INFRASTRUCTURE IMPROVEMENTS PLAN

Prepared for:

City of Yuma, Arizona

March 20, 2013

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EXECUTIVE SUMMARY

The City of Yuma has engaged TischlerBise to update its Infrastructure Improvements Plans and development fees for several categories of necessary public services pursuant to Arizona Revised Statutes 9-463.05. TischlerBise has twice previously calculated development fees for the City, most recently in 2006.

Municipalities in Arizona may assess development fees to offset infrastructure costs to a municipality associated with providing necessary public services to a development. The development fees must be based on an Infrastructure Improvements Plan. Development fees cannot be used for, among other things: projects not included in the Infrastructure Improvements Plan, projects related to existing development, or costs related to operations and maintenance.

This update of the City's Infrastructure Improvements Plan and associated update to its development fees includes the following necessary public services:

- Parks and Recreational Facilities
- Fire Facilities
- Police Facilities
- General Government Facilities
- Streets Facilities

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

ARIZONA DEVELOPMENT FEE ENABLING LEGISLATION

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

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

Governor Brewer signed SB 1525 into law on April 26, 2011. This update of the City's development fees will be in compliance with all of the new requirements of SB 1525.

Note: A full version of the Arizona development fee enabling legislation can be found in Appendix A of this report.

NECESSARY PUBLIC SERVICES

The City of Yuma currently collects development fees for the following infrastructure categories:

- Art and Cultural Facilities
- Parks and Recreation
- Sanitation Facilities
- Police Facilities
- Fire
- General Government Facilities
- Public Works
- Transportation

Under the new requirements of the development fee enabling legislation, development fees may be used only for construction, acquisition or expansion of public facilities that are necessary public services. "Necessary public service" means any of the following categories of facilities that have a life expectancy of three or more years and that are owned and operated by or on behalf of the municipality:

- Water Facilities
- Wastewater Facilities
- Storm Water, Drainage, and Flood Control Facilities
- Library Facilities
- Streets Facilities
- Fire and Police Facilities
- Neighborhood Parks and Recreational Facilities
- 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.

As of January 1, 2012, the City will no longer be able to assess development fees for Art and Cultural Facilities, Sanitation Facilities, and Public Works Facilities. The City will be able to continue to collect General Government Development Fees as a result of existing debt associated with City Hall which meets the above requirements of necessary public services.

INFRASTRUCTURE IMPROVEMENTS PLAN

Development fees must be calculated pursuant to an Infrastructure Improvements Plan (hereafter referred to as the "IIP"). For each necessary public service that is the subject of a development fee, by law, the infrastructure improvements plan shall include the following seven elements:

Element #1: A description of the existing necessary public services in the service area and the costs to upgrade, update, improve, expand, correct or replace those necessary public services to meet existing needs and usage and stricter safety, efficiency, environmental or regulatory standards, which shall be prepared by qualified professionals licensed in this state, as applicable.

Element #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.

Element #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.

Element #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.

Element #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.

Element #6: The projected demand for necessary public services or facility expansions required by new service units for a period not to exceed ten years.

Element #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".

Mr. Paul Brooberg, City Engineer, and Mr. Andrew McGarvie, Assistant City Engineer, have been the City's project managers. Both are licensed Professional Engineers (PE) in the State of Arizona.

TischlerBise is a fiscal, economic, and planning consulting firm specializing in cost of growth services. Our services include development fees, fiscal impact analyses, infrastructure financing analyses, user fee/cost of service studies, capital improvement plans, and fiscal software. TischlerBise has prepared over 800 impact fee studies over the past 30 years for local governments across the United States, including 35 in Arizona. Mr. Christopher Cullinan, a Principal in the firm, is the author of this IIP.

Please see Appendix B for a complete description of the qualifications of TischlerBise and Mr. Cullinan.

CALCULATION METHODOLOGIES

Development fees for the necessary public services made necessary by new development must be based on the same level of service 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.

- **Buy-in methodology** (past) is used in instances when a community has oversized a facility or asset in anticipation of future development. This methodology is based on the rationale that new development is repaying the community for its share of the remaining unused capacity.
- **Incremental expansion method** (present) documents the current level of service for each type of public facility. The intent is to use revenue collected to expand or provide additional facilities, as needed to accommodate new development, based on the current cost to provide capital improvements.
- **Plan-based method** (future) utilizes a community's capital improvement plan and/or other adopted plans or engineering studies to guide capital improvements needed to serve new development.

All three methodologies are utilized in calculating the IIP. A summary is provided in Figure 1 showing the methodologies, components, and allocations used to calculate the IIP.

Figure 1: Recommended Calculation Methodologies

		Methodology		
Necessary Public Service	***Component***	***Buy-in***	***Incremental Expansion***	***Plan-based***
Parks and Recreational Facilities	Parks			✓
	Linear Parks, Paths, Trails			✓
Fire Facilities	Facilities and Apparatus			✓
	Communications Equipment			✓
Police Facilities	Facilities			✓
	Vehicles		✓	
	Communications Equipment			✓
General Government Facilities	City Hall	✓		
Streets Facilities	Arterial Street Improvements			✓
	Arterial Intersection Improvements			✓

PARKS AND RECREATIONAL FACILITIES

OVERVIEW

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

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

The Parks and Recreational Facilities IIP includes components for area parks and the cost of preparing the Parks and Recreational Facilities IIP and development fees. The plan-based methodology is used to calculate the Parks and Recreational Facilities IIP.

SERVICE AREA

The City of Yuma plans to provide a uniform level-of-service and equal service for parks and recreational facilities throughout the City. The City's parks and recreation programs are structured and provided to make full use of the City's inventory of facilities. As a result, the service area for the Parks and Recreational Facilities IIP is citywide.

PROPORTIONATE SHARE

ARS 9-463.05 (B)(3) states that the development fee shall not exceed a proportionate share of the cost of necessary public services needed to provide necessary public services to the development. The Parks and Recreational IIP and development fees are assessed only on residential development as this type of development creates 100% of the burden for additional parks and recreational facilities. Nonresidential development does not create additional burden for parks and recreational facilities, thus its proportionate share is 0% and is not assessed this IIP and development fees.

IIP FOR PARKS AND RECREATIONAL FACILITIES

For each necessary public service that is the subject of a development fee, ARS 9-463.05(E) requires the IIP to include seven elements. This section details each of these seven elements for the Parks and Recreational Facilities IIP.

IIP Element #1

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."*

The City has identified a total of $16,878,887 of capital needs for Parks and Recreation over the next ten years. Of this total, $6,664,178 is the result of new development and is included in the IIP and development fee calculations. The balance of these projects reflect the costs to upgrade, improve, expand, correct or replace parks and recreational facilities to meet existing needs and usage and stricter safety, efficiency, environmental or regulatory standards.

Figure 2: IIP Element #1

Total Parks and Recreation Capital Needs Next Ten Years[1]	***$16,878,887***

New Development's Share of Capital Needs

Yuma Valley Area Park	$220,000
Yuma East Athletic Park	$6,444,178
Subtotal New Development Share	***$6,664,178***

Balance[2]	***$10,214,709***

1. Source: Capital Improvement Program, Fiscal Years 2012 - 2021, including Potential Infrastrucutre Projects; land previously purchased for Yuma East Athletic Park.
2. Reflects 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.

IIP Element #2

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."*

The City currently has 113.7 acres of eligible parks serving the current peak population of 106,146 persons. The total acres include the West Wetlands Park. Per the definition of necessary public services, the wetlands portion of this park is not included in the IIP and, therefore, would not be included in the development fee calculations. The remaining acreage at West Wetlands (35 acres) is larger than the 30-acre threshold in the definition of necessary public services. However, given the unique characteristics and amenities of this facility, the park provides a direct benefit to development.

The current level-of-service for parks is 0.0011 acres per person. The calculation for the current level-of-service for residential development is as follows: (113.7 acres x 100% proportionate share)/106,146 persons = 0.0011 acres per person. The City's *Parks and Recreation Facility Plan* prescribes a level-of-service of 25 acres per 25,000 persons for area parks (0.0010 acres per person). The current level-of-service is slightly above the design level-of-service.

Figure 3: IIP Element #2 – Eligible Parks

Parks	*Eligible Acres*
Caballero	16.1
Carver	5.6
Friendship	4.9
Gateway	7.0
Joe Henry	9.3
Kennedy	11.0
Smucker	24.8
West Wetland[1]	35.0
TOTAL	***113.7***

Current Level of Service (LOS)

	Residential
Total Acres	113.7
Proportionate Share	100%
2011 Demand Units Served (peak population)	106,146
Current LOS: Acres per Person	***0.0011***

	Nonresidential
Total Acres	113.7
Proportionate Share	0%
2011 Demand Units Served (jobs)	47,632
Current LOS: Acres per Job	***0.000***

Comparison of Current LOS to Design LOS

Area Park (acres)[2]	25.0
Service Population (persons)[2]	25,000
Design LOS: Acres per Person	***0.0010***

Ratio of Current LOS:Design LOS	***107%***

1 . Does not include wetlands.

2. City of Yuma, *Parks and Recreation Facility Plan*.

IIP Element #3

ARS 9-463.05(E)(3) requires:

> *"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."*

The parks component of the IIP includes projects for Yuma Valley Area Park and Yuma East Athletic Park. The Yuma Valley Area Park project totals $1,100,000 for improvements. The City's Engineering Department estimates that 20% of this park is necessitated and attributable to new development. The Yuma East Athletic Park total $12,888,355 which includes land and improvements. The City's Engineering Department estimates that 50% of this park is necessitated and attributable to new development. The total acreage and costs necessitated and attributable to new development is 21.3 acres and $6,444,178; an average of $312,872 per acre.

Based on the current level-of-service of 0.0011 acres per person, this equates to a per person cost of $335.14 (0.0011 acres per person x $312,872 per acre = $335.14 per person).

Figure 4: IIP Element #3 –Parks

Necessary Public Facilities/ Facility Expansions	*Acres*	*Land*[1]	*Improvements*[2]	*TOTAL*	*Portion Necessitated and Attributable to New Development*[3]	*TOTAL Necessitated and Attributable to New Development*	
						Acres	*Cost*
Yuma Valley Area Park	19.0	$0	$1,100,000	***$1,100,000***	***20%***	***3.8***	***$220,000***
Yuma East Athletic Park	35.0	$3,488,355	$9,400,000	***$12,888,355***	***50%***	***17.5***	***$6,444,178***
TOTAL	54.0	$3,488,355	$10,500,000	***$13,988,355***		***21.3***	***$6,664,178***

Average Cost per Acre	***$312,872***
Current LOS (acres per person)	***0.0011***
Cost per Person	***$335.14***

1. City of Yuma, City Engineering Department. Reflects actual cost to purchase land (including financing costs) less portion funded with development fees.
2. City of Yuma, *FY2012-FY2022 Capital Improvements Plan*.
3. City of Yuma, City Engineering Department.

The cost to prepare the Parks and Recreational Facilities IIP and development fees totals $12,300. The City plans to update its report every five years. Based on this cost, proportionate share, and five year projections of new residential development from the Land Use Assumptions, the cost per person is $4.96.

Figure 5: IIP Element #3 – IIP and Development Fee Report

Necessary Public Service	*Cost*	*Assessed Against*	*Proportionate Share*	*Demand Units*				*Cost per Demand Unit*
				Units	*FY2012*	*FY2017*	*Change*	
Parks and Recreational Facilities	***$12,300***	Residential	***100%***	Population	106,146	108,628	***2,482***	***$4.96***
Police Facilities	$15,375	Residential	53%	Population	106,146	108,628	2,482	$3.28
		Nonresidential	47%	Nonres Trips	170,731	182,397	11,666	$0.62
Fire Facilities	$15,375	Residential	75%	Population	106,146	108,628	2,482	$4.67
		Nonresidential	25%	Jobs	47,632	50,622	2,990	$1.27
General Government Facilities	$8,200	Residential	83%	Population	106,146	108,628	2,482	$2.74
		Nonresidential	17%	Jobs	47,632	50,622	2,990	$0.47
Street Facilities	$30,750	Res. and Nonres.	100%	Trips	341,633	357,536	15,903	$1.93
TOTAL	***$82,000***							

IIP Element #4

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."*

The number of persons per household from the Land Use Assumptions is multiplied by the current level-of-service which yields the number of units of infrastructure needed to serve one service unit by type of housing unit. To determine the ratio of a service unit to various types of land uses, the number of units of infrastructure needed to serve one service unit by type of housing unit is then divided by the number of units of infrastructure need to serve a single family housing. This provides a basis for comparing the infrastructure needs of various land uses to a single family house.

Using the parks needs of a multi-family unit as an example, the number of persons per household (2.55) is multiplied by the current level-of-service of 0.0011 acres per person. This results in 0.0027 acres of parks per multi-family unit. This figure is then divided by the number of acres needed to serve a single family housing unit (0.0035 acres) which results in a ratio of 0.79. This can be read as a multi-family unit having 79% of the needs of a single family unit. This calculation is repeated for all types of development and each component of the IIP.

Figure 6: IIP Element #4

RESIDENTIAL DEVELOPMENT

Type	*Service Unit*	*# of Persons*[1]	*Current Parks LOS: Acres per Person*[2]	*Park Acres per Service Unit*	*Ratio to 1 Single Family Unit*	*IIP and Dev Fee Study Cost per Person*[4]	*Cost per Service Unit*	*Ratio to 1 Single Family Unit*
Single Family	1 Unit	***3.24***	0.0011	***0.0035***	***1.00***	$4.96	***$16.04***	***1.00***
Multi-family	1 Unit	***2.55***	0.0011	***0.0027***	***0.79***	$4.96	***$12.64***	***0.79***
All Other Types of Housing	1 Unit	***1.96***	0.0011	***0.0021***	***0.61***	$4.96	***$9.71***	***0.61***

1. Land Use Assumptions Document.
2. Taken from Figure 3.
3. Taken from Figure 5.

IIP Elements #5 and #6

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."*

The Land Use Assumptions projects an additional 1,989 housing units and 5,026 peak persons over the next ten years. These projected service units are multiplied by the current levels-of-service for each of the IIP components. This new development will demand an additional 5.4 acres of parks and $24,911 in IIP and development fee study costs.

