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

Prepared for:
Goodyear, Arizona

January 8, 2024

4701 Sangamore Road

Suite S240

Bethesda, MD 20816

301.320.6900

www.TischlerBise.com

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EXECUTIVE SUMMARY

The City of Goodyear, Arizona, contracted with TischlerBise to document land use assumptions, prepare the Infrastructure Improvements Plan (hereinafter referred to as the "IIP"), and update development fees pursuant to Arizona Revised Statutes ("ARS") § 9-436.05 (hereafter referred to as the "Enabling Legislation"). Municipalities in Arizona may assess development fees to offset infrastructure costs to a municipality for necessary public services. The development fees must be based on an Infrastructure Improvements Plan 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 Goodyear's Infrastructure Improvements Plan and associated update to its development fees includes the following necessary public services:

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

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	Citywide	N/A	Fire Apparatus	Fire Facilities, Development Fee Report	Population, Jobs
Parks and Recreational	North	N/A	Park Land, Park Amenities, Recreation Facilities	Development Fee Report	Population, Jobs
	South	N/A	Park Amenities	Development Fee Report	Population, Jobs
Police	Citywide	N/A	Police Vehicles, Communication Equipment	Police Facilities, Development Fee Report	Population, Jobs
Street	North	N/A	N/A	Street Improvements, Development Fee Report	VMT
	South	N/A	N/A	Street Improvements, Development Fee Report	VMT
Water	North	GRIC Water Lease, Surface Water Treatment	N/A	Distribution / Storage, Development Fee Report	Gallons
	South	Surface Water Treatment	N/A	Distribution / Storage, Development Fee Report	Gallons
Wastewater	North	N/A	N/A	Water Reclamation, Collection, Development Fee Report	Gallons
	South	N/A	N/A	Water Reclamation, Collection, Development Fee Report	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

Current development fees are assessed per dwelling unit for residential development and per 1,000 square feet of floor area for nonresidential development. Current development fees for water and wastewater are assessed by meter size and type.

North Service Area

Figure 2: Current Development Fees

Residential Fees per Unit					
Development Type	Fire	Parks & Recreational	Police	Street	Current Fees
Single Family	$911	$1,375	$820	$2,669	$5,775
Multi-Family	$682	$1,030	$616	$2,069	$4,397

Nonresidential Fees per 1,000 Square Feet					
Development Type	Fire	Parks & Recreational	Police	Street	Current Fees
Industrial	$362	$23	$333	$303	$1,021
Commercial / Retail	$467	$29	$429	$3,621	$4,546
Office & Other Services	$816	$50	$751	$1,698	$3,315
Institutional	$934	$57	$859	$2,247	$4,097

Fees per Meter			
Meter Size	Water	Wastewater	Current Fees
3/4-inch displacement	$7,553	$2,818	$10,371
1.0-inch displacement	$12,613	$4,706	$17,319
1.5-inch displacement	$25,151	$9,383	$34,534
1.5-inch turbine l/s	$25,151	$0	$25,151
2.0-inch displacement	$40,257	$15,019	$55,276
2.0-inch turbine l/s	$40,257	$0	$40,257
3.0-inch compound	$80,590	$30,068	$110,658
3.0-inch turbine l/s	$80,590	$0	$80,590
4.0-inch compound	$125,908	$46,976	$172,884
4.0-inch turbine l/s	$125,908	$0	$125,908
6.0-inch compound	$251,741	$93,923	$345,664
8.0-inch compound	$402,801	$150,283	$553,084

South Service Area

Figure 3: Current Development Fees

Residential Fees per Unit					
Development Type	Fire	Parks & Recreational	Police	Street	Current Fees
Single Family	$971	$2,255	$820	$3,330	$7,376
Multi-Family	$728	$1,690	$616	$2,582	$5,616

Nonresidential Fees per 1,000 Square Feet					
Development Type	Fire	Parks & Recreational	Police	Street	Current Fees
Industrial	$408	$110	$333	$378	$1,229
Commercial / Retail	$526	$142	$429	$4,517	$5,614
Office & Other Services	$919	$247	$751	$2,119	$4,036
Institutional	$1,052	$284	$859	$2,803	$4,998

Fees per Meter			
Meter Size	Water	Wastewater	Current Fees
3/4-inch displacement	$7,843	$2,538	$10,381
1.0-inch displacement	$13,097	$4,238	$17,335
1.5-inch displacement	$26,117	$8,451	$34,568
1.5-inch turbine l/s	$26,117	$0	$26,117
2.0-inch displacement	$41,803	$13,257	$55,060
2.0-inch turbine l/s	$41,803	$0	$41,803
3.0-inch compound	$83,684	$27,080	$110,764
3.0-inch turbine l/s	$83,684	$0	$83,684
4.0-inch compound	$130,742	$42,308	$173,050
4.0-inch turbine l/s	$130,742	$0	$130,742
6.0-inch compound	$261,407	$84,591	$345,998
8.0-inch compound	$418,267	$135,351	$553,618

PROPOSED DEVELOPMENT FEES

Proposed development fees will be assessed per dwelling unit for residential development and per 1,000 square feet of floor area for nonresidential development. Proposed development fees for water and wastewater will be assessed by meter size and type. The proposed street facilities fees include a credit/offset, because Goodyear'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.

The proposed fees represent the maximum allowable fees. Goodyear 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.

North Service Area

Figure 4: Proposed Development Fees

Residential Fees per Unit					
Development Type	Fire	Parks & Recreational	Police	Street	Proposed Fees
Single Family	$1,647	$1,360	$1,198	$0	$4,205
Multi-Family	$1,022	$843	$743	$0	$2,608

Nonresidential Fees per 1,000 Square Feet					
Development Type	Fire	Parks & Recreational	Police	Street	Proposed Fees
Industrial	$625	$32	$464	$0	$1,121
Commercial	$1,147	$58	$851	$0	$2,056
Office & Other Services	$1,758	$90	$1,303	$0	$3,151
Institutional	$1,638	$83	$1,214	$0	$2,935

Fees per Meter			
Meter Size	Water	Wastewater	Proposed Fees[1]
0.75-inch	$8,317	$3,886	$12,203
1.00-inch	$13,890	$6,490	$20,380
1.50-inch	$27,696	$12,942	$40,638

1. Meters larger than 1.50 inches calculated using $21.21 per gallon (water) and $27.76 per gallon (wastewater) for the north service area multiplied by average day gallons from (1) City of Goodyear Engineering Standards, (2) a submitted water study, or (3) other estimated water demand/wastewater flow.

South Service Area

Figure 5: Proposed Development Fees

Residential Fees per Unit					
Development Type	Fire	Parks & Recreational	Police	Street	Proposed Fees
Single Family	$1,647	$728	$1,198	$0	$3,573
Multi-Family	$1,022	$452	$743	$0	$2,217

Nonresidential Fees per 1,000 Square Feet					
Development Type	Fire	Parks & Recreational	Police	Street	Proposed Fees
Industrial	$625	$41	$464	$0	$1,130
Commercial	$1,147	$75	$851	$0	$2,073
Office & Other Services	$1,758	$116	$1,303	$0	$3,177
Institutional	$1,638	$107	$1,214	$0	$2,959

Fees per Meter			
Meter Size	Water	Wastewater	Proposed Fees[1]
0.75-inch	$8,836	$5,918	$14,754
1.00-inch	$14,756	$9,883	$24,639
1.50-inch	$29,424	$19,706	$49,130

1. Meters larger than 1.50 inches calculated using $21.98 per gallon (water) and $42.27 per gallon (wastewater) for the south service area multiplied by average day gallons from (1) City of Goodyear Engineering Standards, (2) a submitted water study, or (3) other estimated water demand/wastewater flow.

Difference Between Proposed and Current Development Fees

North Service Area

The differences between the proposed and current development fees are displayed below in Figure 6.

Figure 6: Difference Between Proposed and Current Development Fees

Residential Fees per Unit					
Development Type	Fire	Parks & Recreational	Police	Street	Difference
Single Family	$736	($15)	$378	($2,669)	($1,570)
Multi-Family	$340	($187)	$127	($2,069)	($1,789)

Nonresidential Fees per 1,000 Square Feet					
Development Type	Fire	Parks & Recreational	Police	Street	Difference
Industrial	$263	$9	$131	($303)	$100
Commercial	$680	$29	$422	($3,621)	($2,490)
Office & Other Services	$942	$40	$552	($1,698)	($164)
Institutional	$704	$26	$355	($2,247)	($1,162)

Fees per Meter			
Meter Size	Water	Wastewater	Difference
0.75-inch	$764	$1,068	$1,832
1.00-inch	$1,277	$1,784	$3,061
1.50-inch	$2,545	$3,559	$6,104

South Service Area

The differences between the proposed and current development fees are displayed below in Figure 7.

Figure 7: Difference Between Proposed and Current Development Fees

Residential Fees per Unit					
Development Type	Fire	Parks & Recreational	Police	Street	Difference
Single Family	$676	($1,527)	$378	($3,330)	($3,803)
Multi-Family	$294	($1,238)	$127	($2,582)	($3,399)

Nonresidential Fees per 1,000 Square Feet					
Development Type	Fire	Parks & Recreational	Police	Street	Difference
Industrial	$217	($69)	$131	($378)	($99)
Commercial	$621	($67)	$422	($4,517)	($3,541)
Office & Other Services	$839	($131)	$552	($2,119)	($859)
Institutional	$586	($177)	$355	($2,803)	($2,039)

Fees per Meter			
Meter Size	Water	Wastewater	Difference
0.75-inch	$993	$3,380	$4,373
1.00-inch	$1,659	$5,645	$7,304
1.50-inch	$3,307	$11,255	$14,562

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 Goodyear. 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 2023 are used in calculating levels of service (LOS) provided to existing development in Goodyear. Arizona's Enabling Legislation requires fees to be updated at least every five years and limits the IIP to a maximum of 10 years.

The Infrastructure Improvements Plan and the Development Fee Report include multiple service areas. The service area for the Fire Facilities IIP and the Police Facilities IIP is shown in Figure L1. The service area for the Parks and Recreational Facilities IIP is shown in Figure L2, and the service area for the Street Facilities IIP is shown in Figure L3. The service area for the Water Facilities IIP and the Wastewater Facilities IIP is shown in Figure L4.

SUMMARY OF GROWTH INDICATORS

Key land use assumptions include population, housing units, and employment projections. For areas north of the Gila River, TischlerBise projects development based on a combination of Maricopa Association of Governments (MAG) projections and staff recommendations based on recent and planned development. For areas south of the Gila River, the analysis uses development projections included in the Conceptual Master Water Report for Estrella Mountain Ranch PAD Portions of Communities 11-15 (September 2022).

Development projections are summarized in Figure L21 through Figure L29. These projections will be used to estimate fee revenue and to indicate the anticipated need for growth-related infrastructure. However, development fee methodologies are designed to reduce sensitivity to development projections in the determination of the proportionate share fee amounts. If actual development occurs at a slower rate than projected, fee revenue will decline, but so will the need for growth-related infrastructure. In contrast, if development occurs at a faster rate than anticipated, fee revenue will increase, but Goodyear 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 64,015 persons in 29,518 housing units, and nonresidential development projections indicate an employment increase of 10,262 jobs in approximately 3,990,000 square feet of floor area.

Figure L1: Fire and Police Development Impact Fee Service Area

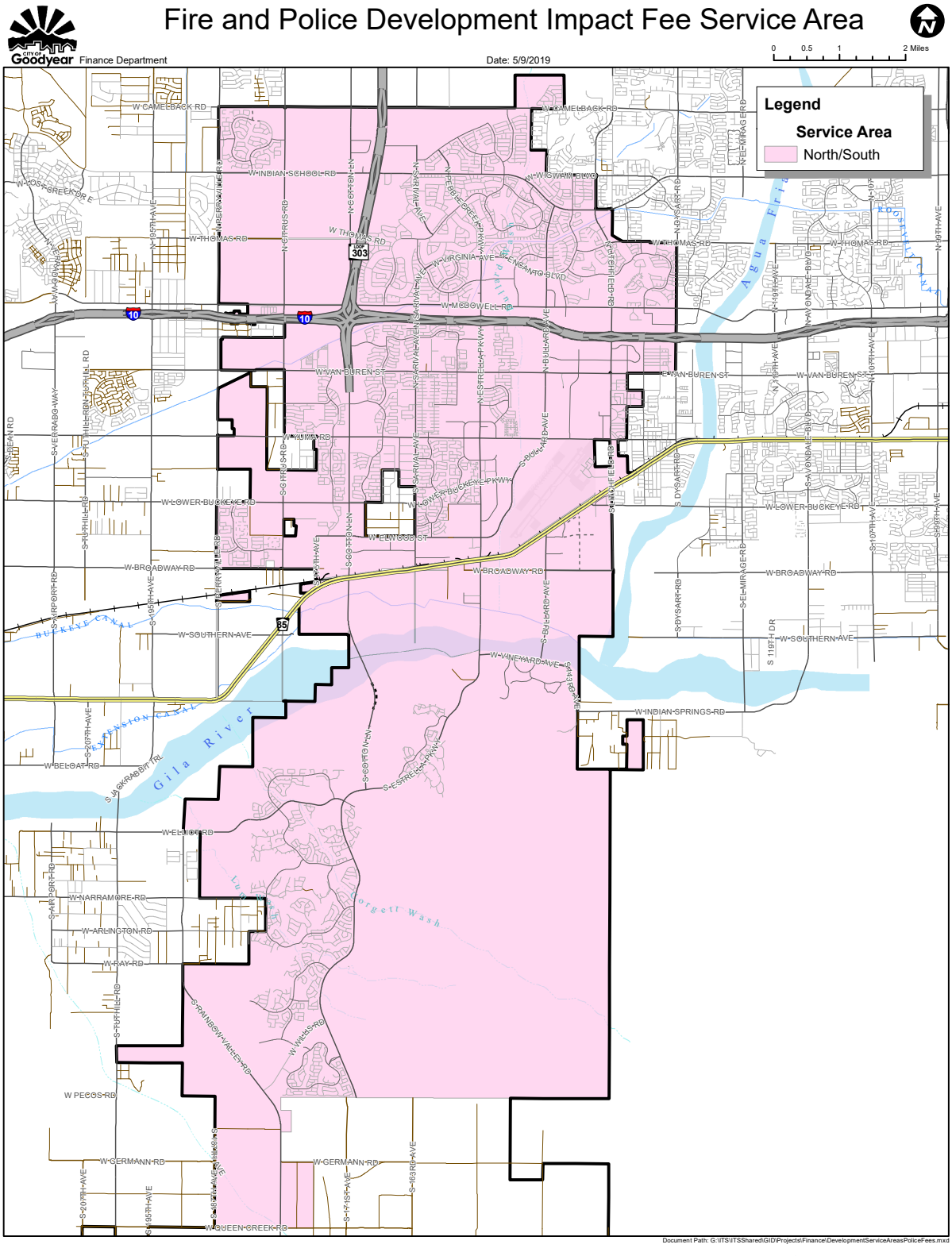

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Figure L2: Parks Development Impact Fee Service Area

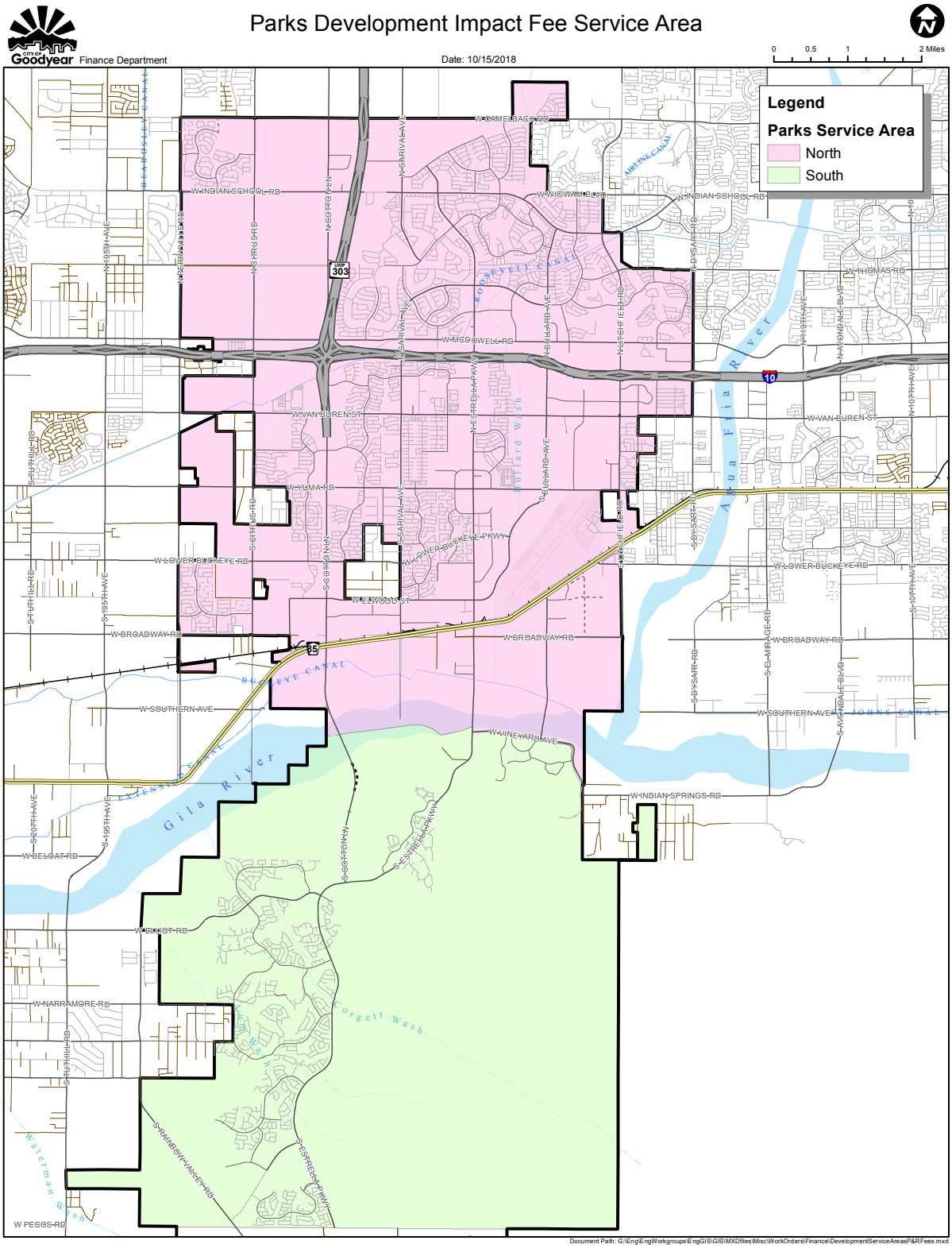


Figure L3: Street Development Impact Fee Service Area

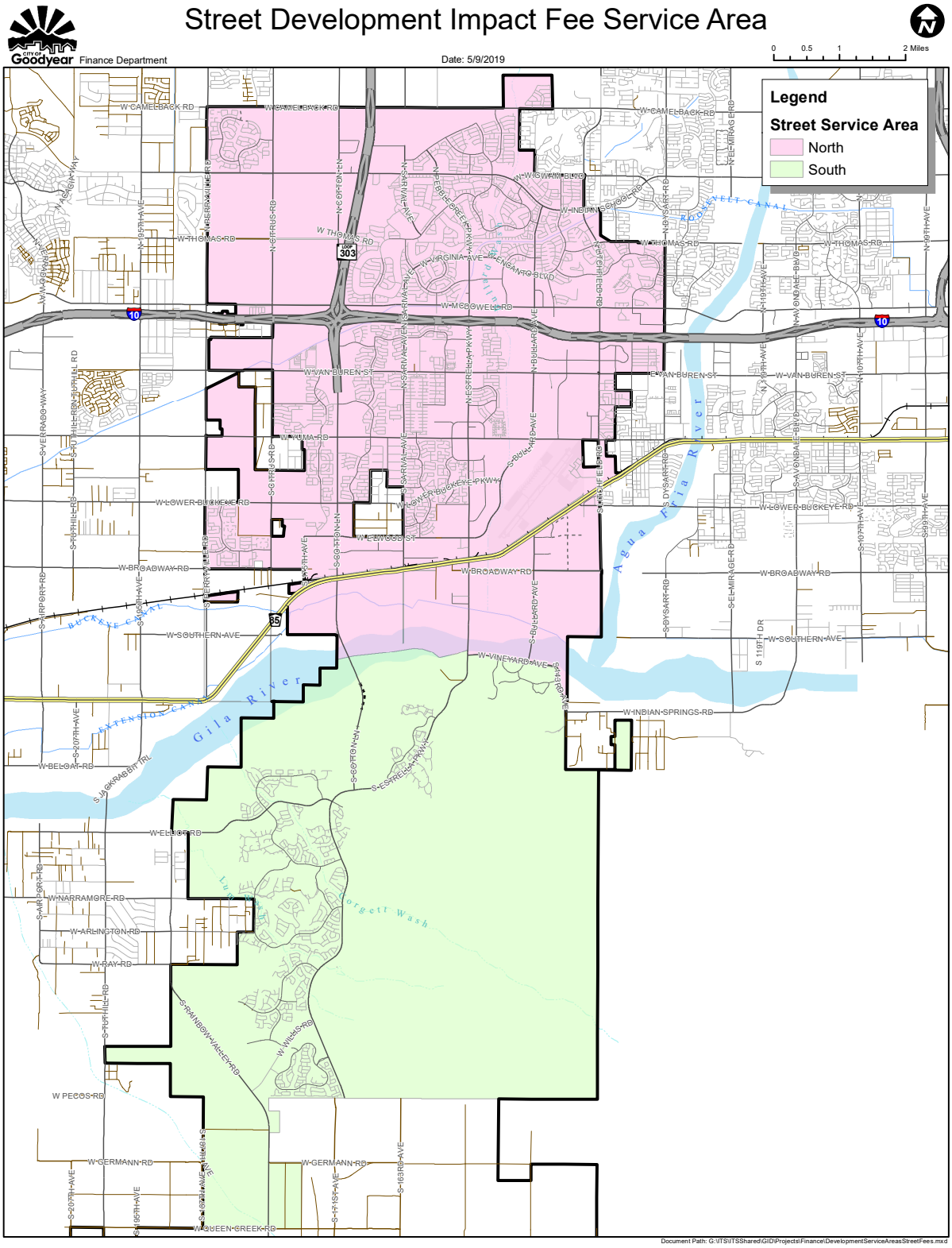
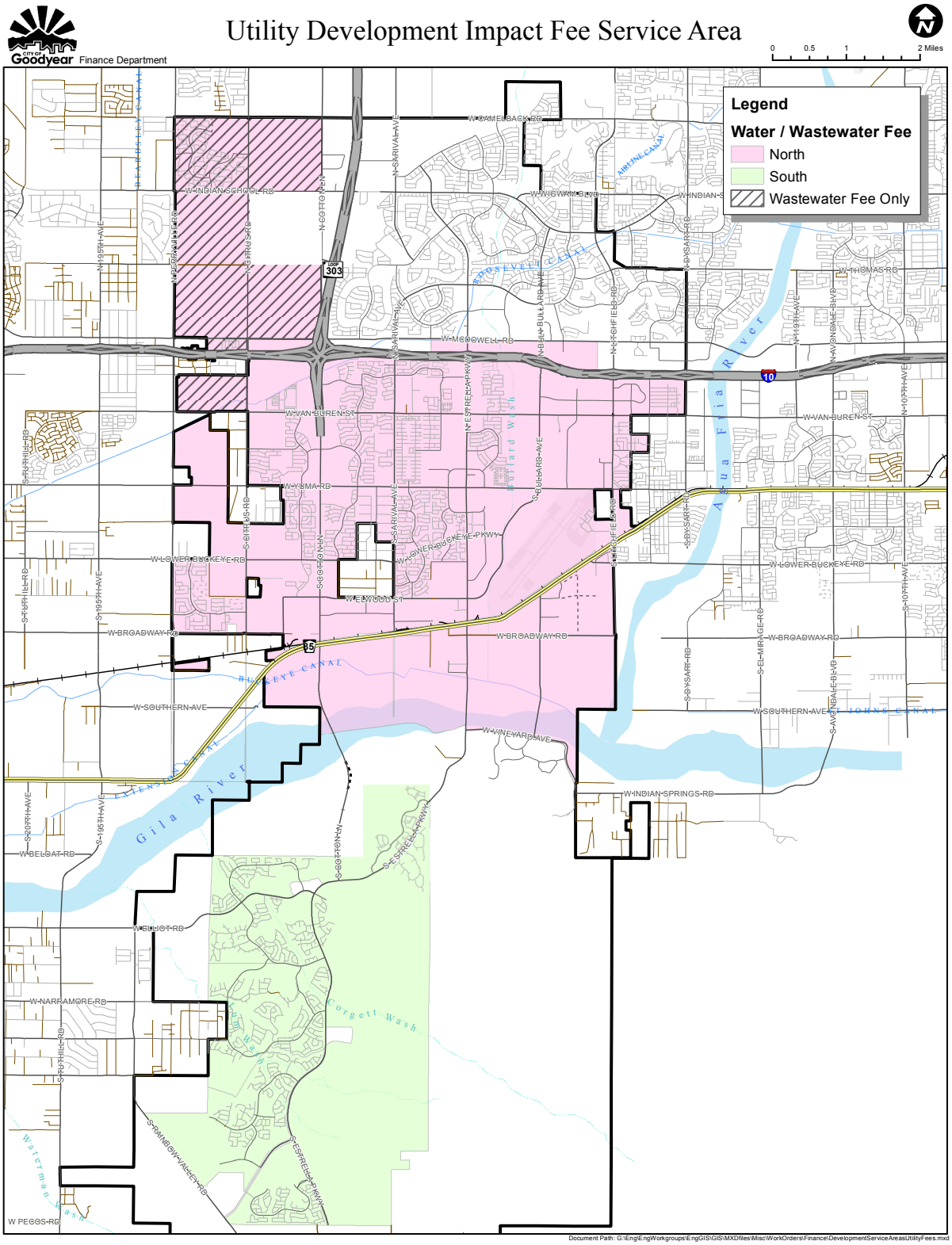


Figure L4: Utility Development Impact Fee Service Area



RESIDENTIAL DEVELOPMENT

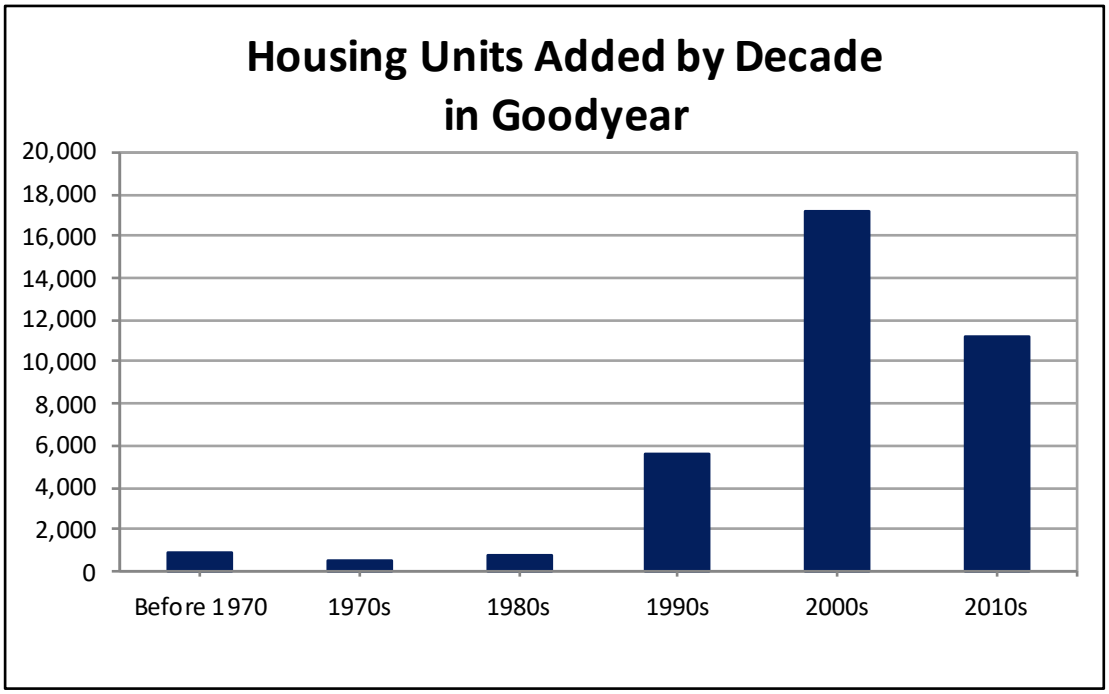
This section details current estimates and future projections of residential development including population and housing units.

