According to the National Household Travel Survey (2009)*, published in December 2011 (see Table 30), home-based work trips are typically 30.99 percent of "production" trips, in other words, out-bound trips (which are 50 percent of all trip ends). Also, LED OnTheMap data from 2020 indicate that 92 percent of Buckeye's workers travel outside the city for work. In combination, these factors (0.3099 x 0.50 x .92 = 0.143) account for 14 percent of additional production trips. The total adjustment factor for residential includes attraction trips (50 percent of trip ends) plus the journey-to-work commuting adjustment (14 percent of production trips) for a total of 64 percent.
*http://nhts.ornl.gov/publications.shtml ; Summary of Travel Trends - Table "Daily Travel Statistics by Weekday vs. Weekend"

Adjustment for Pass-By Trips

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

Average Weekday Vehicle Trips

Shown below in Figure S4, multiplying average weekday vehicle trip ends and trip adjustment factors by existing development units provides the average weekday vehicle trips generated by existing development. As shown below, existing development citywide generates 302,706 vehicle trips on an average weekday.

Figure S4: Average Weekday Vehicle Trips by Land Use – Citywide

Development Type	Development Unit	ITE Code	Avg Wkday VTE	Trip Adjustment	2024 Dev Units	2024 Veh Trips
Single Family	HU	210	9.43	64%	38,782	234,060
Multi-Family	HU	220	6.74	64%	1,298	5,598
Industrial	KSF	150	1.71	50%	16,360	13,988
Commercial	KSF	820	37.01	33%	2,839	34,677
Office & Other Services	KSF	710	10.84	50%	1,063	5,760
Institutional	KSF	730	22.59	33%	1,157	8,623
Total						302,706

Shown below in Figure S5, existing development in the street service area generates 261,001 vehicle trips on an average weekday—this includes trips generated in the trip reduction and arterial service areas.

Figure S5: Average Weekday Vehicle Trips by Land Use – Street Service Area

Development Type	Development Unit	ITE Code	Avg Wkday VTE	Trip Adjustment	2024 Dev Units	2024 Veh Trips
Single Family	HU	210	9.43	64%	32,477	195,965
Multi-Family	HU	220	6.74	64%	1,298	5,598
Industrial	KSF	150	1.71	50%	16,360	13,988
Commercial	KSF	820	37.01	33%	2,631	32,113
Office & Other Services	KSF	710	10.84	50%	981	5,314
Institutional	KSF	730	22.59	33%	1,076	8,023
Total						261,001

Trip Length Weighting Factor

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

Local Trip Lengths

According to recent estimates, Buckeye provides 228.86 lane miles of arterials citywide. Using a capacity standard of 8,700 vehicles per lane mile, Buckeye's existing arterial network provides 1,991,039 vehicle miles of capacity (228.86 lane miles X 8,700 vehicles per lane mile). To derive the average utilization (i.e., average trip length expressed in miles) of the major streets, divide vehicle miles of capacity by vehicle trips attracted to development in Buckeye. As shown in Figure S4, citywide development currently attracts

302,706 average weekday vehicle trips. Dividing 1,991,039 vehicle miles of capacity by existing average weekday vehicle trips yields an unweighted-average trip length of approximately 6.57 miles. The calibration of average trip length includes the same adjustment factors used in the development fee calculations (i.e., commuter trip adjustment, pass-by trip adjustment, and average trip length adjustment). With these refinements, the weighted-average trip length is 6.0866 miles.

Local Vehicle Miles Traveled

Shown below are the demand indicators for residential and nonresidential land uses related to vehicle miles traveled (VMT). For residential development, the table displays VMT per housing unit. For nonresidential development, the table displays VMT generated per 1,000 square feet of floor.

Figure S6: Ratio of Service Unit to Development Unit

Residential Development per Housing Unit					
Development Type	AWVTE per unit[1]	Trip Adjustment[1]	Average Trip Length (miles)	Trip Length Weight Factor[1]	Avg Wkdy VMT per Unit
Low/Med Density (<8 DU/Acre)	9.43	64%	6.0866	117%	42.98
High Density (≥8 DU/Acre)	6.74	64%	6.0866	117%	30.72
Age Restricted (≤8 DU/Acre)	4.31	64%	6.0866	117%	19.64

Nonresidential Development per 1,000 Square Feet					
Development Type	AWVTE per 1,000 Sq Ft[1]	Trip Adjustment[1]	Average Trip Length (miles)	Trip Length Weight Factor[1]	Avg Wkdy VMT per 1,000 Sq Ft
Industrial	1.71	50%	6.0866	73%	3.80
Commercial	37.01	33%	6.0866	75%	55.75
Office & Other Services	10.84	50%	6.0866	73%	24.08
Institutional	22.59	33%	6.0866	73%	33.12

1. See Land Use Assumptions

Shown below are the demand indicators for residential and nonresidential land uses related to VMT in the trip reduction service area. For residential development, the table displays VMT per housing unit. For nonresidential development, the table displays VMT generated per 1,000 square feet of floor.

Figure S7: Ratio of Service Unit to Development Unit – Trip Reduction Service Area

Residential Development per Housing Unit					
Development Type	AWVTE per unit[1]	Trip Adjustment[1]	Average Trip Length (miles)	Trip Length Weight Factor[1]	Avg Wkdy VMT per Unit
Low/Med Density (<8 DU/Acre)	9.43	32%	6.0866	117%	21.49
High Density (≥8 DU/Acre)	6.74	32%	6.0866	117%	15.36
Age Restricted (≤8 DU/Acre)	4.31	32%	6.0866	117%	9.82

Nonresidential Development per 1,000 Square Feet					
Development Type	AWVTE per 1,000 Sq Ft[1]	Trip Adjustment[1]	Average Trip Length (miles)	Trip Length Weight Factor[1]	Avg Wkdy VMT per 1,000 Sq Ft
Industrial	1.71	25%	6.0866	73%	1.90
Commercial	37.01	17%	6.0866	75%	27.88
Office & Other Services	10.84	25%	6.0866	73%	12.04
Institutional	22.59	17%	6.0866	73%	16.56

1. See Land Use Assumptions

PROJECTED DEMAND FOR SERVICES AND COSTS

ARS § 9-463.05(E)(5) requires:

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

ARS § 9-463.05(E)(6) requires:

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

Citywide

As shown in the *Land Use Assumptions* document, citywide projected development includes an additional 29,507 housing units and 21,435,000 square feet of nonresidential floor area over the next 10 years. Based on the trip generation factors discussed in this section, projected development generates an additional 1,590,499 VMT over the next 10 years.

Figure S8: Projected Travel Demand – Citywide

Development Type	Development Unit	ITE Code	Weekday VTE	Trip Adjustment	Trip Length Adjustment	Weekday VMT
Single Family	HU	210	9.43	64%	117%	42.98
Multi-Family	HU	220	6.74	64%	117%	30.72
Industrial	KSF	150	1.71	50%	73%	3.80
Commercial	KSF	820	37.01	33%	75%	55.75
Office & Other Services	KSF	710	10.84	50%	73%	24.08
Institutional	KSF	730	22.59	33%	73%	33.12

Capacity Per Lane Mile	8,700
Average Trip Length	6.087

Buckeye	2024	2025	2026	2027	2028	2029	2034	10-Year Increase
	Base	1	2	3	4	5	10	
Single Family Units	38,782	41,092	43,325	45,739	47,878	50,257	60,324	21,542
Multi-Family Units	1,298	1,993	2,689	3,507	4,480	5,454	9,263	7,965
Industrial KSF	16,360	18,207	20,053	21,899	22,903	24,236	29,890	13,530
Commercial KSF	2,839	3,388	4,200	4,659	5,119	5,636	8,178	5,339
Office & Other Services KSF	1,063	1,187	1,300	1,413	1,526	1,639	2,621	1,558
Institutional KSF	1,157	1,238	1,318	1,399	1,480	1,561	2,165	1,008
Single-Family Trips	234,060	247,998	261,474	276,042	288,952	303,313	364,070	130,010
Multi-Family Trips	5,598	8,598	11,598	15,128	19,327	23,525	39,956	34,358
Residential Trips	239,658	256,597	273,072	291,170	308,278	326,838	404,026	164,368
Industrial Trips	13,988	15,567	17,145	18,723	19,582	20,722	25,556	11,568
Commercial Trips	34,677	41,381	51,293	56,906	62,519	68,839	99,884	65,208
Office & Other Services Trips	5,760	6,435	7,046	7,658	8,270	8,882	14,205	8,445
Institutional Trips	8,623	9,225	9,828	10,430	11,032	11,634	16,138	7,515
Nonresidential Trips	63,048	72,608	85,312	93,718	101,403	110,078	155,784	92,736
Total Vehicle Trips	**302,706**	**329,205**	**358,385**	**384,888**	**409,681**	**436,916**	**559,810**	**257,104**
Vehicle Miles Traveled (VMT)	**1,991,039**	**2,154,958**	**2,329,941**	**2,496,854**	**2,653,515**	**2,825,000**	**3,581,538**	**1,590,499**
Arterial Lane Miles	228.86	247.70	267.81	286.99	305.00	324.71	411.67	182.82

Street Service Area

Figure S9 includes projected VMT during the next 10 years within the street service area. Based on projections in the *Land Use Assumptions* document and demand factors shown in Figure S6, projected development within the street service area generates an additional 631,502 VMT over the next five years (2,061,468 VMT in 2029 – 1,429,967 VMT in 2024) and 1,091,565 VMT over the next 10 years (2,521,532 VMT in 2034 – 1,429,967 VMT in 2024).

Figure S9: Projected Travel Demand – Street Service Area

Development Type	Development Unit	ITE Code	Weekday VTE	Trip Adjustment	Trip Length Adjustment	Weekday VMT
Single Family	HU	210	9.43	64%	117%	42.98
Multi-Family	HU	220	6.74	64%	117%	30.72
Industrial	KSF	150	1.71	50%	73%	3.80
Commercial	KSF	820	37.01	33%	75%	55.75
Office & Other Services	KSF	710	10.84	50%	73%	24.08
Institutional	KSF	730	22.59	33%	73%	33.12

Capacity Per Lane Mile	8,700
Average Trip Length	6.0866

Street Service Area	2024	2025	2026	2027	2028	2029	2034	10-Year Increase
	Base	1	2	3	4	5	10	
Single Family Units	32,477	34,415	36,276	38,318	40,086	42,094	48,452	15,975
Multi-Family Units	1,298	1,993	2,689	3,507	4,480	5,454	9,263	7,965
Industrial KSF	16,360	18,207	20,053	21,899	22,903	24,236	29,797	13,436
Commercial KSF	2,631	3,108	3,848	4,236	4,623	5,069	7,340	4,710
Office & Other Services KSF	981	1,083	1,175	1,266	1,357	1,449	2,301	1,320
Institutional KSF	1,076	1,143	1,209	1,276	1,342	1,409	1,901	825
Single-Family Trips	195,965	207,653	217,972	228,931	238,231	248,983	278,598	82,633
Multi-Family Trips	5,598	8,598	11,598	15,128	18,993	22,857	38,621	33,023
Residential Trips	201,563	216,251	229,570	244,059	257,224	271,840	317,219	115,656
Industrial Trips	13,988	15,567	17,145	18,723	19,582	20,581	24,630	10,642
Commercial Trips	32,113	37,937	46,968	51,700	56,432	61,518	87,478	55,365
Office & Other Services Trips	5,314	5,872	6,367	6,862	7,357	7,852	12,420	7,106
Institutional Trips	8,023	8,519	9,015	9,511	10,007	10,503	14,103	6,080
Nonresidential Trips	59,438	67,894	79,495	86,796	93,378	100,454	138,631	79,193
Total Vehicle Trips	**261,001**	**284,145**	**309,065**	**330,855**	**350,601**	**372,294**	**455,850**	**194,849**
Vehicle Miles Traveled (VMT)	**1,429,967**	**1,562,007**	**1,698,664**	**1,823,826**	**1,936,356**	**2,061,468**	**2,521,532**	**1,091,565**

Arterial Service Area

Figure S10 includes projected VMT during the next 10 years within the arterial service area. Based on projections in the *Land Use Assumptions* document and demand factors shown in Figure S6, projected development within the arterial service area generates an additional 534,078 VMT over the next 10 years.