Figure 7: IIP Elements #5 and #6

		Projected Service Units Necessitated by New Development in Service Area[1]		Projected Demand Units Necessitated by New Development in Service Area[1]		Projected Demand for Necessary Public Services or Facility Expansion @ Current LOS[2]		Projected Demand for Necessary Public Services or Facility Expansion[4]	
		Type of Development	Residential	Type of Development	Residential	Necessary Public Service	Parks	Necessary Public Service	IIP and Development Fee Study
		Service Units	1 housing unit	Demand Units	persons	Unit of Measurement	Acres	Unit of Measurement	cost
Projection Year	Fiscal Year								
1	2012		195		491		0.5		$2,436
2	2013		195		494		0.5		$2,448
3	2014		196		496		0.5		$2,460
4	2015		197		499		0.5		$2,472
5	2016		198		501		0.5		$2,485
6	2017		199		504		0.5		$2,497
7	2018		200		506		0.5		$2,510
8	2019		201		509		0.5		$2,522
9	2020		202		511		0.5		$2,535
10	2021		203		514		0.6		$2,547
		10 YEAR TOTAL	1,989	10 YEAR TOTAL	5,026	10 YEAR TOTAL	5.4	10 YEAR TOTAL	$24,911

1. Land Use Assumptions Document.
2. Taken from Figure 3.
3. Taken from Figure 5.

IIP Element #7

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."*

TischlerBise has projected on-going and one-time revenues based on the development projections in the Land Use Assumptions document, characteristics of new development, and the City's current revenue structure and rates.

The revenues included in this analysis and the applicable rates and calculation methodologies are shown in the figure below.

Figure 8: Revenue Assumptions, Rates, Calculation Methodologies

Revenue Source	*Current Rate/ Formula*	*Applicability*
Property Tax	$1.5757 per $100 assessed value, 20% assessment ratio for nonresidential development, 10% assessment ratio for residential development	All development
Sales Tax	1.0% General Fund	Commercial development
	0.2% Public Safety Fund	
	0.5% Road Fund	
Construction Sales Tax	1.0% of 65% of market value - General Fund	All development
	0.2% of 65% of market value - Public Safety Fund	
	0.5% of 65% of market value - Road Fund	
State Shared Revenues[1]	2010 actual collections/2010 peak population = state shared rev/capita[2]	Residential development
State Grant Revenues[1]	Average of 10 years historic collections (CPI adjusted to 2010)/10 year peak population estimates = state grant rev/capita[2]	Residential development
Federal Grant Revenues[1]	Average of 10 years historic collections (CPI adjusted to 2010)/10 year peak population estimates = federal grant rev/capita[2]	Residential development

1. Includes Sales Tax, Revenue Sharing, Auto-in-Lieu, HURF. LTAF is not included since state now keeps these revenues and does not remit to the City.
2. TischlerBise calculation methodology.

The figure below lists the revenue characteristics of new development that is used to forecast revenues.

Figure 9: Revenue Characteristics of New Development

Residential Development	Market Value per Unit[1]	Assessed Value per Unit (10% assessment ratio)	Construction Value per Unit for Construction Sales Tax Calculations[2]	Annual Retail Sales Generated per Unit for Sales Tax Calculations[3]	State Shared Revenue per Unit (revenues per capita x persons per household)[4]	State Grant Revenue per Unit (revenues per capita x persons per household)[4]	Federal Grant Revenue per Unit (revenues per capita x persons per household)[4]
Single Family	$154,000	$15,400	$100,100	N/A	$742	$244	$183
Multi-family	$47,000	$4,700	$30,550	N/A	$585	$192	$144
All Other Types of Housing	$116,000	$11,600	$75,400	N/A	$449	$147	$111

Nonresidential Development	Market Value per Square Foot of Building[1]	Assessed Value per SF (20% assessment ratio)	Construction Value per Square Foot for Construction Sales Tax Calculations[2]	Annual Retail Sales Generated per Square Foot for Sales Tax Calculations[3]	State Shared Revenue per Square Foot	State Grant Revenue per Square Foot	Federal Grant Revenue per Square Foot
Commercial	$241	$48	$157	$425	N/A	N/A	N/A
Office/Institutional	$103	$21	$67	N/A	N/A	N/A	N/A
Industrial/Flex	$65	$13	$42	N/A	N/A	N/A	N/A

1. Examples of recent construction in City of Yuma from zillow.com, trulia.com, loopnet.com, pancrazirealestate.com.
2. 65% of market/assessed value.
3. Average based on data taken from annual reports from Wal-Mart, Safeway, Albertsons, and Target.
4. TischlerBise methodology and calcuation.

TischlerBise's forecast of revenues for the next ten years is shown in the figure below based on the development projections from the Land Use Assumptions, revenue assumptions and rates, and revenue characteristics of new development.

Figure 10: IIP Element #7

Fiscal Year	Property Taxes[1]	Transaction Privledge Tax-Retail Sales[1]			Transaction Privledge Tax-Construction[2]			State-Shared Revenues[3]	State Grant Revenues[3]	Federal Grant Revenues[3]	TOTAL
		General Fund	Public Safety	Roads	General Fund	Public Safety	Roads				
2011	$13,895	$332,937	$166,469	$66,587	$57,211	$11,442	$28,605	$145,889	$37,001	$11,889	**$871,926**
2012	$27,936	$669,953	$334,976	$133,991	$57,811	$11,562	$28,906	$146,618	$37,186	$11,948	**$1,460,887**
2013	$42,125	$1,011,097	$505,548	$202,219	$58,418	$11,684	$29,209	$147,351	$37,372	$12,008	**$2,057,031**
2014	$56,462	$1,356,419	$678,210	$271,284	$59,032	$11,806	$29,516	$148,088	$37,559	$12,058	**$2,660,445**
2015	$70,951	$1,705,971	$852,986	$341,194	$59,654	$11,931	$29,827	$148,828	$37,747	$12,129	**$3,271,217**
2016	$85,592	$2,059,806	$1,029,903	$411,961	$60,282	$12,056	$30,141	$149,572	$37,935	$12,189	**$3,889,437**
2017	$100,387	$2,417,974	$1,208,987	$483,595	$60,917	$12,183	$30,459	$150,320	$38,125	$12,250	**$4,515,198**
2018	$115,339	$2,780,530	$1,390,265	$556,106	$61,560	$12,312	$30,780	$151,072	$38,316	$12,311	**$5,148,590**
2019	$130,448	$3,147,527	$1,573,763	$629,505	$62,210	$12,442	$31,105	$151,827	$38,507	$12,373	**$5,789,707**
2020	$145,717	$3,519,019	$1,759,509	$703,804	$62,867	$12,573	$31,434	$152,586	$38,700	$12,435	**$6,438,644**
2021	$161,147	$3,895,062	$1,947,531	$779,012	$63,532	$12,706	$31,766	$153,349	$38,893	$12,497	**$7,095,497**
TOTAL	**$949,999**	**$22,896,294**	**$11,448,147**	**$4,579,259**	**$663,494**	**$132,699**	**$331,747**	**$1,645,501**	**$417,340**	**$134,098**	**$43,198,578**

1. This is an on-going revenue source as illustrated by the cumulative increase over the projection period.
2. This is a one-time revenue source realized at the time of construction.
3. These revenues are considered one-time given the irregularity and uncertainty of the City receiving these funds.

Note: the above figure should not be interpreted as the total fiscal impact of new development as there is no forecast of on-going and one-time costs resulting from new development.

The debt service associated with the land purchase for Yuma Valley Area Park is being repaid with sales tax revenues. Thus, these contributions from new development should be used in the IIP in determining the extent of the burden imposed by new development. The figure below calculates a credit for future sales tax contributions, which will be applied against the cost of serving new development in the development fee calculations. A net present value calculation is used to account for the value of future revenues in current dollars

Figure 11: Future Revenue Credit for Yuma Valley Area Park Land Purchase

Fiscal Year	Principal	Interest	TOTAL	Residential Share 100%	Peak Population	Credit per Person
2012	$133,143	$126,001	$259,144	$259,144	106,146	***$2.44***
2013	$139,376	$120,675	$260,051	$260,051	106,637	***$2.44***
2014	$145,041	$115,100	$260,142	$260,142	107,131	***$2.43***
2015	$151,273	$109,299	$260,572	$260,572	107,627	***$2.42***
2016	$157,506	$103,248	$260,754	$260,754	108,126	***$2.41***
2017	$163,738	$96,948	$260,686	$260,686	108,628	***$2.40***
2018	$170,537	$90,398	$260,935	$260,935	109,131	***$2.39***
2019	$177,336	$83,577	$260,912	$260,912	109,638	***$2.38***
2020	$184,701	$76,483	$261,184	$261,184	110,147	***$2.37***
2021	$192,633	$68,726	$261,359	$261,359	110,658	***$2.36***
2022	$200,565	$60,539	$261,104	$261,104	111,172	***$2.35***
2023	$209,630	$51,915	$261,544	$261,544	111,689	***$2.34***
2024	$218,695	$41,433	$260,128	$260,128	112,208	***$2.32***
2025	$227,760	$31,865	$259,625	$259,625	112,730	***$2.30***
2026	$237,958	$21,901	$259,859	$259,859	113,254	***$2.29***
2027	$248,723	$11,193	$259,916	$259,916	113,781	***$2.28***
TOTAL	***$2,958,615***	***$1,209,300***	***$4,167,914***			***$37.94***

Discount Rate	***4.00%***
Net Present Value	***$27.73***

FIRE FACILITIES

OVERVIEW

ARS 9-463.05 (T)(7)(f) defines the facilities and assets which can be included in the Fire Facilities IIP:

> *"Fire facilities, including all appurtenances, equipment and vehicles. Fire 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 from more than one station or substation."*

The Fire Facilities IIP includes components for stations (including apparatus), communications equipment, and the cost of preparing the Fire Facilities IIP and development fees. The plan-based methodology utilizing the City's *Capital Improvement Program, Fiscal Year 2012-2022* is used to calculate each of the components of the Fire Facilities IIP.

SERVICE AREA

The City's *Fire Services and Facilities Plan* utilizes a Citywide goal of an average drive time of 4 minutes for the first unit and 6 minutes for the second unit for emergency calls. The City's networks of fire stations are planned and operate as an integrated network. Depending on the number and type of calls, apparatus can be dispatched across the City from any of the stations. As a result, the service area for the Fire Facilities IIP is citywide.

PROPORTIONATE SHARE

ARS 9-463.05 (B)(3) states that the development fee shall not exceed a proportionate share of the cost of necessary public services needed to provide necessary public services to the development.

The Fire Facilities IIP and development fees are assessed on both residential and nonresidential development as both types of development create a burden for additional fire facilities. Calls for service by land use are used to determine the proportionate share of this burden. Over the last ten years, approximately 75% of non-road related calls were to residential addresses with the remaining 25% going to nonresidential addresses. Road related calls are omitted from this analysis because the origin and destination of these trips is unknown and thus these calls cannot be attributed to residential or nonresidential development.

Figure 12: Calls for Service by Land Use

	Annual Ave. Calls for Service 2001-2011
Residential	*75%*
Nonresidential	*25%*
TOTAL	*100%*

Source: City of Yuma Fire Department.

IIP FOR FIRE FACILITIES

For each necessary public service that is the subject of a development fee, ARS 9-463.05(E) requires the IIP to include seven elements. This section details each of these seven elements for the Fire Facilities IIP.

IIP Element #1

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."*

The City's *FY2012-FY2022 Capital Improvements Program* identifies a total of $17,375,000 of capital needs for Fire over the next ten years. Of this total, $4,606,418 is the result of new development and is included in the IIP and development fee calculations. The balance of these projects reflect the costs to upgrade, improve, expand, correct or replace fire facilities to meet existing needs and usage and stricter safety, efficiency, environmental or regulatory standards.

Figure 13: IIP Element #1

Total Fire Capital Needs Next Ten Years[1]	***$17,375,000***

New Development's Share of Capital Needs	
Fire Station #7 (inc. apparatus)	$1,459,831
Fire Station #8 (inc. apparatus)	$2,964,027
Fire Dept. Share of Communications System	$60,460
Fire Dept. Share of Fleet Services Building	$122,100
Subtotal New Development Share	***$4,606,418***

Balance[2]	***$12,768,582***

1. Source: Capital Improvement Program, Fiscal Years 2012 - 2021.
2. Reflects 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.

IIP Element #2

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."*

The City currently has 59,564 square feet of fire stations serving the current peak population of 106,146 persons and 47,632 jobs. The current level-of-service for residential development for fire stations is 0.42 square feet per person. The calculation for the current level-of-service for residential development is as follows: (59,564 square feet x 75% proportionate share)/106,146 persons = 0.42 square feet per person. This calculation is repeated using nonresidential factors resulting in a current level-of-service for nonresidential development of 0.31 square feet per job.