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 L5 indicates the estimated number of housing units added by decade according to data obtained from the U.S. Census Bureau. In the previous decade, Goodyear's housing stock grew by an average of 1,118 housing units per year.

Figure L5: Housing Units by Decade

Census 2010 Housing Units	25,027	Goodyear's housing stock grew by an average of 1,118 housing units per year from 2010 to 2020.
Census 2020 Housing Units	36,205	
New Housing Units 2010 to 2020	11,178	



Source: U.S. Census Bureau, Census 2020 Summary File 1, Census 2010 Summary File 1, 2016-2020 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 PPHU is used in the fee calculations, infrastructure standards are derived using year-round population. When PPH is used in the fee calculations, the development fee methodology assumes a higher percentage of housing units will be occupied, thus requiring seasonal or peak population to be used when deriving infrastructure standards. TischlerBise recommends that development fees for residential development be imposed according to the number of persons per housing unit.

Occupancy calculations require data on population and the types of units by structure. The 2010 census did not obtain detailed information using a "long-form" questionnaire. Instead, the U.S. Census Bureau switched to a continuous monthly mailing of surveys, known as the American Community Survey (ACS), which has limitations due to sample-size constraints. For example, data on detached housing units are now combined with attached single units (commonly known as townhouses, which share a common sidewall, but are constructed on an individual parcel of land). For development fees in Goodyear, detached units and attached units are included in the "Single-Family" category. The second residential category includes duplexes, all structures with two or more units on an individual parcel of land, mobile home units, recreational vehicles, and all other units.

Figure L6 below shows the occupancy estimates for Goodyear based on 2017-2021 American Community Survey 5-Year Estimates. Single-family units averaged 2.66 persons per housing unit and multi-family units averaged 1.65 persons per housing unit. The estimates shown below are used only to calculate occupancy factors and may not match population and housing unit estimates shown throughout this report.

Figure L6: Occupancy Factors

Housing Type	Persons	Households	Persons per Household	Housing Units	Persons per Housing Unit	Housing Mix	Vacancy Rate
Single-Family[1]	83,888	28,462	2.95	31,573	**2.66**	90.6%	9.85%
Multi-Family[2]	5,395	2,894	1.86	3,268	**1.65**	9.4%	11.44%
Total	89,283	31,356	2.85	34,841	**2.56**	100.0%	10.00%

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

1. Includes detached and attached (i.e., townhouses) units.
2. Includes dwellings in structures with two or more units, mobile homes, RVs, and all other units.

Residential Estimates

For 2020, data published by the U.S. Census Bureau includes 95,294 persons living in 36,205 housing units citywide. Using multi-family construction data provided by Goodyear staff and single-family construction data published by the Maricopa Association of Governments (MAG), TischlerBise estimates there are currently 43,287 housing units. Converting additional housing units to population using the occupancy factors shown in Figure L6 results in a 2023 population estimate of 106,642 persons. For this study, the analysis assumes the occupancy factors shown in Figure L6 will remain constant throughout the 10-year projection period.

Residential Projections

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

Non-Utility Service Areas

TischlerBise projects residential development north of the Gila River based on approved / planned multi-family units in the development pipeline and single-family construction data published by the Maricopa Association of Governments (MAG). Projected residential development over the next 10 years includes an additional 6,957 single-family units and 14,247 multi-family units in the north service area.

To convert housing units to population, occupancy factors shown in Figure L6 are applied to the housing unit projections shown in Figure L7. For example, the 10-year increase of 6,957 single-family units multiplied by 2.66 persons per housing unit equals 18,507 persons in new single-family units. Based on these assumptions, the 10-year projections include an increase of 42,015 persons and 21,205 housing units in the north service area.

Figure L7: Residential Projections – Non-Utility Service Area (North)

Non-Utility Service Area - North	2023 Base Year	2024 1	2025 2	2026 3	2027 4	2028 5	2033 10	10-Year Increase
Resident Population								
Single Family	72,308	74,090	75,872	78,054	80,235	82,416	90,815	18,507
Multi-Family	16,344	20,220	24,093	26,063	28,032	30,002	39,852	23,508
Total	**88,652**	**94,310**	**99,965**	**104,116**	**108,267**	**112,418**	**130,667**	**42,015**
Housing Units								
Single Family	28,826	29,496	30,166	30,986	31,806	32,626	35,783	6,957
Multi-Family	6,367	8,716	11,063	12,257	13,451	14,645	20,614	14,247
Total	**35,193**	**38,212**	**41,229**	**43,243**	**45,257**	**47,271**	**56,398**	**21,205**

For development south of the Gila River, TischlerBise projects residential development using housing unit projections included in the Conceptual Master Water Report for Estrella Mountain Ranch PAD Portions of Communities 11-15 (September 2022). Projected residential development over the next 10 years includes an additional 8,202 single-family units and 111 multi-family units in the south service area. Applying the occupancy factors shown in Figure L6 to projected housing units shown below, the 10-year projections include an increase of 22,000 persons and 8,313 housing units in the south service area.

Figure L8: Residential Projections – Non-Utility Service Area (South)

Non-Utility Service Area - South	2023 Base Year	2024 1	2025 2	2026 3	2027 4	2028 5	2033 10	10-Year Increase
Resident Population								
Single Family	17,990	20,172	22,353	24,535	26,717	28,899	39,807	21,817
Multi-Family	0	18	37	55	73	92	183	183
Total	**17,990**	**20,190**	**22,390**	**24,590**	**26,790**	**28,990**	**39,991**	**22,000**
Housing Units								
Single Family	8,094	8,914	9,734	10,554	11,374	12,195	16,296	8,202
Multi-Family	0	11	22	33	44	56	111	111
Total	**8,094**	**8,925**	**9,756**	**10,587**	**11,419**	**12,250**	**16,407**	**8,313**

Utility Service Areas

For utility service areas, TischlerBise projects residential development north of the Gila River using the same methodology used for non-utility service areas; however, the utility service areas exclude some areas located near and north of Interstate 10. There is no difference between the south service areas.

For the north water service area (Figure L4), projected residential development over the next 10 years includes an additional 6,086 single-family units and 8,839 multi-family units. Applying the occupancy factors shown in Figure L6 to projected housing units shown below, the 10-year projections include an increase of 30,773 persons and 14,925 housing units in the north water service area.

Figure L9: Residential Projections – Water Service Area (North)

Water Service Area - North	2023 Base Year	2024 1	2025 2	2026 3	2027 4	2028 5	2033 10	10-Year Increase
Resident Population								
Single Family	42,691	44,634	46,578	48,368	50,158	51,949	58,879	16,188
Multi-Family	8,776	11,185	13,593	14,814	16,035	17,256	23,361	14,584
Total	**51,467**	**55,820**	**60,171**	**63,182**	**66,193**	**69,204**	**82,240**	**30,773**
Housing Units								
Single Family	15,125	15,855	16,586	17,259	17,932	18,605	21,210	6,086
Multi-Family	3,377	4,837	6,296	7,036	7,776	8,516	12,216	8,839
Total	**18,502**	**20,692**	**22,882**	**24,295**	**25,708**	**27,121**	**33,426**	**14,925**

For the north wastewater service area, projected residential development over the next 10 years includes an additional 6,526 single-family units and 8,839 multi-family units. Applying the occupancy factors shown in Figure L6 to projected housing units shown below, the 10-year projections include an increase of 31,944 persons and 15,365 housing units in the north wastewater service area.

Figure L10: Residential Projections – Wastewater Service Area (North)

Wastewater Service Area - North	2023 Base Year	2024 1	2025 2	2026 3	2027 4	2028 5	2033 10	10-Year Increase
Resident Population								
Single Family	43,010	45,060	47,110	49,029	50,948	52,867	60,369	17,359
Multi-Family	9,463	11,872	14,279	15,500	16,721	17,942	24,047	14,584
Total	**52,472**	**56,932**	**61,389**	**64,529**	**67,669**	**70,809**	**84,416**	**31,944**
Housing Units								
Single Family	15,979	16,749	17,520	18,241	18,963	19,684	22,505	6,526
Multi-Family	3,793	5,253	6,712	7,452	8,192	8,932	12,632	8,839
Total	**19,772**	**22,002**	**24,232**	**25,693**	**27,155**	**28,616**	**35,137**	**15,365**

NONRESIDENTIAL DEVELOPMENT

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

Nonresidential Demand Factors

TischlerBise uses the term jobs to refer to employment by place of work. In Figure L11, gray shading indicates the nonresidential development prototypes used to derive employment densities. For nonresidential development, TischlerBise uses data published in Trip Generation, Institute of Transportation Engineers, 11th Edition (2021). The prototype for industrial development is Industrial Park (ITE 130) with 864 square feet of floor area per employee. For office development, the proxy is General Office (ITE 710) with 307 square feet of floor area per employee. Institutional development uses Government Office (ITE 730) with 330 square feet of floor area per employee. The prototype for commercial development is Shopping Center (ITE 820) with 471 square feet of floor area per employee.

Figure L11: Nonresidential Demand Units

ITE Code	Land Use / Size	Demand Unit	Wkdy Trip Ends Per Dmd Unit[1]	Wkdy Trip Ends Per Employee[1]	Emp Per Dmd Unit	Sq Ft Per Emp
110	Light Industrial	1,000 Sq Ft	4.87	3.10	1.57	637
130	Industrial Park	1,000 Sq Ft	3.37	2.91	1.16	864
140	Manufacturing	1,000 Sq Ft	4.75	2.51	1.89	528
150	Warehousing	1,000 Sq Ft	1.71	5.05	0.34	2,953
254	Assisted Living	bed	2.60	4.24	0.61	na
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

Shown below, 2022 MAG estimates for Goodyear equal 35,742 jobs. Applying the employment multipliers shown in Figure L11 to employment estimates shown in Figure L12 results in a nonresidential floor area estimate of 14,288,055 square feet.

Figure L12: Nonresidential Estimates

Nonresidential Category	2022 Jobs[1]	Percent of Total Jobs	Square Feet per Job[2]	2022 Estimated Floor Area[3]	Jobs per 1,000 Sq. Ft.[2]
Industrial[4]	6,610	18%	864	5,710,982	1.16
Commercial[5]	10,328	29%	471	4,864,300	2.12
Office & Other Service[6]	9,042	25%	307	2,775,771	3.26
Institutional[7]	2,839	8%	330	937,002	3.03
Non-Site Based	6,923	19%	-	-	-
Total	35,742	100%		14,288,055	

1. Maricopa Association of Governments (MAG), Spring Conformity, 2021.
2. Trip Generation, Institute of Transportation Engineers, 11th Edition (2021).
3. TischlerBise calculation (2022 jobs X square feet per job).
4. Major sectors are Industrial; Construction.
5. Major sector is Retail.
6. Major sectors are Real Estate, Rental & Leasing; Other Services.
7. Major sectors are Health Care; Public Administration.

Nonresidential Projections

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

Non-Utility Service Areas

TischlerBise projects nonresidential development using employment data published by the Maricopa Association of Governments (MAG). Projected employment growth over the next 10 years includes an additional 9,874 jobs in the north service area.

To convert employment to nonresidential floor area, nonresidential demand factors shown in Figure L11 are applied to the employment projections shown below. For example, the 10-year increase of 1,108 industrial jobs multiplied by 864 square feet per industrial job equals approximately 957,000 square feet of industrial development. Based on these assumptions, the 10-year projections include an increase of approximately 3,826,000 square feet in the north service area.

Figure L13: Nonresidential Projections – Non-Utility Service Area (North)

Non-Utility Service Area - North	2023 Base Year	2024 1	2025 2	2026 3	2027 4	2028 5	2033 10	10-Year Increase
Employment								
Industrial	8,796	8,866	8,936	9,046	9,156	9,266	9,904	1,108
Commercial	9,983	10,091	10,198	10,288	10,378	10,468	10,881	898
Office & Other Services	12,241	12,551	12,861	13,580	14,298	15,017	18,780	6,539
Institutional	2,699	2,832	2,964	3,085	3,206	3,327	4,029	1,329
Total	**33,719**	**34,339**	**34,959**	**35,999**	**37,038**	**38,078**	**43,594**	**9,874**
Nonres. Floor Area (x1,000)								
Industrial	5,762	5,822	5,883	5,978	6,073	6,168	6,719	957
Commercial	4,702	4,753	4,803	4,846	4,888	4,930	5,125	423
Office & Other Services	2,801	2,896	2,991	3,211	3,432	3,653	4,808	2,007
Institutional	891	934	978	1,018	1,058	1,098	1,329	439
Total	**14,155**	**14,405**	**14,655**	**15,053**	**15,451**	**15,849**	**17,982**	**3,826**

For development south of the Gila River, TischlerBise projects nonresidential development using nonresidential projections included in the Conceptual Master Water Report for Estrella Mountain Ranch PAD Portions of Communities 11-15 (September 2022). Projected nonresidential development over the next 10 years includes an additional 387 jobs in the south service area. Applying the occupancy factors shown in Figure L11 to projected employment shown below, the 10-year projections include an increase of approximately 207,000 square feet in the south service area.

Figure D1: Nonresidential Projections – Non-Utility Service Area (South)

Non-Utility Service Area - South	2023 Base Year	2024 1	2025 2	2026 3	2027 4	2028 5	2033 10	10-Year Increase
Employment								
Industrial	1,397	1,399	1,400	1,401	1,402	1,404	1,410	13
Commercial	453	455	456	470	485	499	676	222
Office & Other Services	695	704	713	722	731	739	782	87
Institutional	292	299	306	312	319	325	358	66
Total	**2,838**	**2,856**	**2,874**	**2,905**	**2,936**	**2,968**	**3,225**	**387**
Nonres. Floor Area (x1,000)								
Industrial	11	12	13	14	15	17	22	11
Commercial	213	214	215	222	228	235	318	105
Office & Other Services	73	76	79	81	84	87	100	27
Institutional	96	99	101	103	105	107	118	22
Total	**394**	**401**	**407**	**420**	**433**	**446**	**558**	**164**

Utility Service Areas

For utility service areas, TischlerBise projects nonresidential development north of the Gila River using the same methodology used for non-utility service areas; however, the utility service areas exclude some areas located near and north of Interstate 10. There is no difference between the south service areas.

For the north water service area (Figure L4), projected nonresidential development over the next 10 years includes an additional 7,085 jobs. Applying the occupancy factors shown in Figure L11 to projected employment shown below, the 10-year projections include an increase of approximately 2,865,000 square feet in the north water service area.

Figure L14: Nonresidential Projections – Water Service Area (North)

Water Service Area - North	2023 Base Year	2024 1	2025 2	2026 3	2027 4	2028 5	2033 10	10-Year Increase
Employment								
Industrial	6,579	6,643	6,708	6,809	6,910	7,011	7,605	1,026
Commercial	4,266	4,333	4,401	4,467	4,534	4,600	4,920	654
Office & Other Services	3,719	3,875	4,030	4,577	5,123	5,670	8,636	4,917
Institutional	3,102	3,143	3,183	3,219	3,255	3,291	3,590	488
Total	**17,666**	**17,994**	**18,322**	**19,072**	**19,822**	**20,573**	**24,751**	**7,085**
Nonres. Floor Area (x1,000)								
Industrial	4,274	4,329	4,385	4,472	4,560	4,647	5,160	887
Commercial	2,009	2,041	2,073	2,104	2,135	2,167	2,317	308
Office & Other Services	1,142	1,190	1,237	1,405	1,573	1,741	2,651	1,510
Institutional	493	506	520	532	544	555	654	161
Total	**7,918**	**8,066**	**8,215**	**8,513**	**8,811**	**9,110**	**10,783**	**2,865**

For the north wastewater service area (Figure L4), projected nonresidential development over the next 10 years includes an additional 8,463 jobs. Applying the occupancy factors shown in Figure L11 to projected employment shown below, the 10-year projections include an increase of approximately 3,335,000 square feet in the north wastewater service area.

Figure L15: Nonresidential Projections – Wastewater Service Area (North)

Wastewater Service Area - North	2023 Base Year	2024 1	2025 2	2026 3	2027 4	2028 5	2033 10	10-Year Increase
Employment								
Industrial	8,100	8,168	8,236	8,343	8,450	8,557	9,175	1,075
Commercial	4,272	4,342	4,412	4,481	4,550	4,619	4,950	678
Office & Other Services	4,953	5,162	5,370	5,987	6,604	7,220	10,490	5,537
Institutional	3,507	3,584	3,661	3,776	3,891	4,006	4,680	1,174
Total	**20,833**	**21,256**	**21,679**	**22,587**	**23,495**	**24,402**	**29,295**	**8,463**
Nonres. Floor Area (x1,000)								
Industrial	5,445	5,504	5,562	5,655	5,747	5,840	6,374	929
Commercial	2,012	2,045	2,078	2,111	2,143	2,176	2,332	319
Office & Other Services	1,521	1,585	1,649	1,838	2,027	2,217	3,220	1,700
Institutional	557	582	608	646	684	722	944	387
Total	**9,535**	**9,716**	**9,897**	**10,249**	**10,601**	**10,953**	**12,870**	**3,335**

AVERAGE WEEKDAY VEHICLE TRIPS

Goodyear will use average weekday vehicle trips (AWVT) for fire facilities fees and police facilities fees. Components used to determine AWVT include average weekday vehicle trip generation rates, adjustments for commuting patterns, and adjustments for pass-by trips.

Residential Trip Generation Rates

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.

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 Industrial Park (ITE 130) which generates 3.37 average weekday vehicle trip ends per 1,000 square feet of floor area. The prototype for commercial development is Shopping Center (ITE 820) which generates 37.01 average weekday vehicle trips per 1,000 square feet of floor area. For office & other services development, the proxy is General Office (ITE 710), and it generates 10.84 average weekday vehicle trip ends per 1,000 square feet of floor area. Institutional development uses Government Office (ITE 730) and generates 22.59 average weekday vehicle trip ends per 1,000 square feet of floor area.

Figure L16: Average Weekday Vehicle Trip Ends by Land Use

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

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

Trip Rate Adjustments

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 Goodyear for work. According to the 2009 National Household Travel Survey (see Table 30) weekday work trips are typically 31 percent of production trips (i.e., all out-bound trips, which are 50 percent of all trip ends). As shown in Figure L17, the U.S. Census Bureau's OnTheMap web application indicates 91 percent of resident workers traveled outside of Goodyear for work in 2019. In combination, these factors (0.31 x 0.50 x 0.91 = 0.14) support the additional 14 percent allocation of trips to residential development.

Figure L17: Commuter Trip Adjustment

Trip Adjustment Factor for Commuters[1]	
Employed Residents	36,611
Residents Living and Working in Goodyear	3,180
Residents Commuting Outside Goodyear for Work	33,431
Percent Commuting out of Goodyear	91%
Additional Production Trips[2]	14%
Residential Trip Adjustment Factor	64%

1. U.S. Census Bureau, OnTheMap Application (version 6.8.1) and LEHD Origin-Destination Employment Statistics, 2019.

2. 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 2019 indicate that 91 percent of Goodyear's workers travel outside the city for work. In combination, these factors (0.3099 x 0.50 x 0.91 = 0.14) 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 L18, multiplying average weekday vehicle trip ends and trip adjustment factors (discussed on the previous page) by Goodyear's existing development units provides the average weekday vehicle trips generated by existing development. As shown below, Goodyear's existing citywide development generates 342,978 vehicle trips on an average weekday.

Figure L18: Average Weekday Vehicle Trips by Land Use – Citywide

Development Type	Development Unit	ITE Code	Avg Wkday VTE	Trip Adjustment	2023 Dev Units	2023 Veh Trips
Single Family	HU	210	9.43	64%	36,920	222,817
Multi-Family	HU	220	6.74	64%	6,367	27,465
Industrial	KSF	130	3.37	50%	5,773	9,727
Commercial	KSF	820	37.01	33%	4,916	60,035
Office & Other Services	KSF	710	10.84	50%	2,874	15,575
Institutional	KSF	610	22.59	33%	987	7,359
Total						342,978

Shown below in Figure L19, Goodyear's existing development in the north service area generates 290,391 vehicle trips on an average weekday.

Figure L19: Average Weekday Vehicle Trips by Land Use – North

Development Type	Development Unit	ITE Code	Avg Wkday VTE	Trip Adjustment	2023 Dev Units	2023 Veh Trips
Single Family	HU	210	9.43	64%	28,826	173,971
Multi-Family	HU	220	6.74	64%	6,367	27,465
Industrial	KSF	130	3.37	50%	5,762	9,708
Commercial	KSF	820	37.01	33%	4,702	57,428
Office & Other Services	KSF	710	10.84	50%	2,801	15,179
Institutional	KSF	610	22.59	33%	891	6,640
Total						290,391

Shown below in Figure L20, Goodyear's existing development in the south service area generates 52,587 vehicle trips on an average weekday.

Figure L20: Average Weekday Vehicle Trips by Land Use – South

Development Type	Development Unit	ITE Code	Avg Wkday VTE	Trip Adjustment	2023 Dev Units	2023 Veh Trips
Single Family	HU	210	9.43	64%	8,094	48,846
Multi-Family	HU	220	6.74	64%	0	0
Industrial	KSF	130	3.37	50%	11	19
Commercial	KSF	820	37.01	33%	213	2,607
Office & Other Services	KSF	710	10.84	50%	73	396
Institutional	KSF	610	22.59	33%	96	719
Total						52,587

DEVELOPMENT PROJECTIONS

Non-Utility Service Area

Provided below is a summary of development projections used in the Development Fee Report. Base year estimates for 2023 are used in the fee calculations. Development projections are used to illustrate a possible future pace of demand for service units and cash flows resulting from revenues and expenditures associated with those demands. TischlerBise uses the projections shown below for fire and police service areas.

Figure L21: Development Projections Summary

Non-Utility Service Area	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	10-Year Increase
	Base Year	1	2	3	4	5	6	7	8	9	10	
Resident Population												
Single Family	90,298	94,262	98,226	102,589	106,952	111,315	115,678	120,040	123,568	127,095	130,622	40,324
Multi-Family	16,344	20,238	24,129	26,118	28,106	30,094	32,082	34,071	36,059	38,047	40,035	23,691
Total	**106,642**	**114,500**	**122,355**	**128,706**	**135,057**	**141,409**	**147,760**	**154,111**	**159,626**	**165,142**	**170,657**	**64,015**
Housing Units												
Single Family	36,920	38,410	39,900	41,540	43,180	44,821	46,461	48,101	49,427	50,753	52,079	15,159
Multi-Family	6,367	8,727	11,085	12,290	13,495	14,700	15,905	17,110	18,315	19,520	20,725	14,358
Total	**43,287**	**47,137**	**50,985**	**53,830**	**56,676**	**59,521**	**62,366**	**65,211**	**67,742**	**70,273**	**72,804**	**29,518**
Employment												
Industrial	10,193	10,264	10,336	10,447	10,558	10,670	10,781	10,892	11,033	11,173	11,314	1,121
Commercial	10,436	10,545	10,654	10,758	10,863	10,967	11,072	11,176	11,303	11,430	11,557	1,121
Office & Other Services	12,936	13,255	13,574	14,301	15,029	15,756	16,484	17,211	17,995	18,778	19,562	6,625
Institutional	2,992	3,131	3,270	3,397	3,525	3,652	3,780	3,907	4,067	4,227	4,387	1,395
Total	**36,557**	**37,195**	**37,833**	**38,904**	**39,975**	**41,045**	**42,116**	**43,187**	**44,397**	**45,608**	**46,819**	**10,262**
Nonres. Floor Area (x1,000)												
Industrial	5,773	5,834	5,896	5,992	6,088	6,185	6,281	6,377	6,498	6,620	6,741	968
Commercial	4,916	4,967	5,018	5,067	5,116	5,166	5,215	5,264	5,324	5,384	5,443	528
Office & Other Services	2,874	2,972	3,069	3,293	3,516	3,739	3,963	4,186	4,427	4,667	4,908	2,034
Institutional	987	1,033	1,079	1,121	1,163	1,205	1,247	1,289	1,342	1,395	1,448	460
Total	**14,549**	**14,806**	**15,063**	**15,473**	**15,884**	**16,295**	**16,705**	**17,116**	**17,591**	**18,065**	**18,540**	**3,990**

North Service Area

TischlerBise uses the projections shown below for the north parks service area.

Figure L22: Development Projections Summary

Non-Utility Service Area - North	2023 Base Year	2024 1	2025 2	2026 3	2027 4	2028 5	2029 6	2030 7	2031 8	2032 9	2033 10	10-Year Increase
Resident Population												
Single Family	72,308	74,090	75,872	78,054	80,235	82,416	84,597	86,778	88,124	89,469	90,815	18,507
Multi-Family	16,344	20,220	24,093	26,063	28,032	30,002	31,972	33,942	35,912	37,882	39,852	23,508
Total	**88,652**	**94,310**	**99,965**	**104,116**	**108,267**	**112,418**	**116,569**	**120,721**	**124,036**	**127,351**	**130,667**	**42,015**
Housing Units												
Single Family	28,826	29,496	30,166	30,986	31,806	32,626	33,446	34,266	34,772	35,278	35,783	6,957
Multi-Family	6,367	8,716	11,063	12,257	13,451	14,645	15,839	17,033	18,226	19,420	20,614	14,247
Total	**35,193**	**38,212**	**41,229**	**43,243**	**45,257**	**47,271**	**49,285**	**51,299**	**52,998**	**54,698**	**56,398**	**21,205**
Employment												
Industrial	8,796	8,866	8,936	9,046	9,156	9,266	9,376	9,486	9,625	9,764	9,904	1,108
Commercial	9,983	10,091	10,198	10,288	10,378	10,468	10,558	10,648	10,726	10,804	10,881	898
Office & Other Services	12,241	12,551	12,861	13,580	14,298	15,017	15,735	16,454	17,229	18,005	18,780	6,539
Institutional	2,699	2,832	2,964	3,085	3,206	3,327	3,448	3,569	3,722	3,875	4,029	1,329
Total	**33,719**	**34,339**	**34,959**	**35,999**	**37,038**	**38,078**	**39,117**	**40,157**	**41,303**	**42,448**	**43,594**	**9,874**
Nonres. Floor Area (x1,000)												
Industrial	5,762	5,822	5,883	5,978	6,073	6,168	6,263	6,358	6,478	6,599	6,719	957
Commercial	4,702	4,753	4,803	4,846	4,888	4,930	4,973	5,015	5,052	5,088	5,125	423
Office & Other Services	2,801	2,896	2,991	3,211	3,432	3,653	3,873	4,094	4,332	4,570	4,808	2,007
Institutional	891	934	978	1,018	1,058	1,098	1,138	1,178	1,228	1,279	1,329	439
Total	**14,155**	**14,405**	**14,655**	**15,053**	**15,451**	**15,849**	**16,247**	**16,645**	**17,091**	**17,536**	**17,982**	**3,826**

South Service Area

TischlerBise uses the projections shown below for the south parks service area.