Figure S10: Projected Travel Demand – Arterial Service Area

Development Type	Development Unit	ITE Code	Weekday VTE	Trip Adjustment	Trip Length Adjustment	Weekday VMT
Single Family	HU	210	9.43	64%	117%	42.98
Multi-Family	HU	220	6.74	64%	117%	30.72
Industrial	KSF	150	1.71	50%	73%	3.80
Commercial	KSF	820	37.01	33%	75%	55.75
Office & Other Services	KSF	710	10.84	50%	73%	24.08
Institutional	KSF	730	22.59	33%	73%	33.12

Capacity Per Lane Mile	8,700
Average Trip Length	6.0866

Street Service Area: Arterial	2024 Base	2025 1	2026 2	2027 3	2028 4	2029 5	2034 10	10-Year Increase
Single Family Units	17,547	18,787	19,651	20,482	21,039	21,837	20,156	2,609
Multi-Family Units	1,212	1,827	2,442	3,260	4,079	4,897	8,397	7,185
Industrial KSF	15,623	17,458	19,293	21,127	22,119	23,112	26,231	10,608
Commercial KSF	1,836	2,177	2,781	3,032	3,284	3,535	4,393	2,556
Office & Other Services KSF	572	651	719	786	853	921	913	341
Institutional KSF	516	536	556	575	595	615	824	308
Single-Family Trips	105,898	113,384	118,597	123,615	126,976	131,788	121,645	15,748
Multi-Family Trips	5,228	7,881	10,534	14,064	17,594	21,124	36,221	30,993
Residential Trips	111,126	121,265	129,130	137,679	144,569	152,912	157,867	46,741
Industrial Trips	13,358	14,927	16,495	18,064	18,912	19,761	22,428	9,070
Commercial Trips	22,428	26,591	33,961	37,032	40,103	43,174	53,650	31,222
Office & Other Services Trips	3,102	3,529	3,894	4,259	4,624	4,989	4,948	1,846
Institutional Trips	3,850	3,996	4,143	4,290	4,437	4,583	6,143	2,294
Nonresidential Trips	42,737	49,043	58,493	63,645	68,076	72,507	87,169	44,432
Total Vehicle Trips	**153,862**	**170,308**	**187,624**	**201,324**	**212,645**	**225,419**	**245,035**	**91,173**
Vehicle Miles Traveled (VMT)	**983,981**	**1,084,711**	**1,183,611**	**1,267,754**	**1,336,883**	**1,416,354**	**1,518,058**	**534,078**

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

ARS § 9-463.05(E)(1) requires:

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

ARS § 9-463.05(E)(2) requires:

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

Arterial Improvements – Plan-Based

Buckeye plans to construct arterial improvements within the arterial service area to serve existing and future development over the next 10 years. The planned arterial improvements will add capacity to the arterial network by widening arterials in areas with asymmetric road layouts, also known as scalloped streets, located adjacent to parcels where future development is not required to construct half-street improvements. Examples include bridges across the Roosevelt Irrigation District (RID) Canal and arterial segments adjacent to developed county islands. The total cost of planned arterial improvements within the arterial service area is $37,807,000.

Figure S11: Planned Arterial Improvements

Description	Cost
Watson Road, Elwood to RID	$7,225,000
Watson Road Bridge at RID	$10,275,000
Miller Road Bridge at RID	$7,525,000
Apache Rd., Roeser South (Napolitano Frontage)	$4,125,000
249th Ave/Yuma Road, Store All American to Jones Ford	$3,670,000
Miller Rd., Broadway to Warner St. (No Signal)	$4,987,000
Total	$37,807,000

Source: Buckeye Engineering Department

The planned arterial improvements provide a benefit to existing and future development, so the analysis allocates the total cost of the planned arterial improvements to 2034 total VMT generated in the arterial service area. The arterial improvements cost is $24.90 per VMT ($37,807,000 / 1,518,058 total VMT in 2034), and 10-year projected revenue is $13,298,536 ($24.90 per VMT X 534,078 additional VMT).

Figure S12: Cost Allocation

Cost Factors	
Planned Arertial Improvements	$37,807,000
2034 VMT	1,518,058
Cost per VMT	$24.90
10-Year VMT Increase	534,078
10-Year Projected Revenue	$13,298,536

Interchange ROW – Plan-Based

Buckeye plans to acquire rights-of-way for future Interstate 10 interchanges to serve future development. Shown below, the total cost of planned interchange ROW acquisitions in the street service area is $28,226,880. Dean Road and Johnson Road were included in the previous Street Facilities IIP, so this analysis includes a credit for development fees already collected for these projects. After subtracting the existing street development fee fund balance as of February 29, 2024, the eligible cost is $27,126,880.

Figure S13: Planned Interchange ROW Acquisition

Description	Project Cost[1]	Fund Balance[2]	Eligible Cost
Dean Rd & I-10 (ROW)	$12,545,280	($776,471)	$11,768,809
Johnson Rd & I-10 (ROW)	$5,227,200	($323,529)	$4,903,671
Wilson Rd & I-10 (ROW)	$5,227,200	$0	$5,227,200
Bruner Rd & I-10 (ROW)	$5,227,200	$0	$5,227,200
Total	$28,226,880	($1,100,000)	$27,126,880

1. Buckeye Engineering Department
2. Buckeye Finance Department, February 2024

The growth share for Dean Road and Johnson Road is 30.6 percent (5-year increase of 631,502 VMT / 1,429,967 VMT in 2024), and the growth share for Wilson Road and Bruner Road is 43.3 percent (10-year increase of 1,091,565 VMT / 1,429,967 VMT in 2024). Applying the growth shares to the eligible costs provides a growth cost of $9,628,534. Dividing the growth costs by the VMT increase associated with each project equals a growth-related cost of $12.22 per VMT.

Figure S14: Cost Allocation

Description	Eligible Cost	Growth Share[1]	Growth Cost	VMT Increase	Cost per VMT
Dean Rd & I-10 (ROW)	$11,768,809	30.6%	$3,601,256	631,502	$5.70
Johnson Rd & I-10 (ROW)	$4,903,671	30.6%	$1,500,523	631,502	$2.38
Wilson Rd & I-10 (ROW)	$5,227,200	43.3%	$2,263,378	1,091,565	$2.07
Bruner Rd & I-10 (ROW)	$5,227,200	43.3%	$2,263,378	1,091,565	$2.07
Total	$27,126,880	35.5%	$9,628,534		$12.22

1. Growth share based on VMT increase

Development Fee Report – Plan-Based

The cost to prepare the Street Facilities IIP and related Development Fee Report equals $27,500. Buckeye plans to update its report every five years. Based on this cost, proportionate share, and five-year projections of new residential and nonresidential development from the *Land Use Assumptions* document, the cost is $0.04 per VMT.

Figure S15: IIP and Development Fee Report

Necessary Public Service	Cost	Proportionate Share		Service Unit	5-Year Change	Cost per Service Unit
Fire	$27,500	Residential	82%	Population	45,138	$0.50
		Nonresidential	18%	Jobs	11,709	$0.42
Library	$9,000	Residential	98%	Population	35,466	$0.25
		Nonresidential	2%	Jobs	11,709	$0.02
Parks and Recreational	$18,400	Residential	98%	Population	35,466	$0.51
		Nonresidential	2%	Jobs	11,709	$0.03
Police	$27,500	Residential	83%	Population	45,138	$0.51
		Nonresidential	17%	Vehicle Trips	47,030	$0.10
Street	$27,500	All Development	100%	VMT	631,502	$0.04
Water	$39,840	All Development	100%	Max Day Gallons	10,846,001	$0.01
Wastewater	$33,640	All Development	100%	Avg Day Gallons	2,285,458	$0.01
Total	$183,380					

STREET FACILITIES DEVELOPMENT FEES

Revenue Credit/Offset

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

Street Facilities Development Fees

Arterial Service Area

Figure S16 includes infrastructure components and cost factors for street facilities development fees in the arterial service area. The cost per service unit is $37.16 per VMT.

Street facilities fees for residential development are assessed according to the number of VMT per housing unit. The fee of $1,597 for low/medium density unit is calculated using a cost per service unit of $37.16 per VMT multiplied by a demand unit of 42.98 VMT per housing unit.

Nonresidential development fees are calculated using VMT as the service unit. The fee of $141 per 1,000 square feet of industrial development is derived from a cost per service unit of $37.16 per VMT multiplied by a demand unit of 3.80 VMT per 1,000 square feet.

Figure S16: Street Facilities Development Fees

Fee Component	Cost per VMT
Arterial Improvements	$24.90
Interchange ROW	$12.22
Development Fee Report	$0.04
Total	$37.16

Residential Fees per Unit				
Development Type	Avg Wkdy VMT per Unit[1]	Proposed Fees	Current Fees	Difference
Low/Med Density (<8 DU/Acre)	42.98	$1,597	$300	$1,297
High Density (≥8 DU/Acre)	30.72	$1,142	$173	$969
Age Restricted (≤8 DU/Acre)	19.64	$730	$136	$594

Nonresidential Fees per 1,000 Square Feet				
Development Type	Avg Wkdy VMT per 1,000 Sq Ft[1]	Proposed Fees	Current Fees	Difference
Industrial	3.80	$141	$26	$115
Commercial	55.75	$2,072	$337	$1,735
Office & Other Services	24.08	$895	$146	$749
Institutional	33.12	$1,231	$193	$1,038

1. See Land Use Assumptions

Street Service Area

Figure S17 includes infrastructure components and cost factors for street facilities development fees in the street service area. The cost per service unit is $12.26 per VMT.

Street facilities fees for residential development are assessed according to the number of VMT per housing unit. The fee of $527 for low/medium density unit is calculated using a cost per service unit of $12.26 per VMT multiplied by a demand unit of 42.98 VMT per housing unit.

Nonresidential development fees are calculated using VMT as the service unit. The fee of $47 per 1,000 square feet of industrial development is derived from a cost per service unit of $12.26 per VMT multiplied by a demand unit of 3.80 VMT per 1,000 square feet.

Figure S17: Street Facilities Development Fees

Fee Component	Cost per VMT
Interchange ROW	$12.22
Development Fee Report	$0.04
Total	$12.26

Residential Fees per Unit				
Development Type	Avg Wkdy VMT per Unit[1]	Proposed Fees	Current Fees	Difference
Low/Med Density (<8 DU/Acre)	42.98	$527	$300	$227
High Density (≥8 DU/Acre)	30.72	$377	$173	$204
Age Restricted (≤8 DU/Acre)	19.64	$241	$136	$105

Nonresidential Fees per 1,000 Square Feet				
Development Type	Avg Wkdy VMT per 1,000 Sq Ft[1]	Proposed Fees	Current Fees	Difference
Industrial	3.80	$47	$26	$21
Commercial	55.75	$683	$337	$346
Office & Other Services	24.08	$295	$146	$149
Institutional	33.12	$406	$193	$213

1. See Land Use Assumptions

Trip Reduction Service Area

Figure S18 includes infrastructure components and cost factors for street facilities development fees in the trip reduction service area. The cost per service unit is $12.26 per VMT.

Street facilities fees for residential development are assessed according to the number of VMT per housing unit. The fee of $263 for low/medium density unit is calculated using a cost per service unit of $12.26 per VMT multiplied by a demand unit of 21.49 VMT per housing unit.