Figure 14: IIP Element #2 – Stations

Facility	*Square Feet*
Station #1	9,944
Station #2	11,910
Station #3	9,800
Station #4	6,500
Station #5	11,910
Station #6	9,500
TOTAL	***59,564***

Level of Service (LOS) Standards

	Residential
Total Square Footage	59,564
Proportionate Share (calls for service)	75%
2011 Demand Units Served (peak population)	106,146
Current LOS: Square Feet per Person	***0.42***

	Nonresidential
Total Square Footage	59,564
Proportionate Share (calls for service)	25%
2011 Demand Units Served (jobs)	47,632
Current LOS: Square Feet per Job	***0.31***

The ability to quickly respond to emergencies is related to the distribution of fire stations. The City's *Fire Services and Facilities Plan* notes "if the City continues to annex and grow in population, coverage for some areas may become difficult, and positive response times could begin to diminish Citywide, reaching unacceptable limits if facility planning is not completed." In order to maintain the current level-of-service as the City grows, additional fire stations will satisfy the future demand for emergency service.

The City of Yuma is a member of a regional consortium for public safety communications equipment. The City's participation percentage equals 42%. The current inventory of communications equipment is shown below. The current system is both reaching the end of its useful life and needs to be expanded to accommodate future development. The Fire Department accounts for 33% of the usage of the City's share of the system based on the number of Police and Fire personnel.

Figure 15: IIP Element #2 – Communications Equipment

Equipment
Master site
Black Hill Site
Friendship Site
Stone Cabin Site
San Luis Site
Telegraph Site
Oatman Site
Windy Hill Site
Hill 630 Site
12 Dispatch Consoles
Communications Center Backend Support Equip.
EOC Backend Support Equip.

Usage Analysis-Full-time Equivalent Employees[1]		
Police	267	***67%***
Fire	133	***33%***
TOTAL	***400***	***100%***

1. City of Yuma, FY2010 Comprehensive Annual Financial Report.

IIP Element #3

ARS 9-463.05(E)(3) requires:

> *"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."*

The facilities component of the IIP includes planned construction of Stations 7 and 8 and the Fire Department's share of the planned Fleet Services Buildings. The City's Engineering Department estimates for the portion of these planned facilities that is necessitated and attributable to new development is shown in the figure below. The total square footage and costs necessitated and attributable to new development is 20,144 square feet and $4,545,958; an average of $225.67 per square foot.

Based on the current level-of-service of 0.42 square feet per person, this equates to a per person cost of $95.39 (0.42 square feet per person x $225.67 per square foot = $95.39). This calculation is repeated for

nonresidential development resulting in a cost per job of $69.62 (0.31 square feet x $225.67 per square foot = $69.62 per job).

Figure 16: IIP Element #3 – Facilities

Necessary Public Facilities/ Facility Expansions	*Square Footage*	*Apparatus*	*Building*[1]	*Apparatus*[2]	*TOTAL*	*Portion Necessitated and Attributable to New Development*[3]	*TOTAL Necessitated and Attributable to New Development*	
							Square Footage	*Cost*
Fire Station 7	8,199	2	$1,985,338	$625,000	***$2,610,338***	***56%***	***4,585***	***$1,459,831***
Fire Station 8	16,000	2	$2,655,000	$625,000	***$3,280,000***	***90%***	***14,459***	***$2,964,027***
Fire Share of Fleet Services Building	5,500	0	$610,500	$0	***$610,500***	***20%***	***1,100***	***$122,100***
TOTAL	29,699	4	$5,250,838	$1,250,000	***$6,500,838***		***20,144***	***$4,545,958***

Average Cost per SF	***$225.67***
Current Residential LOS (sf per person)	***0.42***
Current Nonresidential LOS (sf per job)	***0.31***
Cost per Person	***$95.39***
Cost per Job	***$69.62***

1. City of Yuma, *FY2012-FY2022 Capital Improvements Plan*.
2. Each station would be equiped with one engine and one rescue unit.
3. City of Yuma, City Engineering Department.

The City's share of the planned cost for the planned public safety communications system totals $1,050,000, of which 67% is for the Fire Department's share of the system ($703,500). Representatives from the Fire Department estimate that the planned system will provide sufficient capacity to both existing and new development through FY 2025.

Based on projections from the Land Use Assumptions, existing residential development will account for 86% of system while new residential development will account for 14%. The cost per person for both existing and new development is $4.68.

For the portion of the system attributable to nonresidential development, existing development will account for 75% of the system while new development will account for 25%. The cost per job for both new and existing nornesidential development is $3.07.

Figure 17: IIP Element #3 – Communications Equipment

Planned Expenditires[1]	*$2,500,000*
City Share @ 42%	*$1,050,000*
Fire Department Share @ 67%	***$703,500***

					Residential
Fire Department's Share of Planned Cost					$703,500
Proportionate Share (calls for service)					75%
	Existing Dev		*New Dev.*		*TOTAL*
2025 Demand Units Served (peak population)[2]	106,146	94%	7,108	6%	113,254
Cost per Person	***$4.68***		***$4.68***		

					Nonresidential
Fire Department's Share of Planned Cost					$703,500
Proportionate Share (calls for service)					25%
	Existing Dev		*New Dev.*		*TOTAL*
2025 Demand Units Served (jobs)[2]	47,632	84%	8,852	16%	56,484
Cost per Job	***$3.07***		***$3.07***		

1. City of Yuma, *FY2012-FY2022 Capital Improvements Plan*.
2. City of Yuma, Fire Department

The cost to prepare the Fire Facilities IIP and development fees totals $15,375. The City 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, the cost per person is $4.67 and per job $1.27.

Figure 18: IIP Element #3 – IIP and Development Fee Report

					Demand Units			*Cost per Demand Unit*
Necessary Public Service	*Cost*	*Assessed Against*	*Proportionate Share*	*Units*	*FY2012*	*FY2017*	*Change*	
Parks and Recreational Facilities	$12,300	Residential	100%	Population	106,146	108,628	2,482	$4.96
Police Facilities	$15,375	Residential	53%	Population	106,146	108,628	2,482	$3.28
		Nonresidential	47%	Nonres Trips	170,731	182,397	11,666	$0.62
Fire Facilities	***$15,375***	Residential	***75%***	Population	106,146	108,628	***2,482***	***$4.67***
		Nonresidential	***25%***	Jobs	47,632	50,622	***2,990***	***$1.27***
General Government Facilities	$8,200	Residential	83%	Population	106,146	108,628	2,482	$2.74
		Nonresidential	17%	Jobs	47,632	50,622	2,990	$0.47
Street Facilities	$30,750	Res. and Nonres.	100%	Trips	341,633	357,536	15,903	$1.93
TOTAL	***$82,000***							

IIP Element #4

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."*

The number of persons per household and jobs per square foot from the Land Use Assumptions is multiplied by the current level-of-service, which yields the number of units of infrastructure needed to serve one service unit by type of development. To determine the ratio of a service unit to various types of land uses, the number of units of infrastructure needed to serve one service unit by type of housing unit or one square foot of nonresidential building by type is then divided by the number of units of infrastructure needed to serve a single family house. For analytical purposes, this provides a basis for comparing the infrastructure needs of all land use categories and types to a single family house. However, it should be noted, this does not assume that the impacts of commercial, industrial, and residential land uses are the same. This again, is simply an analytical technique used to provide a common unit of measure.

Using the fire station needs of a multi-family unit as an example, the number of persons per household (2.55) is multiplied by the current level-of-service of 0.42 square feet per person. This results in 1.08 square feet of fire station facilities per multi-family unit. This figure is then divided by the number of square feet needed to serve a single family housing unit (1.37 square feet) which results in a ratio of 0.79. This can be read as a multi-family unit having 79% of the needs of a single family unit. This calculation is repeated for all types of development and each component of the IIP.

Figure 19: IIP Element #4

RESIDENTIAL DEVELOPMENT

Type	Service Unit	# of Persons[1]	Current Facilities LOS: Square Feet per Person[2]	Facilities Square Feet per Service Unit	Ratio to 1 Single Family Unit	Communications LOS: Cost per Person[3]	Cost of Equipment per Service Unit	Ratio to 1 Single Family Unit	IIP and Dev Fee Study Cost per Person[4]	Cost per Service Unit	Ratio to 1 Single Family Unit
Single Family	1 Unit	***3.24***	0.42	***1.37***	***1.00***	$4.68	***$15.15***	***1.00***	$4.67	***$15.11***	***1.00***
Multi-family	1 Unit	***2.55***	0.42	***1.08***	***0.79***	$4.68	***$11.94***	***0.79***	$4.67	***$11.90***	***0.79***
All Other Types of Housing	1 Unit	***1.96***	0.42	***0.83***	***0.61***	$4.68	***$9.17***	***0.61***	$4.67	***$9.14***	***0.61***

NONRESIDENTIAL DEVELOPMENT

Type	Service Unit	# of Jobs[1]	Current Facilities LOS: Square Feet per Job[2]	Facilities Square Feet per Service Unit	Ratio to 1 Single Family Unit	Communications LOS: Units per Job[3]	Cost of Equipment per Service Unit	Ratio to 1 Single Family Unit	IIP and Dev Fee Study Cost per Job[4]	Cost per Service Unit	Ratio to 1 Single Family Unit
Commercial/Retail Development											
0 - 10,000 square feet	1 sq ft of building	***0.00388***	0.31	***0.00120***	***0.00087***	$3.07	***$0.0119***	***0.00079***	$1.27	***$0.00492***	***0.000326***
10,001 - 20,000 square feet	1 sq ft of building	***0.00341***	0.31	***0.00105***	***0.00077***	$3.07	***$0.0105***	***0.00069***	$1.27	***$0.00433***	***0.000287***
20,001 - 30,000 square feet	1 sq ft of building	***0.00317***	0.31	***0.00098***	***0.00071***	$3.07	***$0.0097***	***0.00064***	$1.27	***$0.00402***	***0.000266***
30,001 - 40,000 square feet	1 sq ft of building	***0.00301***	0.31	***0.00093***	***0.00068***	$3.07	***$0.0092***	***0.00061***	$1.27	***$0.00381***	***0.000252***
40,001 - 50,000 square feet	1 sq ft of building	***0.00288***	0.31	***0.00089***	***0.00065***	$3.07	***$0.0089***	***0.00059***	$1.27	***$0.00366***	***0.000242***
50,001 - 60,000 square feet	1 sq ft of building	***0.00279***	0.31	***0.00086***	***0.00063***	$3.07	***$0.0086***	***0.00057***	$1.27	***$0.00354***	***0.000234***
60,001 - 70,000 square feet	1 sq ft of building	***0.00271***	0.31	***0.00084***	***0.00061***	$3.07	***$0.0083***	***0.00055***	$1.27	***$0.00344***	***0.000228***
70,001 - 80,000 square feet	1 sq ft of building	***0.00265***	0.31	***0.00082***	***0.00060***	$3.07	***$0.0081***	***0.00054***	$1.27	***$0.00336***	***0.000222***
80,001 - 90,000 square feet	1 sq ft of building	***0.00259***	0.31	***0.00080***	***0.00058***	$3.07	***$0.0080***	***0.00053***	$1.27	***$0.00329***	***0.000217***
90,001 - 100,000 square feet	1 sq ft of building	***0.00254***	0.31	***0.00078***	***0.00057***	$3.07	***$0.0078***	***0.00052***	$1.27	***$0.00322***	***0.000213***
100,001 - 110,000 square feet	1 sq ft of building	***0.00250***	0.31	***0.00077***	***0.00056***	$3.07	***$0.0077***	***0.00051***	$1.27	***$0.00317***	***0.00021***
110,001 - 120,000 square feet	1 sq ft of building	***0.00246***	0.31	***0.00076***	***0.00055***	$3.07	***$0.0075***	***0.00050***	$1.27	***$0.00312***	***0.000206***
120,001 - 130,000 square feet	1 sq ft of building	***0.00242***	0.31	***0.00075***	***0.00055***	$3.07	***$0.0074***	***0.00049***	$1.27	***$0.00307***	***0.000203***
130,001 - 140,000 square feet	1 sq ft of building	***0.00239***	0.31	***0.00074***	***0.00054***	$3.07	***$0.0073***	***0.00048***	$1.27	***$0.00303***	***0.000201***
140,001 - 150,000 square feet	1 sq ft of building	***0.00236***	0.31	***0.00073***	***0.00053***	$3.07	***$0.0072***	***0.00048***	$1.27	***$0.00299***	***0.000198***
150,001 - 160,000 square feet	1 sq ft of building	***0.00233***	0.31	***0.00072***	***0.00053***	$3.07	***$0.0072***	***0.00047***	$1.27	***$0.00296***	***0.000196***
160,001 - 170,000 square feet	1 sq ft of building	***0.00230***	0.31	***0.00071***	***0.00052***	$3.07	***$0.0071***	***0.00047***	$1.27	***$0.00292***	***0.000194***
170,001 - 180,000 square feet	1 sq ft of building	***0.00228***	0.31	***0.00070***	***0.00051***	$3.07	***$0.0070***	***0.00046***	$1.27	***$0.00289***	***0.000191***
180,001 - 190,000 square feet	1 sq ft of building	***0.00226***	0.31	***0.00070***	***0.00051***	$3.07	***$0.0069***	***0.00046***	$1.27	***$0.00286***	***0.00019***
190,001 - 200,000 square feet	1 sq ft of building	***0.00224***	0.31	***0.00069***	***0.00050***	$3.07	***$0.0069***	***0.00045***	$1.27	***$0.00284***	***0.000188***
Office											
0 - 10,000 square feet	1 sq ft of building	***0.00448***	0.31	***0.00138***	***0.00101***	$3.07	***$0.0138***	***0.00091***	$1.27	***$0.00568***	***0.000376***
10,001 - 20,000 square feet	1 sq ft of building	***0.00422***	0.31	***0.00130***	***0.00095***	$3.07	***$0.0130***	***0.00086***	$1.27	***$0.00536***	***0.000355***
20,001 - 30,000 square feet	1 sq ft of building	***0.00408***	0.31	***0.00126***	***0.00092***	$3.07	***$0.0125***	***0.00083***	$1.27	***$0.00518***	***0.000343***
30,001 - 40,000 square feet	1 sq ft of building	***0.00399***	0.31	***0.00123***	***0.00090***	$3.07	***$0.0123***	***0.00081***	$1.27	***$0.00506***	***0.000335***
40,001 - 50,000 square feet	1 sq ft of building	***0.00391***	0.31	***0.00121***	***0.00088***	$3.07	***$0.0120***	***0.00079***	$1.27	***$0.00497***	***0.000329***
50,001 - 60,000 square feet	1 sq ft of building	***0.00385***	0.31	***0.00119***	***0.00087***	$3.07	***$0.0118***	***0.00078***	$1.27	***$0.00489***	***0.000324***
60,001 - 70,000 square feet	1 sq ft of building	***0.00381***	0.31	***0.00117***	***0.00086***	$3.07	***$0.0117***	***0.00077***	$1.27	***$0.00483***	***0.00032***
70,001 - 80,000 square feet	1 sq ft of building	***0.00376***	0.31	***0.00116***	***0.00085***	$3.07	***$0.0116***	***0.00076***	$1.27	***$0.00477***	***0.000316***
80,001 - 90,000 square feet	1 sq ft of building	***0.00373***	0.31	***0.00115***	***0.00084***	$3.07	***$0.0115***	***0.00076***	$1.27	***$0.00473***	***0.000313***
90,001 - 100,000 square feet	1 sq ft of building	***0.00369***	0.31	***0.00114***	***0.00083***	$3.07	***$0.0114***	***0.00075***	$1.27	***$0.00469***	***0.00031***
100,001 - 110,000 square feet	1 sq ft of building	***0.00366***	0.31	***0.00113***	***0.00083***	$3.07	***$0.0113***	***0.00074***	$1.27	***$0.00465***	***0.000308***
110,001 - 120,000 square feet	1 sq ft of building	***0.00364***	0.31	***0.00112***	***0.00082***	$3.07	***$0.0112***	***0.00074***	$1.27	***$0.00462***	***0.000306***
120,001 - 130,000 square feet	1 sq ft of building	***0.00361***	0.31	***0.00112***	***0.00081***	$3.07	***$0.0111***	***0.00073***	$1.27	***$0.00459***	***0.000304***
130,001 - 140,000 square feet	1 sq ft of building	***0.00359***	0.31	***0.00111***	***0.00081***	$3.07	***$0.0110***	***0.00073***	$1.27	***$0.00456***	***0.000302***
140,001 - 150,000 square feet	1 sq ft of building	***0.00357***	0.31	***0.00110***	***0.00081***	$3.07	***$0.0110***	***0.00072***	$1.27	***$0.00453***	***0.0003***
150,001 - 160,000 square feet	1 sq ft of building	***0.00355***	0.31	***0.00110***	***0.00080***	$3.07	***$0.0109***	***0.00072***	$1.27	***$0.00451***	***0.000298***
160,001 - 170,000 square feet	1 sq ft of building	***0.00353***	0.31	***0.00109***	***0.00080***	$3.07	***$0.0109***	***0.00072***	$1.27	***$0.00448***	***0.000297***
170,001 - 180,000 square feet	1 sq ft of building	***0.00352***	0.31	***0.00109***	***0.00079***	$3.07	***$0.0108***	***0.00071***	$1.27	***$0.00446***	***0.000295***
180,001 - 190,000 square feet	1 sq ft of building	***0.00350***	0.31	***0.00108***	***0.00079***	$3.07	***$0.0108***	***0.00071***	$1.27	***$0.00444***	***0.000294***
190,001 - 200,000 square feet	1 sq ft of building	***0.00349***	0.31	***0.00108***	***0.00079***	$3.07	***$0.0107***	***0.00071***	$1.27	***$0.00442***	***0.000293***
Light Industrial	1 sq ft of building	***0.00231***	0.31	***0.00071***	***0.00052***	$3.07	***$0.0071***	***0.00047***	$1.27	***$0.00293***	***0.000194***
Warehousing	1 sq ft of building	***0.00092***	0.31	***0.00028***	***0.00021***	$3.07	***$0.0028***	***0.00019***	$1.27	***$0.00117***	***7.73E-05***
Manufacturing	1 sq ft of building	***0.00179***	0.31	***0.00055***	***0.00040***	$3.07	***$0.0055***	***0.00036***	$1.27	***$0.00227***	***0.00015***
Hotel (per room)	1 hotel room	0.44	0.31	***0.14***	***0.10***	$3.07	***$1***	***0.09***	$1.27	***$0.55827***	***0.04***