Figure L23: Development Projections Summary

Non-Utility Service Area - South	2023 Base Year	2024 1	2025 2	2026 3	2027 4	2028 5	2029 6	2030 7	2031 8	2032 9	2033 10	10-Year Increase
Resident Population												
Single Family	17,990	20,172	22,353	24,535	26,717	28,899	31,080	33,262	35,444	37,626	39,807	21,817
Multi-Family	0	18	37	55	73	92	110	128	147	165	183	183
Total	**17,990**	**20,190**	**22,390**	**24,590**	**26,790**	**28,990**	**31,190**	**33,390**	**35,590**	**37,790**	**39,991**	**22,000**
Housing Units												
Single Family	8,094	8,914	9,734	10,554	11,374	12,195	13,015	13,835	14,655	15,475	16,296	8,202
Multi-Family	0	11	22	33	44	56	67	78	89	100	111	111
Total	**8,094**	**8,925**	**9,756**	**10,587**	**11,419**	**12,250**	**13,081**	**13,913**	**14,744**	**15,575**	**16,407**	**8,313**
Employment												
Industrial	1,397	1,399	1,400	1,401	1,402	1,404	1,405	1,406	1,408	1,409	1,410	13
Commercial	453	455	456	470	485	499	514	528	577	626	676	222
Office & Other Services	695	704	713	722	731	739	748	757	765	773	782	87
Institutional	292	299	306	312	319	325	332	338	345	351	358	66
Total	**2,838**	**2,856**	**2,874**	**2,905**	**2,936**	**2,968**	**2,999**	**3,030**	**3,095**	**3,160**	**3,225**	**387**
Nonres. Floor Area (x1,000)												
Industrial	11	12	13	14	15	17	18	19	20	21	22	11
Commercial	213	214	215	222	228	235	242	249	272	295	318	105
Office & Other Services	73	76	79	81	84	87	89	92	95	97	100	27
Institutional	96	99	101	103	105	107	109	112	114	116	118	22
Total	**394**	**401**	**407**	**420**	**433**	**446**	**458**	**471**	**500**	**529**	**558**	**164**

Water Service Area

Provided below is a summary of development projections used in the Development Fee Report. Base year estimates for 2023 are used in the fee calculations. Development projections are used to illustrate a possible future pace of demand for service units and cash flows resulting from revenues and expenditures associated with those demands. TischlerBise uses the projections shown below for water service areas.

Figure L24: Development Projections Summary

Water Service Area	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	10-Year Increase
	Base Year	1	2	3	4	5	6	7	8	9	10	
Resident Population												
Single Family	60,681	64,806	68,932	72,904	76,875	80,847	84,819	88,791	92,090	95,388	98,686	38,006
Multi-Family	8,776	11,204	13,629	14,869	16,108	17,347	18,587	19,826	21,065	22,304	23,544	14,768
Total	**69,457**	**76,010**	**82,561**	**87,772**	**92,983**	**98,195**	**103,406**	**108,617**	**113,155**	**117,692**	**122,230**	**52,773**
Housing Units												
Single Family	23,218	24,769	26,320	27,813	29,306	30,800	32,293	33,786	35,026	36,266	37,506	14,288
Multi-Family	3,377	4,848	6,318	7,069	7,820	8,572	9,323	10,074	10,825	11,576	12,327	8,950
Total	**26,595**	**29,617**	**32,638**	**34,882**	**37,127**	**39,371**	**41,615**	**43,860**	**45,851**	**47,842**	**49,833**	**23,238**
Employment												
Industrial	7,977	8,042	8,108	8,210	8,312	8,415	8,517	8,620	8,752	8,884	9,015	1,039
Commercial	4,719	4,788	4,857	4,938	5,019	5,099	5,180	5,261	5,373	5,484	5,596	877
Office & Other Services	4,414	4,579	4,743	5,298	5,854	6,409	6,965	7,520	8,153	8,785	9,418	5,004
Institutional	3,394	3,442	3,489	3,531	3,574	3,617	3,659	3,702	3,784	3,866	3,948	553
Total	**20,504**	**20,850**	**21,196**	**21,978**	**22,759**	**23,540**	**24,321**	**25,103**	**26,061**	**27,019**	**27,977**	**7,473**
Nonres. Floor Area (x1,000)												
Industrial	4,285	4,341	4,398	4,487	4,575	4,664	4,752	4,841	4,955	5,069	5,183	898
Commercial	2,223	2,255	2,288	2,326	2,364	2,402	2,440	2,478	2,530	2,583	2,636	413
Office & Other Services	1,215	1,265	1,316	1,486	1,657	1,827	1,998	2,168	2,363	2,557	2,751	1,536
Institutional	589	609	629	648	666	684	703	721	753	784	815	226
Total	**8,312**	**8,471**	**8,631**	**8,946**	**9,262**	**9,577**	**9,893**	**10,208**	**10,600**	**10,992**	**11,384**	**3,073**

North Service Area

TischlerBise uses the projections shown below for the north water service area.

Figure L25: Development Projections Summary

Water Service Area - North	2023 Base Year	2024 1	2025 2	2026 3	2027 4	2028 5	2029 6	2030 7	2031 8	2032 9	2033 10	10-Year Increase
Resident Population												
Single Family	42,691	44,634	46,578	48,368	50,158	51,949	53,739	55,529	56,646	57,762	58,879	16,188
Multi-Family	8,776	11,185	13,593	14,814	16,035	17,256	18,477	19,698	20,919	22,140	23,361	14,584
Total	**51,467**	**55,820**	**60,171**	**63,182**	**66,193**	**69,204**	**72,215**	**75,227**	**77,564**	**79,902**	**82,240**	**30,773**
Housing Units												
Single Family	15,125	15,855	16,586	17,259	17,932	18,605	19,278	19,951	20,371	20,791	21,210	6,086
Multi-Family	3,377	4,837	6,296	7,036	7,776	8,516	9,256	9,996	10,736	11,476	12,216	8,839
Total	**18,502**	**20,692**	**22,882**	**24,295**	**25,708**	**27,121**	**28,534**	**29,947**	**31,107**	**32,267**	**33,426**	**14,925**
Employment												
Industrial	6,579	6,643	6,708	6,809	6,910	7,011	7,112	7,214	7,344	7,475	7,605	1,026
Commercial	4,266	4,333	4,401	4,467	4,534	4,600	4,667	4,733	4,795	4,858	4,920	654
Office & Other Services	3,719	3,875	4,030	4,577	5,123	5,670	6,216	6,763	7,387	8,012	8,636	4,917
Institutional	3,102	3,143	3,183	3,219	3,255	3,291	3,327	3,363	3,439	3,514	3,590	488
Total	**17,666**	**17,994**	**18,322**	**19,072**	**19,822**	**20,573**	**21,323**	**22,073**	**22,966**	**23,859**	**24,751**	**7,085**
Nonres. Floor Area (x1,000)												
Industrial	4,274	4,329	4,385	4,472	4,560	4,647	4,735	4,822	4,935	5,048	5,160	887
Commercial	2,009	2,041	2,073	2,104	2,135	2,167	2,198	2,229	2,259	2,288	2,317	308
Office & Other Services	1,142	1,190	1,237	1,405	1,573	1,741	1,908	2,076	2,268	2,460	2,651	1,510
Institutional	493	506	520	532	544	555	567	579	604	629	654	161
Total	**7,918**	**8,066**	**8,215**	**8,513**	**8,811**	**9,110**	**9,408**	**9,707**	**10,065**	**10,424**	**10,783**	**2,865**

South Service Area

TischlerBise uses the projections shown below for the south water service area.

Figure L26: Development Projections Summary

Water Service Area - South	2023 Base Year	2024 1	2025 2	2026 3	2027 4	2028 5	2029 6	2030 7	2031 8	2032 9	2033 10	10-Year Increase
Resident Population												
Single Family	17,990	20,172	22,353	24,535	26,717	28,899	31,080	33,262	35,444	37,626	39,807	21,817
Multi-Family	0	18	37	55	73	92	110	128	147	165	183	183
Total	**17,990**	**20,190**	**22,390**	**24,590**	**26,790**	**28,990**	**31,190**	**33,390**	**35,590**	**37,790**	**39,991**	**22,000**
Housing Units												
Single Family	8,094	8,914	9,734	10,554	11,374	12,195	13,015	13,835	14,655	15,475	16,296	8,202
Multi-Family	0	11	22	33	44	56	67	78	89	100	111	111
Total	**8,094**	**8,925**	**9,756**	**10,587**	**11,419**	**12,250**	**13,081**	**13,913**	**14,744**	**15,575**	**16,407**	**8,313**
Employment												
Industrial	1,397	1,399	1,400	1,401	1,402	1,404	1,405	1,406	1,408	1,409	1,410	13
Commercial	453	455	456	470	485	499	514	528	577	626	676	222
Office & Other Services	695	704	713	722	731	739	748	757	765	773	782	87
Institutional	292	299	306	312	319	325	332	338	345	351	358	66
Total	**2,838**	**2,856**	**2,874**	**2,905**	**2,936**	**2,968**	**2,999**	**3,030**	**3,095**	**3,160**	**3,225**	**387**
Nonres. Floor Area (x1,000)												
Industrial	11	12	13	14	15	17	18	19	20	21	22	11
Commercial	213	214	215	222	228	235	242	249	272	295	318	105
Office & Other Services	73	76	79	81	84	87	89	92	95	97	100	27
Institutional	96	103	109	116	122	129	135	142	148	155	161	65
Total	**394**	**405**	**416**	**433**	**450**	**467**	**484**	**502**	**535**	**568**	**601**	**207**

Wastewater Service Area

Provided below is a summary of development projections used in the Development Fee Report. Base year estimates for 2023 are used in the fee calculations. Development projections are used to illustrate a possible future pace of demand for service units and cash flows resulting from revenues and expenditures associated with those demands. TischlerBise uses the projections shown below for wastewater service areas.

Figure L27: Development Projections Summary

Wastewater Service Area	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	10-Year Increase
	Base Year	1	2	3	4	5	6	7	8	9	10	
Resident Population												
Single Family	61,000	65,232	69,464	73,564	77,665	81,766	85,866	89,967	93,370	96,773	100,176	39,177
Multi-Family	9,463	11,890	14,316	15,555	16,794	18,034	19,273	20,512	21,752	22,991	24,230	14,768
Total	**70,462**	**77,122**	**83,779**	**89,119**	**94,459**	**99,799**	**105,139**	**110,479**	**115,122**	**119,764**	**124,407**	**53,944**
Housing Units												
Single Family	24,072	25,663	27,254	28,796	30,337	31,879	33,420	34,962	36,241	37,521	38,800	14,728
Multi-Family	3,793	5,264	6,734	7,485	8,236	8,988	9,739	10,490	11,241	11,992	12,743	8,950
Total	**27,865**	**30,927**	**33,988**	**36,281**	**38,574**	**40,866**	**43,159**	**45,452**	**47,482**	**49,513**	**51,543**	**23,678**
Employment												
Industrial	9,498	9,567	9,636	9,744	9,853	9,961	10,069	10,177	10,313	10,449	10,585	1,087
Commercial	4,726	4,797	4,868	4,951	5,035	5,118	5,202	5,285	5,399	5,512	5,626	900
Office & Other Services	5,648	5,866	6,083	6,709	7,334	7,960	8,585	9,211	9,898	10,585	11,271	5,623
Institutional	3,799	3,883	3,967	4,088	4,209	4,331	4,452	4,574	4,728	4,883	5,038	1,239
Total	**23,671**	**24,112**	**24,554**	**25,492**	**26,431**	**27,370**	**28,308**	**29,247**	**30,338**	**31,429**	**32,521**	**8,850**
Nonres. Floor Area (x1,000)												
Industrial	5,456	5,516	5,576	5,669	5,763	5,856	5,950	6,043	6,161	6,278	6,396	940
Commercial	2,226	2,259	2,293	2,332	2,371	2,411	2,450	2,489	2,543	2,596	2,650	424
Office & Other Services	1,594	1,660	1,727	1,919	2,111	2,303	2,495	2,687	2,898	3,109	3,320	1,726
Institutional	653	685	717	762	806	851	895	939	995	1,050	1,106	452
Total	**9,929**	**10,121**	**10,313**	**10,682**	**11,052**	**11,421**	**11,790**	**12,159**	**12,597**	**13,034**	**13,471**	**3,542**

North Service Area

TischlerBise uses the projections shown below for the north wastewater service area.

Figure L28: Development Projections Summary

Wastewater Service Area - North	2023 Base Year	2024 1	2025 2	2026 3	2027 4	2028 5	2029 6	2030 7	2031 8	2032 9	2033 10	10-Year Increase
Resident Population												
Single Family	43,010	45,060	47,110	49,029	50,948	52,867	54,786	56,705	57,926	59,148	60,369	17,359
Multi-Family	9,463	11,872	14,279	15,500	16,721	17,942	19,163	20,384	21,605	22,826	24,047	14,584
Total	**52,472**	**56,932**	**61,389**	**64,529**	**67,669**	**70,809**	**73,949**	**77,089**	**79,531**	**81,974**	**84,416**	**31,944**
Housing Units												
Single Family	15,979	16,749	17,520	18,241	18,963	19,684	20,406	21,127	21,586	22,045	22,505	6,526
Multi-Family	3,793	5,253	6,712	7,452	8,192	8,932	9,672	10,412	11,152	11,892	12,632	8,839
Total	**19,772**	**22,002**	**24,232**	**25,693**	**27,155**	**28,616**	**30,078**	**31,539**	**32,738**	**33,937**	**35,137**	**15,365**
Employment												
Industrial	8,100	8,168	8,236	8,343	8,450	8,557	8,664	8,771	8,906	9,040	9,175	1,075
Commercial	4,272	4,342	4,412	4,481	4,550	4,619	4,688	4,757	4,821	4,886	4,950	678
Office & Other Services	4,953	5,162	5,370	5,987	6,604	7,220	7,837	8,454	9,133	9,811	10,490	5,537
Institutional	3,507	3,584	3,661	3,776	3,891	4,006	4,120	4,235	4,384	4,532	4,680	1,174
Total	**20,833**	**21,256**	**21,679**	**22,587**	**23,495**	**24,402**	**25,310**	**26,217**	**27,243**	**28,269**	**29,295**	**8,463**
Nonres. Floor Area (x1,000)												
Industrial	5,445	5,504	5,562	5,655	5,747	5,840	5,932	6,025	6,141	6,257	6,374	929
Commercial	2,012	2,045	2,078	2,111	2,143	2,176	2,208	2,241	2,271	2,301	2,332	319
Office & Other Services	1,521	1,585	1,649	1,838	2,027	2,217	2,406	2,595	2,804	3,012	3,220	1,700
Institutional	557	582	608	646	684	722	759	797	846	895	944	387
Total	**9,535**	**9,716**	**9,897**	**10,249**	**10,601**	**10,953**	**11,306**	**11,658**	**12,062**	**12,466**	**12,870**	**3,335**

South Service Area

TischlerBise uses the projections shown below for the south wastewater service area.

Figure L29: Development Projections Summary

Wastewater Service Area - South	2023 Base Year	2024 1	2025 2	2026 3	2027 4	2028 5	2029 6	2030 7	2031 8	2032 9	2033 10	10-Year Increase
Resident Population												
Single Family	17,990	20,172	22,353	24,535	26,717	28,899	31,080	33,262	35,444	37,626	39,807	21,817
Multi-Family	0	18	37	55	73	92	110	128	147	165	183	183
Total	**17,990**	**20,190**	**22,390**	**24,590**	**26,790**	**28,990**	**31,190**	**33,390**	**35,590**	**37,790**	**39,991**	**22,000**
Housing Units												
Single Family	8,094	8,914	9,734	10,554	11,374	12,195	13,015	13,835	14,655	15,475	16,296	8,202
Multi-Family	0	11	22	33	44	56	67	78	89	100	111	111
Total	**8,094**	**8,925**	**9,756**	**10,587**	**11,419**	**12,250**	**13,081**	**13,913**	**14,744**	**15,575**	**16,407**	**8,313**
Employment												
Industrial	1,397	1,399	1,400	1,401	1,402	1,404	1,405	1,406	1,408	1,409	1,410	13
Commercial	453	455	456	470	485	499	514	528	577	626	676	222
Office & Other Services	695	704	713	722	731	739	748	757	765	773	782	87
Institutional	292	299	306	312	319	325	332	338	345	351	358	66
Total	**2,838**	**2,856**	**2,874**	**2,905**	**2,936**	**2,968**	**2,999**	**3,030**	**3,095**	**3,160**	**3,225**	**387**
Nonres. Floor Area (x1,000)												
Industrial	11	12	13	14	15	17	18	19	20	21	22	11
Commercial	213	214	215	222	228	235	242	249	272	295	318	105
Office & Other Services	73	76	79	81	84	87	89	92	95	97	100	27
Institutional	96	103	109	116	122	129	135	142	148	155	161	65
Total	**394**	**405**	**416**	**433**	**450**	**467**	**484**	**502**	**535**	**568**	**601**	**207**

Average Weekday Vehicle Trips

TischlerBise uses the projections shown below for the street service areas.

Figure L30: Average Weekday Vehicle Trips Summary

Non-Utility Service Area		Base	1	2	3	4	5	6	7	8	9	10	10-Year Increase
		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	
Development	Single Family Units	36,920	38,410	39,900	41,540	43,180	44,821	46,461	48,101	49,427	50,753	52,079	15,159
	Multi-Family Units	6,367	8,727	11,085	12,290	13,495	14,700	15,905	17,110	18,315	19,520	20,725	14,358
	Industrial KSF	5,773	5,834	5,896	5,992	6,088	6,185	6,281	6,377	6,498	6,620	6,741	968
	Commercial KSF	4,916	4,967	5,018	5,067	5,116	5,166	5,215	5,264	5,324	5,384	5,443	528
	Office & Other Services KSF	2,874	2,972	3,069	3,293	3,516	3,739	3,963	4,186	4,427	4,667	4,908	2,034
	Institutional KSF	987	1,037	1,088	1,134	1,180	1,227	1,273	1,320	1,377	1,434	1,491	504
Avg Weekday Vehicle Trips	Single-Family Trips	222,817	231,810	240,804	250,703	260,602	270,501	280,400	290,299	298,301	306,304	314,307	91,490
	Multi-Family Trips	27,465	37,645	47,817	53,015	58,213	63,411	68,609	73,807	79,004	84,202	89,400	61,936
	Residential Trips	250,281	269,455	288,621	303,718	318,815	333,911	349,008	364,105	377,306	390,506	403,707	153,426
	Industrial Trips	9,727	9,831	9,935	10,097	10,259	10,421	10,583	10,745	10,950	11,154	11,359	1,632
	Commercial Trips	60,035	60,661	61,287	61,887	62,488	63,088	63,689	64,290	65,020	65,751	66,481	6,446
	Office & Other Services Trips	15,575	16,106	16,636	17,846	19,057	20,267	21,477	22,688	23,992	25,296	26,599	11,024
	Institutional Trips	7,359	7,734	8,108	8,454	8,800	9,146	9,492	9,838	10,264	10,689	11,114	3,755
	Nonresidential Trips	92,697	94,331	95,966	98,285	100,604	102,923	105,242	107,561	110,225	112,889	115,554	22,857
	Total Vehicle Trips	**342,978**	**363,787**	**384,587**	**402,003**	**419,418**	**436,834**	**454,250**	**471,666**	**487,531**	**503,396**	**519,260**	**176,282**
VMC	**Vehicle Miles of Capacity (VMC)**	**4,024,285**	**4,287,300**	**4,550,203**	**4,765,695**	**4,981,187**	**5,196,678**	**5,412,170**	**5,627,662**	**5,821,302**	**6,014,943**	**6,208,583**	**2,184,298**
Need	Arterial Lane Miles		29.2	29.2	23.9	23.9	23.9	23.9	23.9	21.5	21.5	21.5	242.7

TischlerBise uses the projections shown below for the north street service area.

Figure L31: Average Weekday Vehicle Trips Summary

Non-Utility Service Area - North		Base	1	2	3	4	5	6	7	8	9	10	10-Year
		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Increase
Development	Single Family Units	28,826	29,496	30,166	30,986	31,806	32,626	33,446	34,266	34,772	35,278	35,783	6,957
	Multi-Family Units	6,367	8,716	11,063	12,257	13,451	14,645	15,839	17,033	18,226	19,420	20,614	14,247
	Industrial KSF	5,762	5,822	5,883	5,978	6,073	6,168	6,263	6,358	6,478	6,599	6,719	957
	Commercial KSF	4,702	4,753	4,803	4,846	4,888	4,930	4,973	5,015	5,052	5,088	5,125	423
	Office & Other Services KSF	2,801	2,896	2,991	3,211	3,432	3,653	3,873	4,094	4,332	4,570	4,808	2,007
	Institutional KSF	891	934	978	1,018	1,058	1,098	1,138	1,178	1,228	1,279	1,329	439
Avg Weekday Vehicle Trips	Single-Family Trips	173,971	178,014	182,058	187,007	191,956	196,904	201,853	206,802	209,855	212,907	215,960	41,989
	Multi-Family Trips	27,465	37,597	47,721	52,871	58,021	63,171	68,321	73,471	78,621	83,771	88,921	61,457
	Residential Trips	201,435	215,612	229,779	239,878	249,977	260,076	270,175	280,274	288,476	296,679	304,881	103,446
	Industrial Trips	9,708	9,811	9,913	10,073	10,233	10,393	10,553	10,714	10,916	11,119	11,321	1,613
	Commercial Trips	57,428	58,046	58,664	59,181	59,699	60,217	60,735	61,252	61,700	62,147	62,595	5,167
	Office & Other Services Trips	15,179	15,695	16,210	17,406	18,602	19,797	20,993	22,189	23,479	24,769	26,059	10,880
	Institutional Trips	6,640	6,966	7,292	7,589	7,887	8,185	8,482	8,780	9,157	9,534	9,911	3,270
	Nonresidential Trips	88,956	90,517	92,078	94,249	96,421	98,592	100,763	102,934	105,252	107,569	109,886	20,930
	Total Vehicle Trips	**290,391**	**306,129**	**321,857**	**334,127**	**346,398**	**358,668**	**370,938**	**383,208**	**393,728**	**404,248**	**414,768**	**124,377**
VMC	**Vehicle Miles of Capacity (VMC)**	**3,357,468**	**3,554,825**	**3,752,070**	**3,901,282**	**4,050,494**	**4,199,707**	**4,348,919**	**4,498,131**	**4,623,829**	**4,749,528**	**4,875,226**	**1,517,758**
Need	Arterial Lane Miles		21.9	21.9	16.6	16.6	16.6	16.6	16.6	14.0	14.0	14.0	168.6

TischlerBise uses the projections shown below for the south street service area.

Figure L32: Average Weekday Vehicle Trips Summary

Non-Utility Service Area - South		Base	1	2	3	4	5	6	7	8	9	10	10-Year
		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Increase
Development	Single Family Units	8,094	8,914	9,734	10,554	11,374	12,195	13,015	13,835	14,655	15,475	16,296	8,202
	Multi-Family Units	0	11	22	33	44	56	67	78	89	100	111	111
	Industrial KSF	11	12	13	14	15	17	18	19	20	21	22	11
	Commercial KSF	213	214	215	222	228	235	242	249	272	295	318	105
	Office & Other Services KSF	73	76	79	81	84	87	89	92	95	97	100	27
	Institutional KSF	96	103	109	116	122	129	135	142	148	155	161	65
Avg Weekday Vehicle Trips	Single-Family Trips	48,846	53,796	58,746	63,696	68,646	73,596	78,546	83,496	88,446	93,397	98,347	49,501
	Multi-Family Trips	0	48	96	144	192	239	287	335	383	431	479	479
	Residential Trips	48,846	53,844	58,842	63,840	68,838	73,836	78,834	83,832	88,830	93,827	98,825	49,980
	Industrial Trips	19	20	22	24	26	28	30	32	33	35	37	18
	Commercial Trips	2,607	2,615	2,623	2,706	2,789	2,872	2,954	3,037	3,320	3,603	3,886	1,279
	Office & Other Services Trips	396	411	426	441	455	470	485	499	513	526	540	144
	Institutional Trips	719	768	816	865	913	962	1,010	1,059	1,107	1,155	1,204	485
	Nonresidential Trips	3,741	3,814	3,888	4,035	4,183	4,331	4,479	4,627	4,973	5,320	5,667	1,926
	Total Vehicle Trips	**52,587**	**57,658**	**62,729**	**67,875**	**73,021**	**78,167**	**83,312**	**88,458**	**93,803**	**99,148**	**104,493**	**51,906**
VMC	**Vehicle Miles of Capacity (VMC)**	**666,817**	**732,475**	**798,133**	**864,413**	**930,692**	**996,972**	**1,063,252**	**1,129,531**	**1,197,473**	**1,265,415**	**1,333,357**	**666,540**
Need	Arterial Lane Miles		7.3	7.3	7.4	7.4	7.4	7.4	7.4	7.5	7.5	7.5	74.1

FIRE FACILITIES

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 facilities, fire apparatus, and the cost of preparing the Fire Facilities IIP and related development fee report. The incremental expansion methodology is used for fire apparatus. The plan-based methodology is used for fire facilities 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 Fire Facilities IIP and development fees will allocate the cost of fire services between residential and nonresidential based on functional population. Based on 2019 estimates from the U.S. Census Bureau's OnTheMap web application, residential development accounts for approximately 77 percent of functional population and nonresidential development accounts for the remaining 23 percent.

Figure F1: Proportionate Share

Demand Units in 2019					
Residential				Demand Hours/Day	Person Hours
	Population	92,584			
	Residents Not Working		55,973	20	1,119,460
	Employed Residents		36,611		
	Employed in Goodyear			3,180	14	44,520
	Employed outside Goodyear			33,431	14	468,034
				Residential Subtotal		1,632,014
				Residential Share		**77%**
Nonresidential					
	Non-working Residents		55,973		4	223,892
	Jobs Located in Goodyear		26,504		
	Residents Employed in Goodyear			3,180	10	31,800
	Non-Resident Workers (inflow commuters)			23,324	10	233,240
				Nonresidential Subtotal		488,932
				Nonresidential Share		**23%**
				Total		2,120,946

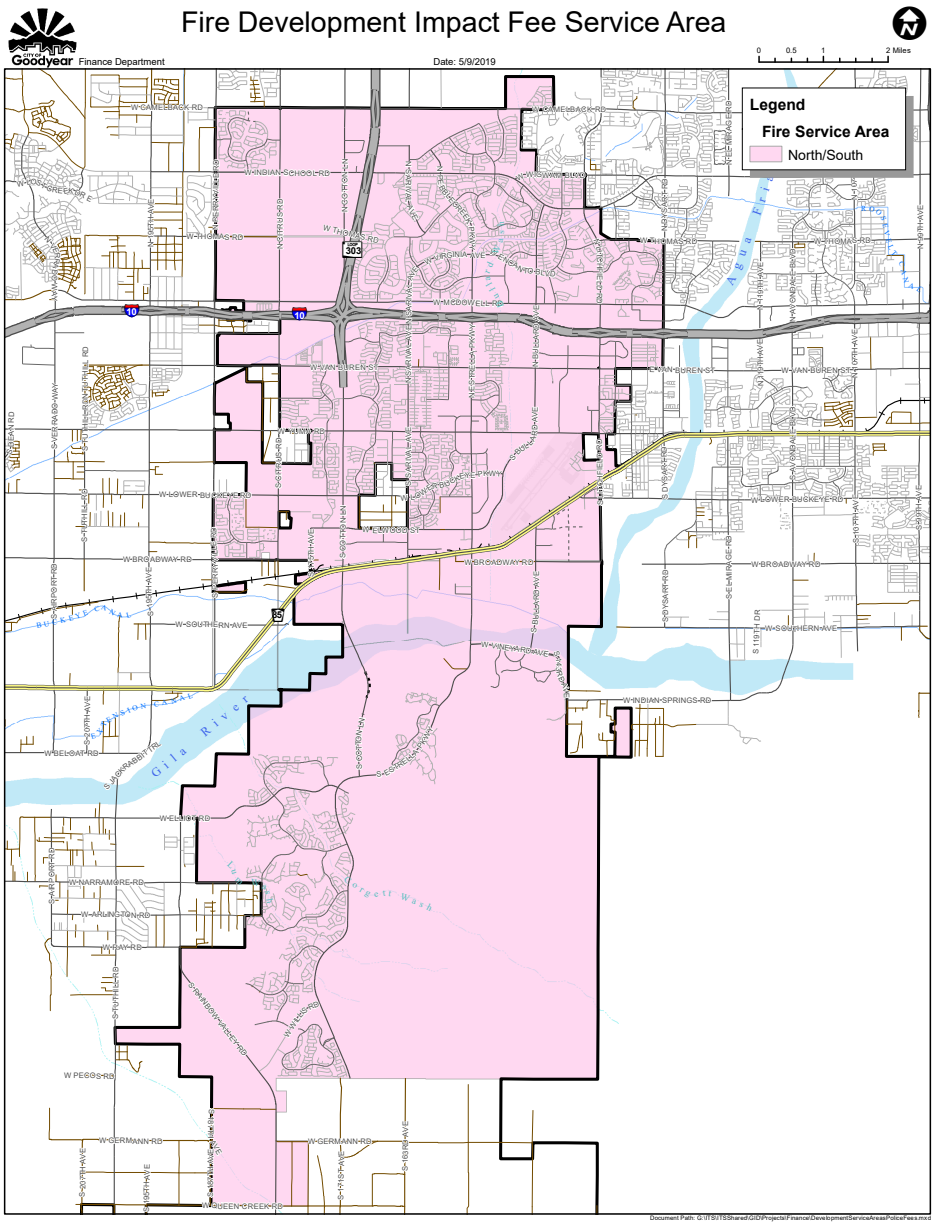
Source: Arizona Office of Economic Opportunity (population), U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics, Version 6.8.1 (employment).