Nonresidential development fees are calculated using VMT as the service unit. The fee of $23 per 1,000 square feet of industrial development is derived from a cost per service unit of $12.26 per VMT multiplied by a demand unit of 1.90 VMT per 1,000 square feet.

Figure S18: Street Facilities Development Fees

Fee Component	Cost per VMT
Interchange ROW	$12.22
Development Fee Report	$0.04
Total	$12.26

Residential Fees per Unit				
Development Type	Avg Wkdy VMT per Unit[1]	Proposed Fees	Current Fees	Difference
Low/Med Density (<8 DU/Acre)	21.49	$263	$300	($37)
High Density (≥8 DU/Acre)	15.36	$188	$173	$15
Age Restricted (≤8 DU/Acre)	9.82	$120	$136	($16)

Nonresidential Fees per 1,000 Square Feet				
Development Type	Avg Wkdy VMT per 1,000 Sq Ft[1]	Proposed Fees	Current Fees	Difference
Industrial	1.90	$23	$26	($3)
Commercial	27.88	$342	$337	$5
Office & Other Services	12.04	$148	$146	$2
Institutional	16.56	$203	$193	$10

1. See Land Use Assumptions

STREET FACILITIES DEVELOPMENT FEE REVENUE

Appendix A contains revenue forecasts required by Arizona's Enabling Legislation (ARS § 9-463.05(E)(7)).

Arterial Service Area

Projected fee revenue shown in Figure S19 is based on the development projections in the *Land Use Assumptions* document and the updated street facilities development fees for the arterial service area. If development occurs faster than projected, the demand for infrastructure will increase along with development fee revenue. If development occurs slower than projected, the demand for infrastructure will decrease and development fee revenue will decrease at a similar rate. Projected development fee revenue equals $19,020,391 and projected expenditures equal $55,585,801. Buckeye will fund existing development's share of projected expenditures with non-development fee revenue.

Figure S19: Street Facilities Development Fee Revenue

Fee Component	Growth Share	Existing Share	Total
Arterial Improvements	$13,298,536	$24,508,464	$37,807,000
Interchange ROW	$5,704,656	$12,055,317	$17,759,973
Development Fee Report	$18,829	$0	$18,829
Total	$19,022,021	$36,563,781	$55,585,801

		Low/Med Res $1,597 per unit	High Res $1,142 per unit	Industrial $141 per 1,000 sq ft	Commercial $2,072 per 1,000 sq ft	Office & Other $895 per 1,000 sq ft	Institutional $1,231 per 1,000 sq ft
Year		Hsg Unit	Hsg Unit	KSF	KSF	KSF	KSF
Base	2024	17,547	1,212	15,623	1,836	572	516
Year 1	2025	18,787	1,827	17,458	2,177	651	536
Year 2	2026	19,651	2,442	19,293	2,781	719	556
Year 3	2027	20,482	3,260	21,127	3,032	786	575
Year 4	2028	21,039	4,079	22,119	3,284	853	595
Year 5	2029	21,837	4,897	23,112	3,535	921	615
Year 6	2030	22,197	5,597	24,104	3,786	988	635
Year 7	2031	21,548	6,297	24,636	3,938	969	682
Year 8	2032	20,721	6,997	25,168	4,090	950	729
Year 9	2033	20,470	7,697	25,699	4,241	932	777
Year 10	2034	20,156	8,397	26,231	4,393	913	824
10-Year Increase		2,609	7,185	10,608	2,556	341	308
Projected Revenue		$4,753,899	$7,329,012	$1,401,660	$4,907,080	$306,322	$322,418

Projected Fee Revenue	$19,020,391
Total Expenditures	$55,585,801

Street Service Area

Projected fee revenue shown in Figure S20 is based on the development projections in the *Land Use Assumptions* document and the updated street facilities development fees in the street service area. If development occurs faster than projected, the demand for infrastructure will increase along with development fee revenue. If development occurs slower than projected, the demand for infrastructure will decrease and development fee revenue will decrease at a similar rate. Projected development fee revenue equals $2,911,422 and projected expenditures equal $8,518,875. Buckeye will fund existing development's share of projected expenditures with non-development fee revenue.

Figure S20: Street Facilities Development Fee Revenue

Fee Component	Growth Share	Existing Share	Total
Interchange ROW	$3,066,300	$5,445,771	$8,512,071
Development Fee Report	$6,804	$0	$6,804
Total	$3,073,104	$5,445,771	$8,518,875

Year		Low/Med Res $527 per unit	High Res $377 per unit	Industrial $47 per 1,000 sq ft	Commercial $683 per 1,000 sq ft	Office & Other $295 per 1,000 sq ft	Institutional $406 per 1,000 sq ft
		Hsg Unit	Hsg Unit	KSF	KSF	KSF	KSF
Base	2024	7,899	1	654	499	366	400
Year 1	2025	8,380	1	662	614	387	445
Year 2	2026	8,861	1	669	728	407	491
Year 3	2027	9,342	1	677	843	428	536
Year 4	2028	9,823	1	685	957	449	581
Year 5	2029	10,304	1	692	1,072	469	627
Year 6	2030	10,785	1	700	1,196	490	672
Year 7	2031	11,722	1	895	1,434	688	723
Year 8	2032	12,658	1	1,090	1,672	887	773
Year 9	2033	13,595	1	1,285	1,910	1,086	823
Year 10	2034	14,531	1	1,480	2,148	1,285	873
10-Year Increase		6,632	0	826	1,649	918	473
Projected Revenue		$2,019,627	$0	$14,175	$639,908	$111,654	$126,058

Projected Fee Revenue	$2,911,422
Verrado Deficit	$5,607,453
Total Expenditures	$8,518,875

Trip Reduction Service Area

Projected fee revenue shown in Figure S21 is based on the development projections in the *Land Use Assumptions* document and the updated street facilities development fees in the trip reduction service area. If development occurs faster than projected, the demand for infrastructure will increase along with development fee revenue. If development occurs slower than projected, the demand for infrastructure will decrease and development fee revenue will decrease at a similar rate. Projected development fee revenue equals $852,414 and projected expenditures equal $856,704. Buckeye will fund existing development's share of projected expenditures with non-development fee revenue.

Figure S21: Street Facilities Development Fee Revenue

Fee Component	Growth Share	Existing Share	Total
Interchange ROW	$850,657	$4,179	$854,836
Development Fee Report	$1,868	$0	$1,868
Total	$852,525	$4,179	$856,704

		Low/Med Res $263 per unit	High Res $188 per unit	Industrial $23 per 1,000 sq ft	Commercial $342 per 1,000 sq ft	Office & Other $148 per 1,000 sq ft	Institutional $203 per 1,000 sq ft
Year		Hsg Unit	Hsg Unit	KSF	KSF	KSF	KSF
Base	2024	12	0	0	3	0	0
Year 1	2025	15	0	0	4	0	0
Year 2	2026	318	0	0	4	0	0
Year 3	2027	771	0	0	5	0	0
Year 4	2028	1,225	155	0	6	0	0
Year 5	2029	1,678	310	330	64	0	0
Year 6	2030	2,211	465	660	123	0	0
Year 7	2031	2,863	619	990	181	4	5
Year 8	2032	3,435	619	1,320	239	9	10
Year 9	2033	4,007	619	1,650	298	13	14
Year 10	2034	4,579	619	1,980	356	18	19
10-Year Increase		4,566	619	1,980	353	18	19
Projected Revenue		$696,859	$78,027	$20,664	$54,659	$894	$1,311

Projected Fee Revenue	$852,414
Total Expenditures	$856,704

WATER FACILITIES IIP

ARS § 9-463.05 (T)(7)(a) defines the eligible facilities and assets for 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 wells, arsenic treatment, pump stations, storage tanks, water campus land, water lines, and the cost of preparing the Water Facilities IIP and related Development Fee Report. The plan-based methodology is used for the central service area and the cost recovery methodology is used for the Tartesso West 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 accommodate future development. The Water Facilities IIP and development fees will allocate the cost of necessary public services between both residential and nonresidential development using max day demand factors.

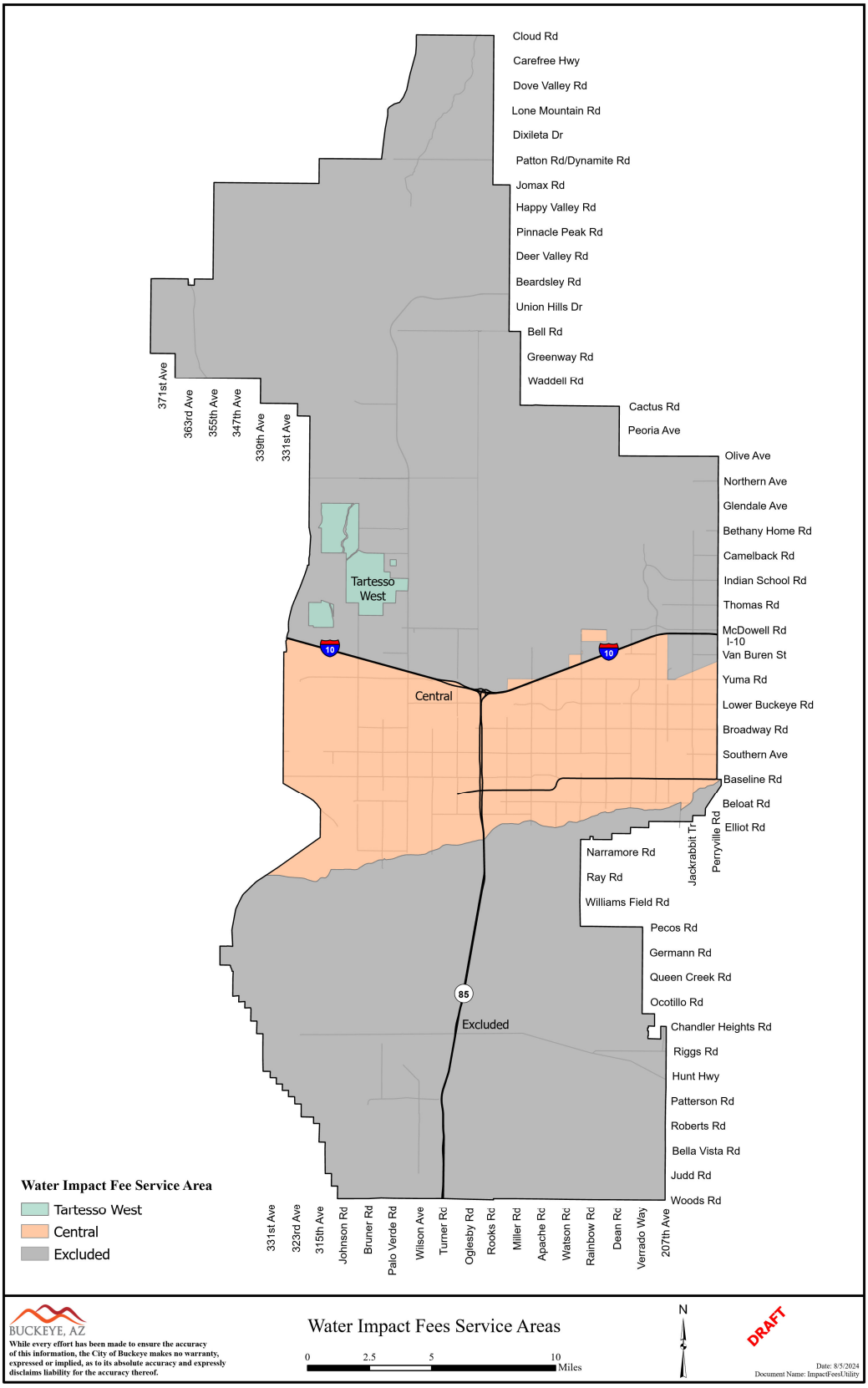
SERVICE AREA

Buckeye's existing water facilities consist of two separate systems with limited potential for interconnection. As shown in Figure W1, there are two service areas for the Water Facilities IIP.