1. Land Use Assumptions Document
2. From Figure 16.
3. From Figure 17.
4. From Figure 18.

IIP Elements #5 and #6

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."*

The Land Use Assumptions projects an additional 1,989 housing units and 2,509,247 square feet of nonresidential buildings over the next ten years. These projected service units are multiplied by the current levels-of-service for each of the IIP components. This new development will demand an additional 4,027 square feet of fire stations, $42,469 of communications equipment, and $31,281 in IIP and development fee study costs.

Figure 20: IIP Elements #5 and #6

		Projected Service Units Necessitated by New Development in Service Area[1]		Projected Demand Units Necessitated by New Development in Service Area[1]		Projected Demand for Necessary Public Services or Facility Expansion @ Current LOS[2]		Projected Demand for Necessary Public Services or Facility Expansion @ Current LOS[3]		Projected Demand for Necessary Public Services or Facility Expansion[4]	
		Type of Development	Residential	Type of Development	Residential	Necessary Public Service	Facilities	Necessary Public Service	Communications Equipment	Necessary Public Service	IIP and Development Fee Study
		Service Units	1 housing unit	Demand Units	persons	Unit of Measurement	square feet	Unit of Measurement	Cost	Unit of Measurement	cost
Projection Year	Fiscal Year										
1	2012		195		491		388		$4,092		$3,034
2	2013		195		494		391		$4,126		$3,054
3	2014		196		496		394		$4,160		$3,075
4	2015		197		499		398		$4,194		$3,096
5	2016		198		501		401		$4,228		$3,117
6	2017		199		504		404		$4,263		$3,138
7	2018		200		506		408		$4,298		$3,159
8	2019		201		509		411		$4,334		$3,181
9	2020		202		511		415		$4,369		$3,203
10	2021		203		514		418		$4,406		$3,225
		10 YEAR TOTAL	1,989	10 YEAR TOTAL	5,026	10 YEAR TOTAL	4,027	10 YEAR TOTAL	$42,469	10 YEAR TOTAL	$31,281

1. Land Use Assumptions Document
2. From Figure 16.
3. From Figure 17.
4. From Figure 18.

IIP Element #7

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.

TischlerBise has projected on-going and one-time revenues based on the development projections in the Land Use Assumptions document, characteristics of new development, and the City's current revenue structure and rates.

The revenues included in this analysis and the applicable rates and calculation methodologies are shown in the figure below.

Figure 21: Revenue Assumptions, Rates, Calculation Methodologies

Revenue Source	*Current Rate/ Formula*	*Applicability*
Property Tax	$1.5757 per $100 assessed value, 20% assessment ratio for nonresidential development, 10% assessment ratio for residential development	All development
Sales Tax	1.0% General Fund	Commercial development
	0.2% Public Safety Fund	
	0.5% Road Fund	
Construction Sales Tax	1.0% of 65% of market value - General Fund	All development
	0.2% of 65% of market value - Public Safety Fund	
	0.5% of 65% of market value - Road Fund	
State Shared Revenues[1]	2010 actual collections/2010 peak population = state shared rev/capita[2]	Residential development
State Grant Revenues[1]	Average of 10 years historic collections (CPI adjusted to 2010)/10 year peak population estimates = state grant rev/capita[2]	Residential development
Federal Grant Revenues[1]	Average of 10 years historic collections (CPI adjusted to 2010)/10 year peak population estimates = federal grant rev/capita[2]	Residential development

1. Includes Sales Tax, Revenue Sharing, Auto-in-Lieu, HURF. LTAF is not included since state now keeps these revenues and does not remit to the City.
2. TischlerBise calculation methodology.

The figure below lists the revenue characteristics of new development that is used to forecast revenues.

Figure 22: Revenue Characteristics of New Development

Residential Development	*Market Value per Unit*[1]	*Assessed Value per Unit (10% assessment ratio)*	*Construction Value per Unit for Construction Sales Tax Calculations*[2]	*Annual Retail Sales Generated per Unit for Sales Tax Calculations*[3]	*State Shared Revenue per Unit (revenues per capita x persons per household)*[4]	*State Grant Revenue per Unit (revenues per capita x persons per household)*[4]	*Federal Grant Revenue per Unit (revenues per capita x persons per household)*[4]
Single Family	$154,000	$15,400	$100,100	N/A	$742	$244	$183
Multi-family	$47,000	$4,700	$30,550	N/A	$585	$192	$144
All Other Types of Housing	$116,000	$11,600	$75,400	N/A	$449	$147	$111

Nonresidential Development	*Market Value per Square Foot of Building*[1]	*Assessed Value per SF (20% assessment ratio)*	*Construction Value per Square Foot for Construction Sales Tax Calculations*[2]	*Annual Retail Sales Generated per Square Foot for Sales Tax Calculations*[3]	*State Shared Revenue per Square Foot*	*State Grant Revenue per Square Foot*	*Federal Grant Revenue per Square Foot*
Commercial	$241	$48	$157	$425	N/A	N/A	N/A
Office/Institutional	$103	$21	$67	N/A	N/A	N/A	N/A
Industrial/Flex	$65	$13	$42	N/A	N/A	N/A	N/A

1. Examples of recent construction in City of Yuma from zillow.com, trulia.com, loopnet.com, pancrazirealestate.com.
2. 65% of market/assessed value.
3. Average based on data taken from annual reports from Wal-Mart, Safeway, Albertsons, and Target.
4. TischlerBise methodology and calcuation.

TischlerBise's forecast of revenues for the next ten years is shown in the figure below based on the development projections from the Land Use Assumptions, revenue assumptions and rates, and revenue characteristics of new development.

Figure 23: IIP Element #7

Fiscal Year	*Property Taxes*[1]	*Transaction Privledge Tax-Retail Sales*[1]			*Transaction Privledge Tax-Construction*[2]			*State-Shared Revenues*[3]	*State Grant Revenues*[3]	*Federal Grant Revenues*[3]	*TOTAL*
		General Fund	*Public Safety*	*Roads*	*General Fund*	*Public Safety*	*Roads*				
2011	$13,895	$332,937	$166,469	$66,587	$57,211	$11,442	$28,605	$145,889	$37,001	$11,889	***$871,926***
2012	$27,936	$669,953	$334,976	$133,991	$57,811	$11,562	$28,906	$146,618	$37,186	$11,948	***$1,460,887***
2013	$42,125	$1,011,097	$505,548	$202,219	$58,418	$11,684	$29,209	$147,351	$37,372	$12,008	***$2,057,031***
2014	$56,462	$1,356,419	$678,210	$271,284	$59,032	$11,806	$29,516	$148,088	$37,559	$12,068	***$2,660,445***
2015	$70,951	$1,705,971	$852,986	$341,194	$59,654	$11,931	$29,827	$148,828	$37,747	$12,129	***$3,271,217***
2016	$85,592	$2,059,806	$1,029,903	$411,961	$60,282	$12,056	$30,141	$149,572	$37,935	$12,189	***$3,889,437***
2017	$100,387	$2,417,974	$1,208,987	$483,595	$60,917	$12,183	$30,459	$150,320	$38,125	$12,250	***$4,515,198***
2018	$115,339	$2,780,530	$1,390,265	$556,106	$61,560	$12,312	$30,780	$151,072	$38,316	$12,311	***$5,148,590***
2019	$130,448	$3,147,527	$1,573,763	$629,505	$62,210	$12,442	$31,105	$151,827	$38,507	$12,373	***$5,789,707***
2020	$145,717	$3,519,019	$1,759,509	$703,804	$62,867	$12,573	$31,434	$152,586	$38,700	$12,435	***$6,438,644***
2021	$161,147	$3,895,062	$1,947,531	$779,012	$63,532	$12,706	$31,766	$153,349	$38,893	$12,497	***$7,095,497***
TOTAL	***$949,999***	***$22,896,294***	***$11,448,147***	***$4,579,259***	***$663,494***	***$132,699***	***$331,747***	***$1,645,501***	***$417,340***	***$134,098***	***$43,198,578***

1. This is an on-going revenue source as illustrated by the cumulative increase over the projection period.
2. This is a one-time revenue source realized at the time of construction.
3. These revenues are considered one-time given the irregularity and uncertainty of the City receiving these funds.

Note: the above figure should not be interpreted as the total fiscal impact of new development as there is no forecast of on-going and one-time costs resulting from new development.

The planned fire facilities improvements necessitated by new development from the City's *Capital Improvements Plan* are expected to be funded with development fees and are not anticipated to be funded from any of these revenue sources listed above. The Public Safety Sales Tax revenues are limited to be used for maintenance and replacement projects. Thus, these contributions from new development are not used in the IIP in determining the extent of the burden imposed by new development.

POLICE FACILITIES

OVERVIEW

ARS 9-463.05 (T)(7)(f) defines the facilities and assets which can be included in the Police Facilities IIP:

> *"Police facilities, including all appurtenances, equipment and vehicles. 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 officers from more than one station or substation."*

The Police Facilities IIP includes components for facilities, vehicles, communications equipment, and the cost of preparing the Police Facilities IIP and development fees. The plan-based methodology utilizing the City's *Capital Improvement Program, Fiscal Year 2012-2022* is used to calculate the stations and communications equipment components of the Police Facilities IIP. The incremental expansion methodology is used to calculate the vehicles component.