The proportionate share of costs attributable to residential development will be allocated to population and then converted to an appropriate amount by type of housing unit. 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.

SERVICE AREA

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

Figure F2: Fire Development Impact Fee 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	
Development Type	Persons per Housing Unit[1]
Single Family	2.66
Multi-Family	1.65

Nonresidential Development	
Development Type	Jobs per 1,000 Sq Ft[1]
Industrial	1.16
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 Facilities – Plan-Based

Goodyear currently provides 105,322 square feet of fire facilities to existing development, and Goodyear plans to construct additional fire facilities to serve future development. Goodyear constructed Station 186 through a development agreement and will repay the developer through future development fee revenue. The existing level of service shown below excludes 8,932 square feet of Station 186 related to the outstanding development agreement.

To allocate the proportionate share of demand for fire facilities to residential and nonresidential development, this analysis uses proportionate share shown in Figure F1. Goodyear's existing level of service for residential development is 0.6960 square feet per person (96,390 square feet X 77 percent residential share / 106,642 persons). The nonresidential level of service is 0.6064 square feet per job (96,390 square feet X 23 percent nonresidential share / 36,557 jobs).

Figure F4: Existing Fire Facilities

Description	Square Feet
Headquarters	14,634
Fire Resource	13,094
Station 181	16,126
Station 182	10,870
Station 183	12,653
Station 184	13,476
Station 185	9,712
Station 186	14,757
Total	105,322

Level-of-Service (LOS) Standards	
Existing Square Feet[1]	96,390
Residential	
Residential Share	77%
2023 Population	106,642
Square Feet per Person	0.6960
Nonresidential	
Nonresidential Share	23%
2023 Jobs	36,557
Square Feet per Job	0.6064

Source: Goodyear Fire Department

1. Excludes Station 186 reimbursement share

If Goodyear maintains its existing level of service over the next 10 years, future development will demand approximately 50,776 square feet of fire facilities.

Figure F5: Projected Demand for Fire Facilities

Demand for Fire Facilities					
Year	Population	Jobs	Square Feet		
			Residential	Nonresidential	Total
2023	106,642	36,557	74,220.2	22,169.7	96,389.9
2024	114,500	37,195	79,689.3	22,556.6	102,245.9
2025	122,355	37,833	85,156.0	22,943.5	108,099.5
2026	128,706	38,904	89,576.3	23,592.8	113,169.1
2027	135,057	39,975	93,996.5	24,242.1	118,238.6
2028	141,409	41,045	98,416.8	24,891.3	123,308.1
2029	147,760	42,116	102,837.1	25,540.6	128,377.6
2030	154,111	43,187	107,257.3	26,189.8	133,447.2
2031	159,626	44,397	111,095.9	26,924.1	138,020.0
2032	165,142	45,608	114,934.5	27,658.4	142,592.9
2033	170,657	46,819	118,773.1	28,392.7	147,165.8
10-Yr Increase	64,015	10,262	44,552.8	6,223.0	50,775.8

As shown below in Figure F6, Goodyear plans to repay outstanding obligations related to Station 186 and to construct 30,000 square feet of fire facilities during the next 10 years. The associated cost related to 38,932 of fire facilities is $37,169,703. Since Goodyear plans to construct fewer square feet of fire facilities than supported by the existing level-of-service projections shown in Figure F5, the analysis will use an adjustment factor of approximately 77 percent (38,932 planned square feet / 50,776 projected square feet) to calculate the adjusted level of service.

Figure F6: Planned Fire Facilities

Description	Square Feet	Cost	Cost per Sq Ft
Station 186[1]	8,932	$4,208,612	$471
Station 188	15,000	$16,159,600	$1,077
Station 189	15,000	$16,801,491	$1,120
Total	38,932	$37,169,703	$955

Source: Goodyear Finance Department

1. Represents share related to city and developer reimbursement

Adjusted Level of Service

As discussed on the previous page, the analysis uses an adjustment factor of 77 percent to account for the planned level of service. The level-of-service standards shown below include 73,906 adjusted square feet (96,390 square feet X 77 percent adjustment factor). To allocate the proportionate share of demand for fire facilities to residential and nonresidential development, this analysis uses proportionate share shown in Figure F1. Goodyear's adjusted level of service for residential development is 0.5336 square feet per person (73,906 adjusted square feet X 77 percent residential share / 106,642 persons). The nonresidential level of service is 0.4650 square feet per job (73,906 adjusted square feet X 23 percent nonresidential share / 36,557 jobs).

Based on the outstanding balance for Station 186 and the construction cost estimates for future fire facilities, the construction cost is $955 per square foot ($37,169,703 cost / 38,932 square feet). For fire facilities, the cost is $509.48 per person (0.5336 square feet per person X $955 per square foot) and $443.93 per job (0.4650 square feet per job X $955 per square foot).

Figure F7: Existing Level of Service

Cost Factors	
Cost per Square Foot	$955

Level-of-Service (LOS) Standards	
Existing Square Feet[1]	96,390
LOS Adjustment	77%
Adjusted Square Feet	73,906
Residential	
Residential Share	77%
2023 Population	106,642
Square Feet per Person	0.5336
Cost per Person	$509.48
Nonresidential	
Nonresidential Share	23%
2023 Jobs	36,557
Square Feet per Job	0.4650
Cost per Job	$443.93

Source: Goodyear Fire Department

1. Excludes share related to city and developer reimbursement

Fire Apparatus – Incremental Expansion

Goodyear currently serves existing development with 50 fire apparatus, and Goodyear plans to acquire additional fire apparatus to serve future development. The replacement cost of the existing fleet is $15,132,000.

Figure F8: Existing Fire Apparatus

Description	Units	Unit Cost	Total Cost
Ladder	1	$1,450,000	$1,450,000
Pumper	6	$950,000	$5,700,000
Backup Pumper	4	$950,000	$3,800,000
Hazmat Truck	2	$645,000	$1,290,000
Wildland Truck	1	$540,000	$540,000
Hazmat Support	1	$212,000	$212,000
Brush Truck	2	$195,000	$390,000
BC Truck	2	$105,000	$210,000
Sport Utility Vehicle	2	$82,000	$164,000
Truck	18	$65,000	$1,170,000
Car	3	$35,000	$105,000
Forklift	1	$25,000	$25,000
UTV	2	$23,000	$46,000
Trailer	5	$6,000	$30,000
Total	50	$302,640	$15,132,000

Source: Goodyear Fire Department

To allocate the proportionate share of demand for fire apparatus to residential and nonresidential development, this analysis uses functional population outlined in Figure F1. Goodyear's existing level of service for residential development is 0.0004 units per person (50 units X 77 percent residential share / 106,642 persons). The nonresidential level of service is 0.0003 units per job (50 units X 23 percent nonresidential share / 36,557 jobs).

Based on the total cost of Goodyear's existing fire apparatus, the weighted average cost for a new fire apparatus is $302,640 per unit ($15,132,000 total cost / 50 units). Goodyear may use development fees to expand its fire apparatus fleet. For fire apparatus, the cost is $109.26 per person (0.0004 units per person X $302,640 per unit) and $95.20 per job (0.0003 units per job X $302,640 per unit).

Figure F9: Existing Level of Service

Cost Factors	
Weighted Average per Unit	$302,640

Level-of-Service (LOS) Standards	
Existing Units	50
Residential	
Residential Share	77%
2023 Population	106,642
Units per Person	0.0004
Cost per Person	$109.26
Nonresidential	
Nonresidential Share	23%
2023 Jobs	36,557
Units per Job	0.0003
Cost per Job	$95.20

Source: Goodyear Fire Department

Development Fee Report – Plan-Based

The cost to prepare the Fire Facilities IIP and related development fee report totals $18,000. Goodyear 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 $0.40 per person and $0.92 per job.

Figure F10: IIP and Development Fee Report

Necessary Public Service	Cost	Proportionate Share		Service Unit	5-Year Change	Cost per Service Unit
Fire	$18,000	Residential	77%	Population	34,766	$0.40
		Nonresidential	23%	Jobs	4,488	$0.92
Parks and Recreational	$15,500	Residential	98%	Population	34,766	$0.44
		Nonresidential	2%	Jobs	4,488	$0.07
Police	$18,000	Residential	79%	Population	34,766	$0.41
		Nonresidential	21%	Jobs	4,488	$0.84
Street	$26,110	All Development	100%	VMT	1,172,394	$0.02
Water	$25,000	All Development	100%	Gallons	3,256,698	$0.01
Wastewater	$25,000	All Development	100%	Gallons	1,223,084	$0.02
Total	$127,610					

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, Goodyear's population is expected to increase by 64,015 persons and employment is expected to increase by 10,262 jobs over the next 10 years. To reach the planned level of service, Goodyear will need to construct 30,000 square feet of fire facilities over the next 10 years. To maintain the existing level of service, Goodyear will need to expand the apparatus fleet by approximately 26 units over the next 10 years. The following pages include a more detailed projection of demand for services and costs for the Fire Facilities IIP.

Fire Facilities – Plan-Based

Goodyear will use development fees to repay costs associated with Station 186 ($3,401,226 for developer reimbursement and $807,386 for Goodyear reimbursement). Goodyear will also use development fees to construct Station 188 and Station 189 over the next 10 years. Based on a projected population increase of 64,015 persons, future residential development demands approximately 34,161 square feet of planned fire facilities (64,015 additional persons X 0.5336 square feet per person). With projected nonresidential growth of 10,262 jobs, future nonresidential development demands approximately 4,771 square feet of planned fire facilities (10,262 additional jobs X 0.4650 square feet per job). Future development demands 38,932 square feet of fire facilities at a cost of $37,169,703 (38,932 square feet X $955 per square foot). This includes Station 186 (8,932 square feet), Station 188 (15,000 square feet), and Station 189 (15,000 square feet) for a total of 38,923 square feet.

Figure F11: Projected Demand

Type of Infrastructure	Level of Service	Demand Unit	Cost per Unit
Fire Facilities	0.5336 Square Feet	per Person	$955
	0.4650 Square Feet	per Job	

Demand for Fire Facilities					
Year	Population	Jobs	Square Feet		
			Residential	Nonresidential	Total
2023	106,642	36,557	56,907.7	16,998.4	73,906.1
2024	114,500	37,195	61,101.0	17,295.1	78,396.1
2025	122,355	37,833	65,292.6	17,591.7	82,884.3
2026	128,706	38,904	68,681.8	18,089.6	86,771.3
2027	135,057	39,975	72,071.0	18,587.4	90,658.3
2028	141,409	41,045	75,460.2	19,085.2	94,545.3
2029	147,760	42,116	78,849.4	19,583.0	98,432.4
2030	154,111	43,187	82,238.6	20,080.8	102,319.4
2031	159,626	44,397	85,181.7	20,643.8	105,825.6
2032	165,142	45,608	88,124.9	21,206.8	109,331.8
2033	170,657	46,819	91,068.1	21,769.8	112,838.0
10-Yr Increase	64,015	10,262	34,160.5	4,771.4	38,931.9

Growth-Related Expenditures	$32,614,154	$4,555,449	$37,169,603

Fire Apparatus – Incremental Expansion

Goodyear plans to maintain its level of service for fire apparatus over the next 10 years. Based on a projected population increase of 64,015 persons, future residential development demands approximately 23 fire apparatus (64,015 additional persons X 0.0004 units per person). With projected nonresidential growth of 10,262 jobs, future nonresidential development demands approximately three fire apparatus (10,262 additional jobs X 0.0003 units per job). Future development demands approximately 26 fire apparatus at a cost of $7,971,166 (26.3 units X $302,640 per unit). Goodyear may use development fees to expand its fire apparatus fleet.

Figure F12: Projected Demand

Type of Infrastructure	Level of Service	Demand Unit	Cost per Unit
Fire Apparatus	0.0004 Units	per Person	$302,640
	0.0003 Units	per Job	

Demand for Fire Apparatus					
Year	Population	Jobs	Units		
			Residential	Nonresidential	Total
2023	106,642	36,557	38.5	11.5	50.0
2024	114,500	37,195	41.3	11.7	53.0
2025	122,355	37,833	44.2	11.9	56.1
2026	128,706	38,904	46.5	12.2	58.7
2027	135,057	39,975	48.8	12.6	61.3
2028	141,409	41,045	51.1	12.9	64.0
2029	147,760	42,116	53.3	13.2	66.6
2030	154,111	43,187	55.6	13.6	69.2
2031	159,626	44,397	57.6	14.0	71.6
2032	165,142	45,608	59.6	14.3	74.0
2033	170,657	46,819	61.6	14.7	76.3
10-Yr Increase	64,015	10,262	23.1	3.2	26.3

Growth-Related Expenditures	$6,994,231	$976,935	$7,971,166

FIRE FACILITIES DEVELOPMENT FEES

Revenue Credit/Offset

A revenue credit/offset is necessary for development fees, because Goodyear'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. Goodyear will apply the entire revenue credit/offset to street facilities fees. Appendix A contains the forecast of revenues required by Arizona's Enabling Legislation (ARS § 9-463.05(E)(7)).

Fire Facilities Development Fees

Infrastructure components and cost factors for fire facilities are summarized in the upper portion of Figure F13. The cost per service unit for fire facilities is $619.14 per person and $540.05 per job.

Fire facilities development fees for residential development are assessed according to the number of persons per housing unit. The fee of $1,647 for a single-family unit is calculated using a cost per service unit of $619.14 per person multiplied by a demand unit of 2.66 persons per housing unit.

Nonresidential development fees are calculated using jobs as the service unit. The fee of $625 per 1,000 square feet of industrial development is derived from a cost per service unit of $540.05 per job multiplied by a demand unit of 1.16 jobs per 1,000 square feet.

Figure F13: Fire Facilities Development Fees

Fee Component	Cost per Person	Cost per Job
Fire Facilities	$509.48	$443.93
Fire Apparatus	$109.26	$95.20
Development Fee Report	$0.40	$0.92
Total	$619.14	$540.05

Residential Fees per Unit				
Development Type	Persons per Housing Unit[1]	Proposed Fees	Current Fees	Difference
Single Family	2.66	$1,647	$911	$736
Multi-Family	1.65	$1,022	$682	$340

Nonresidential Fees per 1,000 Square Feet				
Development Type	Jobs per 1,000 Sq Ft[1]	Proposed Fees	Current Fees	Difference
Industrial	1.16	$625	$362	$263
Commercial	2.12	$1,147	$467	$680
Office & Other Services	3.26	$1,758	$816	$942
Institutional	3.03	$1,638	$934	$704

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. Projected fee revenue shown in Figure F14 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 equals $45,158,243 and projected expenditures equal $45,158,869.

Figure F14: Fire Facilities Development Fee Revenue

Fee Component	Growth Share	Existing Share	Total
Fire Facilities	$37,169,703	$0	$37,169,703
Fire Apparatus	$7,971,166	$0	$7,971,166
Development Fee Report	$18,000	$0	$18,000
Total	$45,158,869	$0	$45,158,869

		Single Family $1,647 per unit	Multi-Family $1,022 per unit	Industrial $625 per 1,000 sq ft	Commercial $1,147 per 1,000 sq ft	Office & Other $1,758 per 1,000 sq ft	Institutional $1,638 per 1,000 sq ft
Year		Hsg Unit	Hsg Unit	KSF	KSF	KSF	KSF
Base	2023	36,920	6,367	5,773	4,916	2,874	987
Year 1	2024	38,410	8,727	5,834	4,967	2,972	1,033
Year 2	2025	39,900	11,085	5,896	5,018	3,069	1,079
Year 3	2026	41,540	12,290	5,992	5,067	3,293	1,121
Year 4	2027	43,180	13,495	6,088	5,116	3,516	1,163
Year 5	2028	44,821	14,700	6,185	5,166	3,739	1,205
Year 6	2029	46,461	15,905	6,281	5,215	3,963	1,247
Year 7	2030	48,101	17,110	6,377	5,264	4,186	1,289
Year 8	2031	49,427	18,315	6,498	5,324	4,427	1,342
Year 9	2032	50,753	19,520	6,620	5,384	4,667	1,395
Year 10	2033	52,079	20,725	6,741	5,443	4,908	1,448
10-Year Increase		15,159	14,358	968	528	2,034	460
Projected Revenue		$24,958,481	$14,664,088	$604,973	$605,270	$3,572,274	$753,157

Projected Fee Revenue	$45,158,243
Total Expenditures	$45,158,869

PARKS AND RECREATIONAL FACILITIES IIP

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

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

The Parks and Recreational Facilities IIP includes components for park land (north only), park amenities, recreation facilities (north only), and the cost of preparing the Parks and Recreational Facilities IIP and related Development Fee Report. The incremental expansion methodology is used for park land, park amenities, and recreation facilities. 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 Parks and Recreational Facilities IIP and development fees allocate the cost of necessary public services between residential and nonresidential based on functional population. The Arizona Office of Economic Opportunity estimates Goodyear's 2019 population equal to 92,584 persons. Based on 2019 estimates from the U.S. Census Bureau's OnTheMap web application, 23,324 inflow commuters traveled to Goodyear for work in 2019. The proportionate share is based on cumulative impact hours per year with a resident potentially impacting parks and recreational facilities 5,840 hours per year and an inflow commuter potentially impacting parks and recreational facilities 500 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	Service Unit	Impact Hours per Year	Cumulative Impact Hours per Year	Proportionate Share
Residential	92,584 residents[1]	5,840	540,690,560	98%
Nonresidential	23,324 inflow commuters[2]	500	11,662,000	2%
Total			552,352,560	100%

1. Arizona Office of Economic Opportunity, 2019

2. U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics, Version 6.8.1, 2019

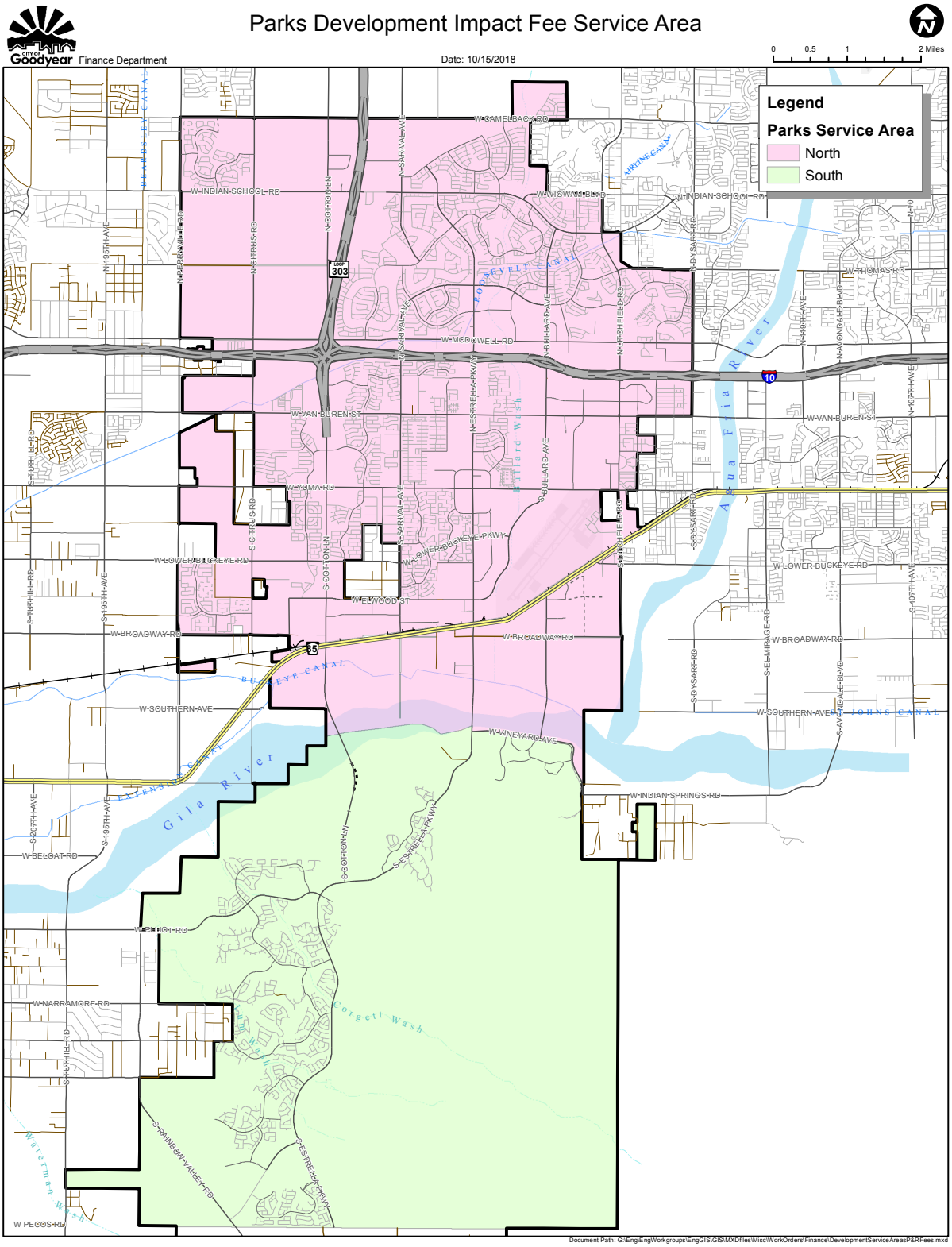
Residential Impact: 16 hours per day X 365 per year

Nonresidential Impact: 2 hours per day X 5 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 Development Impact Fee Service Area



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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	
Development Type	Persons per Housing Unit[1]
Single Family	2.66
Multi-Family	1.65

Nonresidential Development	
Development Type	Jobs per 1,000 Sq Ft[1]
Industrial	1.16
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."*

North Service Area

Park Land – Incremental Expansion

Goodyear currently provides 113.0 acres of park land in the north service area and plans to acquire additional park land to serve future development. To allocate the proportionate share of demand for park land to residential and nonresidential development, this analysis uses the proportionate share shown in Figure PR1. Goodyear's existing LOS for residential development is 0.00125 acres per person (113.0 acres X 98 percent residential share / 88,652 persons). For nonresidential development, the existing LOS is 0.00007 acres per job (113.0 acres X two percent nonresidential share / 33,719 jobs).

Based on estimates provided by the Goodyear Finance Department, the cost for park land is $200,000 per acre. For park land, the cost is $249.83 per person (0.00125 acres per person X $200,000 per acre) and $13.40 per job (0.00007 acres per job X $200,000 per acre).

Figure PR4: Existing Level of Service

Description	Acres
Goodyear Community Park	36.0
Goodyear Recreation Campus[1]	30.0
Portales	17.0
Falcon	16.0
Rio Paseo	14.0
Total	113.0

Cost Factors	
Cost per Acre	$200,000

Level-of-Service (LOS) Standards	
Existing Acres	113.0
Residential	
Residential Share	98%
2023 Population - North	88,652
Acres per Person	0.00125
Cost per Person	$249.83
Nonresidential	
Nonresidential Share	2%
2023 Jobs - North	33,719
Acres per Job	0.00007
Cost per Job	$13.40

Source: Goodyear Parks and Recreation Department

1. Excludes portion in excess of 30 acres

Park Amenities – Incremental Expansion

Goodyear currently provides 46 park amenities in its existing parks in the north service area and plans to construct additional park amenities to serve future development. Based on costs provided by Goodyear's Parks and Recreation Department to construct recent park amenities, the total cost of Goodyear's existing park amenities in the north service area is $22,397,701.

To allocate the proportionate share of demand for park amenities to residential and nonresidential development, this analysis uses the proportionate share shown in Figure PR1. Goodyear's existing LOS for residential development is 0.00051 units per person (46 units X 98 percent residential share / 88,652 persons). For nonresidential development, the existing LOS is 0.00003 units per job (46 units X two percent nonresidential share / 33,719 jobs).

Based on the total cost of Goodyear's existing park amenities in the north service area, the weighted average cost for park amenities is $486,907 per unit ($22,397,701 total cost / 46 units). Goodyear may use development fees to construct additional park amenities in existing or future parks. For park amenities, the cost is $247.59 per person (0.00051 units per person X $486,907 per unit) and $13.28 per job (0.00003 units per job X $486,907 per unit).

Figure PR5: Existing Level of Service

Description	Units	Unit Cost	Total Cost
Ball Field	7	$945,501	$6,618,507
Soccer Field	2	$706,327	$1,412,654
Basketball Court	6	$106,380	$638,280
Tennis Court	6	$156,300	$937,800
Pickelball Court	10	$116,696	$1,166,960
Restroom	6	$553,500	$3,321,000
Playground	9	$922,500	$8,302,500
Total	46	$486,907	$22,397,701

Cost Factors	
Weighted Average per Unit	$486,907

Level-of-Service (LOS) Standards	
Existing Units	46
Residential	
Residential Share	98%
2023 Population - North	88,652
Units per Person	0.00051
Cost per Person	$247.59
Nonresidential	
Nonresidential Share	2%
2023 Jobs - North	33,719
Units per Job	0.00003
Cost per Job	$13.28

Source: Goodyear Parks and Recreation Department

Recreation Facilities – Incremental Expansion

Goodyear currently provides 48,000 square feet of recreation facilities and plans to construct additional recreation facilities to serve future development. The Enabling Legislation limits recreation facilities to "three thousand square feet that provide a direct benefit to development." To comply with the Enabling Legislation, Goodyear will use 3,000 square feet in the level-of-service standards.

To allocate the proportionate share of demand for recreation facilities to residential and nonresidential development, this analysis uses proportionate share shown in Figure PR1. Goodyear's eligible level of service for residential development is 0.0332 eligible square feet per person (3,000 eligible square feet X 98 percent residential share / 88,652 persons). The nonresidential level of service is 0.0018 eligible square feet per job (3,000 eligible square feet X two percent nonresidential share / 33,719 jobs).