1. **Central:** South of Interstate 10 and north of the Gila River
2. **Tartesso West:** Tartesso West development

The water service areas are acceptable for these facilities as they are defined as the incorporated area or Buckeye utility service area. The water system relies on groundwater, which is pumped to the surface by wells. The wells are connected by transmission lines that convey the water to a water campus where the water is treated, stored in tanks, and pumped into a system of pressurized distribution lines. The water campuses in the central service area are interconnected to provide emergency backup, so it is reasonable to consolidate these water campuses into a single service area. Buckeye is not the only water provider within the city limits, and the proposed water service areas do not include areas served by Arizona Water and EPCOR.

Figure W1: Water Facilities Service Area



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."*

According to estimates derived during Buckeye's 2024 Water Resource Master Plan update, average day demand from a single-family unit (low and medium density residential development) equals 302 gallons per unit. The analysis includes a peaking factor of 1.8 from Buckeye's Water Engineering Design Standards to account for max day demand. As shown below, max day demand from residential development includes a range from 340 gallons per day for active adult units to 544 gallons per day for low and medium density units. Buckeye's current Water Engineering Design Standards include max day demand of 652 gallons for low and medium density residential development (362 average day gallons X 1.8 max day peaking factor), so the updated demand factors shown below represent approximately 83 percent of max day demand as defined in the Water Engineering Design Standards.

Figure W2: Water Demand Factors

Residential Land Use	Dwelling Units per Acre	Persons per Dwelling Unit[1]	Average Day Demand/Person	Average Day Gallons
Low and Medium Density	less than 8	3.20	94	302
High Density (includes apartments)	8 or more	2.50	94	236
Active Adult	max 8	2.00	94	189

Residential Land Use	Dwelling Units per Acre	Average Day Gallons	Maximum Day Peaking Factor[1]	Maximum Day Gallons
Low and Medium Density	less than 8	302	1.8	544
High Density (includes apartments)	8 or more	236	1.8	425
Active Adult	max 8	189	1.8	340

Residential Land Use	Dwelling Units per Acre	Average Day Gallons	Peak Hour Peaking Factor[1]	Peak Hour Gallons
Low and Medium Density	less than 8	302	3.0	906
High Density (includes apartments)	8 or more	236	3.0	708
Active Adult	max 8	189	3.0	566

Source: Buckeye Water Resources Department, 2023

1. Buckeye Water Engineering Design Standards, Section 3-1.202

Figure W3 includes the demand indicators for residential and nonresidential land uses. Future development in the central service area will use the updated demand factors discussed on the previous page. Since Tartesso West uses development fees to recover costs of existing infrastructure, and the current repayment calculation uses demand factors from the existing Water Engineering Design Standards, future development in the Tartesso West service area will continue using the Water Engineering Design Standards demand factors shown below. For residential development, the table displays maximum day gallons per housing unit. For nonresidential development, the table displays maximum day gallons per meter by size. For meters larger than 1.5 inches, maximum day demand is calculated from (1) City of Buckeye Engineering Standards, (2) a submitted water study, or (3) other estimated water demand.

Figure W3: Ratio of Service Unit to Development Unit

Residential Demand per Housing Unit			
Residential Land Use	Demand Unit (Gallons)	Central	Tartesso West[1]
Low/Med Density (<8 DU/Acre)	Max Day	544	652
High Density (≥8 DU/Acre)	Max Day	425	509
Age Restricted (≤8 DU/Acre)	Max Day	340	407

Nonresidential Demand per Meter				
Meter Type and Size	Capacity Ratio	Demand Unit (Gallons)	Central	Tartesso West[1]
Disc 1.0"	1.0	Max Day	544	652
Disc 1.5"	1.7	Max Day	925	1,108
Turbine 1.5"	2.9	Max Day	1,578	1,891

Source: Buckeye Water Resources Department

1. Buckeye Water Engineering Design Standards, Section 3-1.202

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

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 Demand

According to Water Resources Department estimates, 2024 average day demand equals 8.50 million gallons per day (mgd). Using the maximum day peaking factor from Buckeye's Water Engineering Design Standards, maximum day demand is 15.30 mgd. Maximum day demand is 12.51 mgd in the central service area and 2.79 mgd in the Tartesso West area.

Figure W4: Existing Demand

Existing Demand	Central	Tartesso West	Total
Average Day Demand (mgd), 2024	6.95	1.55	8.50
x Max Day Peaking Factor[1]	1.80	1.80	1.80
Max Day Demand (mgd), 2024	12.51	2.79	15.30

Source: Buckeye Water Resources Department

1. Buckeye Water Engineering Design Standards, 2020

System Components

Level of service (LOS) generally refers to the ratio of capacity to demand. One of the principles of development fee analysis is that future development should not be required to pay for a higher LOS than existing development currently receives. Consequently, it is important to determine the existing LOS.

For water facilities, the capacity of water production facilities is generally used as reflective of the capacity of the entire water system. However, some components of the system may have more capacity or less capacity than needed for full utilization of production facilities. The existing water system consists of wells (and the associated transmission lines to connect the wells to the system), arsenic treatment, pump stations, storage tanks, water campus land, and water lines greater than or equal to 16 inches that form the distribution system grid.

Well

Existing well production capacity is summarized in Figure W5. Total capacity of individual wells is shown in gallons per minute (gpm) and millions of gallons per day (mgd). The City's design criteria indicate the capacity of a system of wells should be measured in terms of firm capacity to account for the eventuality that a well may be out of service. Existing firm capacity is 15.43 mgd in the central service area and 3.59 mgd in the Tartesso West service area.

Figure W5: Well Capacity

Existing Well Capacity			
Well	GPM	MGD	MGD (Firm)
Central			
Well 12	310	0.45	0.33
Well 13	150	0.22	0.16
Well 14	245	0.35	0.26
Buckeye Airport Well 1	120	0.17	0.13
Buckeye Airport Well 2	420	0.60	0.45
Riata Well 2	380	0.55	0.41
Evergreen Well 2*	0	0.00	0.00
Sonoran Vista NE Well	525	0.76	0.57
Sonoran Vista SW Well	400	0.58	0.43
Bales Well*	0	0.00	0.00
4th and Baseline Well 1*	0	0.00	0.00
4th and Baseline Well 2*	0	0.00	0.00
Church*	0	0.00	0.00
Sundance Well 1	645	0.93	0.70
Sundance Well 2	760	1.09	0.82
Sundance Well 3	540	0.78	0.58
Sundance Well 4	970	1.40	1.05
Sundance Well 7	510	0.73	0.55
Sundance Well 8	850	1.22	0.92
Sundance Well 9	470	0.68	0.51
North Airport Rd Well 1	2,600	3.74	2.81
North Airport Rd Well 2	3,000	4.32	3.24
B.W. 1	180	0.26	0.19
B.W. 2	500	0.72	0.54
B.W. 3	175	0.25	0.19
Bulfer	40	0.06	0.04
Farallon Well 2	500	0.72	0.54
Subtotal, Central	**14,290**	**20.58**	**15.43**
Tartesso West			
Well 1	400	0.58	0.43
Well 2	1,200	1.73	1.30
Well 3	1,300	1.87	1.40
Well S.V. 1	240	0.35	0.26
Well S.V. 2	180	0.26	0.19
Subtotal, Tartesso West	**3,320**	**4.78**	**3.59**
Total	**17,610**	**25.36**	**19.02**

Source: Buckeye Water Resources Department

*Inactive

Pump Station

Shown below, Figure W6 includes existing pump station capacity. Total capacity of individual pump stations is shown in gallons per minute (gpm) and millions of gallons per day (mgd). The City's design criteria indicate the capacity of individual pump stations should be measured in terms of firm capacity to account for the eventuality that a pump within a pump station may be out of service. Existing firm capacity is 48.02 mgd in the central service area and 13.20 mgd in the Tartesso West service area.

Figure W6: Pump Station Capacity

Existing Pump Station Capacity		
Pump Station	GPM	MGD (Firm)
Central		
Hopeville	3,500	5.04
Sonoran Vista*	0	0.00
Lower Buckeye*	0	0.00
Buckeye North	500	0.72
West Park	3,000	4.32
Rancho Vista	1,850	2.66
Bales	1,800	2.59
4th & Central*	0	0.00
North Airport Rd	6,000	8.64
Sundance Zone 3	6,000	8.64
Sundance Zone 2	3,000	4.32
Historic Buckeye	2,400	3.46
JMWC	5,000	7.20
Bulfer	300	0.43
Subtotal, Central	**33,350**	**48.02**
Tartesso West		
Tartesso Water Campus	9,165	13.20
Subtotal, Tartesso West	**9,165**	**13.20**
Total	**42,515**	**61.22**

Source: Buckeye Water Resources Department

*Inactive

Storage

Figure W7 includes existing storage capacity. Total capacity of individual storage tanks is shown in millions of gallons (MG). Existing capacity is 15.55 mg in the central service area and 2.13 mg in the Tartesso West service area.

Figure W7: Storage Capacity

Existing Storage Capacity	
Storage	MG
Central	
Hopeville #1	0.10
Hopeville #2	0.10
Sonoran Vista WTP*	0.00
Bales 1	0.60
Bales 2	0.50
Lower Buckeye*	0.00
Buckeye North	0.20
Westpark 1	0.50
Westpark 2	0.20
Rancho Vista	0.80
4th & Central*	0.00
4th & Baseline 1*	0.00
4th & Baseline 2*	0.00
Historic Buckeye 1	0.75
Historic Buckeye 2	0.70
Sundance 1	2.60
Sundance 2	1.50
North Airport Rd 1	1.05
North Airport Rd 2	1.05
JMWC	4.00
Bulfer	0.90
Subtotal, Central	**15.55**
Tartesso West	
Tartessto Water Campus	2.00
Sun Valley Water Campus	0.13
Subtotal, Tartesso West	**2.13**
Total	**17.68**

Source: Buckeye Water Resources Department

*Inactive

System Components Summary

Shown below, Figure W8 includes a summary of water system components by service area.

Figure W8: System Components

		Existing Quantity		
System Component	Unit	Central	Tartesso West	Total
Well	each	22.00	5.00	27.00
Arsenic Treatment	mgd	5.00	1.50	6.50
Pump Station	mgd	48.02	13.20	61.22
Storage Tank	mg	15.55	2.13	17.68
Water Campus Land	acres	61.32	3.20	64.52
Water Line, ≥ 16"	lin. ft.	266,512	38,154	304,666

Source: Buckeye Water Resources Department

Level of Service

The central service area provides the most developed water system, while the Tartesso West service area has a smaller system. Figure W9 shows existing quantities for water system components in each service area and a comparison of system component quantities per mgd of well firm capacity.

Figure W9: Existing Level of Service

		Existing Quantity		Quantity per Well mgd	
System Component	Unit	Central	Tartesso West	Central	Tartesso West
Well (Firm)	mgd	15.43	3.59	1.00	1.00
Arsenic Treatment	mgd	5.00	1.50	0.32	0.42
Pump Station	mgd	48.02	13.20	3.11	3.68
Storage Tank	mg	15.55	2.13	1.01	0.59
Water Campus Land	acres	61.32	3.20	3.97	0.89
Water Line, ≥ 16"	lin. ft.	266,512	38,154	17,269	10,641

Source: Buckeye Water Resources Department

Cost Factors

Buckeye's Water Resources Department provided unit costs for water system components based on recent and planned construction costs.

Figure W10: Cost Factors

System Component	Unit	Unit Cost
Well	each	$5,000,000
Arsenic Treatment	mgd	$4,500,000
Pump Station	mgd	$3,900,000
Storage Tank	mg	$1,360,000
Water Campus Land	acres	$60,000
Water Line, ≥ 16"	lin. ft.	$568

Source: Buckeye Water Resources Department

System Value

This section includes the system value for each service area based on existing water system components shown in Figure W8 and unit costs shown in Figure W10.