SERVICE AREA

The City Police Department strives to provide a uniform response time across the City. The City's network of Police stations and substations are planned and operate as an integrated network. Patrol vehicles and equipment are dispatched from across the City. As a result, the service area for the Police Facilities IIP is citywide.

PROPORTIONATE SHARE

ARS 9-463.05 (B)(3) states that the development fee shall not exceed a proportionate share of the cost of necessary public services needed to provide necessary public services to the development.

The Police Facilities IIP and development fees are assessed on both residential and nonresidential development as both types of development create a burden for additional police facilities. Calls for service by land use are used to determine the proportionate share of this burden. Based on three years of call data, approximately 53% of non-road related calls were to residential addresses with the remaining 47% going to nonresidential addresses. Road related calls are omitted from this analysis because the origin and destination of these trips is unknown and thus these calls cannot be attributed to residential or nonresidential development.

Figure 24: Calls for Service by Land Use

	Annual Ave. Calls for Service
Residential	*53%*
Nonresidential	*47%*
TOTAL	*100%*

Source: City of Yuma Police Department for 2005, 2007, 2010.

IIP FOR POLICE FACILITIES

For each necessary public service that is the subject of a development fee, ARS 9-463.05(E) requires the IIP to include seven elements. This section details each of these seven elements for the Police Facilities IIP.

IIP Element #1

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."*

The City's *FY2012-FY2022 Capital Improvements Program* identifies a total of $5,189,000 of capital needs for Police over the next ten years. Of this total, $1,191,333 is the result of new development and is included in the IIP and development fee calculations. The balance of these projects reflect the costs to upgrade, improve, expand, correct or replace police facilities to meet existing needs and usage and stricter safety, efficiency, environmental or regulatory standards.

Figure 25: IIP Element #1

Total Police Capital Needs Next Ten Years[1]	***$5,189,000***

New Development's Share of Capital Needs

Araby Road Substation	$924,000
ALSCO Storage Facility	$75,000
Police Dept. Share of Communications System	$70,233
Police Dept. Share of Fleet Services Building	$122,100
Subtotal New Development Share	***$1,191,333***

Balance[2]	***$3,997,667***

1. Source: Capital Improvement Program, Fiscal Years 2012 - 2021.
2. Reflects 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.

IIP Element #2

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."*

The City currently has 164,121 square feet of police facilities serving the current peak population of 106,146 persons and 170,731 nonresidential vehicle trips. The current level-of-service for residential development for police facilities is 0.82 square feet per person. The calculation for the current level-of-service for residential development is as follows: (164,121 square feet x 53% proportionate share)/106,146 persons = 0.82 square feet per person. This calculation is repeated using nonresidential factors resulting in a current level-of-service for nonresidential development of 0.45 square feet per nonresidential vehicle trip.

Figure 26: IIP Element #2 – Facilities

	Eligible Facilities	*Square Feet*
Police Station 1st Avenue		93,500
1st Avenue Parking Garage		46,000
Police Storage - Kayla		4,620
Police Storage - ALSCO		20,001
	TOTAL	***164,121***

Level of Service (LOS) Standards

	Residential
Total Square Footage	164,121
Proportionate Share (calls for service)	53%
2011 Demand Units Served (peak population)	106,146
Current LOS: Square Feet per Person	***0.82***

	Nonresidential
Total Square Footage	164,121
Proportionate Share (calls for service)	47%
2011 Demand Units Served (nonres trips)	170,731
Current LOS: Square Feet per Nonresidential Trip	***0.45***

These existing facilities are nearing capacity. In order to maintain response times throughout the City, the Police Department is constructing a substation facility on Araby Road.

The City's current fleet of police vehicle totals 142 units serving the current peak population of 106,146 persons and 170,731 nonresidential vehicle trips. The current level-of-service for residential development for police vehicles is 0.0007 units per person. The calculation for the current level-of-service for residential development is as follows: (142 units x 53% proportionate share)/106,146 persons = 0.0007 units per person. This calculation is repeated using nonresidential factors resulting in a current level-of-service for nonresidential development of 0.0004 units per nonresidential vehicle trip.

Figure 27: IIP Element #2 – Vehicles

Eligible Vehicles	*# of Units*
Marked Patrol Vehicles	63
Marked SUV	3
Marked 4X4 Pickup Truck	1
Marked 3/4 Ton Pickup Truck	5
Unmarked 3/4 Ton Pickup Truck	1
Marked 1/2 Ton Pickup Truck	1
Marked Motorcycles	10
Mini Pick-Up	1
Unmarked Vehicles	44
Trailers Enclosed	4
Trailers Utility	3
Golf Carts	2
Van	1
Armored Transport	1
Mobile Command Vehicle	1
HNT Van	1
TOTAL	***142***

Level of Service (LOS) Standards

	Residential
Total Number of Units	142
Proportionate Share (calls for service)	53%
2011 Demand Units Served (peak population)	106,146
Current LOS: Units per Person	***0.0007***

	Nonresidential
Total Number of Units	142
Proportionate Share (calls for service)	47%
2011 Demand Units Served (nonres trips)	170,731
Current LOS: Units per Nonresidential Trip	***0.0004***

The City plans to maintain the current level-of-service for new development that it is currently providing for existing development.

The City of Yuma is a member of a regional consortium for public safety communications equipment. The City's participation percentage equals 42%. The current inventory of communications equipment is shown below. The current system is both reaching the end of its useful life and needs to be expanded to accommodate future development. The Police Department accounts for 67% of the usage of the City's share of the system based on the number of police and fire personnel.

Figure 28: IIP Element #2 – Communications Equipment

Equipment
Master site
Black Hill Site
Friendship Site
Stone Cabin Site
San Luis Site
Telegraph Site
Oatman Site
Windy Hill Site
Hill 630 Site
12 Dispatch Consoles
Communications Center Backend Support Equip.
EOC Backend Support Equip.

***Usage Analysis-Full-time Equivalent Employees*[1]**

Police	267	***67%***
Fire	133	***33%***
TOTAL	***400***	***100%***

1. City of Yuma, FY2010 Comprehensive Annual Financial Report.

IIP Element #3

ARS 9-463.05(E)(3) requires:

> *"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."*

The facilities component of the IIP includes planned construction of the Araby Road Substation, ALSCO storage facility, and the Police Department's share of the planned Fleet Services Buildings. The City's Engineering Department estimates for the portion of these planned facilities that is necessitated and attributable to new development is shown in the figure below. The total square footage and costs necessitated and attributable to new development is 7,500 square feet and $1,121,000; an average of $149.48 per square foot.

Based on the current level-of-service of 0.82 square feet per person, this equates to a per person cost of $122.49 (0.82 square feet per person x $149.48 per square foot = $122.49). This calculation is repeated

for nonresidential development resulting in a cost per nonresidential vehicle trip of $67.53 (0.45 square feet x $149.48 per square foot = $67.53 per nonresidential vehicle trip).

Figure 29: IIP Element #3 – Facilities

Necessary Public Facilities/ Facility Expansions	*Square Footage*	*TOTAL*[1]	*Portion Necessitated and Attributable to New Development*[2]	*TOTAL Necessitated and Attributable to New Development*	
				Square Footage	*Cost*
Araby Road Substation	4,000	***$1,540,000***	***60%***	***2,400***	***$924,000***
ALSCO Storage Facility	20,001	***$375,000***	***20%***	***4,000***	***$75,000***
Police Share of Fleet Services Building	5,500	***$610,500***	***20%***	***1,100***	***$122,100***
TOTAL	29,501	***$2,525,500***		***7,500***	***$1,121,100***

Average Cost per Square Foot	***$149.48***
Current Residential LOS (sf per person)	***0.82***
Current Nonresidential LOS (sf per trip)	***0.45***
Cost per Person	***$122.49***
Cost per Trip	***$67.53***

1. City of Yuma, *FY2012-FY2022 Capital Improvements Plan*.
2. City of Yuma, City Engineering Department.

The City's current fleet of 142 police vehicles has a current replication value of $5,816,220, an average cost of $40,959 per vehicle. Based on the current residential level-of-service of 0.0007 vehicles per person, the cost per person equals $29.04 (0.0007 vehicles per person x $40,959 per vehicle = $29.04 per person). This calculation is repeated for nonresidential development resulting in a cost per nonresidential vehicle trip of $16.01 (0.0004 vehicles per nonresidential vehicle trip x $40,959 per vehicle = $16.01 per nonresidential vehicle trip).

Figure 30: IIP Element #3 – Vehicles

Eligible Vehicles	*# of Units*	*Replication Value/Unit*[1]	*Total Replication Value*
Marked Patrol Vehicles	63	$48,000	$3,024,000
Marked SUV	3	$48,000	$144,000
Marked 4X4 Pickup Truck	1	$45,000	$45,000
Marked 3/4 Ton Pickup Truck	5	$43,000	$215,000
Unmarked 3/4 Ton Pickup Truck	1	$25,000	$25,000
Marked 1/2 Ton Pickup Truck	1	$42,000	$42,000
Marked Motorcycles	10	$25,522	$255,220
Mini Pick-Up	1	$12,000	$12,000
Unmarked Vehicles	44	$30,000	$1,320,000
Trailers Enclosed	4	$6,000	$24,000
Trailers Utility	3	$2,000	$6,000
Golf Carts	2	$2,000	$4,000
Van	1	$25,000	$25,000
Armored Transport	1	$216,000	$216,000
Mobile Command Vehicle	1	$259,000	$259,000
HNT Van	1	$200,000	$200,000
TOTAL	***142***		***$5,816,220***
		Average Cost per Unit	***$40,959***

Level of Service (LOS) Standards

	Residential
Total Number of Units	142
Proportionate Share (calls for service)	53%
2011 Demand Units Served (peak population)	106,146
Current LOS: Units per Person	***0.0007***

	Nonresidential
Total Number of Units	142
Proportionate Share (calls for service)	47%
2011 Demand Units Served (nonres trips)	170,731
Current LOS: Units per Nonresidential Trip	***0.0004***

Cost Analysis

	Residential
Current LOS: Units per Person	0.0007
Average Cost per Unit	$40,959
Cost per Person	***$29.04***

	Nonresidential
Current LOS: Units per Nonresidential Trip	0.0004
Average Cost per Unit	$40,959
Cost per Nonresidential Trip	***$16.01***

1. City of Yuma, Police Department.

The City's share of the planned cost for the planned public safety communications system totals $1,050,000, of which 33% is for the Police Department's share of the system ($346,500). Representatives from the Police Department estimate that the planned system will provide sufficient capacity to both existing and new development through FY 2025.

Based on projections from the Land Use Assumptions, existing residential development will account for 86% of the system while new residential development will account for 14%. The cost per person for both existing and new development is $1.62.

For the portion of the system attributable to nonresidential development, existing development will account for 73% of the system while new development will account for 27%. The cost per job for both new and existing nonresidential development is $0.79.

Figure 31: IIP Element #3 – Communications Equipment

Planned Expenditures[1]					*$2,500,000*
City Share @ 42%					*$1,050,000*
Police Department Share @ 33%					***$346,500***
					Residential
Police Department's Share of Planned Cost					$346,500
Proportionate Share (calls for service)					53%
	Existing Dev		*New Dev.*		*TOTAL*
2025 Demand Units Served (peak population)[2]	106,146	94%	7,108	6%	113,254
Cost per Person	***$1.62***		***$1.62***		
					Nonresidential
Police Department's Share of Planned Cost					$346,500
Proportionate Share (calls for service)					47%
	Existing Dev		*New Dev.*		*TOTAL*
2025 Demand Units Served (nonres trips)[2]	170,731	83%	34,541	17%	205,272
Cost per Nonres Trip	***$0.79***		***$0.79***		

1. City of Yuma, *FY2012-FY2022 Capital Improvements Plan*.
2. City of Yuma, Police Department

The cost to prepare the Police Facilities IIP and development fees totals $15,375. The City 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, the cost per person is $3.28 and per nonresidential vehicle trip is $0.62.

Figure 32: IIP Element #3 – IIP and Development Fee Report

Necessary Public Service	*Cost*	*Assessed Against*	*Proportionate Share*	*Demand Units*				*Cost per Demand Unit*
				Units	*FY2012*	*FY2017*	*Change*	
Parks and Recreational Facilities	$12,300	Residential	100%	Population	106,146	108,628	2,482	$4.96
Police Facilities	***$15,375***	Residential	***53%***	Population	106,146	108,628	***2,482***	***$3.28***
		Nonresidential	***47%***	Nonres Trips	170,731	182,397	***11,666***	***$0.62***
Fire Facilities	$15,375	Residential	75%	Population	106,146	108,628	2,482	$4.67
		Nonresidential	25%	Jobs	47,632	50,622	2,990	$1.27
General Government Facilities	$8,200	Residential	83%	Population	106,146	108,628	2,482	$2.74
		Nonresidential	17%	Jobs	47,632	50,622	2,990	$0.47
Street Facilities	$30,750	Res. and Nonres.	100%	Trips	341,633	357,536	15,903	$1.93
TOTAL	***$82,000***							

IIP Element #4

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."*

The number of persons per household and vehicle trips per square foot from the Land Use Assumptions is multiplied by the current level-of-service, which yields the number of units of infrastructure needed to serve one service unit by type of development. To determine the ratio of a service unit to various types of land uses, the number of units of infrastructure needed to serve one service unit by type of housing unit or one square foot of nonresidential building by type is then divided by the number of units of infrastructure needed to serve a single family house. For analytical purposes, this provides a basis for comparing the infrastructure needs of all land use categories and types to a single family house. However, it should be noted, this does not assume that the impacts of commercial, industrial, and residential land uses are the same. This again, is simply an analytical technique used to provide a common unit of measure.