Goodyear provided a construction cost of $400 per square foot. For recreation facilities, the cost is $13.27 per person (0.0332 eligible square feet per person X $400 per square foot) and $0.71 per job (0.0018 eligible square feet per job X $400 per square foot).

Figure PR6: Existing Level of Service

Description	Total Square Feet	Eligible Square Feet
Goodyear Recreation Center	48,000	3,000

Cost Factors	
Cost per Square Foot	$400

Level-of-Service (LOS) Standards	
Eligible Square Feet	3,000
Residential	
Residential Share	98%
2023 Population - North	88,652
Eligible Square Feet per Person	0.0332
Cost per Person	$13.27
Nonresidential	
Nonresidential Share	2%
2023 Jobs - North	33,719
Eligible Square Feet per Job	0.0018
Cost per Job	$0.71

Source: Goodyear Parks and Recreation Department

South Service Area

Park Amenities – Incremental Expansion

Goodyear currently provides six park amenities in its existing parks in the south service area and plans to construct additional park amenities to serve future development. Based on costs provided by Goodyear's Parks and Recreation Department to construct recent park amenities, the total cost of Goodyear's existing park amenities in the south service area is $5,018,830.

To allocate the proportionate share of demand for park amenities to residential and nonresidential development, this analysis uses the proportionate share shown in Figure PR1. Goodyear's existing LOS for residential development is 0.00033 units per person (six units X 98 percent residential share / 17,990 persons). For nonresidential development, the existing LOS is 0.00004 units per job (six units X two percent nonresidential share / 2,838 jobs).

Based on the total cost of Goodyear's existing park amenities in the south service area, the weighted average cost for park amenities is $836,472 per unit ($5,018,830 total cost / six units). Goodyear may use development fees to construct additional park amenities in existing or future parks. For park amenities, the cost is $273.40 per person (0.00033 units per person X $836,472 per unit) and $35.37 per job (0.00004 units per job X $836,472 per unit).

Figure PR7: Existing Level of Service

Description	Units	Unit Cost	Total Cost
Ball Field	3	$945,501	$2,836,503
Soccer Field	1	$706,327	$706,327
Restroom	1	$553,500	$553,500
Playground	1	$922,500	$922,500
Total	6	$836,472	$5,018,830

Cost Factors	
Weighted Average per Unit	$836,472

Level-of-Service (LOS) Standards	
Existing Units	6
Residential	
Residential Share	98%
2023 Population - South	17,990
Units per Person	0.00033
Cost per Person	$273.40
Nonresidential	
Nonresidential Share	2%
2023 Jobs - South	2,838
Units per Job	0.00004
Cost per Job	$35.37

Source: Goodyear Parks and Recreation Department

Development Fee Report – Plan-Based

The cost to prepare the Parks and Recreational Facilities IIP and development fees totals $15,500. Goodyear 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 $0.44 per person and $0.07 per job.

Figure PR8: IIP and Development Fee Report

Necessary Public Service	Cost	Proportionate Share		Service Unit	5-Year Change	Cost per Service Unit
Fire	$18,000	Residential	77%	Population	34,766	$0.40
		Nonresidential	23%	Jobs	4,488	$0.92
Parks and Recreational	$15,500	Residential	98%	Population	34,766	$0.44
		Nonresidential	2%	Jobs	4,488	$0.07
Police	$18,000	Residential	79%	Population	34,766	$0.41
		Nonresidential	21%	Jobs	4,488	$0.84
Street	$26,110	All Development	100%	VMT	1,172,394	$0.02
Water	$25,000	All Development	100%	Gallons	3,256,698	$0.01
Wastewater	$25,000	All Development	100%	Gallons	1,223,084	$0.02
Total	$127,610					

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, Goodyear's population in the north service area is expected to increase by 42,015 persons and employment is expected to increase by 9,874 jobs over the next 10 years. Goodyear's population in the south service area is expected to increase by 22,000 persons and employment is expected to increase by 387 jobs over the next 10 years. To maintain the existing levels of service in the north service area, Goodyear will need to acquire approximately 53 acres of park land, construct approximately 22 park amenities, and construct approximately 1,400 square feet of recreation facilities over the next 10 years. To maintain the existing level of service in the south service area, Goodyear will need to construct approximately seven park amenities over 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.

North Service Area

Park Land – Incremental Expansion

Goodyear plans to maintain its existing level of service for park land in the north service area over the next 10 years. Based on a projected population increase of 42,015 persons, future residential development demands an additional 52.5 acres of park land (42,015 additional persons X 0.00125 acres per person). With projected employment growth of 9,874 jobs, future nonresidential development demands an additional 0.7 acres of park land (9,874 additional jobs X 0.00007 acres per job). Future development demands 53.1 additional acres of park land at a cost of $10,628,877 (53.1 acres X $200,000 per acre). Goodyear may use development fees to acquire additional park land.

Figure PR9: Projected Demand

Type of Infrastructure	Level of Service	Demand Unit	Cost per Acre
Park Land	0.00125 Acres	per Person	$200,000
	0.00007 Acres	per Job	

Demand for Park Land					
Year	Population (North)	Jobs (North)	Acres		
			Residential	Nonresidential	Total
2023	88,652	33,719	110.7	2.3	113.0
2024	94,310	34,339	117.8	2.3	120.1
2025	99,965	34,959	124.9	2.3	127.2
2026	104,116	35,999	130.1	2.4	132.5
2027	108,267	37,038	135.2	2.5	137.7
2028	112,418	38,078	140.4	2.6	143.0
2029	116,569	39,117	145.6	2.6	148.2
2030	120,721	40,157	150.8	2.7	153.5
2031	124,036	41,303	154.9	2.8	157.7
2032	127,351	42,448	159.1	2.8	161.9
2033	130,667	43,594	163.2	2.9	166.1
10-Yr Increase	42,015	9,874	52.5	0.7	53.1

Growth-Related Expenditures	$10,496,513	$132,364	$10,628,877

Park Amenities – Incremental Expansion

Goodyear plans to maintain its existing level of service for park amenities in the north service area over the next 10 years. Based on a projected population increase of 42,015 persons, future residential development demands an additional 21.4 park amenities (42,015 additional persons X 0.00051 amenities per person). With projected employment growth of 9,874 jobs, future nonresidential development demands an additional 0.3 park amenities (9,874 additional jobs X 0.00003 amenities per job). Future development demands 21.6 additional park amenities at a cost of $10,533,735 (21.6 amenities X $486,907 per amenity). Goodyear may use development fees to construct additional park amenities.

Figure PR10: Projected Demand

Type of Infrastructure	Level of Service	Demand Unit	Cost per Unit
Park Amenities	0.00051 Units	per Person	$486,907
	0.00003 Units	per Job	

Demand for Park Amenities					
Year	Population (North)	Jobs (North)	Units		
			Residential	Nonresidential	Total
2023	88,652	33,719	45.1	0.9	46.0
2024	94,310	34,339	48.0	0.9	48.9
2025	99,965	34,959	50.8	1.0	51.8
2026	104,116	35,999	52.9	1.0	53.9
2027	108,267	37,038	55.1	1.0	56.1
2028	112,418	38,078	57.2	1.0	58.2
2029	116,569	39,117	59.3	1.1	60.3
2030	120,721	40,157	61.4	1.1	62.5
2031	124,036	41,303	63.1	1.1	64.2
2032	127,351	42,448	64.8	1.2	65.9
2033	130,667	43,594	66.4	1.2	67.6
10-Yr Increase	42,015	9,874	21.4	0.3	21.6

Growth-Related Expenditures	$10,402,556	$131,179	$10,533,735

Recreation Facilities – Incremental Expansion

Goodyear plans to maintain its eligible level of service for recreation facilities in the north service area over the next 10 years. Based on a projected population increase of 42,015 persons, future residential development demands approximately 1,393 square feet of recreation facilities (42,015 additional persons X 0.0332 square feet per person). With projected employment growth of 9,874 jobs, future nonresidential development demands approximately 18 square feet of recreation facilities (9,874 additional jobs X 0.0018 square feet per job). Future development demands approximately 1,411 square feet of recreation facilities at a cost of $564,365 (1,410.9 square feet X $400 per square foot). Goodyear may use development fees to construct additional recreation facilities.

Figure PR11: Projected Demand

Type of Infrastructure	Level of Service	Demand Unit	Cost per Unit
Recreation Facilities	0.0332 Square Feet	per Person	$400
	0.0018 Square Feet	per Job	

Demand for Recreation Facilities					
Year	Population (North)	Jobs (North)	Square Feet		
			Residential	Nonresidential	Total
2023	88,652	33,719	2,940.0	60.0	3,000.0
2024	94,310	34,339	3,127.6	61.1	3,188.7
2025	99,965	34,959	3,315.2	62.2	3,377.4
2026	104,116	35,999	3,452.8	64.1	3,516.9
2027	108,267	37,038	3,590.5	65.9	3,656.4
2028	112,418	38,078	3,728.2	67.8	3,795.9
2029	116,569	39,117	3,865.8	69.6	3,935.4
2030	120,721	40,157	4,003.5	71.5	4,075.0
2031	124,036	41,303	4,113.4	73.5	4,186.9
2032	127,351	42,448	4,223.4	75.5	4,298.9
2033	130,667	43,594	4,333.3	77.6	4,410.9
10-Yr Increase	42,015	9,874	1,393.3	17.6	1,410.9
Growth-Related Expenditures			$557,337	$7,028	$564,365

South Service Area

Park Amenities – Incremental Expansion

Goodyear plans to maintain its existing level of service for park amenities in the south service area over the next 10 years. Based on a projected population increase of 22,000 persons, future residential development demands an additional 7.2 park amenities (22,000 additional persons X 0.00033 amenities per person). With projected employment growth of 387 jobs, future nonresidential development demands approximately 0.02 park amenities (387 additional jobs X 0.00004 amenities per job). Future development demands 7.2 additional park amenities at a cost of $6,028,598 (7.2 amenities X $836,472 per amenity). Goodyear may use development fees to construct additional park amenities.

Figure PR12: Projected Demand

Type of Infrastructure	Level of Service	Demand Unit	Cost per Unit
Park Amenities	0.00033 Units	per Person	$836,472
	0.00004 Units	per Job	

Demand for Park Amenities					
Year	Population (South)	Jobs (South)	Units		
			Residential	Nonresidential	Total
2023	17,990	2,838	5.9	0.1	6.0
2024	20,190	2,856	6.6	0.1	6.7
2025	22,390	2,874	7.3	0.1	7.4
2026	24,590	2,905	8.0	0.1	8.2
2027	26,790	2,936	8.8	0.1	8.9
2028	28,990	2,968	9.5	0.1	9.6
2029	31,190	2,999	10.2	0.1	10.3
2030	33,390	3,030	10.9	0.1	11.0
2031	35,590	3,095	11.6	0.1	11.8
2032	37,790	3,160	12.4	0.1	12.5
2033	39,991	3,225	13.1	0.1	13.2
10-Yr Increase	22,000	387	7.2	0.0	7.2

Growth-Related Expenditures	$6,014,902	$13,696	$6,028,598

PARKS AND RECREATIONAL FACILITIES DEVELOPMENT FEES

Revenue Credit/Offset

A revenue credit/offset is necessary for development fees, because Goodyear'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. Goodyear will apply the entire revenue credit/offset to street facilities fees. 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

Infrastructure components and cost factors for parks and recreational facilities in the north service area are summarized in the upper portion of Figure PR13. The cost per service unit is $511.13 per person and $27.46 per job.

Parks and recreational facilities fees for residential development are assessed according to the number of persons per housing unit. The fee of $1,360 for a single-family unit is calculated using a cost per service unit of $511.13 per person multiplied by a demand unit of 2.66 persons per housing unit.

Nonresidential development fees are calculated using jobs as the service unit. The fee of $32 per 1,000 square feet of industrial development is derived from a cost per service unit of $27.46 per job multiplied by a demand unit of 1.16 jobs per 1,000 square feet.

Figure PR13: Parks and Recreational Facilities Development Fees – North Service Area

Fee Component	Cost per Person	Cost per Job
Park Land	$249.83	$13.40
Park Amenities	$247.59	$13.28
Recreation Facilities	$13.27	$0.71
Development Fee Report	$0.44	$0.07
Total	$511.13	$27.46

Residential Fees per Unit				
Development Type	Persons per Housing Unit[1]	Proposed Fees	Current Fees	Difference
Single Family	2.66	$1,360	$1,375	($15)
Multi-Family	1.65	$843	$1,030	($187)

Nonresidential Fees per 1,000 Square Feet				
Development Type	Jobs per 1,000 Sq Ft[1]	Proposed Fees	Current Fees	Difference
Industrial	1.16	$32	$23	$9
Commercial	2.12	$58	$29	$29
Office & Other Services	3.26	$90	$50	$40
Institutional	3.03	$83	$57	$26

1. See Land Use Assumptions

South Service Area

Infrastructure components and cost factors for parks and recreational facilities in the south service area are summarized in the upper portion of Figure PR14. The cost per service unit is $273.84 per person and $35.44 per job.

Parks and recreational facilities fees for residential development are assessed according to the number of persons per housing unit. The fee of $728 for a single-family unit is calculated using a cost per service unit of $273.84 per person multiplied by a demand unit of 2.66 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 derived from a cost per service unit of $35.44 per job multiplied by a demand unit of 1.16 jobs per 1,000 square feet.

Figure PR14: Parks and Recreational Facilities Development Fees – South Service Area

Fee Component	Cost per Person	Cost per Job
Park Amenities	$273.40	$35.37
Development Fee Report	$0.44	$0.07
Total	$273.84	$35.44

Residential Fees per Unit				
Development Type	Persons per Housing Unit[1]	Proposed Fees	Current Fees	Difference
Single Family	2.66	$728	$2,255	($1,527)
Multi-Family	1.65	$452	$1,690	($1,238)

Nonresidential Fees per 1,000 Square Feet				
Development Type	Jobs per 1,000 Sq Ft[1]	Proposed Fees	Current Fees	Difference
Industrial	1.16	$41	$110	($69)
Commercial	2.12	$75	$142	($67)
Office & Other Services	3.26	$116	$247	($131)
Institutional	3.03	$107	$284	($177)

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 new 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 equals $21,737,596, and projected expenditures equal $21,737,611.

Figure PR15: Parks and Recreational Facilities Development Fee Revenue – North Service Area

Fee Component	Growth Share	Existing Share	Total
Park Land	$10,628,877	$0	$10,628,877
Park Amenities	$10,533,735	$0	$10,533,735
Recreation Facilities	$564,365	$0	$564,365
Development Fee Report	$10,633	$0	$10,633
Total	$21,737,611	$0	$21,737,611

		Single Family $1,360 per unit	Multi-Family $843 per unit	Industrial $32 per 1,000 sq ft	Commercial $58 per 1,000 sq ft	Office & Other $90 per 1,000 sq ft	Institutional $83 per 1,000 sq ft
Year		Hsg Unit	Hsg Unit	KSF	KSF	KSF	KSF
Base	2023	28,826	6,367	5,762	4,702	2,801	891
Year 1	2024	29,496	8,716	5,822	4,753	2,896	934
Year 2	2025	30,166	11,063	5,883	4,803	2,991	978
Year 3	2026	30,986	12,257	5,978	4,846	3,211	1,018
Year 4	2027	31,806	13,451	6,073	4,888	3,432	1,058
Year 5	2028	32,626	14,645	6,168	4,930	3,653	1,098
Year 6	2029	33,446	15,839	6,263	4,973	3,873	1,138
Year 7	2030	34,266	17,033	6,358	5,015	4,094	1,178
Year 8	2031	34,772	18,226	6,478	5,052	4,332	1,228
Year 9	2032	35,278	19,420	6,599	5,088	4,570	1,279
Year 10	2033	35,783	20,614	6,719	5,125	4,808	1,329
10-Year Increase		6,957	14,247	957	423	2,007	439
Projected Revenue		$9,455,626	$12,011,080	$30,439	$24,596	$179,402	$36,453

Projected Fee Revenue	$21,737,596
Total Expenditures	$21,737,611

South Service Area

In accordance with state law, this report includes an IIP for parks and recreational facilities needed to accommodate new 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 $6,033,465, and projected expenditures equal $6,033,465.

Figure PR16: Parks and Recreational Facilities Development Fee Revenue – South Service Area

Fee Component	Growth Share	Existing Share	Total
Park Amenities	$6,028,598	$0	$6,028,598
Development Fee Report	$4,867	$0	$4,867
Total	$6,033,465	$0	$6,033,465

		Single Family $728 per unit	Multi-Family $452 per unit	Industrial $41 per 1,000 sq ft	Commercial $75 per 1,000 sq ft	Office & Other $116 per 1,000 sq ft	Institutional $107 per 1,000 sq ft
Year		Hsg Unit	Hsg Unit	KSF	KSF	KSF	KSF
Base	2023	8,094	0	11	213	73	96
Year 1	2024	8,914	11	12	214	76	99
Year 2	2025	9,734	22	13	215	79	101
Year 3	2026	10,554	33	14	222	81	103
Year 4	2027	11,374	44	15	228	84	105
Year 5	2028	12,195	56	17	235	87	107
Year 6	2029	13,015	67	18	242	89	109
Year 7	2030	13,835	78	19	249	92	112
Year 8	2031	14,655	89	20	272	95	114
Year 9	2032	15,475	100	21	295	97	116
Year 10	2033	16,296	111	22	318	100	118
10-Year Increase		8,202	111	11	105	27	22
Projected Revenue		$5,969,654	$50,114	$449	$7,858	$3,069	$2,322

Projected Fee Revenue	$6,033,465
Total Expenditures	$6,033,465

POLICE FACILITIES IIP

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

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

The Police Facilities IIP includes components for police facilities, police vehicles, communication equipment, and the cost of preparing the Police Facilities IIP and related Development Fee Report. The incremental expansion methodology, based on the current level of service, is used for police vehicles and communication equipment. The plan-based methodology is used for police facilities 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 Police Facilities IIP and development fees will allocate the cost of police infrastructure between residential and nonresidential using calls for service. Based on 2019-2021 call data provided by the Goodyear Police Department, residential development accounts for approximately 79 percent of demand and nonresidential development accounts for the remaining 21 percent of demand.

Figure P1: Proportionate Share

Development Type	2019	2020	2021	Total
Residential	35,994	24,707	29,377	90,078
Nonresidential	7,847	7,275	9,395	24,517
Total	43,841	31,982	38,772	114,595

Development Type	2019	2020	2021	Total
Residential	82%	77%	76%	79%
Nonresidential	18%	23%	24%	21%
Total	100%	100%	100%	100%

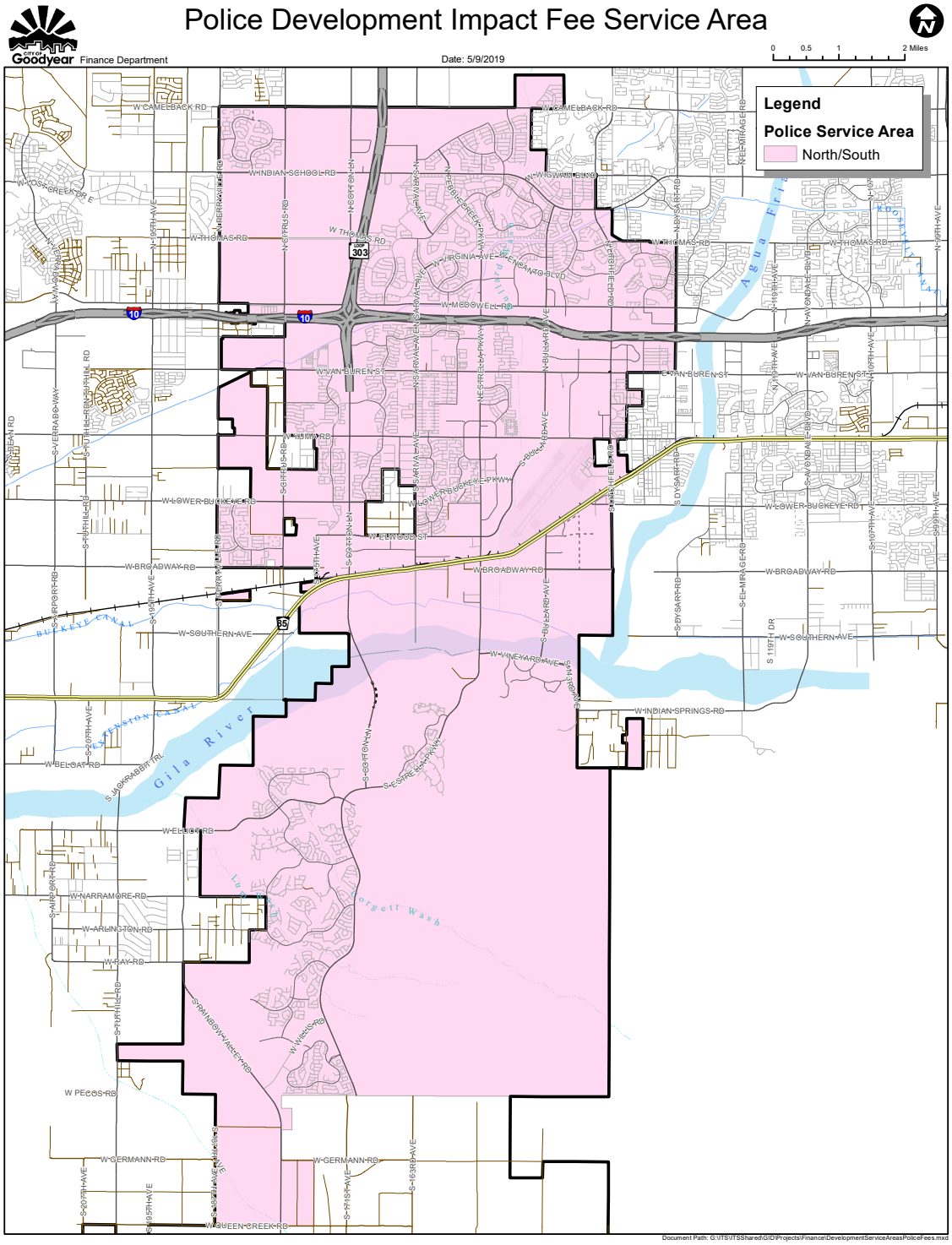
Source: Goodyear Police Department

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 police 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 police services from nonresidential development.

SERVICE AREA

Goodyear'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 Development Impact Fee 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 jobs per thousand square feet of floor area.

Figure P3: Ratio of Service Unit to Development Unit

Residential Development	
Development Type	Persons per Housing Unit[1]
Single Family	2.66
Multi-Family	1.65

Nonresidential Development	
Development Type	Jobs per 1,000 Sq Ft[1]
Industrial	1.16
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."*

Police Facilities – Plan-Based

Goodyear currently provides 32,750 square feet of police facilities to existing development.

Figure P4: Existing Police Facilities

Description	Square Feet
Operations Building - Phase I	21,000
Estrella Substation	5,000
Telecom	6,750
Total	32,750

Goodyear plans to construct an additional 17,860 square feet of police facilities at a cost of $25,709,400 to serve all development in 2033. Goodyear's existing police development fee fund balance is $5,745,704 as of June 20, 3023, and Goodyear will use the available fund balance to fund a portion of the planned police facilities. After accounting for the existing fund balance, the remaining capital cost of planned police facilities is $19,963,696. The weighted average cost for planned police facilities is $1,118 per square foot ($19,963,696 remaining capital cost / 17,860 square feet).

Figure P5: Planned Police Facilities

Description	Square Feet	Cost	Cost per Sq Ft
Operations Building Phase II	8,700	$11,389,800	$1,309
New Substation	9,160	$14,319,600	$1,563
Fund Balance (6/30/2023)	n/a	($5,745,704)	n/a
Total	17,860	$19,963,696	$1,118

Source: Goodyear Police Department

To allocate the proportionate share of demand for police facilities to residential and nonresidential development, this analysis uses calls for service outlined in Figure P1. Goodyear's planned level of service for residential development is 0.2343 square feet per person (50,610 square feet X 79 percent residential share / 170,657 persons). The nonresidential level of service is 0.2270 square feet per job (50,610 square feet X 21 percent nonresidential share / 46,819 jobs).

Based on planned police facilities shown in Figure P5, the construction cost is $1,118 per square foot ($19,963,696 remaining capital cost / 17,860 square feet). For police facilities, the cost is $261.88 per person (0.2343 square feet per person X $1,118 per square foot) and $253.74 per job (0.2270 square feet per job X $1,118 per square foot).

Figure P6: Planned Level of Service

Cost Factors	
Cost per Square Foot	$1,118

Level-of-Service (LOS) Standards	
2023 Square Feet	32,750
Additional Square Feet	17,860
2033 Square Feet (Planned)	50,610
Residential	
Residential Share	79%
2033 Population	170,657
Square Feet per Person	0.2343
Cost per Person	$261.88
Nonresidential	
Nonresidential Share	21%
2033 Jobs	46,819
Square Feet per Job	0.2270
Cost per Job	$253.74

Source: Goodyear Police Department

Police Vehicles – Incremental Expansion

Goodyear has 166 police vehicles with a total cost of $14,305,936, and Goodyear 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 calls for service outlined in Figure P1. Goodyear's existing level of service for residential development is 0.0012 units per person (166 vehicles X 79 percent residential share / 106,642 persons). The nonresidential level of service is 0.0010 units per job (166 vehicles X 21 percent nonresidential share / 36,557 jobs).

Based on the total cost of Goodyear's existing police vehicles, the weighted average cost for a new police vehicle is $86,180 per vehicle ($14,305,936 total cost / 166 vehicles). Goodyear may use development fees to expand its police vehicle fleet. For police vehicles, the cost is $105.98 per person (0.0012 units per person X $86,180 per vehicle) and $82.18 per job (0.0010 units per job X $86,180 per vehicle).

Figure P7: Existing Level of Service

Description	Units	Unit Cost	Total Cost
Sport Utility Vehicle	109	$85,000	$9,265,000
Car	26	$50,000	$1,300,000
Truck	15	$65,000	$975,000
Van	4	$80,100	$320,400
Motorcycle	5	$49,300	$246,500
Command	1	$620,256	$620,256
Command Trailer	1	$227,080	$227,080
Personal Transporter	2	$16,900	$33,800
UTV	1	$21,900	$21,900
Armored	2	$648,000	$1,296,000
Total	166	$86,180	$14,305,936

Cost Factors	
Weighted Average per Unit	$86,180

Level-of-Service (LOS) Standards	
Existing Units	166
Residential	
Residential Share	79%
2023 Population	106,642
Units per Person	0.0012
Cost per Person	$105.98
Nonresidential	
Nonresidential Share	21%
2023 Jobs	36,557
Units per Job	0.0010
Cost per Job	$82.18

Source: Goodyear Police Department

Communication Equipment – Incremental Expansion

Goodyear has 50 units of communication equipment with a total cost of $11,067,410, and Goodyear plans to acquire additional units to serve future development. To allocate the proportionate share of demand for communication equipment to residential and nonresidential development, this analysis uses calls for service outlined in Figure P1. Goodyear's existing level of service for residential development is 0.0004 units per person (50 units X 79 percent residential share / 106,642 persons). The nonresidential level of service is 0.0003 units per job (50 units X 21 percent nonresidential share / 36,557 jobs).

Based on the total cost of Goodyear's existing communication equipment, the weighted average cost for a new unit is $221,348 per unit ($11,067,410 total cost / 50 units). Goodyear may use development fees to acquire additional communication equipment. For communication equipment, the cost is $81.99 per person (0.0004 units per person X $221,348 per unit) and $63.58 per job (0.0003 units per job X $221,348 per unit).