Central Service Area

Existing water facilities in the central service area are summarized below, and unit costs for system components are based on recent and planned construction costs provided by Water Resources Department staff. The existing water system value in the central service area equals $496,048,073.

Figure W11: System Value

Central				
System Component	Unit	Existing	Unit Cost	System Value
Well	each	22.00	$5,000,000	$110,000,000
Arsenic Treatment	mgd	5.00	$4,500,000	$22,500,000
Pump Station	mgd	48.02	$3,900,000	$187,293,600
Storage Tank	mg	15.55	$1,360,000	$21,148,000
Water Campus Land	acres	61.32	$60,000	$3,679,200
Water Line, ≥ 16"	lin. ft.	266,512	$568	$151,427,273
Total				$496,048,073

Source: Buckeye Water Resources Department

Tartesso West Service Area

Existing water facilities in the Tartesso West service area are summarized below, and unit costs for system components are based on recent and planned construction costs provided by Water Resources Department staff. The existing water system value in the Tartesso West service area equals $107,987,849.

Figure W12: System Value

Tartesso West				
System Component	Unit	Existing	Unit Cost	System Value
Well	each	5.00	$5,000,000	$25,000,000
Arsenic Treatment	mgd	1.50	$4,500,000	$6,750,000
Pump Station	mgd	13.20	$3,900,000	$51,470,640
Storage Tank	mg	2.13	$1,360,000	$2,896,800
Water Campus Land	acres	3.20	$60,000	$192,000
Water Line, ≥16"	lin. ft.	38,154	$568	$21,678,409
Total				$107,987,849

Source: Buckeye Water Resources Department

Central – Plan-Based

Shown below, the analysis divides system value by well capacity to calculate the cost per gallon of water facilities. For pump station and water line components, the analysis multiplies well capacity by 3.0 (peak hour demand is 3.0 X average day demand) since these components are constructed to meet peak hour demand. The cost is $17.52 per gallon in the central service area, and Buckeye will use water facilities development fees to construct growth-related water facilities in the central service area.

Figure W13: Cost per Gallon

Central			
System Component	System Value	Well Capacity (mgd)	Cost per Gallon
Well	$110,000,000	15.43	$7.13
Arsenic Treatment	$22,500,000	15.43	$1.46
Pump Station	$187,293,600	46.30	$4.05
Storage Tank	$21,148,000	15.43	$1.37
Water Campus Land	$3,679,200	15.43	$0.24
Water Line, ≥16"	$151,427,273	46.30	$3.27
Total	$496,048,073		$17.52

Tartesso West – Cost Recovery

Buckeye currently collects water facilities development fees in the Tartesso West service area to reimburse the developer for costs related to an existing well and water lines. The remaining cost of these water facilities is $2,729,341, and available well capacity is 0.48 mgd. The cost is $5.70 per gallon in the Tartesso West service area, and Buckeye will use water facilities development fees to reimburse the developer for existing water facilities in the Tartesso West service area.

Figure W14: Cost per Gallon

Tartesso West			
System Component	Remaining Cost	Available Capacity (mgd)	Cost per Gallon
Water Facilities	$2,729,341	0.48	$5.70
Total	$2,729,341		$5.70

Development Fee Report – Plan-Based

The cost to prepare the Water Facilities IIP and related Development Fee Report equals $39,840. Buckeye plans to update its report every five years. Based on this cost, proportionate share, and five-year projections of future max day water demand, the cost is $0.01 per gallon.

Figure W15: Development Fee Report

Necessary Public Service	Cost	Proportionate Share		Service Unit	5-Year Change	Cost per Service Unit
Fire	$27,500	Residential	82%	Population	45,138	$0.50
		Nonresidential	18%	Jobs	11,709	$0.42
Library	$9,000	Residential	98%	Population	35,466	$0.25
		Nonresidential	2%	Jobs	11,709	$0.02
Parks and Recreational	$18,400	Residential	98%	Population	35,466	$0.51
		Nonresidential	2%	Jobs	11,709	$0.03
Police	$27,500	Residential	83%	Population	45,138	$0.51
		Nonresidential	17%	Vehicle Trips	47,030	$0.10
Street	$27,500	All Development	100%	VMT	631,502	$0.04
Water	$39,840	All Development	100%	Max Day Gallons	10,846,001	$0.01
Wastewater	$33,640	All Development	100%	Avg Day Gallons	2,285,458	$0.01
Total	$183,380					

PROJECTED DEMAND FOR SERVICES AND COSTS

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)(5) requires:

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

ARS § 9-463.05(E)(6) requires:

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

Projected Demand

Shown below, Figure W16 includes projections of average day demand and maximum day demand over the next 10 years. Based on projections provided by Buckeye's Water Resources Department, future development generates an additional maximum day demand of 21.77 mgd over the next 10 years. This includes 20.79 mgd in the central service area and 0.98 mgd in the Tartesso West service area.

Figure W16: Projected Demand

Year		Average Day Demand (mgd)			Max Day Demand (mgd)		
		Central	Tartesso West	Total	Central	Tartesso West	Total
Base	2024	6.95	1.55	8.50	12.51	2.79	15.30
1	2025	8.10	1.60	9.71	14.59	2.88	17.47
2	2026	9.26	1.65	10.91	16.67	2.97	19.64
3	2027	10.41	1.70	12.12	18.75	3.06	21.81
4	2028	11.57	1.75	13.32	20.83	3.15	23.98
5	2029	12.72	1.80	14.53	22.91	3.24	26.15
6	2030	13.88	1.85	15.73	24.98	3.33	28.32
7	2031	15.03	1.91	16.95	27.06	3.44	30.50
8	2032	16.19	1.97	18.16	29.14	3.55	32.69
9	2033	17.34	2.03	19.38	31.22	3.66	34.88
10	2034	18.50	2.10	20.59	33.30	3.77	37.07
10-Yr Increase		11.55	0.55	12.10	20.79	0.98	21.77

Source: Buckeye Water Resources Department

Shown below, Figure W17 includes projected well capacity utilization for each service area in 2034. Based on projected maximum day demand and existing firm capacity, projected well capacity deficits include 17.73 mgd in the central service area and 0.18 mgd in the Tartesso West service area.

Figure W17: Projected Well Capacity Utilization

Projected Demand	Central	Tartesso West	Total
Average Day Demand (mgd), 2034	18.50	2.10	20.59
x Max Day Peaking Factor[1]	1.80	1.80	1.80
Max Day Demand (mgd), 2034	33.30	3.77	37.07
Existing Firm Capacity (mgd)	15.57	3.59	19.15
– Max Day Demand (mgd), 2034	(33.30)	(3.77)	(37.07)
Available Capacity (mgd)	(17.73)	(0.18)	(17.92)
÷ Existing Firm Capacity (mgd)	15.57	3.59	19.15
Percent Available Capacity	(113.90%)	(5.10%)	(93.50%)

Source: Buckeye Water Resources Department

1. Buckeye Water Engineering Design Standards, 2020

Water Facilities Costs

The figure shown below includes planned water facilities capital expenditures during the next 10 years.

Figure W18: Water Facilities Costs

Description	Project Type	Fiscal Year	Cost
Farallon Water Campus	CIP	2024-2025	$52,875,000
Jackie Meck Service Area Well 8 (Ventanna Ranch Well 2)	CIP	2024-2026	$5,000,000
Water Resources Operations Center (Water Share)	CIP	2024-2027	$6,150,000
Jackie Meck Water Campus Expansion	CIP	2025-2031	$11,050,000
North Airport Water Campus Expansion	CIP	2024-2026	$7,000,000
Sundnace Well #10	CIP	2027	$5,000,000
Sundnace Water Campus Expansion	CIP	2025-2027	$7,000,000
Farallon WSA Well 4	CIP	2029-2030	$5,000,000
Grandview Well 2	CIP	2031-2032	$5,000,000
Farallon Water Campus Expansion	CIP	2033-2034	$26,000,000
Ventenna Ranch Well 1	Development	2025	$5,000,000
Well TB1	Development	2026	$5,000,000
North Airport Water Campus - AS Expansion	Development	2026	$2,700,000
North Airport Well 3	Development	2026	$5,000,000
Grandview Water Campus	Development	2026-2028	$45,000,000
Grandview Well 1	Development	2026-2028	$5,000,000
Westpark Water Campus	Development	2027-2028	$45,000,000
Water Campus 5	Development	2029-2031	$45,000,000
Shadow Canyon Booster Station	Development	2029	$7,000,000
Well TB2	Development	2030	$5,000,000
North Airport Well 4	Development	2034	$5,000,000
Water Lines	Development	2024-2034	$70,000,000
Development Fee Report	Study Cost	2024-2029	$38,183
Subtotal, Central			$374,813,183
Tartesso Well / Transmission Line Reimbursement	Dev Agreement	2024-2034	$2,729,341
Development Fee Report	Study Cost	2024-2029	$1,657
Subtotal, Tartesso West			$2,730,998
Total			$377,544,181

Source: Buckeye Water Resources Department

WATER FACILITIES DEVELOPMENT FEES

Revenue Credit/Offset

A revenue credit/offset is not necessary for water facilities development fees. Appendix A contains the forecast of revenues required by Arizona's Enabling Legislation (ARS § 9-463.05(E)(7)).

Central Service Area

Figure W19 includes infrastructure components and cost factors for water facilities development fees in the central service area. The cost per service unit is $17.53 per gallon.

Water facilities fees for residential development are assessed according to maximum day gallons per housing unit. The fee of $9,536 for a low/medium density unit is calculated using a cost per service unit of $17.53 per gallon multiplied by a demand unit of 544 maximum day gallons per housing unit.

Water facilities fees are assessed to nonresidential development according to meter size and type. The base 1.0-inch meter is equivalent to a low/medium density unit, and a capacity ratio is used to convert the base meter fee proportionately for larger meters. The capacity ratios are calculated based on data published in Buckeye's Water Engineering Design Standards. The 1.5-inch disc meter fee of $16,212 is calculated using a cost per service unit of $17.53 per gallon, multiplied by 544 maximum day gallons, multiplied by a capacity ratio of 1.7. For meters larger than 1.5 inches, the fee is calculated using a cost per service unit of $17.53 per gallon multiplied by maximum day gallons from (1) City of Buckeye Engineering Standards, (2) a submitted water study, or (3) other estimated water demand.

Figure W19: Water Facilities Development Fees

Fee Component	Cost per Gallon
Well	$7.13
Arsenic Treatment	$1.46
Pump Station	$4.05
Storage Tank	$1.37
Water Campus Land	$0.24
Water Line, ≥ 16"	$3.27
Development Fee Report	$0.01
Total	$17.53

Residential Fees per Unit - Central				
Residential Land Use	Max Day Gallons[1]	Proposed Fees	Current Fees	Difference
Low/Med Density (<8 DU/Acre)	544	$9,536	$7,675	$1,861
High Density (≥8 DU/Acre)	425	$7,450	n/a	n/a
Age Restricted (≤8 DU/Acre)	340	$5,960	$4,799	$1,161

Nonresidential Fees per Meter - Central					
Meter Size	Meter Type	Capacity Ratio[1]	Proposed Fees[2]	Current Fees	Difference
1.0-inch	Disc	1.0	$9,536	$7,675	$1,861
1.5-inch	Disc	1.7	$16,212	$13,048	$3,164
1.5-inch	Turbine	2.9	$27,655	$22,258	$5,397

Current fees represent Central Buckeye fees.

1. Buckeye Water Resources Department

2. Meters larger than 1.50 inches calculated using $17.53 per gallon multiplied by max day gallons from (1) City of Buckeye Engineering Standards, (2) a submitted water study, or (3) other estimated water demand.

Tartesso Service Area

Figure W20 includes infrastructure components and cost factors for water facilities development fees in the Tartesso West service area. The cost per service unit is $5.71 per gallon.