Using the police facility needs of a multi-family unit as an example, the number of persons per household (2.55) is multiplied by the current level-of-service of 0.82 square feet per person. This results in 2.09 square feet of police facilities per multi-family unit. This figure is then divided by the number of square feet needed to serve a single family housing unit (2.65 square feet) which results in a ratio of 0.79. This can be read as a multi-family unit having 79% of the needs of a single family unit. This calculation is repeated for all types of development and each component of the IIP.

Figure 33: IIP Element #4

RESIDENTIAL DEVELOPMENT

Type	Service Unit	# of Persons[1]	Current Facilities LOS: Square Feet per Person[2]	Facilities Square Feet per Service Unit	Ratio to 1 Single Family Unit	Current Vehicles LOS: Units per Person[3]	Vehicles per Service Unit	Ratio to 1 Single Family Unit	Current Communications LOS: Cost per Person[4]	Cost of Equipment per Service Unit	Ratio to 1 Single Family Unit	IIP and Dev Fee Study Cost per Person[5]	Cost per Service Unit	Ratio to 1 Single Family Unit
Single Family	1 Unit	3.24	0.82	2.65	1.00	0.0007	0.0023	1.00	$1.62	$5.25	1.00	$3.28	$3.28	1.00
Multi-family	1 Unit	2.55	0.82	2.09	0.79	0.0007	0.0018	0.79	$1.62	$4.14	0.79	$3.28	$2.59	0.79
All Other Types of Housing	1 Unit	1.96	0.82	1.61	0.61	0.0007	0.0014	0.61	$1.62	$3.18	0.61	$3.28	$1.99	0.61

NONRESIDENTIAL DEVELOPMENT

Type	Service Unit	# of Trips[1]	Trip Adjustment Factor	Adjusted Trip Ends	Current Facilities LOS: Square Feet per Nonres Trip[2]	Facilities Square Feet per Service Unit	Ratio to 1 Single Family Unit	Current Vehicle LOS: Units per Nonres Trip[3]	Vehicles per Service Unit	Ratio to 1 Single Family Unit	Current Communications LOS: Cost per Nonres Trip[4]	Cost of Equipment per Service Unit	Ratio to 1 Single Family Unit	IIP and Dev Fee Study Cost per Nonres Trip[5]	Cost per Service Unit	Ratio to 1 Single Family Unit
Commercial/Retail Development																
0 - 10,000 square feet	1 sq ft of building	0.1520	12%	0.0182	0.45	0.0082	0.0031	0.0004	0.0000071	0.00311	$0.79	$0.121	0.0230	$0.62	$0.01130	0.0034
10,001 - 20,000 square	1 sq ft of building	0.1193	15%	0.0179	0.45	0.0081	0.0030	0.0004	0.0000070	0.00305	$0.79	$0.095	0.0180	$0.62	$0.01108	0.0034
20,001 - 30,000 square	1 sq ft of building	0.1035	17%	0.0171	0.45	0.0077	0.0029	0.0004	0.0000067	0.00291	$0.79	$0.082	0.0156	$0.62	$0.01058	0.0032
30,001 - 40,000 square	1 sq ft of building	0.0936	18%	0.0164	0.45	0.0074	0.0028	0.0004	0.0000064	0.00279	$0.79	$0.074	0.0141	$0.62	$0.01014	0.0031
40,001 - 50,000 square	1 sq ft of building	0.0866	19%	0.0160	0.45	0.0072	0.0027	0.0004	0.0000063	0.00273	$0.79	$0.069	0.0131	$0.62	$0.00992	0.0030
50,001 - 60,000 square	1 sq ft of building	0.0812	19%	0.0154	0.45	0.0070	0.0026	0.0004	0.0000060	0.00263	$0.79	$0.064	0.0123	$0.62	$0.00956	0.0029
60,001 - 70,000 square	1 sq ft of building	0.0769	20%	0.0150	0.45	0.0068	0.0026	0.0004	0.0000059	0.00256	$0.79	$0.061	0.0116	$0.62	$0.00929	0.0028
70,001 - 80,000 square	1 sq ft of building	0.0734	20%	0.0147	0.45	0.0066	0.0025	0.0004	0.0000057	0.00250	$0.79	$0.058	0.0111	$0.62	$0.00910	0.0028
80,001 - 90,000 square	1 sq ft of building	0.0705	21%	0.0144	0.45	0.0065	0.0025	0.0004	0.0000056	0.00246	$0.79	$0.056	0.0106	$0.62	$0.00895	0.0027
90,001 - 100,000 square	1 sq ft of building	0.0679	21%	0.0143	0.45	0.0064	0.0024	0.0004	0.0000056	0.00243	$0.79	$0.054	0.0103	$0.62	$0.00883	0.0027
100,001 - 110,000 squa	1 sq ft of building	0.0657	22%	0.0141	0.45	0.0064	0.0024	0.0004	0.0000055	0.00241	$0.79	$0.052	0.0099	$0.62	$0.00875	0.0027
110,001 - 120,000 squa	1 sq ft of building	0.0637	22%	0.0137	0.45	0.0062	0.0023	0.0004	0.0000054	0.00233	$0.79	$0.051	0.0096	$0.62	$0.00848	0.0026
120,001 - 130,000 squa	1 sq ft of building	0.0620	22%	0.0136	0.45	0.0062	0.0023	0.0004	0.0000053	0.00232	$0.79	$0.049	0.0094	$0.62	$0.00844	0.0026
130,001 - 140,000 squa	1 sq ft of building	0.0604	23%	0.0136	0.45	0.0061	0.0023	0.0004	0.0000053	0.00231	$0.79	$0.048	0.0091	$0.62	$0.00841	0.0026
140,001 - 150,000 squa	1 sq ft of building	0.0589	23%	0.0133	0.45	0.0060	0.0023	0.0004	0.0000052	0.00226	$0.79	$0.047	0.0089	$0.62	$0.00821	0.0025
150,001 - 160,000 squa	1 sq ft of building	0.0576	23%	0.0133	0.45	0.0060	0.0023	0.0004	0.0000052	0.00226	$0.79	$0.046	0.0087	$0.62	$0.00821	0.0025
160,001 - 170,000 squa	1 sq ft of building	0.0564	23%	0.0130	0.45	0.0059	0.0022	0.0004	0.0000051	0.00221	$0.79	$0.045	0.0085	$0.62	$0.00804	0.0024
170,001 - 180,000 squa	1 sq ft of building	0.0553	24%	0.0130	0.45	0.0059	0.0022	0.0004	0.0000051	0.00221	$0.79	$0.044	0.0084	$0.62	$0.00805	0.0025
180,001 - 190,000 squa	1 sq ft of building	0.0542	24%	0.0127	0.45	0.0058	0.0022	0.0004	0.0000050	0.00217	$0.79	$0.043	0.0082	$0.62	$0.00790	0.0024
190,001 - 200,000 squa	1 sq ft of building	0.0533	24%	0.0125	0.45	0.0057	0.0021	0.0004	0.0000049	0.00213	$0.79	$0.042	0.0081	$0.62	$0.00776	0.0024
Office																
0 - 10,000 square feet	1 sq ft of building	0.0227	50%	0.0113	0.45	0.0051	0.0019	0.0004	0.0000044	0.00193	$0.79	$0.018	0.0034	$0.62	$0.00702	0.0021
10,001 - 20,000 square	1 sq ft of building	0.0193	50%	0.0097	0.45	0.0044	0.0016	0.0004	0.0000038	0.00164	$0.79	$0.015	0.0029	$0.62	$0.00598	0.0018
20,001 - 30,000 square	1 sq ft of building	0.0176	50%	0.0088	0.45	0.0040	0.0015	0.0004	0.0000034	0.00150	$0.79	$0.014	0.0027	$0.62	$0.00545	0.0017
30,001 - 40,000 square	1 sq ft of building	0.0165	50%	0.0082	0.45	0.0037	0.0014	0.0004	0.0000032	0.00140	$0.79	$0.013	0.0025	$0.62	$0.00510	0.0016
40,001 - 50,000 square	1 sq ft of building	0.0156	50%	0.0078	0.45	0.0035	0.0013	0.0004	0.0000031	0.00133	$0.79	$0.012	0.0024	$0.62	$0.00485	0.0015
50,001 - 60,000 square	1 sq ft of building	0.0150	50%	0.0075	0.45	0.0034	0.0013	0.0004	0.0000029	0.00128	$0.79	$0.012	0.0023	$0.62	$0.00465	0.0014
60,001 - 70,000 square	1 sq ft of building	0.0145	50%	0.0072	0.45	0.0033	0.0012	0.0004	0.0000028	0.00123	$0.79	$0.011	0.0022	$0.62	$0.00448	0.0014
70,001 - 80,000 square	1 sq ft of building	0.0140	50%	0.0070	0.45	0.0032	0.0012	0.0004	0.0000027	0.00120	$0.79	$0.011	0.0021	$0.62	$0.00435	0.0013
80,001 - 90,000 square	1 sq ft of building	0.0137	50%	0.0068	0.45	0.0031	0.0012	0.0004	0.0000027	0.00116	$0.79	$0.011	0.0021	$0.62	$0.00423	0.0013
90,001 - 100,000 square	1 sq ft of building	0.0133	50%	0.0067	0.45	0.0030	0.0011	0.0004	0.0000026	0.00114	$0.79	$0.011	0.0020	$0.62	$0.00413	0.0013
100,001 - 110,000 squa	1 sq ft of building	0.0131	50%	0.0065	0.45	0.0029	0.0011	0.0004	0.0000026	0.00111	$0.79	$0.010	0.0020	$0.62	$0.00404	0.0012
110,001 - 120,000 squa	1 sq ft of building	0.0128	50%	0.0064	0.45	0.0029	0.0011	0.0004	0.0000025	0.00109	$0.79	$0.010	0.0019	$0.62	$0.00396	0.0012
120,001 - 130,000 squa	1 sq ft of building	0.0126	50%	0.0063	0.45	0.0028	0.0011	0.0004	0.0000025	0.00107	$0.79	$0.010	0.0019	$0.62	$0.00389	0.0012
130,001 - 140,000 squa	1 sq ft of building	0.0123	50%	0.0062	0.45	0.0028	0.0011	0.0004	0.0000024	0.00105	$0.79	$0.010	0.0019	$0.62	$0.00382	0.0012
140,001 - 150,000 squa	1 sq ft of building	0.0122	50%	0.0061	0.45	0.0027	0.0010	0.0004	0.0000024	0.00103	$0.79	$0.010	0.0018	$0.62	$0.00376	0.0011
150,001 - 160,000 squa	1 sq ft of building	0.0120	50%	0.0060	0.45	0.0027	0.0010	0.0004	0.0000023	0.00102	$0.79	$0.009	0.0018	$0.62	$0.00371	0.0011
160,001 - 170,000 squa	1 sq ft of building	0.0118	50%	0.0059	0.45	0.0027	0.0010	0.0004	0.0000023	0.00101	$0.79	$0.009	0.0018	$0.62	$0.00366	0.0011
170,001 - 180,000 squa	1 sq ft of building	0.0117	50%	0.0058	0.45	0.0026	0.0010	0.0004	0.0000023	0.00099	$0.79	$0.009	0.0018	$0.62	$0.00361	0.0011
180,001 - 190,000 squa	1 sq ft of building	0.0115	50%	0.0058	0.45	0.0026	0.0010	0.0004	0.0000022	0.00098	$0.79	$0.009	0.0017	$0.62	$0.00356	0.0011
190,001 - 200,000 squa	1 sq ft of building	0.0114	50%	0.0057	0.45	0.0026	0.0010	0.0004	0.0000022	0.00097	$0.79	$0.009	0.0017	$0.62	$0.00352	0.0011
Light Industrial	1 sq ft of building	0.0070	50%	0.0035	0.45	0.0016	0.0006	0.0004	0.0000014	0.00059	$0.79	$0.006	0.0011	$0.62	$0.00216	0.0007
Warehousing	1 sq ft of building	0.0050	50%	0.0025	0.45	0.0011	0.0004	0.0004	0.0000010	0.00042	$0.79	$0.004	0.0007	$0.62	$0.00154	0.0005
Manufacturing	1 sq ft of building	0.0038	50%	0.0019	0.45	0.0009	0.0003	0.0004	0.0000007	0.00033	$0.79	$0.003	0.0006	$0.62	$0.00118	0.0004
Hotel (per room)	1 hotel room	5.63	50%	2.82	0.45	1.27	0.48	0.0004	0.0022	0.96	$0.79	$4	0.85	$0.62	$1.744	0.53

1. Land Use Assumptions Document
2. From Figure 26.
3. From Figure 27.
4. From Figure 32.
5. From Figure 33.

IIP Elements #5 and #6

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."*

The Land Use Assumptions projects an additional 1,989 housing units and 2,509,247 square feet of nonresidential buildings over the next ten years. These projected service units are multiplied by the current levels-of-service for each of the IIP components. This new development will demand an

additional 14,991 square feet of facilities, 13 vehicles, $27,242 of communications equipment, and $31,409 in IIP and development fee study costs.