Figure P8: Existing Level of Service

Description	Units	Unit Cost	Total Cost
Communication Equipment	50	$221,348	$11,067,410

Cost Factors	
Weighted Average per Unit	$221,348

Level-of-Service (LOS) Standards	
Existing Units	50
Residential	
Residential Share	79%
2023 Population	106,642
Units per Person	0.0004
Cost per Person	$81.99
Nonresidential	
Nonresidential Share	21%
2023 Jobs	36,557
Units per Job	0.0003
Cost per Job	$63.58

Source: Goodyear Police Department

Development Fee Report – Plan-Based

The cost to prepare the Police Facilities IIP and related Development Fee Report totals $18,000. Goodyear 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 $0.41 per person and $0.84 per job.

Figure P9: IIP and Development Fee Report

Necessary Public Service	Cost	Proportionate Share		Service Unit	5-Year Change	Cost per Service Unit
Fire	$18,000	Residential	77%	Population	34,766	$0.40
		Nonresidential	23%	Jobs	4,488	$0.92
Parks and Recreational	$15,500	Residential	98%	Population	34,766	$0.44
		Nonresidential	2%	Jobs	4,488	$0.07
Police	$18,000	Residential	79%	Population	34,766	$0.41
		Nonresidential	21%	Jobs	4,488	$0.84
Street	$26,110	All Development	100%	VMT	1,172,394	$0.02
Water	$25,000	All Development	100%	Gallons	3,256,698	$0.01
Wastewater	$25,000	All Development	100%	Gallons	1,223,084	$0.02
Total	$127,610					

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, Goodyear's population is expected to increase by 64,015 persons and employment is expected to increase by 10,262 jobs over the next 10 years. To reach the planned level of service for police facilities, Goodyear will construct 17,860 square feet over the next 10 years. To maintain the existing levels of service, Goodyear will need to acquire approximately 89 police vehicles and approximately 27 units of communication equipment over 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 – Plan-Based

Goodyear plans to construct 17,860 square feet of police facilities over the next 10 years. Based on a projected population increase of 64,015 persons, future residential development demands approximately 14,998 square feet of police facilities (64,015 additional persons X 0.2343 square feet per person). With projected employment growth of 10,262 jobs, future nonresidential development demands approximately 2,329 square feet of police facilities (10,262 additional jobs X 0.2270 square feet per job). Future development demands approximately 17,327 square feet of police facilities at a cost of $19,367,910 (17,327.0 square feet X $1,118 per square foot).

Existing residential development demands approximately 24,984 square feet of police facilities (106,642 persons X 0.2343 square feet per person) and existing nonresidential development demands approximately 8,299 square feet of police facilities (36,557 jobs X 0.2270 square feet per job). Since Goodyear currently provides 32,750 square feet of police facilities, existing development currently demands an additional 533 square feet of police facilities (33,283 square feet demanded by existing development – 32,750 square feet available to existing development) to reach the planned level of service. Existing development's share of planned police facilities is approximately $595,785 (533 square feet X $1,118 per square foot).

Figure P10: Projected Demand

Type of Infrastructure	Level of Service	Demand Unit	Cost per Unit
Police Facilities	0.2343 Square Feet	per Person	$1,118
	0.2270 Square Feet	per Job	

Demand for Police Facilities					
Year	Population	Jobs	Square Feet		
			Residential	Nonresidential	Total
2023	106,642	36,557	24,984.3	8,298.7	33,283.0
2024	114,500	37,195	26,825.3	8,443.5	35,268.8
2025	122,355	37,833	28,665.6	8,588.3	37,253.9
2026	128,706	38,904	30,153.5	8,831.4	38,984.9
2027	135,057	39,975	31,641.5	9,074.4	40,715.9
2028	141,409	41,045	33,129.5	9,317.4	42,446.9
2029	147,760	42,116	34,617.5	9,560.5	44,177.9
2030	154,111	43,187	36,105.4	9,803.5	45,908.9
2031	159,626	44,397	37,397.6	10,078.4	47,476.0
2032	165,142	45,608	38,689.7	10,353.2	49,043.0
2033	170,657	46,819	39,981.9	10,628.1	50,610.0
10-Yr Increase	64,015	10,262	14,997.6	2,329.4	17,327.0

Growth-Related Expenditures	$16,764,099	$2,603,811	$19,367,910
Non-Growth Expenditures	$447,234	$148,551	$595,785
Total Expenditures	$17,211,333	$2,752,362	$19,963,696

Police Vehicles – Incremental Expansion

Goodyear plans to maintain its existing level of service for police vehicles over the next 10 years. Based on a projected population increase of 64,015 persons, future residential development demands an additional 78.7 vehicles (64,015 additional persons X 0.0012 vehicles per person). With projected employment growth of 10,262 jobs, future nonresidential development demands an additional 9.8 vehicles (10,262 additional jobs X 0.0010 vehicles per job). Future development demands approximately 89 police vehicles at a cost of $7,627,454 (88.5 units X $86,180 per vehicle). Goodyear may use development fees to expand its police vehicle fleet.

Figure P11: Projected Demand

Type of Infrastructure	Level of Service	Demand Unit	Cost per Unit
Police Vehicles	0.0012 Units	per Person	$86,180
	0.0010 Units	per Job	

Demand for Police Vehicles					
Year	Population	Jobs	Units		
			Residential	Nonresidential	Total
2023	106,642	36,557	131.1	34.9	166.0
2024	114,500	37,195	140.8	35.5	176.3
2025	122,355	37,833	150.5	36.1	186.5
2026	128,706	38,904	158.3	37.1	195.4
2027	135,057	39,975	166.1	38.1	204.2
2028	141,409	41,045	173.9	39.1	213.0
2029	147,760	42,116	181.7	40.2	221.9
2030	154,111	43,187	189.5	41.2	230.7
2031	159,626	44,397	196.3	42.3	238.6
2032	165,142	45,608	203.1	43.5	246.6
2033	170,657	46,819	209.9	44.6	254.5
10-Yr Increase	64,015	10,262	78.7	9.8	88.5

Growth-Related Expenditures	$6,784,163	$843,291	$7,627,454

Communication Equipment – Incremental Expansion

Goodyear plans to maintain its existing level of service for communication equipment over the next 10 years. Based on a projected population increase of 64,015 persons, future residential development demands an additional 23.7 units (64,015 additional persons X 0.0004 units per person). With projected employment growth of 10,262 jobs, future nonresidential development demands an additional 2.9 units (10,262 additional jobs X 0.0003 units per job). Future development demands approximately 26.7 units at a cost of $5,900,778 (26.7 units X $221,348 per unit).

Figure P12: Projected Demand

Type of Infrastructure	Level of Service	Demand Unit	Cost per Unit
Communication Equipment	0.0004 Units	per Person	$221,348
	0.0003 Units	per Job	

Demand for Communication Equipment					
Year	Population	Jobs	Units		
			Residential	Nonresidential	Total
2023	106,642	36,557	39.5	10.5	50.0
2024	114,500	37,195	42.4	10.7	53.1
2025	122,355	37,833	45.3	10.9	56.2
2026	128,706	38,904	47.7	11.2	58.8
2027	135,057	39,975	50.0	11.5	61.5
2028	141,409	41,045	52.4	11.8	64.2
2029	147,760	42,116	54.7	12.1	66.8
2030	154,111	43,187	57.1	12.4	69.5
2031	159,626	44,397	59.1	12.8	71.9
2032	165,142	45,608	61.2	13.1	74.3
2033	170,657	46,819	63.2	13.4	76.7
10-Yr Increase	64,015	10,262	23.7	2.9	26.7

Growth-Related Expenditures	$5,248,389	$652,389	$5,900,778

Police Facilities Development Fees

Revenue Credit/Offset

A revenue credit/offset is necessary for development fees, because Goodyear'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. Goodyear will apply the entire revenue credit/offset to street facilities fees. Appendix A contains the forecast of revenues required by Arizona's Enabling Legislation (ARS § 9-463.05(E)(7)).

Police Facilities Development Fees

Infrastructure components and cost factors for police facilities are summarized in the upper portion of Figure P13. The cost per service unit for police facilities is $450.26 per person and $400.34 per job.

Police facilities development fees for residential development are assessed according to the number of persons per housing unit. The fee of $1,198 for single-family unit is calculated using a cost per service unit of $450.26 per person multiplied by a demand unit of 2.66 persons per housing unit.

Nonresidential development fees are calculated using jobs as the service unit. The fee of $464 per 1,000 square feet of industrial development is derived from a cost per service unit of $400.34 per job multiplied by a demand unit of 1.16 jobs per 1,000 square feet.

Figure P13: Police Facilities Development Fees

Fee Component	Cost per Person	Cost per Job
Police Facilities	$261.88	$253.74
Police Vehicles	$105.98	$82.18
Communication Equipment	$81.99	$63.58
Development Fee Report	$0.41	$0.84
Total	$450.26	$400.34

Residential Fees per Unit				
Development Type	Persons per Housing Unit[1]	Proposed Fees	Current Fees	Difference
Single Family	2.66	$1,198	$820	$378
Multi-Family	1.65	$743	$616	$127

Nonresidential Fees per 1,000 Square Feet				
Development Type	Jobs per 1,000 Sq Ft[1]	Proposed Fees	Current Fees	Difference
Industrial	1.16	$464	$333	$131
Commercial	2.12	$851	$429	$422
Office & Other Services	3.26	$1,303	$751	$552
Institutional	3.03	$1,214	$859	$355

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 P14 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 $32,913,939, and projected expenditures equal $33,509,928.

Figure P14: Police Facilities Development Fee Revenue

Fee Component	Growth Share	Existing Share	Total
Police Facilities	$19,367,910	$595,785	$19,963,696
Police Vehicles	$7,627,454	$0	$7,627,454
Communication Equipment	$5,900,778	$0	$5,900,778
Development Fee Report	$18,000	$0	$18,000
Total	$32,914,142	$595,785	$33,509,928

		Single Family $1,198 per unit	Multi-Family $743 per unit	Industrial $464 per 1,000 sq ft	Commercial $851 per 1,000 sq ft	Office & Other $1,303 per 1,000 sq ft	Institutional $1,214 per 1,000 sq ft
Year		Hsg Unit	Hsg Unit	KSF	KSF	KSF	KSF
Base	2023	36,920	6,367	5,773	4,916	2,874	987
Year 1	2024	38,410	8,727	5,834	4,967	2,972	1,033
Year 2	2025	39,900	11,085	5,896	5,018	3,069	1,079
Year 3	2026	41,540	12,290	5,992	5,067	3,293	1,121
Year 4	2027	43,180	13,495	6,088	5,116	3,516	1,163
Year 5	2028	44,821	14,700	6,185	5,166	3,739	1,205
Year 6	2029	46,461	15,905	6,281	5,215	3,963	1,247
Year 7	2030	48,101	17,110	6,377	5,264	4,186	1,289
Year 8	2031	49,427	18,315	6,498	5,324	4,427	1,342
Year 9	2032	50,753	19,520	6,620	5,384	4,667	1,395
Year 10	2033	52,079	20,725	6,741	5,443	4,908	1,448
10-Year Increase		15,159	14,358	968	528	2,034	460
Projected Revenue		$18,148,370	$10,663,047	$448,365	$448,427	$2,647,529	$558,200

Projected Fee Revenue	$32,913,939
Total Expenditures	$33,509,928

STREET FACILITIES IIP

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

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

The Street Facilities IIP includes components for street improvements and the cost of preparing the Street Facilities IIP and related Development Fee Report. The plan-based methodology is used for street improvements and the Development Fee Report.

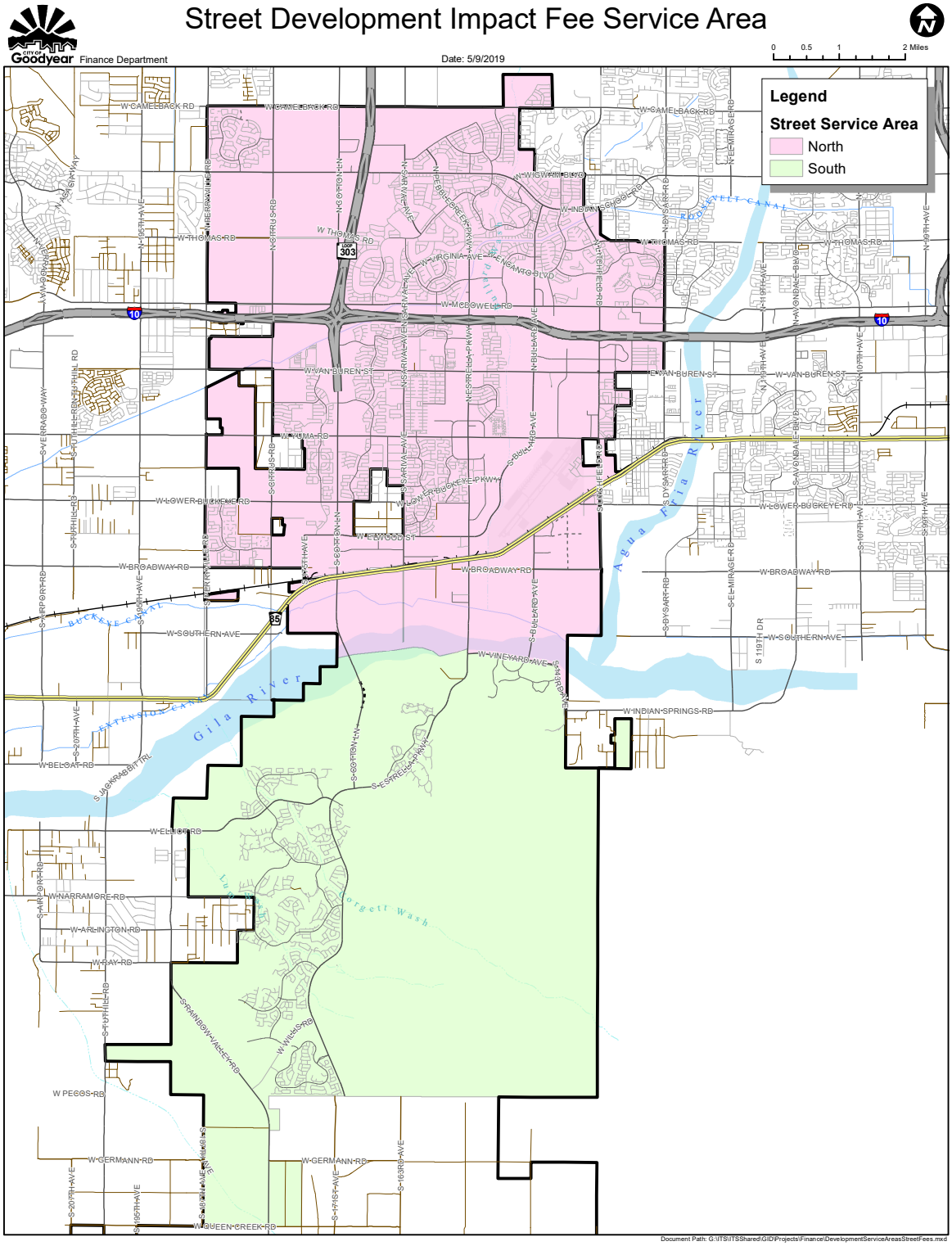
PROPORTIONATE SHARE

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 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

As shown in Figure S1, there are two service areas for the Street Facilities IIP.

Figure S1: Street Development Impact Fee Service Area



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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."*

Goodyear 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.

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 Industrial Park (ITE 130) which generates 3.37 average weekday vehicle trip ends per 1,000 square feet of floor area. The prototype for commercial development is Shopping Center (ITE 820) which generates 37.01 average weekday vehicle trips per 1,000 square feet of floor area. For office & other services development, the proxy is General Office (ITE 710), and it generates 10.84 average weekday vehicle trip ends per 1,000 square feet of floor area. Institutional development uses Government Office (ITE 730) and generates 22.59 average weekday vehicle trip ends per 1,000 square feet of floor area.

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

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

Trip Rate Adjustments

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

Commuter Trip Adjustment

Residential development has a larger trip adjustment factor of 64 percent to account for commuters leaving Goodyear 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 91 percent of resident workers traveled outside of Goodyear for work in 2019. In combination, these factors (0.31 x 0.50 x 0.91 = 0.14) support the additional 14 percent allocation of trips to residential development.

Figure S3: Commuter Trip Adjustment

Trip Adjustment Factor for Commuters[1]	
Employed Residents	36,611
Residents Living and Working in Goodyear	3,180
Residents Commuting Outside Goodyear for Work	33,431
Percent Commuting out of Goodyear	91%
Additional Production Trips[2]	14%
Residential Trip Adjustment Factor	64%

1. U.S. Census Bureau, OnTheMap Application (version 6.8.1) and LEHD Origin-Destination Employment Statistics, 2019.

2. 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 2019 indicate that 91 percent of Goodyear's workers travel outside the city for work. In combination, these factors (0.3099 x 0.50 x 0.91 = 0.14) 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 (discussed on the previous page) by Goodyear's existing development units provides the average weekday vehicle trips generated by existing development. As shown below, Goodyear's existing citywide development generates 342,978 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	2023 Dev Units	2023 Veh Trips
Single Family	HU	210	9.43	64%	36,920	222,817
Multi-Family	HU	220	6.74	64%	6,367	27,465
Industrial	KSF	130	3.37	50%	5,773	9,727
Commercial	KSF	820	37.01	33%	4,916	60,035
Office & Other Services	KSF	710	10.84	50%	2,874	15,575
Institutional	KSF	610	22.59	33%	987	7,359
Total						342,978

Shown below in Figure S5, Goodyear's existing development in the north service area generates 290,391 vehicle trips on an average weekday.

Figure S5: Average Weekday Vehicle Trips by Land Use – North

Development Type	Development Unit	ITE Code	Avg Wkday VTE	Trip Adjustment	2023 Dev Units	2023 Veh Trips
Single Family	HU	210	9.43	64%	28,826	173,971
Multi-Family	HU	220	6.74	64%	6,367	27,465
Industrial	KSF	130	3.37	50%	5,762	9,708
Commercial	KSF	820	37.01	33%	4,702	57,428
Office & Other Services	KSF	710	10.84	50%	2,801	15,179
Institutional	KSF	610	22.59	33%	891	6,640
Total						290,391

Shown below in Figure S6, Goodyear's existing development in the south service area generates 52,587 vehicle trips on an average weekday.

Figure S6: Average Weekday Vehicle Trips by Land Use – South

Development Type	Development Unit	ITE Code	Avg Wkday VTE	Trip Adjustment	2023 Dev Units	2023 Veh Trips
Single Family	HU	210	9.43	64%	8,094	48,846
Multi-Family	HU	220	6.74	64%	0	0
Industrial	KSF	130	3.37	50%	11	19
Commercial	KSF	820	37.01	33%	213	2,607
Office & Other Services	KSF	710	10.84	50%	73	396
Institutional	KSF	610	22.59	33%	96	719
Total						52,587

Local Trip Lengths

According to recent estimates, Goodyear provides 424 lane miles of arterials. Using a capacity standard of 9,000 vehicles per lane mile, Goodyear's existing arterial network provides 3,816,000 vehicle miles of capacity (424 lane miles X 9,000 vehicles per lane mile). To calculate the local trip length, TischlerBise divides estimated vehicle miles of capacity by estimated average weekday vehicle trips. The local average trip length is 11.13 miles (3,816,000 vehicle miles of capacity / 342,978 average weekday vehicle trips. The analysis will use the local trip length shown below to calculate VMT.

Figure S7: Local Trip Lengths

Average Trip Length	
Total Arterial Lane Miles[1]	424.00
Capacity per Lane Mile[1]	9,000
Vehicle Miles of Capacity	3,816,000
Avg Wkday Vehicle Trips	342,978
Avg Trip Length	11.13

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 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 area (per room for lodging, and per bed for assisted living).

Figure S8: Ratio of Service Unit to Development Unit

Residential Development					
Development Type	AWVTE per unit[1]	Trip Adjustment[1]	Average Trip Length (miles)	Trip Length Adjustment	Avg Wkdy VMT per Unit
Single Family	9.43	64%	11.13	117%	78.56
Multi-Family	6.74	64%	11.13	117%	56.15

Nonresidential Development					
Development Type	AWVTE per 1,000 Sq Ft[1]	Trip Adjustment[1]	Average Trip Length (miles)	Trip Length Adjustment	Avg Wkdy VMT per 1,000 Sq Ft[1]
Industrial	3.37	50%	11.13	73%	13.69
Commercial	37.01	33%	11.13	75%	101.91
Office & Other Services	10.84	50%	11.13	73%	44.02
Institutional	22.59	33%	11.13	73%	60.55

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."*

North Service Area

As shown in the *Land Use Assumptions* document, Goodyear's housing stock in the north service area is expected to increase by 21,205 units and nonresidential floor area is expected to increase by 3,826,000 square feet over the next 10 years. Based on the trip generation factors discussed in this section, projected development demands an additional 1,517,758 vehicle miles of capacity over the next 10 years. Shown below in Figure S9, Goodyear will need to construct approximately 168.6 lane miles of street improvements over the next 10 years to maintain the existing levels of service. Goodyear plans to construct 6.30 lane miles of street improvements over the next 10 years; therefore, the analysis allocates the eligible cost to construct 6.30 lane miles to the 10-year projected demand for capacity.

Figure S9: Projected Travel Demand – North Service Area

Development Type	Development Unit	ITE Code	Weekday Veh Trips	Local Trip Length	Trip Adj	Weekday VMT
Single Family	HU	210	6.04	11.13	117%	78.56
Multi-Family	HU	220	4.31	11.13	117%	56.15
Industrial	KSF	130	1.69	11.13	73%	13.69
Commercial	KSF	820	12.21	11.13	75%	101.91
Office & Other Services	KSF	710	5.42	11.13	73%	44.02
Institutional	KSF	610	7.45	11.13	73%	60.55

VMC Per Lane Mile	9,000

	Non-Utility Service Area - North	Base 2023	1 2024	2 2025	3 2026	4 2027	5 2028	10 2033	10-Year Increase
Development	Single Family Units	28,826	29,496	30,166	30,986	31,806	32,626	35,783	6,957
	Multi-Family Units	6,367	8,716	11,063	12,257	13,451	14,645	20,614	14,247
	Industrial KSF	5,762	5,822	5,883	5,978	6,073	6,168	6,719	957
	Commercial KSF	4,702	4,753	4,803	4,846	4,888	4,930	5,125	423
	Office & Other Services KSF	2,801	2,896	2,991	3,211	3,432	3,653	4,808	2,007
	Institutional KSF	891	934	978	1,018	1,058	1,098	1,329	439
Avg Weekday Vehicle Trips	Single-Family Trips	173,971	178,014	182,058	187,007	191,956	196,904	215,960	41,989
	Multi-Family Trips	27,465	37,597	47,721	52,871	58,021	63,171	88,921	61,457
	Residential Trips	201,435	215,612	229,779	239,878	249,977	260,076	304,881	103,446
	Industrial Trips	9,708	9,811	9,913	10,073	10,233	10,393	11,321	1,613
	Commercial Trips	57,428	58,046	58,664	59,181	59,699	60,217	62,595	5,167
	Office & Other Services Trips	15,179	15,695	16,210	17,406	18,602	19,797	26,059	10,880
	Institutional Trips	6,640	6,966	7,292	7,589	7,887	8,185	9,911	3,270
	Nonresidential Trips	88,956	90,517	92,078	94,249	96,421	98,592	109,886	20,930
	Total Vehicle Trips	**290,391**	**306,129**	**321,857**	**334,127**	**346,398**	**358,668**	**414,768**	**124,377**
VMC	**Vehicle Miles of Capacity (VMC)**	**3,357,468**	**3,554,825**	**3,752,070**	**3,901,282**	**4,050,494**	**4,199,707**	**4,875,226**	**1,517,758**
Need	Arterial Lane Miles		21.9	21.9	16.6	16.6	16.6	14.0	168.6

South Service Area

As shown in the *Land Use Assumptions* document, Goodyear's housing stock in the north service area is expected to increase by 8,313 units and nonresidential floor area is expected to increase by 207,000 square feet over the next 10 years. Based on the trip generation factors discussed in this section, projected development demands an additional 666,540 vehicle miles of capacity over the next 10 years. Shown below in Figure S10, Goodyear will need to construct approximately 74.1 lane miles of street improvements over the next 10 years to maintain the existing levels of service. Goodyear plans to construct 1.75 lane miles of street improvements over the next 10 years; therefore, the analysis allocates the eligible cost to construct 1.75 lane miles to the 10-year projected demand for capacity.

Figure S10: Projected Travel Demand – South Service Area

Development Type	Development Unit	ITE Code	Weekday Veh Trips	Local Trip Length	Trip Adj	Weekday VMT
Single Family	HU	210	6.04	11.13	117%	78.56
Multi-Family	HU	220	4.31	11.13	117%	56.15
Industrial	KSF	130	1.69	11.13	73%	13.69
Commercial	KSF	820	12.21	11.13	75%	101.91
Office & Other Services	KSF	710	5.42	11.13	73%	44.02
Institutional	KSF	610	7.45	11.13	73%	60.55

VMC Per Lane Mile	9,000

	Non-Utility Service Area - South	Base 2023	1 2024	2 2025	3 2026	4 2027	5 2028	10 2033	10-Year Increase
Development	Single Family Units	8,094	8,914	9,734	10,554	11,374	12,195	16,296	8,202
	Multi-Family Units	0	11	22	33	44	56	111	111
	Industrial KSF	11	12	13	14	15	17	22	11
	Commercial KSF	213	214	215	222	228	235	318	105
	Office & Other Services KSF	73	76	79	81	84	87	100	27
	Institutional KSF	96	103	109	116	122	129	161	65
Avg Weekday Vehicle Trips	Single-Family Trips	48,846	53,796	58,746	63,696	68,646	73,596	98,347	49,501
	Multi-Family Trips	0	48	96	144	192	239	479	479
	Residential Trips	48,846	53,844	58,842	63,840	68,838	73,836	98,825	49,980
	Industrial Trips	19	20	22	24	26	28	37	18
	Commercial Trips	2,607	2,615	2,623	2,706	2,789	2,872	3,886	1,279
	Office & Other Services Trips	396	411	426	441	455	470	540	144
	Institutional Trips	719	768	816	865	913	962	1,204	485
	Nonresidential Trips	3,741	3,814	3,888	4,035	4,183	4,331	5,667	1,926
	Total Vehicle Trips	**52,587**	**57,658**	**62,729**	**67,875**	**73,021**	**78,167**	**104,493**	**51,906**
VMC	**Vehicle Miles of Capacity (VMC)**	**666,817**	**732,475**	**798,133**	**864,413**	**930,692**	**996,972**	**1,333,357**	**666,540**
Need	Arterial Lane Miles		7.3	7.3	7.4	7.4	7.4	7.5	74.1

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."*

North Service Area

Street Improvements – Plan-Based

Goodyear plans to construct 6.30 lane miles of street improvements to serve future development over the next 10 years. Shown below, the total cost of planned street improvements in the north service area is $79,951,586 and other funding sources equal $2,445,200. The remaining amount of $77,506,386 represents the eligible cost for street improvements. After subtracting the existing street development fee fund balance as of June 30, 2023, the adjusted cost of street improvements is $44,890,087.

Figure S11: Planned Street Improvements

Project	Lane Miles	Total Cost	Other Funding	Eligible Cost
I-1 Pebble Creek Pkwy and I-10 Intersection	0.33	$8,309,994	$0	$8,309,994
McDowell Rd and Citrus Rd Intersection	0.33	$6,567,757	$0	$6,567,757
Sarival Ave (West Half) - Yuma Rd to Elwood St	1.47	$19,545,900	$0	$19,545,900
Estrella Pkwy (Outside NB Lane) - MC85 to Elwood St	0.32	$189,100	$0	$189,100
Sarival Ave - Jefferson Street to Yuma	0.40	$4,163,200	$1,462,400	$2,700,800
Citrus Rd - I-10 (End ADOT Impr.) to Thomas Rd	2.20	$32,855,700	$0	$32,855,700
I-5 Lower Buckeye Rd and Sarival Ave Intersection	0.05	$4,360,000	$982,800	$3,377,200
R-4 Yuma Rd - Canyon Tr to Sarival Ave	1.20	$3,959,935	$0	$3,959,935
Subtotal	6.30	$79,951,586	$2,445,200	$77,506,386
Fund Balance (6/30/2023)				($32,616,299)
Total	6.30	$79,951,586	$2,445,200	$44,890,087

Source: Goodyear Public Works Department

Allocating the adjusted cost to the 10-year VMT increase results in a cost of $29.58 per VMT ($44,890,087 adjusted cost / 1,517,758 additional VMT).