Water facilities fees for residential development are assessed according to maximum day gallons per housing unit. The fee of $3,723 for a low/medium density unit is calculated using a cost per service unit of $5.71 per gallon multiplied by a demand unit of 652 maximum day gallons per housing unit.

Water facilities fees are assessed to nonresidential development according to meter size and type. The base 1.0-inch meter is equivalent to a low/medium density unit, and a capacity ratio is used to convert the base meter fee proportionately for larger meters. The capacity ratios are calculated based on data published in Buckeye's Water Engineering Design Standards. The 1.5-inch disc meter fee of $6,329 is calculated using a cost per service unit of $5.71 per gallon, multiplied by 652 maximum day gallons, multiplied by a capacity ratio of 1.7. For meters larger than 1.5 inches, the fee is calculated using a cost per service unit of $5.71 per gallon multiplied by maximum day gallons from (1) City of Buckeye Engineering Standards, (2) a submitted water study, or (3) other estimated water demand.

Figure W20: Water Facilities Development Fees

Fee Component	Cost per Gallon
Water Facilities Reimbursement	$5.70
Development Fee Report	$0.01
Total	$5.71

Residential Fees per Unit - Tartesso West				
Residential Land Use	Max Day Gallons[1]	Proposed Fees	Current Fees	Difference
Low/Med Density (<8 DU/Acre)	652	$3,723	$3,717	$6
High Density (≥8 DU/Acre)	509	$2,906	n/a	n/a
Age Restricted (≤8 DU/Acre)	407	$2,324	$2,324	$0

Fees per Meter - Tartesso West					
Meter Size	Meter Type	Capacity Ratio[1]	Proposed Fees[2]	Current Fees	Difference
1.0-inch	Disc	1.0	$3,723	$3,717	$6
1.5-inch	Disc	1.7	$6,329	$6,319	$10
1.5-inch	Turbine	2.9	$10,796	$10,780	$16

Current fees represent Tartesso West fees.

1. Buckeye Water Engineering Design Standards, Section 3-1.202

2. Meters larger than 1.50 inches calculated using $5.71 per gallon multiplied by max day gallons from (1) City of Buckeye Engineering Standards, (2) a submitted water study, or (3) other estimated water demand.

WATER FACILITIES DEVELOPMENT FEE REVENUE

Appendix A contains revenue forecasts required by Arizona's Enabling Legislation (ARS § 9-463.05(E)(7)). Projected fee revenue shown in Figure W21 is based on projected maximum day water demand in Figure W16 and the updated water facilities development fees. If development occurs faster than projected, the demand for infrastructure will increase along with development fee revenue. If development occurs slower than projected, the demand for infrastructure will decrease and development fee revenue will decrease at a similar rate. Projected development fee revenue over the next 10 years equals $364,448,700 in the central service area and $2,730,998 in the Tartesso West service area – Buckeye will end collection of water facilities fees in the Tartesso West service area at the time of full reimbursement. Due to existing development agreements, projected development fee revenue may be offset by development fee credits.

Figure W21: Water Facilities Development Fees Revenue

Fee Component	Central	Tartesso West
Water Facilities	$374,775,000	$2,729,341
Development Fee Report	$38,183	$1,657
Total	$374,813,183	$2,730,998

		Central $17.53 per gallon	Tartesso West $5.71 per gallon
Year		MGD	MGD
Base	2024	12.51	2.79
Year 1	2025	14.59	2.88
Year 2	2026	16.67	2.97
Year 3	2027	18.75	3.06
Year 4	2028	20.83	3.15
Year 5	2029	22.91	3.24
Year 6	2030	24.98	3.27
Year 7	2031	27.06	3.27
Year 8	2032	29.14	3.27
Year 9	2033	31.22	3.27
Year 10	2034	33.30	3.27
10-Year Increase		20.79	0.48
Projected Revenue		$364,448,700	$2,730,998

Projected Fee Revenue	$367,179,698
Total Expenditures	$377,544,181

WASTEWATER FACILITIES IIP

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

> *"Wastewater facilities, including collection, interception, transportation, treatment and disposal of wastewater, and any appurtenances for those facilities."*

The Wastewater Facilities IIP includes components for water reclamation facilities (WRF), lift stations, WRF land, collection lines, reclaimed lines, recharge basins, and the cost of preparing the Wastewater Facilities IIP and related Development Fee Report. The plan-based methodology is used for the central and Sundance service areas and the cost recovery methodology is used for the Tartesso West service area.

PROPORTIONATE SHARE

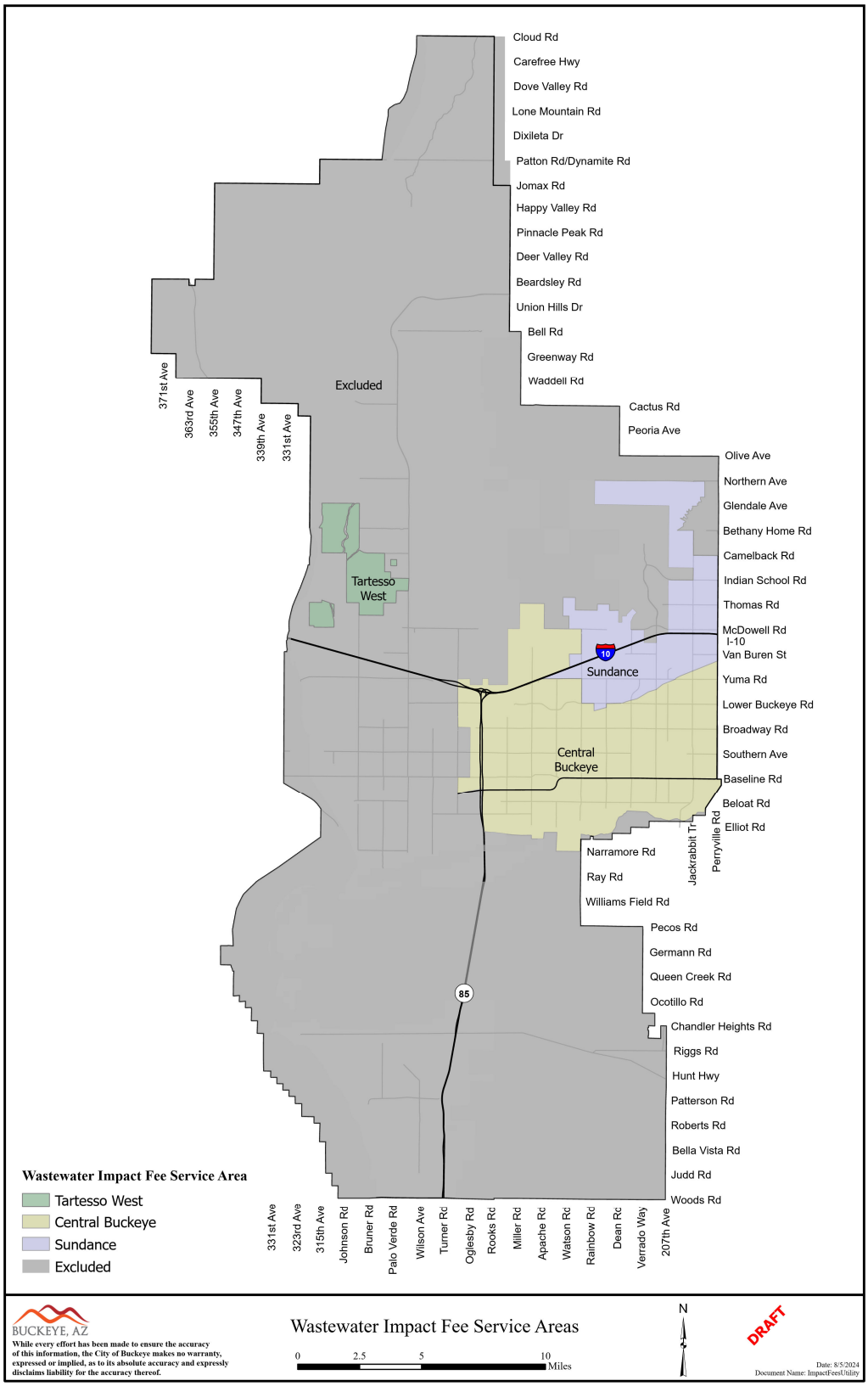
ARS § 9-463.05 (B)(3) states that the development fee shall not exceed a proportionate share of the cost of necessary public services needed to accommodate new development. The Wastewater Facilities IIP and development fees will allocate the cost of necessary public services between both residential and nonresidential development using average day flow factors.

SERVICE AREA

Buckeye's existing wastewater facilities consist of three separate systems with limited potential for interconnection. As shown in Figure WW1, there are three services areas for the Wastewater Facilities IIP.

The wastewater service areas are acceptable for these facilities as they are defined as the incorporated area or Buckeye utility service area. Buckeye is not the only wastewater provider within the city limits, and the proposed wastewater service areas do not include areas served by EPCOR.

Figure WW1: Wastewater Facilities Service Area



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."*

According to estimates derived during Buckeye's 2024 Water Resource Master Plan update, average day flow from a single-family unit (low and medium density residential development) equals 173 gallons per unit. As shown below in Figure WW2, average day flow from residential development includes a range from 108 gallons per day for active adult units to 173 gallons per day for low and medium density units. Buckeye's current Gravity Sewer Design Standards include average day flow of 256 gallons for low and medium density residential development, so the updated flow factors shown below represent approximately 68 percent of average day flow as defined in the Gravity Sewer Design Standards.

Figure WW2: Wastewater Flow Factors

Residential Land Use	Dwelling Units per Acre	Persons per Dwelling Unit[1]	Average Day Flow/Person	Average Day Gallons
Low and Medium Density	less than 8	3.20	54	173
High Density (includes apartments)	8 or more	2.50	54	135
Active Adult	max 8	2.00	54	108

Source: Buckeye Water Resources Department, 2023

1. Buckeye Gravity Sewer Design Standards, Section 4-1.202

Figure WW3 includes the flow factors for residential and nonresidential land uses. Future development in the central and Sundance service areas will use the updated flow factors discussed on the previous page. Since Tartesso West uses development fees to recover costs of existing infrastructure, and the current repayment calculation uses flow factors from the existing Gravity Sewer Design Standards, future development in the Tartesso West service area will continue using the Gravity Sewer Design Standards flow factors shown below. For residential development, the table displays average day gallons per housing unit. For nonresidential development, the table displays average day gallons per meter by size. For meters larger than 1.5 inches, average day flow is calculated from (1) City of Buckeye Engineering Standards, (2) a submitted water study, or (3) other estimated wastewater flow.

Figure WW3: Ratio of Service Unit to Development Unit

Residential Flow per Housing Unit			
Residential Land Use	Demand Unit (Gallons)	Central / Sundance	Tartesso West[1]
Low/Med Density (<8 DU/Acre)	Avg Day	173	256
High Density (≥8 DU/Acre)	Avg Day	135	200
Age Restricted (≤8 DU/Acre)	Avg Day	108	160

Nonresidential Flow per Meter				
Meter Type and Size	Capacity Ratio	Demand Unit (Gallons)	Central / Sundance	Tartesso West[1]
Disc 1.0"	1.0	Avg Day	173	256
Disc 1.5"	1.7	Avg Day	294	435
Turbine 1.5"	2.9	Avg Day	502	742

Source: Buckeye Water Resources Department

1. Buckeye Gravity Sewer Design Standards, Section 4-1.202

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

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 Flow

According to Water Resources Department estimates, 2024 average day flow equals 9.20 million gallons per day (mgd). Average day flow is 2.25 mgd in the central service area, 1.90 mgd in the Sundance service area, and 0.63 mgd in the Tartesso service area.