Figure 34: IIP Elements #5 and #6

		Projected Service Units Necessitated by New Development in Service Area[1]		Projected Demand Units Necessitated by New Development in Service Area[1]			Projected Demand for Necessary Public Services or Facility Expansion[2]		Projected Demand for Necessary Public Services or Facility Expansion[3]		Projected Demand for Necessary Public Services or Facility Expansion[4]		Projected Demand for Necessary Public Services or Facility Expansion[5]	
		Type of Development	Residential	Nonresidential	Type of Development	Residential	Nonresidential	Necessary Public Service	Facilities	Necessary Public Service	Vehicles	Necessary Public Service	Communications Equipment	Necessary Public Service	IIP and Development Fee Study
		Service Units	1 housing unit	1 square foot of building	Demand Units	persons	vehicle trips	Unit of Measurement	square feet	Unit of Measurement	units	Unit of Measurement	cost	Unit of Measurement	cost
Projection Year	Fiscal Year														
1	2012		195	237,402		491	2,277		1,431		1.2		$2,605		$3,024
2	2013		195	240,310		494	2,305		1,446		1.3		$2,629		$3,049
3	2014		196	243,254		496	2,333		1,461		1.3		$2,656		$3,075
4	2015		197	246,233		499	2,361		1,476		1.3		$2,682		$3,101
5	2016		198	249,249		501	2,390		1,491		1.3		$2,709		$3,127
6	2017		199	252,303		504	2,420		1,506		1.3		$2,737		$3,153
7	2018		200	255,393		506	2,449		1,522		1.3		$2,764		$3,180
8	2019		201	258,521		509	2,479		1,537		1.3		$2,792		$3,207
9	2020		202	261,688		511	2,510		1,553		1.3		$2,820		$3,234
10	2021		203	264,894		514	2,540		1,569		1.4		$2,849		$3,261
		10 YEAR TOTAL	1,989	2,509,247	10 YEAR TOTAL	5,026	24,064	10 YEAR TOTAL	14,991	10 YEAR TOTAL	13.0	10 YEAR TOTAL	$27,242	10 YEAR TOTAL	$31,409

1. Land Use Assumptions Document
2. From Figure 26.
3. From Figure 27.
4. From Figure 32.
5. From Figure 33.

IIP Element #7

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.

TischlerBise has projected on-going and one-time revenues based on the development projections in the Land Use Assumptions document, characteristics of new development, and the City's current revenue structure and rates.

The revenues included in this analysis and the applicable rates and calculation methodologies are shown in the figure below.

Figure 35: Revenue Assumptions, Rates, Calculation Methodologies

Revenue Source	*Current Rate/ Formula*	*Applicability*
Property Tax	$1.5757 per $100 assessed value, 20% assessment ratio for nonresidential development, 10% assessment ratio for residential development	All development
Sales Tax	1.0% General Fund	Commercial development
	0.2% Public Safety Fund	
	0.5% Road Fund	
Construction Sales Tax	1.0% of 65% of market value - General Fund	All development
	0.2% of 65% of market value - Public Safety Fund	
	0.5% of 65% of market value - Road Fund	
State Shared Revenues[1]	2010 actual collections/2010 peak population = state shared rev/capita[2]	Residential development
State Grant Revenues[1]	Average of 10 years historic collections (CPI adjusted to 2010)/10 year peak population estimates = state grant rev/capita[2]	Residential development
Federal Grant Revenues[1]	Average of 10 years historic collections (CPI adjusted to 2010)/10 year peak population estimates = federal grant rev/capita[2]	Residential development

1. Includes Sales Tax, Revenue Sharing, Auto-in-Lieu, HURF. LTAF is not included since state now keeps these revenues and does not remit to the City.
2. TischlerBise calculation methodology.

The figure below lists the revenue characteristics of new development that is used to forecast revenues.

Figure 36: Revenue Characteristics of New Development

Residential Development	*Market Value per Unit*[1]	*Assessed Value per Unit (10% assessment ratio)*	*Construction Value per Unit for Construction Sales Tax Calculations*[2]	*Annual Retail Sales Generated per Unit for Sales Tax Calculations*[3]	*State Shared Revenue per Unit (revenues per capita x persons per household)*[4]	*State Grant Revenue per Unit (revenues per capita x persons per household)*[4]	*Federal Grant Revenue per Unit (revenues per capita x persons per household)*[4]
Single Family	$154,000	$15,400	$100,100	N/A	$742	$244	$183
Multi-family	$47,000	$4,700	$30,550	N/A	$585	$192	$144
All Other Types of Housing	$116,000	$11,600	$75,400	N/A	$449	$147	$111

Nonresidential Development	*Market Value per Square Foot of Building*[1]	*Assessed Value per SF (20% assessment ratio)*	*Construction Value per Square Foot for Construction Sales Tax Calculations*[2]	*Annual Retail Sales Generated per Square Foot for Sales Tax Calculations*[3]	*State Shared Revenue per Square Foot*	*State Grant Revenue per Square Foot*	*Federal Grant Revenue per Square Foot*
Commercial	$241	$48	$157	$425	N/A	N/A	N/A
Office/Institutional	$103	$21	$67	N/A	N/A	N/A	N/A
Industrial/Flex	$65	$13	$42	N/A	N/A	N/A	N/A

1. Examples of recent construction in City of Yuma from zillow.com, trulia.com, loopnet.com, pancrazirealestate.com.
2. 65% of market/assessed value.
3. Average based on data taken from annual reports from Wal-Mart, Safeway, Albertsons, and Target.
4. TischlerBise methodology and calcuation.

TischlerBise's forecast of revenues for the next ten years is shown in the figure below based on the development projections from the Land Use Assumptions, revenue assumptions and rates, and revenue characteristics of new development.

Figure 37: IIP Element #7

Fiscal Year	*Property Taxes*[1]	*Transaction Privledge Tax-Retail Sales*[1]			*Transaction Privledge Tax-Construction*[2]			*State-Shared Revenues*[3]	*State Grant Revenues*[3]	*Federal Grant Revenues*[3]	*TOTAL*
		General Fund	*Public Safety*	*Roads*	*General Fund*	*Public Safety*	*Roads*				
2011	$13,895	$332,937	$166,469	$66,587	$57,211	$11,442	$28,605	$145,889	$37,001	$11,889	***$871,926***
2012	$27,936	$669,953	$334,976	$133,991	$57,811	$11,562	$28,906	$146,618	$37,186	$11,948	***$1,460,887***
2013	$42,125	$1,011,097	$505,548	$202,219	$58,418	$11,684	$29,209	$147,351	$37,372	$12,008	***$2,057,031***
2014	$56,462	$1,356,419	$678,210	$271,284	$59,032	$11,806	$29,516	$148,088	$37,559	$12,058	***$2,660,445***
2015	$70,951	$1,705,971	$852,986	$341,194	$59,654	$11,931	$29,827	$148,828	$37,747	$12,129	***$3,271,217***
2016	$85,592	$2,059,806	$1,029,903	$411,961	$60,282	$12,056	$30,141	$149,572	$37,935	$12,189	***$3,889,437***
2017	$100,387	$2,417,974	$1,208,987	$483,595	$60,917	$12,183	$30,459	$150,320	$38,125	$12,250	***$4,515,198***
2018	$115,339	$2,780,530	$1,390,265	$556,106	$61,560	$12,312	$30,780	$151,072	$38,316	$12,311	***$5,148,590***
2019	$130,448	$3,147,527	$1,573,763	$629,505	$62,210	$12,442	$31,105	$151,827	$38,507	$12,373	***$5,789,707***
2020	$145,717	$3,519,019	$1,759,509	$703,804	$62,867	$12,573	$31,434	$152,586	$38,700	$12,435	***$6,438,644***
2021	$161,147	$3,895,062	$1,947,531	$779,012	$63,532	$12,706	$31,766	$153,349	$38,893	$12,497	***$7,095,497***
TOTAL	***$949,999***	***$22,896,294***	***$11,448,147***	***$4,579,259***	***$663,494***	***$132,699***	***$331,747***	***$1,645,501***	***$417,340***	***$134,098***	***$43,198,578***

1. This is an on-going revenue source as illustrated by the cumulative increase over the projection period.
2. This is a one-time revenue source realized at the time of construction.
3. These revenues are considered one-time given the irregularity and uncertainty of the City receiving these funds.

Note: the above figure should not be interpreted as the total fiscal impact of new development as there is no forecast of on-going and one-time costs resulting from new development.

The planned police facilities improvements necessitated by new development from the City's *Capital Improvements Plan* are expected to be funded with development fees and are not anticipated to be funded from any of these revenue sources listed above. The Public Safety Sales Tax revenues are limited to be used for maintenance and replacement projects. Thus, these contributions from new development are not used in the IIP in determining the extent of the burden imposed by new development.

GENERAL GOVERNMENT FACILITIES

OVERVIEW

ARS 9-463.05 (T)(7)(f) does not include General Government Facilities as a necessary public service. However, facilities which have been debt financed can be included in the IIP and development fees:

> *"Any facility that was financed and that meets all of the requirements prescribed in subsection R of this section.*
>
> *R. A municipality may continue to assess a development fee adopted before January 1, 2012 for any facility that was financed before June 1, 2011 if:*
>
> > *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 under this subsection are used solely for the payment of principal and interest on the portion of the bonds, notes or other debt service obligations issued before June 1, 2011 to finance construction of the facility."*

The City has outstanding debt service for City Hall, which meets the above criteria. Given that this existing facility was oversized in anticipation of new development, the buy-in methodology is used to calculate this component of the General Government Facilities IIP. The cost of preparing the General Government Facilities IIP and development fees is also included in the General Government Facilities IIP.

SERVICE AREA

City Hall is a single, unique facility, which serves the City as a whole. This facility has a Citywide service area.

PROPORTIONATE SHARE

ARS 9-463.05 (B)(3) states that the development fee shall not exceed a proportionate share of the cost of necessary public services needed to provide necessary public services to the development.

The General Government Facilities IIP uses a functional population concept to allocate the proportionate burdens and costs between residential and nonresidential development. The table distinguishes time at home (2/3 of a day, 16 hours) versus time at work (1/3 of a day, 8 hours) and accounts for commuting patterns in Yuma. According to 2005-2009 data from the Census Bureau's *American Community Survey* and Arizona Department of Commerce, 27% of workers living in the City go to work outside of the City. Based on the total number of jobs in Yuma, there is also in-migration of non-resident workers. According to the functional population analysis, residential development accounts for 83% of the demand for General Government facilities and nonresidential development accounts for 17% of the infrastructure demand.

Figure 38: Functional Population

	Demand Units		Demand Hours/ Day	Person Hours
Residential				
Population*	88,440			
Residents Not Working	53,081		24	1,273,944
Workers Living in City**	35,359			
Residents Working in City***		25,883	16	414,128
Residents Working Outside City		9,476	16	151,616
			Residential Subtotal	1,839,688
				83%
Nonresidential				
Jobs Located in City****	47,632			
Residents Working in City**		25,883	8	207,064
Non-Resident Workers		21,749	8	173,996
			Nonresidential Subtotal	381,060
				17%
			TOTAL	2,220,748

* Table B01003, *2005-2009 American Community Survey 5-Year Estimates*, U.S. Census Bureau.
** Table B08130, 2005-2009 *American Community Survey 5-Year Estimates*, U.S. Census Bureau.
*** Table B08008, 2005-2009 *American Community Survey 5-Year Estimates*, U.S. Census Bureau.
**** Arizona Department of Commerce, Arizona Unemployment Statistics Program, Special Unemployment Report.

IIP FOR GENERAL GOVERNMENT FACILITIES

For each necessary public service that is the subject of a development fee, ARS 9-463.05(E) requires the IIP to include seven elements. This section details each of these seven elements for the General Government Facilities IIP.

IIP Element #1

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."*

The City is expecting to pay $30,075,260 of debt service payments on City Hall over the next ten years. Of this total, $12,578,213 is projected to be funded with development fees. The balance of these projects reflect the costs to upgrade, improve, expand, correct or replace general government facilities to meet existing needs and usage and stricter safety, efficiency, environmental or regulatory standards.

Figure 39: IIP Element #1

Total Debt Service Payment for City Hall Next Ten Years[1]	***$30,075,260***

New Development's Share of Capital Needs

New Development Share of City Hall	$12,578,213
Subtotal New Development Share	***$12,578,213***

Balance[2]	***$17,497,047***

1. Offical Statement from bond issue.
2. Reflects 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.

IIP Element #2

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."*

The current City Hall encompasses 150,000 square feet and was oversized in anticipation of serving new development. Based on the current number of employees and average square feet per work station, the City Engineering Department estimates the facility is currently at 69% capacity. Using the current estimates of population and jobs from the Land Use Assumptions and the proportionate share allocation, it is possible to determine how much additional new development will be served by City Hall at capacity. Using residential development as an example, the current estimate of peak population (106,146 persons) is divided by the current capacity being utilized (69% or 0.69), resulting in a total population at 100% capacity of 152,860 persons (106,146 persons/0.69 = 152,860 persons). Next, the current population is subtracted from the number of persons to be served when the building is at capacity. City Hall has sufficient capacity to serve an additional 46,714 persons (152,860 persons at capacity – 106,146 persons from existing residential development = 46,714 persons yet to be served). This calculation is repeated for nonresidential development, resulting in an additional 20,963 jobs to be served by City Hall.

Figure 40: IIP Element #2 – City Hall

Facility	*Current Capacity*[1]	*Commitment for Usage of Future Capacity*	*Total Capacity*	Type of Development	*Current Level-of-Service*	*Planned Level-of-Service*	*Additional New Development to be Served*
City Hall	***69%***	***31%***	100%	Residential (persons)	106,146	152,860	***46,714***
				Nonresidential (jobs)	47,632	68,595	***20,963***

1. City of Yuma, City Engineering Department.

IIP Element #3

ARS 9-463.05(E)(3) requires:

> *"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."*

The buy-in level-of-service for both existing and new residential development is 0.81 square feet per person. The total population to be served by City Hall at capacity is used in the level-of-service calculation, which ensures the same level-of-service is being calculated for both existing and new development. The buy-in level-of-service for residential development is calculated as follows: (150,000 square feet x 0.83)/152,860 persons at capacity = 0.81 square feet per person. This calculation is repeated for nonresidential development resulting in a buy-in level-of-service of 0.37 square feet per job.