Figure S12: Cost Allocation

Cost Factors	
Eligible Cost	$77,506,386
DIF Balance	($32,616,299)
Adjusted Cost	$44,890,087
10-Year VMT Increase	1,517,758
Cost per VMT	$29.58

South Service Area

Street Improvements – Plan-Based

Goodyear plans to construct 1.75 lane miles of street improvements to serve future development over the next 10 years. Shown below, the total cost of planned street improvements in the south service area is $35,845,992. After subtracting the existing street development fee fund balance as of June 30, 2023, the adjusted cost of street improvements is $31,202,670.

Figure S13: Planned Street Improvements

Project	Lane Miles	Total Cost	Other Funding	Eligible Cost
I-8 Estrella Pkwy and Cotton Ln Intersection	0.88	$14,000,000	$0	$14,000,000
R-2 Estrella Pkwy - Vineyard Ave to MC85[1]	0.87	$21,845,992	$0	$21,845,992
Subtotal	1.75	$35,845,992	$0	$35,845,992
Fund Balance (6/30/2023)				($4,643,323)
Total	1.75	$35,845,992	$0	$31,202,670

Source: Goodyear Public Works Department

1. Represents 1/3 of total cost based on the assumption that the bridge will service growth for 30 years (10-year LUA / 30 years)

Allocating the adjusted cost to the 10-year VMT increase results in a cost of $46.81 per VMT ($31,202,670 adjusted cost / 666,540 additional VMT).

Figure S14: Cost Allocation

Cost Factors	
Adjusted Cost	$35,845,992
DIF Balance	($4,643,323)
Adjusted Cost	$31,202,670
10-Year VMT Increase	666,540
Cost per VMT	$46.81

Development Fee Report – Plan-Based

The cost to prepare the Street Facilities IIP and related Development Fee Report totals $26,110. Goodyear 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 $0.02 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	$18,000	Residential	77%	Population	34,766	$0.40
		Nonresidential	23%	Jobs	4,488	$0.92
Parks and Recreational	$15,500	Residential	98%	Population	34,766	$0.44
		Nonresidential	2%	Jobs	4,488	$0.07
Police	$18,000	Residential	79%	Population	34,766	$0.41
		Nonresidential	21%	Jobs	4,488	$0.84
Street	$26,110	All Development	100%	VMT	1,172,394	$0.02
Water	$25,000	All Development	100%	Gallons	3,256,698	$0.01
Wastewater	$25,000	All Development	100%	Gallons	1,223,084	$0.02
Total	$127,610					

STREET FACILITIES DEVELOPMENT FEES

Revenue Credit/Offset

A revenue credit/offset is necessary for development fees, because Goodyear'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. Goodyear will apply the entire revenue credit/offset to street facilities fees. Appendix A contains the forecast of revenues required by Arizona's Enabling Legislation (ARS § 9-463.05(E)(7)).

Street Facilities Development Fees

North Service Area

Infrastructure components and cost factors for street facilities in the north service area are summarized in the upper portion of Figure S16. Since Goodyear will offset the street facilities fees with excess construction sales tax, the cost per service unit for street facilities is $0.00 per VMT.

Figure S16: Street Facilities Development Fees – North Service Area

Fee Component	Cost per VMT
Street Improvements	$29.58
Development Fee Report	$0.02
Excess Construction Sales Tax	($29.60)
Total	$0.00

Residential Fees per Unit				
Development Type	Avg Wkdy VMT per Unit[1]	Proposed Fees	Current Fees	Difference
Single Family	78.56	$0	$2,669	($2,669)
Multi-Family	56.15	$0	$2,069	($2,069)

Nonresidential Fees per 1,000 Square Feet				
Development Type	Avg Wkdy VMT per 1,000 Sq Ft[1]	Proposed Fees	Current Fees	Difference
Industrial	13.69	$0	$303	($303)
Commercial	101.91	$0	$3,621	($3,621)
Office & Other Services	44.02	$0	$1,698	($1,698)
Institutional	60.55	$0	$1,698	($1,698)

1. See Land Use Assumptions

South Service Area

Infrastructure components and cost factors for street facilities in the south service area are summarized in the upper portion of Figure S17. Since Goodyear will offset the street facilities fees with excess construction sales tax, the cost per service unit for street facilities is $0.00 per VMT.

Figure S17: Street Facilities Development Fees – South Service Area

Fee Component	Cost per VMT
Street Improvements	$46.81
Development Fee Report	$0.02
Excess Construction Sales Tax	($46.83)
Total	$0.00

Residential Fees per Unit				
Development Type	Avg Wkdy VMT per Unit[1]	Proposed Fees	Current Fees	Difference
Single Family	78.56	$0	$3,330	($3,330)
Multi-Family	56.15	$0	$2,582	($2,582)

Nonresidential Fees per 1,000 Square Feet				
Development Type	Avg Wkdy VMT per 1,000 Sq Ft[1]	Proposed Fees	Current Fees	Difference
Industrial	13.69	$0	$378	($378)
Commercial	101.91	$0	$4,517	($4,517)
Office & Other Services	44.02	$0	$2,119	($2,119)
Institutional	60.55	$0	$2,803	($2,803)

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)).

North Service Area

Projected fee revenue shown in Figure S18 is based on the development projections in the *Land Use Assumptions* document and the updated street facilities development fees. If development occurs faster than projected, the demand for infrastructure will increase along with development fee revenue. If development occurs slower than projected, the demand for infrastructure will decrease and development fee revenue will decrease at a similar rate. Goodyear will use excess construction sales tax revenue to offset street facilities fees; therefore, projected development fee revenue equals $0, and projected expenditures equal $44,908,844.

Figure S18: Street Facilities Development Fee Revenue – North Service Area

Fee Component	Growth Share	Existing Share	Total
Street Improvements	$44,890,087	$0	$44,890,087
Development Fee Report	$18,757	$0	$18,757
Excess Construction Sales Tax	($44,908,844)	$0	($44,908,844)
Total	$0	$0	$0

	Single Family $0 per unit	Multi-Family $0 per unit	Industrial $0 per 1,000 sq ft	Commercial $0 per 1,000 sq ft	Office & Other $0 per 1,000 sq ft	Institutional $0 per 1,000 sq ft
Year	Hsg Unit	Hsg Unit	KSF	KSF	KSF	KSF
Base 2023	28,826	6,367	5,762	4,702	2,801	891
Year 1 2024	29,496	8,716	5,822	4,753	2,896	934
Year 2 2025	30,166	11,063	5,883	4,803	2,991	978
Year 3 2026	30,986	12,257	5,978	4,846	3,211	1,018
Year 4 2027	31,806	13,451	6,073	4,888	3,432	1,058
Year 5 2028	32,626	14,645	6,168	4,930	3,653	1,098
Year 6 2029	33,446	15,839	6,263	4,973	3,873	1,138
Year 7 2030	34,266	17,033	6,358	5,015	4,094	1,178
Year 8 2031	34,772	18,226	6,478	5,052	4,332	1,228
Year 9 2032	35,278	19,420	6,599	5,088	4,570	1,279
Year 10 2033	35,783	20,614	6,719	5,125	4,808	1,329
10-Year Increase	6,957	14,247	957	423	2,007	439
Projected Revenue	$16,171,740	$23,669,975	$387,710	$1,275,608	$2,614,322	$785,906

Projected Fee Revenue	$0
Excess Construction Sales Tax	$44,908,844
Total Expenditures	$44,908,844

South 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. 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. Goodyear will use excess construction sales tax revenue to offset street facilities fees; therefore, projected development fee revenue equals $0, and projected expenditures equal $31,210,022.

Figure S19: Street Facilities Development Fee Revenue – South Service Area

Fee Component	Growth Share	Existing Share	Total
Street Improvements	$31,202,670	$0	$31,202,670
Development Fee Report	$7,353	$0	$7,353
Excess Construction Sales Tax	($31,210,022)	$0	($31,210,022)
Total	$0	$0	$0

	Single Family $0 per unit	Multi-Family $0 per unit	Industrial $0 per 1,000 sq ft	Commercial $0 per 1,000 sq ft	Office & Other $0 per 1,000 sq ft	Institutional $0 per 1,000 sq ft
Year	Hsg Unit	Hsg Unit	KSF	KSF	KSF	KSF
Base 2023	8,094	0	11	213	73	96
Year 1 2024	8,914	11	12	214	76	103
Year 2 2025	9,734	22	13	215	79	109
Year 3 2026	10,554	33	14	222	81	116
Year 4 2027	11,374	44	15	228	84	122
Year 5 2028	12,195	56	17	235	87	129
Year 6 2029	13,015	67	18	242	89	135
Year 7 2030	13,835	78	19	249	92	142
Year 8 2031	14,655	89	20	272	95	148
Year 9 2032	15,475	100	21	295	97	155
Year 10 2033	16,296	111	22	318	100	161
10-Year Increase	8,202	111	11	105	27	65
Projected Revenue	$30,170,277	$291,831	$6,983	$499,777	$54,798	$184,283

Projected Fee Revenue	$0
Excess Construction Sales Tax	$31,210,022
Total Expenditures	$31,210,022

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 Gila River Indian Community (GRIC) water lease, surface water treatment, distribution / storage, and the cost of preparing the Water Facilities IIP and related Development Fee Report. The cost recovery methodology is used to calculate the GRIC water lease and the surface water treatment components. The plan-based methodology is used for distribution / storage and the Development Fee Report.

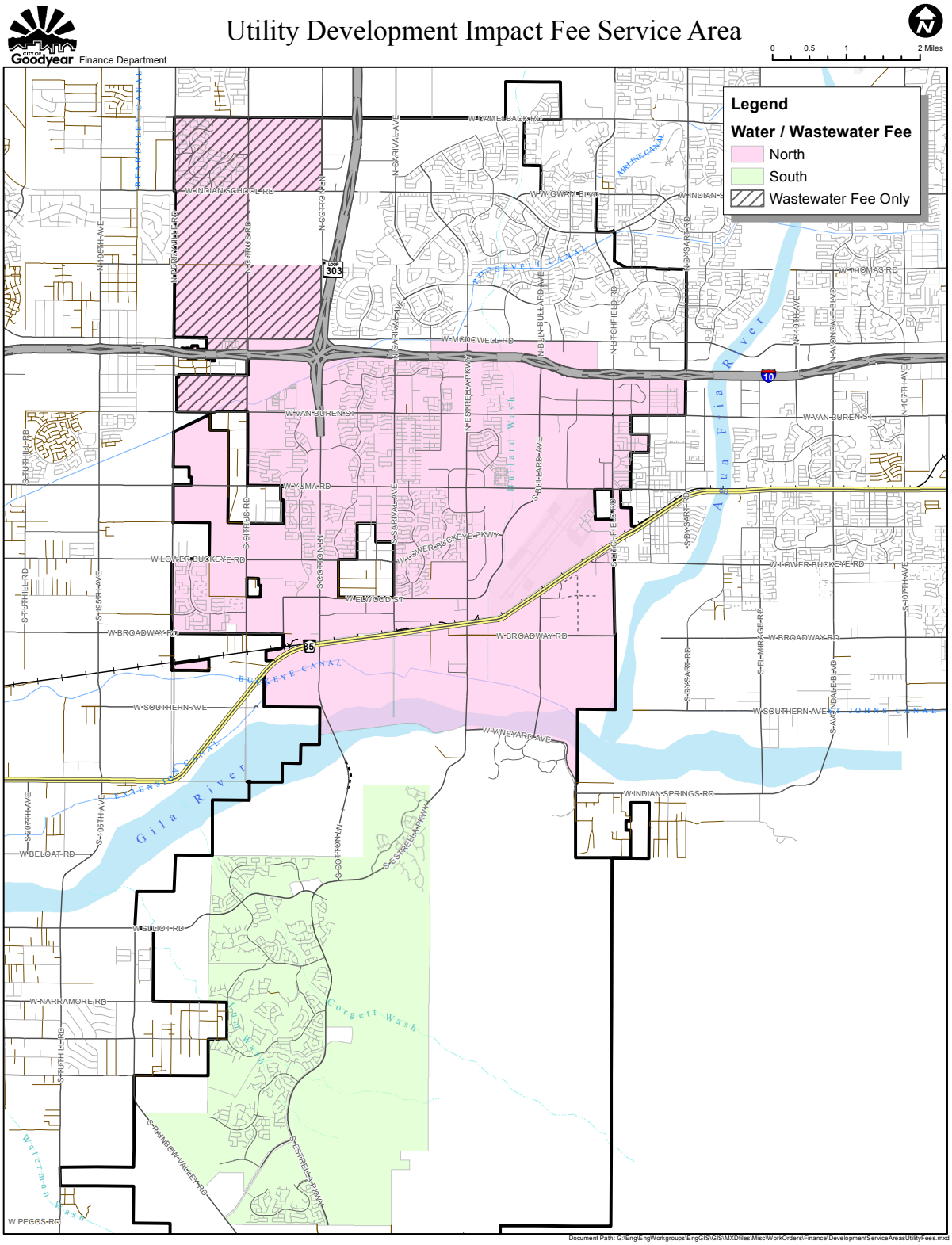
PROPORTIONATE SHARE

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 Water Facilities IIP and development fees will allocate the cost of necessary public services between both residential and nonresidential development using average day demand factors.

SERVICE AREA

As shown in Figure W1, there are two service areas for the Water Facilities IIP.

Figure W1: Utility Development Impact Fee Service Area



TischlerBise
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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 the 2016 Integrated Water Master Plan, average day demand from single-family units is 402 gallons. Goodyear recharges 27 percent of water demand, so this analysis uses 293 gallons for water resource demand.

Figure W2: Water Demand Factors

Single Family Average Day Demand	
Water Treatment Demand	402 Gallons
% of Demand Recharged	27%
Water Resource Demand	293 Gallons

Source: 2016 Integrated Water Master Plan

Water development fees are assessed by meter size, and the analysis uses average day demand from single-family units of 402 gallons per day (water treatment) and 293 gallons per day (water resource) as the demand factors for a 0.75-inch meter. For 1.00-inch and 1.50-inch meters, average day demand is calculated by multiplying average day demand from existing single-family units by the capacity ratio for the corresponding meter size. For meters larger than 1.50 inches, average day demand is calculated from (1) City of Goodyear Engineering Standards, (2) a submitted water study, or (3) other estimated water demand.

Figure W3: Water Ratio of Service Unit to Development Unit

Average Day Gallons	
Water Treatment	402
Water Resource	293

Meter Size	Capacity Ratio[1]
0.75-inch	1.00
1.00-inch	1.67
1.50-inch	3.33

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

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

Using water demand factors from the 2016 Integrated Water Master Plan and existing development estimates, average day demand from Goodyear water customers in 2023 is 10,778,331 gallons. Average day demand in the north service area is 6,881,115 gallons and average day demand in the south service area is 3,897,216 gallons.

Figure W4: Existing Demand

		Average Day Gallons		
Year		North	South	Total
Base	2023	6,881,115	3,897,216	10,778,331

Source: TischlerBise estimate

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 W5 includes projected average day demand over the next 10 years. To project future water demand in the north service area, the analysis applies water demand factors from the 2016 Integrated Water Master Plan to development projections for the north service area. Based on this analysis, projected average day demand increases by 2,771,788 gallons in the north service area over the next 10 years. The analysis uses the Conceptual Master Water Report for Estrella Mountain Ranch PAD Portions of Communities 11-15 (September 2022) to project future water demand in the south service area. Based on these projections, average day demand increases by 3,444,889 gallons in the south service area over the next 10 years (water storage demand increases by 3,677,400 gallons).

Figure W5: Projected Demand

Year		Average Day Gallons		
		North	South	Total
Base	2023	6,881,115	3,897,216	10,778,331
1	2024	7,191,221	4,241,705	11,432,926
2	2025	7,501,327	4,586,194	12,087,521
3	2026	7,806,008	4,930,683	12,736,690
4	2027	8,110,688	5,275,172	13,385,860
5	2028	8,415,369	5,619,661	14,035,029
6	2029	8,720,049	5,964,149	14,684,199
7	2030	9,024,730	6,308,638	15,333,368
8	2031	9,234,121	6,653,127	15,887,248
9	2032	9,443,512	6,997,616	16,441,129
10	2033	9,652,904	7,342,105	16,995,009
10-Year Increase		2,771,788	3,444,889	6,216,677

Source: TischlerBise estimate

GRIC Water Lease – Cost Recovery

North Service Area

The City of Goodyear issued debt with a principal balance of $8,823,600 in 2011 for a lease purchase of 7,000 acre-feet of water with the Gila River Indian Community (GRIC) to meet demand from future development. Goodyear will use development fees to repay debt related to the GRIC water lease. As shown in Figure W6, dividing the total principal balance of $8,823,600 by 6,249,197 gallons (7,000 acre-feet) results in a principal cost of $1.41 per gallon. Based on a 10-year demand increase of 2,771,788 gallons, the 10-year principal cost is $3,913,647. Including 10 years of interest costs increases the 10-year total cost to $5,320,484. Dividing the 10-year total cost by the 10-year demand increase of 2,771,788 gallons results in a cost of $1.92 per gallon.

Figure W6: Cost Factors

GRIC Water Lease	
Total Principal (Series 2011)	$8,823,600
÷ Average Day Gallons (7,000 acre-feet)	6,249,197
Principal Cost per Gallon	$1.41
x 10-Year Additional Demand (gallons)	2,771,788
10-Year Principal Cost	$3,913,647
10-Year Interest Cost	$1,406,838
10-Year Total Cost	$5,320,484
÷ 10-Year Additional Demand (gallons)	2,771,788
Cost per Gallon	$1.92

Surface Water Treatment – Cost Recovery

The existing Surface Water Treatment Facility has a total capacity of 8,000,000 gallons and has available capacity to serve future development. The total principal cost is $90,000,000, and the total developer reimbursement is $24,000,000. Goodyear will use development fees to repay outstanding principal, interest, and developer reimbursement related to the available capacity. The remaining principal balance is $81,823,581, the 10-year interest cost is $29,317,308, and the remaining developer reimbursement is $22,331,301. Dividing the remaining cost of $133,472,189 by the total capacity of 8,000,000 gallons results in a remaining cost of $16.68 per gallon.

Figure W7: Cost Factors

Surface Water Treatment	
Remaining Principal Cost	$81,823,581
10-Year Interest Cost	$29,317,308
Remaining Developer Reimbursement	$22,331,301
Remaining Cost	$133,472,189
÷ Total Capacity (average day gallons)	8,000,000
Remaining Cost per Gallon	$16.68

North Service Area

Multiplying the remaining cost of $16.68 per gallon by the 10-year additional demand of 2,771,788 gallons in the north service area results in $46,244,577 related to surface water treatment costs in the north service area. After adjusting for the existing north service area fund balance of $13,081,910, the 10-year cost is $33,162,2267. Dividing the 10-year cost of $33,162,2267 by the 10-year additional demand of 2,771,788 gallons results in a cost of $11.96 per gallon.

Figure W8: Cost Factors – North Service Area

Surface Water Treatment - North	
Remaining Cost per Gallon	$16.68
x 10-Year Additional Demand (gallons)	2,771,788
North Share	$46,244,577
Fund Balance (6/30/2023)	($13,081,910)
10-Year Cost - North	$33,162,667
÷ 10-Year Additional Demand (gallons)	2,771,788
Cost per Gallon	$11.96

South Service Area

Multiplying the remaining cost of $16.68 per gallon by the 10-year additional demand of 3,444,889 gallons in the south service area results in $57,474,610 related to surface water treatment costs in the south service area. After adjusting for the existing south service area fund balance of $1,426,849, the 10-year cost is $56,047,761. Dividing the 10-year cost of $56,047,761 by the 10-year additional demand of 3,444,889 gallons results in a cost of $16.27 per gallon.

Figure W9: Cost Factors – South Service Area

Surface Water Treatment - South	
Remaining Cost per Gallon	$16.68
x 10-Year Additional Demand (gallons)	3,444,889
South Share	$57,474,610
Fund Balance (6/30/2023)	($1,426,849)
10-Year Cost - South	$56,047,761
÷ 10-Year Additional Demand (gallons)	3,444,889
Cost per Gallon	$16.27

Distribution / Storage – Plan-Based

North Service Area

The City of Goodyear identified distribution / storage projects to serve future development in the north service area over the next 10 years. Dividing the total cost of $20,277,400 by the 10-year demand increase of 2,771,788 gallons yields a cost of $7.32 per gallon.

Figure W10: Cost Factors

Distribution / Storage	Cost
16" water main in Litchfield Rd from El Cielo St to MC85 (650 LF)	$190,200
12" water main in Litchfield Rd from Broadway Rd to La Tierra St (4,300 LF)	$1,155,800
16" water main in Broadway Rd from Estrella Pkwy to 143rd Ave (7,920 LF)	$2,317,400
12" water main in Broadway Rd from 143rd Ave to Litchfield Rd (2,680 LF)	$720,300
12" water main in 143rd Ave from Broadway Rd to El Sol St (3,430 LF)	$922,000
16" water main in Litchfield (WPA 2)	$1,834,100
Increase Booster Capacity at Site 12	$350,000
1.5 MG storage reservoir at Site 18	$4,039,000
4.0 MG storage reservoir at SWTF or Silva Site	$8,748,600
Total Cost	$20,277,400
÷ 10-Year Additional Demand (gallons)	2,771,788
Cost per Gallon	$7.32
x 10-Year Additional Demand (gallons)	2,771,788
10-Year Revenue Collections	$20,277,400

South Service Area

The City of Goodyear identified distribution / storage projects to serve future development in the south service area over the next 10 years. Dividing the total cost of $20,944,315 by the 10-year demand increase of 3,677,400 gallons yields a cost of $5.70 per gallon.

Figure W11: Cost Factors

Distribution / Storage	Cost
12" water main connection NE of Estrella Pkwy and Cotton Ln (17,000 LF)	$4,569,600
30" water transmission line	$12,335,715
1.5 MG reservoir at Site 13	$4,039,000
Total Cost	$20,944,315
÷ 10-Year Additional Demand (gallons)	3,677,400
Cost per Gallon	$5.70
x 10-Year Additional Demand (gallons)	3,677,400
10-Year Revenue Collections	$20,944,315

Development Fee Report – Plan-Based

The cost to prepare the Water Facilities IIP and related Development Fee Report totals $25,000. Goodyear 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 $0.01 per gallon.

Figure W12: IIP and Development Fee Report

Necessary Public Service	Cost	Proportionate Share		Service Unit	5-Year Change	Cost per Service Unit
Fire	$18,000	Residential	77%	Population	34,766	$0.40
		Nonresidential	23%	Jobs	4,488	$0.92
Parks and Recreational	$15,500	Residential	98%	Population	34,766	$0.44
		Nonresidential	2%	Jobs	4,488	$0.07
Police	$18,000	Residential	79%	Population	34,766	$0.41
		Nonresidential	21%	Jobs	4,488	$0.84
Street	$26,110	All Development	100%	VMT	1,172,394	$0.02
Water	$25,000	All Development	100%	Gallons	3,256,698	$0.01
Wastewater	$25,000	All Development	100%	Gallons	1,223,084	$0.02
Total	$127,610					

WATER FACILITIES DEVELOPMENT FEES

Revenue Credit/Offset

A revenue credit/offset is necessary for development fees, because Goodyear'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. Goodyear will apply the entire revenue credit/offset to street facilities fees. Appendix A contains the forecast of revenues required by Arizona's Enabling Legislation (ARS § 9-463.05(E)(7)).

Water Facilities Development Fees

North Service Area

The cost per service unit is $21.21 per gallon for water facilities development fees in the north service area, and Goodyear will assess water facilities development fees by meter size to new development. The base 0.75-inch meter is equivalent to a single-family 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 *AWWA Manual of Water Supply Practices M-1, 7th Edition*.

Water facilities development fees are calculated by multiplying the cost per gallon by the average day gallons per EDU (single-family unit) and the associated capacity ratio. The 0.75-inch fee (single-family fee) of $8,317 is calculated in two parts. The first part, related to water resource, is calculated using a cost per service unit of $1.92 per gallon, multiplied by 293 average day gallons (water resource), multiplied by a capacity ratio of 1.00. The second part, related to water treatment and distribution, is calculated using a cost per service unit of $19.29 per gallon, multiplied by 402 average day gallons (water treatment), multiplied by a capacity ratio of 1.00.

For meters larger than 1.50 inches, the fee is calculated using a cost per service unit of $21.21 per gallon multiplied by average day gallons from (1) City of Goodyear Engineering Standards, (2) a submitted water study, or (3) other estimated water demand.

Figure W13: Water Facilities Development Fees – North Service Area

Fee Component	Cost per Gallon	Gallons	Single Family
GRIC Water Lease	$1.92	293	$563
Surface Water Treatment	$11.96	402	$4,808
Distribution / Storage	$7.32	402	$2,943
Development Fee Report	$0.01	402	$4
Total	$21.21		**$8,317**

Development Type	Average Day Gallons
Single Family	402

Fees per Meter				
Meter Size	Capacity Ratio[1]	Proposed Fees[2]	Current Fees	Difference
0.75-inch	1.00	$8,317	$7,553	$764
1.00-inch	1.67	$13,890	$12,613	$1,277
1.50-inch	3.33	$27,696	$25,151	$2,545

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

2. Meters larger than 1.50 inches calculated using $21.21 per gallon for the north service area multiplied by average day gallons from (1) City of Goodyear Engineering Standards, (2) a submitted water study, or (3) other estimated water demand.

South Service Area

The cost per service unit is $21.98 per gallon for water facilities development fees in the south service area, and Goodyear will assess water facilities development fees by meter size to new development. The base 0.75-inch meter is equivalent to a single-family 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 *AWWA Manual of Water Supply Practices M-1, 7th Edition*.

Water facilities development fees are calculated by multiplying the cost per gallon by the average day gallons per EDU (single-family unit) and the associated capacity ratio. For example, the 0.75-inch fee (single-family fee) of $8,836 is calculated using a cost per service unit of $21.98 per gallon, multiplied by 402 average day gallons, multiplied by a capacity ratio of 1.00. For meters larger than 1.50 inches, the fee is calculated using a cost per service unit of $21.98 per gallon multiplied by average day gallons from (1) City of Goodyear Engineering Standards, (2) a submitted water study, or (3) other estimated water demand.

Figure W14: Water Facilities Development Fees – South Service Area

Fee Component	Cost per Gallon
Surface Water Treatment	$16.27
Distribution / Storage	$5.70
Development Fee Report	$0.01
Total	$21.98

Development Type	Average Day Gallons
Single Family	402

Fees per Meter				
Meter Size	Capacity Ratio[1]	Proposed Fees[2]	Current Fees	Difference
0.75-inch	1.00	$8,836	$7,843	$993
1.00-inch	1.67	$14,756	$13,097	$1,659
1.50-inch	3.33	$29,424	$26,117	$3,307

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

2. Meters larger than 1.50 inches calculated using $21.98 per gallon for the south service area multiplied by average day gallons from (1) City of Goodyear 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)).

North Service Area

Projected fee revenue shown in Figure W15 is based on projected development in the north service area and the updated water facilities development fees in Figure W13. For nonresidential development, the analysis uses a 1.50-inch meter. 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 $52,293,933 and projected expenditures equal $59,127,442. Based on the actual mix of meter sizes used by future nonresidential accounts, the projected development fee revenue shown below will change.