Figure WW4: Existing Flow

Existing Flow	Central	Sundance	Tartesso West	Total
Existing Capacity (mgd)	4.50	3.50	1.20	9.20
– Average Day Flow (mgd), 2024	(2.25)	(1.90)	(0.63)	(4.77)
Available Capacity (mgd)	2.25	1.61	0.57	4.43
÷ Existing Capacity (mgd)	4.50	3.50	1.20	9.20
Percent Available Capacity	50.00%	45.90%	47.60%	48.10%

Source: Buckeye Water Resources Department

System Components

Level of service (LOS) generally refers to the ratio of capacity to demand. One of the principles of development fee analysis is that future development should not be required to pay for a higher LOS than existing development currently receives. Consequently, it is important to determine the existing LOS.

For wastewater facilities, water reclamation facility (WRF) treatment capacity is generally used as reflective of the capacity of the entire wastewater system. However, some components of the system may have more capacity or less capacity than needed for full utilization of treatment facilities. The existing wastewater system consists of WRFs, lift stations, WRF land, collection lines greater than or equal to 15 inches that form the collection system grid, reclaimed lines, and recharge basins. Figure WW5 includes a summary of wastewater system components by service area.

Figure WW5: System Components

Existing Quantity					
System Component	Unit	Central	Sundance	Tartesso West	Total
WRFs, < 5 mgd	mgd	4.5	3.5	1.2	9.2
Lift Stations	mgd	1.5	2.8	0.0	4.3
WRF Land	acres	52.0	5.4	44.0	101.4
Collection Lines, ≥ 15"	lin. ft.	105,219.0	22,619.8	35,769.0	163,607.8
Reclaimed Lines	lin. ft.	1,216.0	0.0	0.0	1,216.0
Recharge Basins	acres	0.0	0.0	2.0	2.0

Source: Buckeye Water Resources Department

Level of Service

The Central and Sundance service areas provide the most developed wastewater systems, while the Tartesso West service area has a smaller system. Figure WW6 shows existing quantities for wastewater system components in each service area and a comparison of system component quantities per mgd of WRF capacity.

Figure WW6: Existing Level of Service

		Existing Quantity			Quantity per WRF mgd		
System Component	Unit	Central	Sundance	Tartesso West	Central	Sundance	Tartesso West
WRFs, < 5 mgd	mgd	4.5	3.5	1.2	1.0	1.0	1.0
Lift Stations	mgd	1.5	2.8	0.0	0.3	0.8	0.0
WRF Land	acres	52.0	5.4	44.0	11.6	1.5	36.7
Collection Lines, ≥ 15"	lin. ft.	105,219.0	22,619.8	35,769.0	23,382.0	6,462.8	29,807.5
Reclaimed Lines	lin. ft.	1,216.0	0.0	0.0	270.2	0.0	0.0
Recharge Basins	acres	0.0	0.0	2.0	0.0	0.0	1.7

Source: Buckeye Water Resources Department

Cost Factors

Buckeye's Water Resources Department provided unit costs for wastewater system components based on recent and planned construction costs.

Figure WW7: Cost Factors

System Component	Unit	Unit Cost
WRFs, < 5 mgd	mgd	$25,000,000
Lift Stations	mgd	$1,500,000
WRF Land	acres	$60,000
Collection Lines, ≥ 15"	lin. ft.	$760
Reclaimed Lines	lin. ft.	$760
Recharge Basins	acres	$60,000

Source: Buckeye Water Resources Department

System Value

This section includes the system value for each service area based on existing wastewater system components shown in Figure WW6 and unit costs shown in Figure WW7.

Central Service Area

Existing wastewater facilities in the central service area are summarized below, and unit costs for system components are based on recent and planned construction costs provided by Water Resources Department staff. The existing wastewater system value in the central service area equals $198,760,600.

Figure WW8: System Value

Central				
System Component	Unit	Existing	Unit Cost	System Value
WRFs, < 5 mgd	mgd	4.5	$25,000,000	$112,500,000
Lift Stations	mgd	1.5	$1,500,000	$2,250,000
WRF Land	acres	52.0	$60,000	$3,120,000
Collection Lines, ≥ 15"	lin. ft.	105,219.0	$760	$79,966,440
Reclaimed Lines	lin. ft.	1,216.0	$760	$924,160
Recharge Basins	acres	0.0	$60,000	$0
Total				$198,760,600

Source: Buckeye Water Resources Department

Sundance Service Area

Existing wastewater facilities in the Sundance service area are summarized below, and unit costs for system components are based on recent and planned construction costs provided by Water Resources Department staff. The existing system value in the Sundance service area equals $109,212,010.

Figure WW9: System Value

Sundance				
System Component	Unit	Existing	Unit Cost	System Value
WRFs, < 5 mgd	mgd	3.5	$25,000,000	$87,500,000
Lift Stations	mgd	2.8	$1,500,000	$4,200,000
WRF Land	acres	5.4	$60,000	$321,000
Collection Lines, ≥ 15"	lin. ft.	22,619.8	$760	$17,191,010
Reclaimed Lines	lin. ft.	0.0	$760	$0
Recharge Basins	acres	0.0	$60,000	$0
Total				$109,212,010

Source: Buckeye Water Resources Department

Tartesso West Service Area

Existing wastewater facilities in the Tartesso West service area are summarized below, and unit costs for system components are based on recent and planned construction costs provided by Water Resources Department staff. The existing system value in the Tartesso West service area equals $59,944,440.

Figure WW10: System Value

Tartesso West				
System Component	Unit	Existing	Unit Cost	System Value
WRFs, < 5 mgd	mgd	1.2	$25,000,000	$30,000,000
Lift Stations	mgd	0.0	$1,500,000	$0
WRF Land	acres	44.0	$60,000	$2,640,000
Collection Lines, ≥ 15"	lin. ft.	35,769.0	$760	$27,184,440
Reclaimed Lines	lin. ft.	0.0	$760	$0
Recharge Basins	acres	2.0	$60,000	$120,000
Total				$59,944,440

Source: Buckeye Water Resources Department

Central – Plan-Based

Shown below, the analysis divides system value by WRF capacity to calculate the cost per gallon of wastewater facilities. The cost is $44.17 per gallon in the central service area, and Buckeye will use wastewater facilities development fees to construct growth-related water facilities in the central service area.

Figure WW11: Cost per Gallon

Central			
System Component	System Value	WRF Capacity (mgd)	Cost per Gallon
WRFs, < 5 mgd	$112,500,000	4.50	$25.00
Lift Stations	$2,250,000	4.50	$0.50
WRF Land	$3,120,000	4.50	$0.69
Collection Lines, ≥ 15"	$79,966,440	4.50	$17.77
Reclaimed Lines	$924,160	4.50	$0.21
Recharge Basins	$0	4.50	$0.00
Total	$198,760,600		$44.17

Sundance – Plan-Based

Shown below, the analysis divides system value by WRF capacity to calculate the cost per gallon of wastewater facilities. The cost is $31.20 per gallon in the Sundance service area, and Buckeye will use wastewater facilities development fees to construct growth-related water facilities in the Sundance service area.

Figure WW12: Cost per Gallon

Sundance			
System Component	System Value	WRF Capacity (mgd)	Cost per Gallon
WRFs, < 5 mgd	$87,500,000	3.50	$25.00
Lift Stations	$4,200,000	3.50	$1.20
WRF Land	$321,000	3.50	$0.09
Collection Lines, ≥ 15"	$17,191,010	3.50	$4.91
Reclaimed Lines	$0	3.50	$0.00
Recharge Basins	$0	3.50	$0.00
Total	$109,212,010		$31.20

Tartesso West – Cost Recovery

Buckeye currently collects wastewater facilities development fees in the Tartesso West service area to reimburse the developer for costs related to the existing wastewater facilities. The remaining cost of these wastewater facilities is $5,668,690, and available WRF capacity is 0.19 mgd. The cost is $29.96 per gallon in the Tartesso West service area, and Buckeye will use wastewater facilities development fees to reimburse the developer for existing wastewater facilities in the Tartesso West service area.

Figure WW13: Cost per Gallon

Tartesso West			
System Component	Remaining Cost	Available Capacity (mgd)	Cost per Gallon
Wastewater Facilities	$5,668,690	0.19	$29.96
Total	$5,668,690		$29.96

Development Fee Report – Plan-Based

The cost to prepare the Wastewater Facilities IIP and related Development Fee Report equals $33,640. Buckeye plans to update its report every five years. Based on this cost, proportionate share, and five-year projections of future average day wastewater flow, the cost is $0.01 per gallon.

Figure WW14: Development Fee Report

Necessary Public Service	Cost	Proportionate Share		Service Unit	5-Year Change	Cost per Service Unit
Fire	$27,500	Residential	82%	Population	45,138	$0.50
		Nonresidential	18%	Jobs	11,709	$0.42
Library	$9,000	Residential	98%	Population	35,466	$0.25
		Nonresidential	2%	Jobs	11,709	$0.02
Parks and Recreational	$18,400	Residential	98%	Population	35,466	$0.51
		Nonresidential	2%	Jobs	11,709	$0.03
Police	$27,500	Residential	83%	Population	45,138	$0.51
		Nonresidential	17%	Vehicle Trips	47,030	$0.10
Street	$27,500	All Development	100%	VMT	631,502	$0.04
Water	$39,840	All Development	100%	Max Day Gallons	10,846,001	$0.01
Wastewater	$33,640	All Development	100%	Avg Day Gallons	2,285,458	$0.01
Total	$183,380					

PROJECTED DEMAND FOR SERVICES AND COSTS

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)(5) requires:

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

ARS § 9-463.05(E)(6) requires:

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

Projected Flow

Shown below, Figure WW15 includes projections of average day flow over the next 10 years. Based on projections provided by Buckeye's Water Resources Department, future development generates additional average day flow of 4.57 mgd over the next 10 years. This includes 2.37 mgd in the central service area, 1.57 mgd in the Sundance service area, and 0.63 mgd in the Tartesso West service area.

Figure WW15: Projected Flow

Year		Average Day Flow (mgd)			
		Central	Sundance	Tartesso	Total
Base	2024	2.25	1.90	0.63	4.77
1	2025	2.49	2.05	0.69	5.23
2	2026	2.72	2.21	0.75	5.69
3	2027	2.96	2.37	0.82	6.14
4	2028	3.20	2.52	0.88	6.60
5	2029	3.43	2.68	0.94	7.06
6	2030	3.67	2.84	1.01	7.52
7	2031	3.91	3.00	1.07	7.97
8	2032	4.14	3.15	1.13	8.43
9	2033	4.38	3.31	1.19	8.89
10	2034	4.62	3.47	1.26	9.34
10-Yr Increase		2.37	1.57	0.63	4.57

Source: Buckeye Water Resources Department

Shown below, Figure WW16 includes projected WRF capacity utilization for each service area in 2034. Based on projected average day flow and existing capacity, projected WRF capacity utilization includes a deficit of 0.12 mgd of capacity in the central service area, excess of 0.03 mgd of capacity in the Sundance service area, and a deficit of 0.06 mgd in the Tartesso service area.

Figure WW16: Projected WRF Capacity Utilization

Projected Flow	Central	Sundance	Tartesso West	Total
Existing Capacity (mgd)	4.50	3.50	1.20	9.20
– Average Day Flow (mgd), 2034	(4.62)	(3.47)	(1.26)	(9.34)
Available Capacity (mgd)	(0.12)	0.03	(0.06)	(0.14)
÷ Existing Capacity (mgd)	4.50	3.50	1.20	9.20
Percent Available Capacity	(2.60%)	0.90%	(4.80%)	(1.60%)

Source: Buckeye Water Resources Department

Wastewater Facilities Costs

The figure shown below includes planned capital expenditures during the next 10 years.