Figure W15: Water Facilities Development Fees Revenue – North Service Area

Fee Component	Growth Share	Total
GRIC Water Lease	$3,924,210	$5,675,598
Surface Water Treatment	$33,162,667	$33,162,667
Distribution / Storage	$20,277,400	$20,277,400
Development Fee Report	$11,778	$11,778
Total	$57,376,054	$59,127,442

		Single-Family $8,317 per meter	Nonresidential $27,696 per meter
Year		Meter	Meter
Base	2023		
Year 1	2024	731	3
Year 2	2025	1,462	6
Year 3	2026	2,135	12
Year 4	2027	2,808	19
Year 5	2028	3,481	25
Year 6	2029	4,154	32
Year 7	2030	4,827	38
Year 8	2031	5,246	45
Year 9	2032	5,666	53
Year 10	2033	6,086	61
10-Year Increase		6,086	61
Projected Revenue		$50,616,430	$1,677,502

Projected Fee Revenue	$52,293,933
Total Expenditures	$59,127,442

South Service Area

Projected fee revenue shown in Figure W16 is based on projected development in the south service area and the updated water facilities development fees in Figure W14. For nonresidential development, the analysis uses a 1.50-inch meter. 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 $73,074,319 and projected expenditures equal $77,005,298. Based on the actual mix of meter sizes used by future nonresidential accounts, the projected development fee revenue shown below will change.

Figure W16: Water Facilities Development Fees Revenue – South Service Area

Surface Water Treatment	$56,047,761	$56,047,761
Distribution / Storage	$20,944,315	$20,944,315
Development Fee Report	$13,222	$13,222
Total	$77,005,298	$77,005,298

		Single-Family $8,836 per meter	Nonresidential $29,424 per meter
Year		Meter	Meter
Base	2023		
Year 1	2024	820	2
Year 2	2025	1,640	4
Year 3	2026	2,461	6
Year 4	2027	3,281	8
Year 5	2028	4,101	10
Year 6	2029	4,921	12
Year 7	2030	5,741	14
Year 8	2031	6,562	16
Year 9	2032	7,382	18
Year 10	2033	8,202	20
10-Year Increase		8,202	20
Projected Revenue		$72,472,872	$601,447

Projected Fee Revenue	$73,074,319
Total Expenditures	$77,005,298

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, collection, and the cost of preparing the Wastewater Facilities IIP and related Development Fee Report. The plan-based methodology is used for water reclamation, collection, and the Development Fee Report.

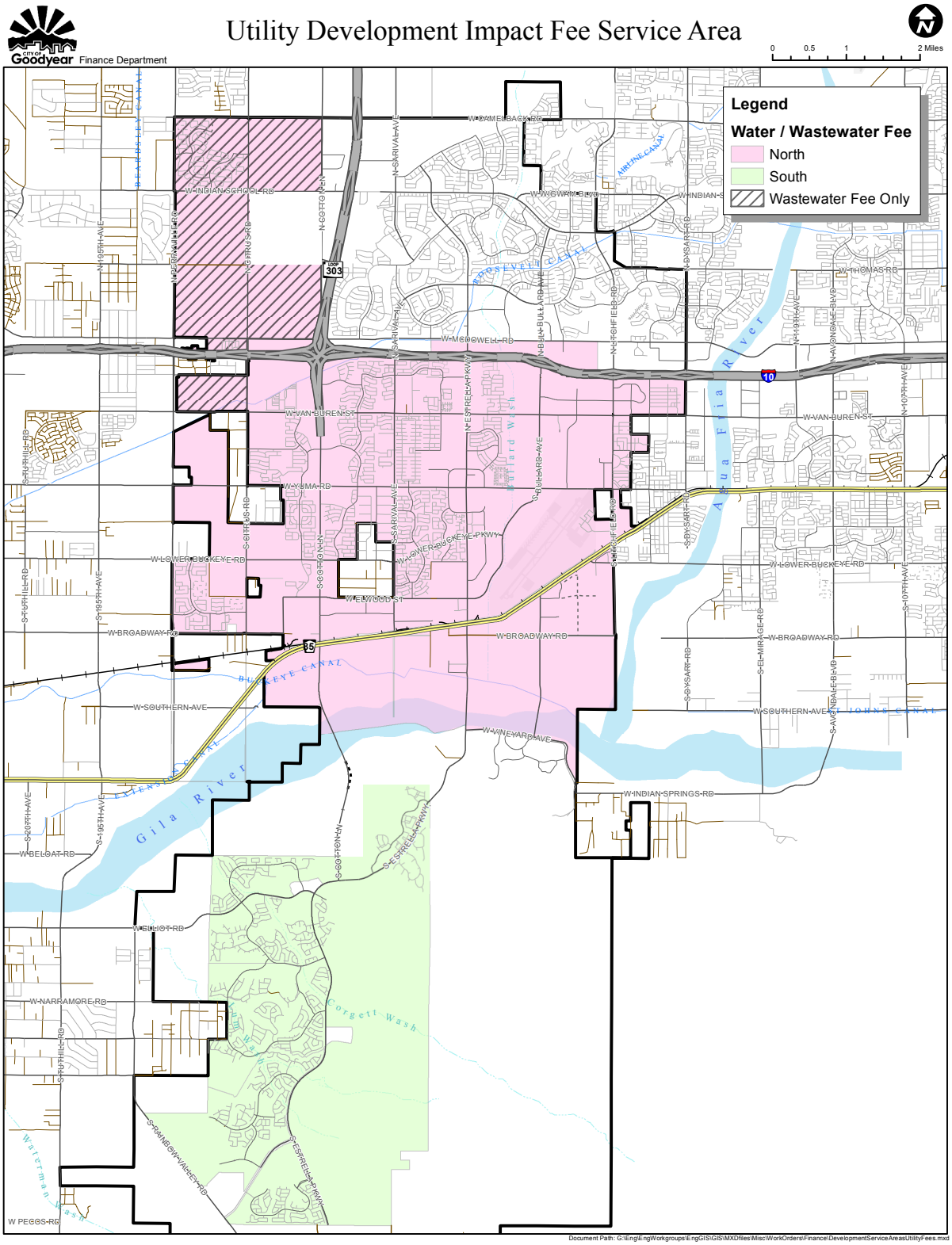
PROPORTIONATE SHARE

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 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

As shown in Figure WW1, there are two services areas for the Wastewater Facilities IIP.

Figure WW1: Utility Development Impact Fee 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 the 2016 Integrated Water Master Plan, average day flow from single-family units is 140 gallons. Wastewater development fees are assessed by meter size, and the analysis uses average day flow from single-family units of 140 gallons per day as the demand factor for a 0.75-inch meter. For 1.00-inch and 1.50-inch meters, average day flow is calculated by multiplying average day flow from existing single-family units by the capacity ratio for the corresponding meter size. For meters larger than 1.50 inches, average day flow is calculated from (1) City of Goodyear Engineering Standards, (2) a submitted water study, or (3) other estimated wastewater flow.

Figure WW2: Wastewater Ratio of Service Unit to Development Unit

Development Type	Average Day Gallons
Single Family	140

Meter Size	Capacity Ratio[1]
0.75-inch	1.00
1.00-inch	1.67
1.50-inch	3.33

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

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

Using wastewater flow factors from the 2016 Integrated Water Master Plan and existing development estimates, average day flow from Goodyear wastewater customers in 2023 is 5,800,000 gallons. Average day flow in the north service area is 4,720,000 gallons and average day flow in the south service area is 1,080,000 gallons.

Figure WW3: Existing Flow

	Average Day Gallons		
Year	North	South	Total
Base 2023	4,720,000	1,080,000	5,800,000

Source: TischlerBise estimate

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 WW4 includes projected average day flow over the next 10 years. To project future wastewater flow in the north service area, the analysis applies wastewater flow factors from the 2016 Integrated Water Master Plan to development projections for the north service area. Based on this analysis, projected average day flow increases by 1,144,108 gallons in the north service area over the next 10 years. The analysis uses the Conceptual Master Wastewater Report for Estrella Mountain Ranch PAD Portions of Communities 11-15 (September 2022) to project future wastewater flow in the south service area. Based on these projections, average day flow increases by 1,212,479 gallons in the south service area over the next 10 years.

Figure WW4: Projected Flow

Year		Average Day Gallons		
		North	South	Total
Base	2023	4,720,000	1,080,000	5,800,000
1	2024	4,840,151	1,201,248	6,041,399
2	2025	4,960,302	1,322,496	6,282,797
3	2026	5,085,816	1,443,744	6,529,560
4	2027	5,211,330	1,564,992	6,776,322
5	2028	5,336,844	1,686,240	7,023,084
6	2029	5,462,359	1,807,487	7,269,846
7	2030	5,587,873	1,928,735	7,516,608
8	2031	5,679,951	2,049,983	7,729,934
9	2032	5,772,029	2,171,231	7,943,261
10	2033	5,864,108	2,292,479	8,156,587
10-Year Increase		1,144,108	1,212,479	2,356,587

Source: TischlerBise estimate

Water Reclamation – Plan-Based

North Service Area

The 157th Avenue water reclamation facility currently provides 6,000,000 gallons of water reclamation capacity to serve existing development in the north service area. Existing development currently uses 4,720,000 gallons of the existing capacity and 1,280,000 gallons of capacity is available to serve future development. As shown in Figure WW4, future development will demand 1,144,108 gallons of water reclamation capacity over the next 10 years. This is approximately equal to the available capacity; however, Goodyear must initiate construction of the next expansion by the time average day flow reaches 90 percent of treatment capacity (5,400,000 gallons). Goodyear plans to expand the facility by 4,500,000 gallons to serve future development.

Figure WW5: Water Reclamation Capacity

Water Reclamation Facility	Capacity Used	Capacity Available	Total Capacity
Goodyear (157th Ave)	4,720,000	1,280,000	6,000,000
Existing Subtotal	4,720,000	1,280,000	6,000,000
Goodyear (157th Ave) Expansion	0	1,500,000	1,500,000
Goodyear (157th Ave) Expansion	0	3,000,000	3,000,000
Expansion Subtotal	0	4,500,000	4,500,000
Planned Total	**4,720,000**	**5,780,000**	**10,500,000**

Source: TischlerBise estimate

The City of Goodyear plans to spend $96,000,000 to add 4,500,000 gallons of capacity to the 157th Avenue facility. After deducting the existing north wastewater development fee fund balance from the planned expansion cost, the adjusted cost is $88,570,274 ($96,000,000 total cost - $7,429,726 fund balance). Dividing the adjusted cost by the additional capacity yields a cost of $19.68 per gallon ($88,570,274 adjusted cost / 4,500,000 additional gallons of capacity). With an estimated increase in daily wastewater flow of 1,144,108 gallons, 10-year revenue collections equal $22,516,045.

Figure WW6: Cost Factors

Water Reclamation	
GWRF Expansion (6.0 to 7.5 MGD)	$6,000,000
GWRF Expansion (7.5 to 10.5 MGD)	$90,000,000
Fund Balance (6/30/2023)	($7,429,726)
Adjusted Cost	$88,570,274
÷ Additional Capacity (average day gallons)	4,500,000
Cost per Gallon	$19.68
x 10-Year Additional Flow (gallons)	1,144,108
10-Year Revenue Collections	$22,516,045

South Service Area

Goodyear currently provides 1,550,000 gallons of water reclamation capacity in the south service area. Existing development currently uses 1,080,000 gallons of the existing capacity and 470,000 gallons of capacity is available to serve future development. Wastewater flow projections shown in Figure WW4 include an increase of 1,212,479 gallons generated by future development over the next 10 years. Goodyear must initiate construction of the next expansion by the time average day flow reaches 90 percent of treatment capacity (720,000 gallons at Corgett and 675,000 gallons at Rainbow Valley). After using the available capacity, future development will demand an additional 742,479 gallons of water reclamation capacity (1,212,479 gallons needed – 470,000 gallons available). To serve future development, Goodyear will use development fees to expand capacity by 1,250,000 gallons in the south service area.

Figure WW7: Water Reclamation Capacity

Water Reclamation Facility	Capacity Used	Capacity Available	Total Capacity
Corgett	520,000	280,000	800,000
Rainbow Valley	560,000	190,000	750,000
Existing Subtotal	1,080,000	470,000	1,550,000
Rainbow Valley Expansion	0	1,250,000	1,250,000
Expansion Subtotal	0	1,250,000	1,250,000
Planned Total	**1,080,000**	**1,720,000**	**2,800,000**

Source: Conceptual Master Wastewater Report for Estrella Mountain Ranch PAD Portions of Communities 11-15 (September 2022)

Goodyear plans to add 1,250,000 gallons of capacity to the Rainbow Valley Water Reclamation Facility at a cost of $50,593,433. After deducting the city share of $663,082 and the Canta Mia share of $3,771,618, future development's share of the planned expansion is $46,158,734. Goodyear will fund future development's share with a developer investment of $31,200,000 and debt of $14,958,734 (5.0 percent interest for 20 years), and Goodyear will use future development fee revenue to repay future development's share of costs. After deducting the available fund balance at the end of FY 2023 from future development's share of expansion costs, the adjusted cost is $45,177,478 ($46,158,734 future development share - $981,256 fund balance). Dividing the adjusted cost by the additional capacity yields a cost of $36.14 per gallon ($45,177,478 adjusted cost / 1,250,000 additional gallons of capacity). With an estimated increase in daily wastewater flow of 1,212,479 gallons, the 10-year principal cost equals $43,821,395. Including 10 years of interest costs results in a 10-year total cost of $50,122,262 ($43,821,395 10-year principal cost + $6,300,867 10-year interest cost), and dividing the 10-year total cost by the 10-year additional flow results in a cost of $41.34 per gallon ($50,122,262 total cost / 1,212,479 gallons) for water reclamation in the south service area.

Figure WW8: Cost Factors

Water Reclamation	
Rainbow Valley WRF Expansion	$50,593,433
City Share	($663,082)
Canta Mia Share	($3,771,618)
Future Development Share	$46,158,734
Fund Balance (6/30/2023)	($981,256)
Adjusted Cost	$45,177,478
÷ Additional Capacity (average day gallons)	1,250,000
Principal Cost per Gallon	$36.14
x 10-Year Additional Flow (gallons)	1,212,479
10-Year Principal Cost	$43,821,395
10-Year Interest Cost	$6,300,867
10-Year Total Cost	$50,122,262
÷ 10-Year Additional Flow (gallons)	1,212,479
Cost per Gallon	$41.34
x 10-Year Additional Flow (gallons)	1,212,479
10-Year Revenue Collections	$50,122,262

Collection– Plan-Based

North Service Area

The City of Goodyear identified collection projects to serve future development in the north service area over the next 10 years. Dividing the total cost of $9,223,200 by the 10-year demand increase of 1,144,108 gallons yields a cost of $8.06 per gallon.

Figure WW9: Cost Factors

Collection	Cost
12" gravity sewer in Elwood Rd - Citrus Rd to 175th Ave (2,500 LF)	$541,200
8" gravity sewer in Citrus Rd - Lower Buckeye Rd to Elwood Rd (2,560 LF)	$505,300
8" gravity sewer north of Las Brisas Lift Station (2,990 LF)	$590,200
Perryville - South of I-10 to Roosevelt then east to Citrus Rd	$1,270,000
10" (3,404 LF) and 12" (469 LF) gravity sewer in Van Buren St - Perryville to east of Citrus	$774,000
8" (1,219 LF) and 12" (1,437 LF) gravity sewer in Citrus Rd - Roosevelt to Van Buren St	$552,000
South of Roosevelt and West of Citrus to East of Perryville	$1,327,000
8" gravity sewer in Litchfield Rd - Lower Buckeye Rd to Broadway Rd (4,390 LF)	$866,600
10" (2,730 LF) and 12" (2,670 LF) gravity sewer in Broadway Rd - Bullard Ave to Litchfield Rd	$1,164,300
8" gravity sewer in 143rd Ave - El Sol to Broadway Rd (2,690 LF)	$533,000
12" gravity sewer in Bullard Ave - Van Buren to Yuma (5,090 LF)	$1,099,600
Total Cost	$9,223,200
÷ 10-Year Additional Flow (gallons)	1,144,108
Cost per Gallon	$8.06
x 10-Year Additional Flow (gallons)	1,144,108
10-Year Revenue Collections	$9,223,200

South Service Area

The City of Goodyear identified collection projects to serve future development in the south service area over the next 10 years. Dividing the total cost of $1,105,400 by the 10-year demand increase of 1,212,479 gallons yields a cost of $0.91 per gallon.

Figure WW10: Cost Factors

Collection	Cost
8" gravity sewer upstream of Lost Lift Station (1,920 LF)	$379,000
8" gravity sewer in San Miguel east of Estrella Pkwy (1,330 LF)	$262,500
8" gravity sewer in Coyote Train Dr east of Estrella Pkwy (1,660 LF)	$327,700
8" gravity sewer in Wind Drift Rd east of Estrella Pkwy (690 LF)	$136,200
Total Cost	$1,105,400
÷ 10-Year Additional Flow (gallons)	1,212,479
Cost per Gallon	$0.91
x 10-Year Additional Flow (gallons)	1,212,479
10-Year Revenue Collections	$1,105,400

Development Fee Report – Plan-Based

The cost to prepare the Wastewater Facilities IIP and related Development Fee Report totals $25,000. Goodyear 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 $0.02 per gallon.

Figure WW11: IIP and Development Fee Report

Necessary Public Service	Cost	Proportionate Share		Service Unit	5-Year Change	Cost per Service Unit
Fire	$18,000	Residential	77%	Population	34,766	$0.40
		Nonresidential	23%	Jobs	4,488	$0.92
Parks and Recreational	$15,500	Residential	98%	Population	34,766	$0.44
		Nonresidential	2%	Jobs	4,488	$0.07
Police	$18,000	Residential	79%	Population	34,766	$0.41
		Nonresidential	21%	Jobs	4,488	$0.84
Street	$26,110	All Development	100%	VMT	1,172,394	$0.02
Water	$25,000	All Development	100%	Gallons	3,256,698	$0.01
Wastewater	$25,000	All Development	100%	Gallons	1,223,084	$0.02
Total	$127,610					

WASTEWATER FACILITIES DEVELOPMENT FEES

Revenue Credit/Offset

A revenue credit/offset is necessary for development fees, because Goodyear'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. Goodyear will apply the entire revenue credit/offset to street facilities fees. Appendix A contains the forecast of revenues required by Arizona's Enabling Legislation (ARS § 9-463.05(E)(7)).

Wastewater Facilities Development Fees

North Service Area

The cost per service unit is $27.76 per gallon for wastewater facilities development fees in the north service area, and Goodyear will assess wastewater facilities development fees by meter size to new development. The base 0.75-inch meter is equivalent to a single-family 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 *AWWA Manual of Water Supply Practices M-1, 7th Edition*.

Wastewater facilities development fees are calculated by multiplying the cost per gallon by the average day gallons per EDU (single-family unit) and the associated capacity ratio. For example, the 0.75-inch fee (single-family fee) of $3,886 is calculated using a cost per service unit of $27.76 per gallon, multiplied by 140 average day gallons, multiplied by a capacity ratio of 1.00. For meters larger than 1.50 inches, the fee is calculated using a cost per service unit of $27.76 per gallon multiplied by average day gallons from (1) City of Goodyear Engineering Standards, (2) a submitted water study, or (3) other estimated wastewater flow.

Figure WW12: Wastewater Facilities Development Fees – North Service Area

Fee Component	Cost per Gallon
Water Reclamation	$19.68
Collection	$8.06
Development Fee Report	$0.02
Total	$27.76

Development Type	Average Day Gallons
Single Family	140

Fees per Meter				
Meter Size	Capacity Ratio[1]	Proposed Fees[2]	Current Fees	Difference
0.75-inch	1.00	$3,886	$2,818	$1,068
1.00-inch	1.67	$6,490	$4,706	$1,784
1.50-inch	3.33	$12,942	$9,383	$3,559

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

2. Meters larger than 1.50 inches calculated using $27.76 per gallon for the north service area multiplied by average day gallons from (1) City of Goodyear Engineering Standards, (2) a submitted water study, or (3) other estimated wastewater flow.

South Service Area

The cost per service unit is $41.34 per gallon for wastewater facilities development fees in the south service area, and Goodyear will assess wastewater facilities development fees by meter size to new development. The base 0.75-inch meter is equivalent to a single-family 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 *AWWA Manual of Water Supply Practices M-1, 7th Edition*.

Wastewater facilities development fees are calculated by multiplying the cost per gallon by the average day gallons per EDU (single-family unit) and the associated capacity ratio. For example, the 0.75-inch fee (single-family fee) of $5,918 is calculated using a cost per service unit of $42.27 per gallon, multiplied by 140 average day gallons, multiplied by a capacity ratio of 1.00. For meters larger than 1.50 inches, the fee is calculated using a cost per service unit of $42.27 per gallon multiplied by average day gallons from (1) City of Goodyear Engineering Standards, (2) a submitted water study, or (3) other estimated wastewater flow.

Figure WW13: Wastewater Facilities Development Fees – South Service Area

Fee Component	Cost per Gallon
Water Reclamation	$41.34
Collection	$0.91
Development Fee Report	$0.02
Total	$42.27

Development Type	Average Day Gallons
Single Family	140

Fees per Meter				
Meter Size	Capacity Ratio[1]	Proposed Fees[2]	Current Fees	Difference
0.75-inch	1.00	$5,918	$2,538	$3,380
1.00-inch	1.67	$9,883	$4,238	$5,645
1.50-inch	3.33	$19,706	$8,451	$11,255

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

2. Meters larger than 1.50 inches calculated using $42.27 per gallon for the south service area multiplied by average day gallons from (1) City of Goodyear 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)).

North Service Area

Projected fee revenue shown in Figure WW14 is based on development projections for the north service area and the updated wastewater facilities development fees in Figure WW12. For nonresidential development, the analysis uses a 1.50-inch meter. 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 $26,144,301 and projected expenditures equal $97,806,082. Based on the actual mix of meter sizes used by future nonresidential accounts, the projected development fee revenue shown below will change.

Figure WW14: Wastewater Facilities Development Fees Revenue – North Service Area

Fee Component	Growth Share	Total
Water Reclamation	$22,516,045	$88,570,274
Collection	$9,223,200	$9,223,200
Development Fee Report	$12,608	$12,608
Total	$31,751,854	$97,806,082

		Single-Family $3,886 per meter	Nonresidential $12,942 per meter
Year		Meter	Meter
Base	2023		
Year 1	2024	771	3
Year 2	2025	1,542	6
Year 3	2026	2,263	12
Year 4	2027	2,984	19
Year 5	2028	3,706	25
Year 6	2029	4,427	32
Year 7	2030	5,149	38
Year 8	2031	5,608	45
Year 9	2032	6,067	53
Year 10	2033	6,526	61
10-Year Increase		6,526	61
Projected Revenue		$25,360,425	$783,876

Projected Fee Revenue	$26,144,301
Total Expenditures	$97,806,082

South Service Area

Projected fee revenue shown in Figure WW15 is based on development projections for the south service area and the updated wastewater facilities development fees in Figure WW13. For nonresidential development, the analysis uses a 1.50-inch meter. 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 $48,942,240 and projected expenditures equal $51,711,225. Based on the actual mix of meter sizes used by future nonresidential accounts, the projected development fee revenue shown below will change.

Figure WW15: Wastewater Facilities Development Fees Revenue – South Service Area

Fee Component	Growth Share	Total
Water Reclamation	$50,122,262	$50,593,433
Collection	$1,105,400	$1,105,400
Development Fee Report	$12,392	$12,392
Total	$51,240,053	$51,711,225

		Single-Family $5,918 per meter	Nonresidential $19,706 per meter
Year		Meter	Meter
Base	2023		
Year 1	2024	820	2
Year 2	2025	1,640	4
Year 3	2026	2,461	6
Year 4	2027	3,281	8
Year 5	2028	4,101	10
Year 6	2029	4,921	12
Year 7	2030	5,741	14
Year 8	2031	6,562	16
Year 9	2032	7,382	18
Year 10	2033	8,202	20
10-Year Increase		8,202	20
Projected Revenue		$48,539,436	$402,804

Projected Fee Revenue	$48,942,240
Total Expenditures	$51,711,225

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

Goodyear has a higher-than-normal construction excise tax rate; therefore, the required offset described above is applicable. Shown in Figure A1, Goodyear 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. Except for excess construction sales tax revenue, Goodyear directs the revenues shown below to non-development fee eligible capital needs including maintenance, repair, and replacement. Goodyear will use excess construction sales tax revenue to offset the street facilities development fees.

Figure A1: Revenue Projections

Source	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28
City Sales Tax	$88,737,900	$92,391,400	$96,452,800	$100,703,200	$105,151,800
Construction Sales Tax	$16,782,600	$16,782,600	$16,782,600	$16,782,600	$16,782,600
"Excess" Construction Sales Tax	$6,713,100	$6,713,100	$6,713,100	$6,713,100	$6,713,100
Property Tax	$13,923,900	$14,673,900	$15,446,700	$16,241,400	$17,060,500
State Sales & Income Tax	$40,315,400	$41,211,500	$42,149,000	$43,723,800	$45,362,000
Subtotal, General Fund	$166,472,900	$171,772,500	$177,544,200	$184,164,100	$191,070,000
Water Revenue	$39,493,000	$34,981,400	$37,395,200	$40,162,500	$43,174,500
Sewer Revenue	$23,070,500	$24,685,400	$26,388,700	$28,341,500	$30,467,200
Subtotal, Utility	$62,563,500	$59,666,800	$63,783,900	$68,504,000	$73,641,700
Total	$229,036,400	$231,439,300	$241,328,100	$252,668,100	$264,711,700

Source: City of Goodyear Finance Department

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	$18,000	Residential	77%	Population	34,766	$0.40
		Nonresidential	23%	Jobs	4,488	$0.92
Parks and Recreational	$15,500	Residential	98%	Population	34,766	$0.44
		Nonresidential	2%	Jobs	4,488	$0.07
Police	$18,000	Residential	79%	Population	34,766	$0.41
		Nonresidential	21%	Jobs	4,488	$0.84
Street	$26,110	All Development	100%	VMT	1,172,394	$0.02
Water	$25,000	All Development	100%	Gallons	3,256,698	$0.01
Wastewater	$25,000	All Development	100%	Gallons	1,223,084	$0.02
Total	$127,610					

APPENDIX C: LAND USE DEFINITIONS

RESIDENTIAL DEVELOPMENT

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

Single Family:

1. Single-family detached is a one-unit structure detached from any other house, that is, with open space on all four sides. Such structures are considered detached even if they have an adjoining shed or garage. A one-family house that contains a business is considered detached if the building has open space on all four sides.
2. Single-family attached (townhouse) is a one-unit structure that has one or more walls extending from ground to roof separating it from adjoining structures. In row houses (sometimes called townhouses), double houses, or houses attached to nonresidential structures, each house is a separate, attached structure if the dividing or common wall goes from ground to roof.

Multi-Family:

1. Includes units in structures containing two or more housing units, further categorized as units in structures with "2, 3 or 4, 5 to 9, 10 to 19, 20 to 49, and 50 or more apartments."
2. Includes both occupied and vacant mobile homes, to which no permanent rooms have been added. Mobile homes used only for business purposes or for extra sleeping space and mobile homes for sale on a dealer's lot, at the factory, or in storage are not counted in the housing inventory.
3. Includes any living quarters occupied as a housing unit that does not fit the other categories (e.g., houseboats, railroad cars, campers, and vans). Recreational vehicles, boats, vans, railroad cars, and the like are included only if they are occupied as a current place of residence.

NONRESIDENTIAL DEVELOPMENT

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

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

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

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

Office and Other Services: Establishments providing management, administrative, professional, or business services; personal and health care services. By way of example, Office and Other services includes banks, business offices, and hospitals.