Figure WW17: Wastewater Facilities Costs

Description	Project Type	Fiscal Year	Cost
Central Water Reclamation Facility Expansion (1.5 MGD)	CIP	2025-2029	$37,500,000
Water Resource Operations Facility (Wastewater Share)	CIP	2024-2027	$6,150,000
Central WRF Effluent Management	CIP	2026-2034	$65,000,000
Turner Road Lift Station	Development	2025	$1,500,000
Development Fee Report	Study Cost	2024-2029	$17,437
Subtotal, Central			$110,167,437
Sundance Water Reclamation Facility Expansion	CIP	2026-2030	$27,000,000
Sundance Reimbursement	Dev Agreement	2024-2034	$35,133,058
Development Fee Report	Study Cost	2024-2029	$11,579
Subtotal, Sundance			$62,144,637
Tartesso West Water Reclamation Facility Reimbursement	Dev Agreement	2024-2034	$5,668,690
Development Fee Report	Study Cost	2024-2029	$4,624
Subtotal, Tartesso West			$5,673,314
Total			$177,985,388

Source: Buckeye Water Resources Department

WASTEWATER FACILITIES DEVELOPMENT FEES

Revenue Credit/Offset

A revenue credit/offset is not necessary for development fees. Appendix A contains the forecast of revenues required by Arizona's Enabling Legislation (ARS § 9-463.05(E)(7)).

Central Service Area

Figure WW18 includes infrastructure components and cost factors for wastewater facilities development fees in the central service area. The cost per service unit is $43.49 per gallon.

Wastewater facilities fees for residential development are assessed according to average day gallons per housing unit. The fee of $7,524 for a low/medium density unit is calculated using a cost per service unit of $43.49 per gallon multiplied by a demand unit of 173 average day gallons per housing unit.

Wastewater facilities fees are assessed to nonresidential development according to meter size and type. The base 1.0-inch meter is equivalent to a low/medium density unit, and a capacity ratio is used to convert the base meter fee proportionately for larger meters. The capacity ratios are calculated based on data published in Buckeye's Water Engineering Design Standards. The 1.5-inch disc meter fee of $12,790 is calculated using a cost per service unit of $43.49 per gallon, multiplied by 173 average day gallons, multiplied by a capacity ratio of 1.7. For meters larger than 1.5 inches, the fee is calculated using a cost per service unit of $43.49 per gallon multiplied by average day gallons from (1) City of Buckeye Engineering Standards, (2) a submitted water study, or (3) other estimated wastewater demand.

Figure WW18: Wastewater Facilities Development Fees

Fee Component	Cost per Gallon
WRF	$25.00
Lift Station	$0.50
WRF Land	$0.00
Collection Line, ≥ 15"	$17.77
Reclaimed Line	$0.21
Recharge Basin	$0.00
Development Fee Report	$0.01
Total	$43.49

Residential Fees per Unit - Central				
Residential Land Use	Average Day Gallons[1]	Proposed Fees	Current Fees	Difference
Low/Med Density (<8 DU/Acre)	173	$7,524	$4,214	$3,310
High Density (≥8 DU/Acre)	135	$5,871	n/a	n/a
Age Restricted (≤8 DU/Acre)	108	$4,697	$2,634	$2,063

Nonresidential Fees per Meter - Central					
Meter Size	Meter Type	Capacity Ratio[1]	Proposed Fees[2]	Current Fees	Difference
1.0-inch	Disc	1.0	$7,524	$4,214	$3,310
1.5-inch	Disc	1.7	$12,790	$7,163	$5,627
1.5-inch	Turbine	2.9	$21,819	$12,219	$9,600

Current Fees represent Central Buckeye fees.

1. Buckeye Water Resources Department

2. Meters larger than 1.50 inches calculated using $43.49 per gallon multiplied by average day gallons from (1) City of Buckeye Engineering Standards, (2) a submitted water study, or (3) other estimated wastewater flow.

Sundance Service Area

Figure WW19 includes infrastructure components and cost factors for wastewater facilities development fees in the Sundance service area. The cost per service unit is $31.21 per gallon.

Wastewater facilities fees for residential development are assessed according to average day gallons per housing unit. The fee of $5,399 for a low/medium density unit is calculated using a cost per service unit of $31.21 per gallon multiplied by a demand unit of 173 average day gallons per housing unit.

Wastewater facilities fees are assessed to nonresidential development according to meter size and type. The base 1.0-inch meter is equivalent to a low/medium density unit, and a capacity ratio is used to convert the base meter fee proportionately for larger meters. The capacity ratios are calculated based on data published in Buckeye's Water Engineering Design Standards. The 1.5-inch disc meter fee of $9,179 is calculated using a cost per service unit of $31.21 per gallon, multiplied by 173 average day gallons, multiplied by a capacity ratio of 1.7. For meters larger than 1.5 inches, the fee is calculated using a cost per service unit of $31.21 per gallon multiplied by average day gallons from (1) City of Buckeye Engineering Standards, (2) a submitted water study, or (3) other estimated wastewater demand.

Figure WW19: Wastewater Facilities Development Fees

Fee Component	Cost per Gallon
WRF	$25.00
Lift Station	$1.20
WRF Land	$0.09
Collection Line, ≥ 15"	$4.91
Reclaimed Line	$0.00
Recharge Basin	$0.00
Development Fee Report	$0.01
Total	$31.21

Residential Fees per Unit - Sundance				
Residential Land Use	Average Day Gallons[1]	Proposed Fees	Current Fees	Difference
Low/Med Density (<8 DU/Acre)	173	$5,399	$5,915	($516)
High Density (≥8 DU/Acre)	135	$4,213	n/a	n/a
Age Restricted (≤8 DU/Acre)	108	$3,371	$3,697	($326)

Nonresidential Fees per Meter - Sundance					
Meter Size	Meter Type	Capacity Ratio[1]	Proposed Fees[2]	Current Fees	Difference
1.0-inch	Disc	1.0	$5,399	$5,915	($516)
1.5-inch	Disc	1.7	$9,179	$10,056	($877)
1.5-inch	Turbine	2.9	$15,658	$17,154	($1,496)

1. Buckeye Water Resources Department
2. Meters larger than 1.50 inches calculated using $31.21 per gallon multiplied by average day gallons from (1) City of Buckeye Engineering Standards, (2) a submitted water study, or (3) other estimated wastewater flow.

Tartesso West Service Area

Figure WW20 includes infrastructure components and cost factors for wastewater facilities development fees in the Tartesso West service area. The cost per service unit is $29.97 per gallon.

Wastewater facilities fees for residential development are assessed according to average day gallons per housing unit. The fee of $7,672 for a low/medium density unit is calculated using a cost per service unit of $29.97 per gallon multiplied by a demand unit of 256 average day gallons per housing unit.

Wastewater facilities fees are assessed to nonresidential development according to meter size and type. The base 1.0-inch meter is equivalent to a low/medium density unit, and a capacity ratio is used to convert the base meter fee proportionately for larger meters. The capacity ratios are calculated based on data published in Buckeye's Water Engineering Design Standards. The 1.5-inch disc meter fee of $13,043 is calculated using a cost per service unit of $29.97 per gallon, multiplied by 256 average day gallons, multiplied by a capacity ratio of 1.7. For meters larger than 1.5 inches, the fee is calculated using a cost per service unit of $29.97 per gallon multiplied by average day gallons from (1) City of Buckeye Engineering Standards, (2) a submitted water study, or (3) other estimated wastewater demand.

Figure WW20: Wastewater Facilities Development Fees

Fee Component	Cost per Gallon
Wastewater Facilities	$29.96
Development Fee Report	$0.01
Total	$29.97

Residential Fees per Unit - Tartesso West				
Residential Land Use	Average Day Gallons[1]	Proposed Fees	Current Fees	Difference
Low/Med Density (<8 DU/Acre)	256	$7,672	$7,670	$2
High Density (≥8 DU/Acre)	200	$5,994	n/a	n/a
Age Restricted (≤8 DU/Acre)	160	$4,795	$4,794	$1

Nonresidential Fees per Meter - Tartesso West					
Meter Size	Meter Type	Capacity Ratio[1]	Proposed Fees[2]	Current Fees	Difference
1.0-inch	Disc	1.0	$7,672	$7,670	$2
1.5-inch	Disc	1.7	$13,043	$13,040	$3
1.5-inch	Turbine	2.9	$22,250	$22,244	$6

1. Buckeye Gravity Sewer Design Standards, Section 4-1.202
2. Meters larger than 1.50 inches calculated using $29.97 per gallon multiplied by average day gallons from (1) City of Buckeye Engineering Standards, (2) a submitted water study, or (3) other estimated wastewater flow.

WASTEWATER FACILITIES DEVELOPMENT FEE REVENUE

Appendix A contains revenue forecasts required by Arizona's Enabling Legislation (ARS § 9-463.05(E)(7)). Projected fee revenue shown in Figure WW21 is based on projected average day water flow in Figure WW15 and the updated wastewater facilities development fees. If development occurs faster than projected, the demand for infrastructure will increase along with development fee revenue. If development occurs slower than projected, the demand for infrastructure will decrease and development fee revenue will decrease at a similar rate. Projected development fee revenue over the next 10 years equals $103,037,921 in the central service area, $49,103,919 in the Sundance service area, and $5,673,314 in the Tartesso West service area – Buckeye will end collection of wastewater facilities fees in the Tartesso West service area at the time of full reimbursement. Due to existing development agreements, projected development fee revenue may be offset by development fee credits.

Figure WW21: Wastewater Facilities Development Fees Revenue

Fee Component	Central	Sundance	Tartesso West
Wastewater Facilities	$110,150,000	$62,133,058	$5,668,690
Development Fee Report	$17,437	$11,579	$4,624
Total	$110,167,437	$62,144,637	$5,673,314

Year		Central $43.49 per gallon	Sundance $31.21 per gallon	Tartesso West $29.97 per gallon
		MGD	MGD	MGD
Base	2023	2.25	1.90	0.63
Year 1	2024	2.49	2.05	0.69
Year 2	2025	2.72	2.21	0.75
Year 3	2026	2.96	2.37	0.82
Year 4	2027	3.20	2.52	0.82
Year 5	2028	3.43	2.68	0.82
Year 6	2029	3.67	2.84	0.82
Year 7	2030	3.91	3.00	0.82
Year 8	2031	4.14	3.15	0.82
Year 9	2032	4.38	3.31	0.82
Year 10	2033	4.62	3.47	0.82
10-Year Increase		2.37	1.57	0.19
Projected Revenue		$103,037,921	$49,103,919	$5,673,314

Projected Fee Revenue	$157,815,155
Total Expenditures	$177,985,388

APPENDIX A: FORECAST OF REVENUES OTHER THAN FEES

ARS § 9-463.05(E)(7) requires:

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

ARS § 9-463.05(B)(12) states,

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

REVENUE PROJECTIONS

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

Figure A1: Revenue Projections

NOTE TO STAFF: WE NEED DEVELOP THIS BEFORE STARTING THE DEVELOPMENT FEE ADOPTION PROCESS.

APPENDIX B: PROFESSIONAL SERVICES

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

Figure B1: Cost of Professional Services

Necessary Public Service	Cost	Proportionate Share		Service Unit	5-Year Change	Cost per Service Unit
Fire	$27,500	Residential	82%	Population	45,138	$0.50
		Nonresidential	18%	Jobs	11,709	$0.42
Library	$9,000	Residential	98%	Population	35,466	$0.25
		Nonresidential	2%	Jobs	11,709	$0.02
Parks and Recreational	$18,400	Residential	98%	Population	35,466	$0.51
		Nonresidential	2%	Jobs	11,709	$0.03
Police	$27,500	Residential	83%	Population	45,138	$0.51
		Nonresidential	17%	Vehicle Trips	47,030	$0.10
Street	$27,500	All Development	100%	VMT	631,502	$0.04
Water	$39,840	All Development	100%	Max Day Gallons	10,846,001	$0.01
Wastewater	$33,640	All Development	100%	Avg Day Gallons	2,285,458	$0.01
Total	$183,380					