The construction of City Hall cost $41,159,075 including construction and financing costs. This equates to $274.39 per square foot ($41,159,075/150,000 square feet = $274.39). Based on the buy-in level-of-service for residential development of 0.81 square feet per person and a cost of $274.39 per square foot, the buy-in cost per person is $223.49 (0.81 square feet per person x $274.39 per square foot = $223.49 per person). This calculation is repeated for nonresidential development resulting in a buy-in cost per job of $102.00 (0.37 square feet x $274.39 per square foot = $102.00 per job).

Figure 41: IIP Element #3 – City Hall

Eligible Facility	*Square Feet*	*Original Cost*[1]
City Hall	***150,000***	***$41,159,075***
	Ave. Cost per Square Foot=>	***$274.39***

1. Estimated total debt service on Series 2010B refinancing bonds.
Taken from page 9 of the Official Statement. Includes principal and interest.

Level of Service (LOS) Standards

	Residential
Total Square Footage	150,000
Proportionate Share	83%
Demand Units Served at Capacity (peak population)	152,860
Buy-in LOS: Square Feet per Person	***0.81***

	Nonresidential
Total Square Footage	150,000
Proportionate Share	17%
Demand Units Served at Capacity (jobs)	68,595
Buy-in LOS: Square Feet per Job	***0.37***

Cost Analysis

	Residential
Buy-in LOS: Square Feet per Person	0.81
Average Cost per Square Foot	$274.39
Cost per Person	***$223.49***

	Nonresidential
Buy-in LOS: Square Feet per Job	0.37
Average Cost per Square Foot	$274.39
Cost per Job	***$102.00***

The cost to prepare the General Government Facilities IIP and development fees totals $8,200. The City 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, the cost per person is $2.74 and per job is $0.47.

Figure 42: IIP Element #3 – IIP and Development Fee Report

Necessary Public Service	*Cost*	*Assessed Against*	*Proportionate Share*	*Demand Units*				*Cost per Demand Unit*
				Units	*FY2012*	*FY2017*	*Change*	
Parks and Recreational Facilities	$12,300	Residential	100%	Population	106,146	108,628	2,482	$4.96
Police Facilities	$15,375	Residential	53%	Population	106,146	108,628	2,482	$3.28
		Nonresidential	47%	Nonres Trips	170,731	182,397	11,666	$0.62
Fire Facilities	$15,375	Residential	75%	Population	106,146	108,628	2,482	$4.67
		Nonresidential	25%	Jobs	47,632	50,622	2,990	$1.27
General Government Facilities	***$8,200***	Residential	***83%***	Population	106,146	108,628	***2,482***	***$2.74***
		Nonresidential	***17%***	Jobs	47,632	50,622	***2,990***	***$0.47***
Street Facilities	$30,750	Res. and Nonres.	100%	Trips	341,633	357,536	15,903	$1.93
TOTAL	***$82,000***							

IIP Element #4

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."*

The number of persons per household and jobs per square foot from the Land Use Assumptions is multiplied by the current level-of-service, which yields the number of units of infrastructure needed to serve one service unit by type of development. To determine the ratio of a service unit to various types of land uses, the number of units of infrastructure needed to serve one service unit by type of housing unit or one square foot of nonresidential building by type is then divided by the number of units of infrastructure needed to serve a single family house. For analytical purposes, this provides a basis for comparing the infrastructure needs of all land use categories and types to a single family house. However, it should be noted, this does not assume that the impacts of commercial, industrial, and residential land uses are the same. This again, is simply an analytical technique used to provide a common unit of measure.

Using the general government facility needs of a multi-family unit as an example, the number of persons per household (2.55) is multiplied by the buy-in level-of-service of 0.81 square feet per person. This results in 2.08 square feet of City Hall space per multi-family unit. This figure is then divided by the number of square feet needed to serve a single family housing unit (2.64 square feet) which results in a ratio of 0.79. This can be read as a multi-family unit having 79% of the needs of a single family unit. This calculation is repeated for all types of development and each component of the IIP.

Figure 43: IIP Element #4

RESIDENTIAL DEVELOPMENT

Type	Service Unit	# of Persons[1]	City Hall LOS: Square Feet per Person[2]	City Hall Square Feet per Service Unit	Ratio to 1 Single Family Unit	IIP and Dev Fee Study Cost per Person[3]	Cost per Service Unit	Ratio to 1 Single Family Unit
Single Family	1 Unit	***3.24***	0.81	***2.64***	***1.00***	$2.74	***$8.88***	***1.00***
Multi-family	1 Unit	***2.55***	0.81	***2.08***	***0.79***	$2.74	***$7.00***	***0.79***
All Other Types of Housing	1 Unit	***1.96***	0.81	***1.60***	***0.61***	$2.74	***$5.37***	***0.61***

NONRESIDENTIAL DEVELOPMENT

Type	Service Unit	# of Jobs[1]	Facilities LOS: Square Feet per Job[2]	City Hall Square Feet per Service Unit	Ratio to 1 Single Family Unit	IIP and Dev Fee Study Cost per Job[3]	Cost per Service Unit	Ratio to 1 Single Family Unit
Commercial/Retail Development								
0 - 10,000 square feet	1 sq ft of building	***0.00388***	0.37	***0.00144***	***0.000547***	$0.47	***$0.00181***	***0.000204***
10,001 - 20,000 square feet	1 sq ft of building	***0.00341***	0.37	***0.00127***	***0.000481***	$0.47	***$0.00159***	***0.000179***
20,001 - 30,000 square feet	1 sq ft of building	***0.00317***	0.37	***0.00118***	***0.000447***	$0.47	***$0.00148***	***0.000166***
30,001 - 40,000 square feet	1 sq ft of building	***0.00301***	0.37	***0.00112***	***0.000424***	$0.47	***$0.00140***	***0.000158***
40,001 - 50,000 square feet	1 sq ft of building	***0.00288***	0.37	***0.00107***	***0.000407***	$0.47	***$0.00135***	***0.000152***
50,001 - 60,000 square feet	1 sq ft of building	***0.00279***	0.37	***0.00104***	***0.000393***	$0.47	***$0.00130***	***0.000147***
60,001 - 70,000 square feet	1 sq ft of building	***0.00271***	0.37	***0.00101***	***0.000382***	$0.47	***$0.00126***	***0.000142***
70,001 - 80,000 square feet	1 sq ft of building	***0.00265***	0.37	***0.00098***	***0.000373***	$0.47	***$0.00123***	***0.000139***
80,001 - 90,000 square feet	1 sq ft of building	***0.00259***	0.37	***0.00096***	***0.000365***	$0.47	***$0.00121***	***0.000136***
90,001 - 100,000 square feet	1 sq ft of building	***0.00254***	0.37	***0.00094***	***0.000358***	$0.47	***$0.00118***	***0.000133***
100,001 - 110,000 square feet	1 sq ft of building	***0.00250***	0.37	***0.00093***	***0.000352***	$0.47	***$0.00116***	***0.000131***
110,001 - 120,000 square feet	1 sq ft of building	***0.00246***	0.37	***0.00091***	***0.000346***	$0.47	***$0.00115***	***0.000129***
120,001 - 130,000 square feet	1 sq ft of building	***0.00242***	0.37	***0.00090***	***0.000341***	$0.47	***$0.00113***	***0.000127***
130,001 - 140,000 square feet	1 sq ft of building	***0.00239***	0.37	***0.00089***	***0.000337***	$0.47	***$0.00111***	***0.000125***
140,001 - 150,000 square feet	1 sq ft of building	***0.00236***	0.37	***0.00088***	***0.000332***	$0.47	***$0.00110***	***0.000124***
150,001 - 160,000 square feet	1 sq ft of building	***0.00233***	0.37	***0.00087***	***0.000328***	$0.47	***$0.00109***	***0.000122***
160,001 - 170,000 square feet	1 sq ft of building	***0.00230***	0.37	***0.00086***	***0.000325***	$0.47	***$0.00107***	***0.000121***
170,001 - 180,000 square feet	1 sq ft of building	***0.00228***	0.37	***0.00085***	***0.000321***	$0.47	***$0.00106***	***0.000120***
180,001 - 190,000 square feet	1 sq ft of building	***0.00226***	0.37	***0.00084***	***0.000318***	$0.47	***$0.00105***	***0.000119***
190,001 - 200,000 square feet	1 sq ft of building	***0.00224***	0.37	***0.00083***	***0.000315***	$0.47	***$0.00104***	***0.000117***
Office								
0 - 10,000 square feet	1 sq ft of building	***0.00448***	0.37	***0.00166***	***0.000631***	$0.47	***$0.00209***	***0.000235***
10,001 - 20,000 square feet	1 sq ft of building	***0.00422***	0.37	***0.00157***	***0.000596***	$0.47	***$0.00197***	***0.000222***
20,001 - 30,000 square feet	1 sq ft of building	***0.00408***	0.37	***0.00152***	***0.000576***	$0.47	***$0.00190***	***0.000215***
30,001 - 40,000 square feet	1 sq ft of building	***0.00399***	0.37	***0.00148***	***0.000562***	$0.47	***$0.00186***	***0.000209***
40,001 - 50,000 square feet	1 sq ft of building	***0.00391***	0.37	***0.00145***	***0.000552***	$0.47	***$0.00182***	***0.000206***
50,001 - 60,000 square feet	1 sq ft of building	***0.00385***	0.37	***0.00143***	***0.000543***	$0.47	***$0.00180***	***0.000202***
60,001 - 70,000 square feet	1 sq ft of building	***0.00381***	0.37	***0.00141***	***0.000537***	$0.47	***$0.00177***	***0.000200***
70,001 - 80,000 square feet	1 sq ft of building	***0.00376***	0.37	***0.00140***	***0.000531***	$0.47	***$0.00175***	***0.000198***
80,001 - 90,000 square feet	1 sq ft of building	***0.00373***	0.37	***0.00139***	***0.000525***	$0.47	***$0.00174***	***0.000196***
90,001 - 100,000 square feet	1 sq ft of building	***0.00369***	0.37	***0.00137***	***0.000521***	$0.47	***$0.00172***	***0.000194***
100,001 - 110,000 square feet	1 sq ft of building	***0.00366***	0.37	***0.00136***	***0.000517***	$0.47	***$0.00171***	***0.000192***
110,001 - 120,000 square feet	1 sq ft of building	***0.00364***	0.37	***0.00135***	***0.000513***	$0.47	***$0.00170***	***0.000191***
120,001 - 130,000 square feet	1 sq ft of building	***0.00361***	0.37	***0.00134***	***0.000510***	$0.47	***$0.00169***	***0.000190***
130,001 - 140,000 square feet	1 sq ft of building	***0.00359***	0.37	***0.00134***	***0.000506***	$0.47	***$0.00167***	***0.000189***
140,001 - 150,000 square feet	1 sq ft of building	***0.00357***	0.37	***0.00133***	***0.000504***	$0.47	***$0.00167***	***0.000188***
150,001 - 160,000 square feet	1 sq ft of building	***0.00355***	0.37	***0.00132***	***0.000501***	$0.47	***$0.00166***	***0.000187***
160,001 - 170,000 square feet	1 sq ft of building	***0.00353***	0.37	***0.00131***	***0.000498***	$0.47	***$0.00165***	***0.000186***
170,001 - 180,000 square feet	1 sq ft of building	***0.00352***	0.37	***0.00131***	***0.000496***	$0.47	***$0.00164***	***0.000185***
180,001 - 190,000 square feet	1 sq ft of building	***0.00350***	0.37	***0.00130***	***0.000494***	$0.47	***$0.00163***	***0.000184***
190,001 - 200,000 square feet	1 sq ft of building	***0.00349***	0.37	***0.00130***	***0.000492***	$0.47	***$0.00163***	***0.000183***
Light Industrial	1 sq ft of building	***0.00231***	0.37	***0.00086***	***0.000326***	$0.47	***$0.00108***	***0.000121***
Warehousing	1 sq ft of building	***0.00092***	0.37	***0.00034***	***0.000130***	$0.47	***$0.00043***	***0.000048***
Manufacturing	1 sq ft of building	***0.00179***	0.37	***0.00067***	***0.000252***	$0.47	***$0.00083***	***0.000094***
Hotel (per room)	1 hotel room	***0.44***	0.37	***0.16***	***0.06***	$0.47	***$0.20516***	***0.02***

1. Land Use Assumptions document.
2. Taken from Figure 41.
3. Taken from Figure 42.

IIP Elements #5 and #6

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."*

The Land Use Assumptions projects an additional 1,989 housing units and 2,509,247 square feet of nonresidential buildings over the next ten years. These projected service units are multiplied by the levels-of-service for each of the IIP components. This new development will utilize 6,386 square feet of City Hall space and $16,659 in IIP and development fee study costs.

Figure 44: IIP Elements #5 and #6

		Projected Service Units Necessitated by New Development in Service Area[1]		Projected Demand Units Necessitated by New Development in Service Area[1]			Projected Demand for Necessary Public Services or Facility Expansion[2]		Projected Demand for Necessary Public Services or Facility Expansion[3]	
		Type of Development	Residential	Nonresidential	Type of Development	Residential	Nonresidential	Necessary Public Service	Facilities	Necessary Public Service	IIP and Development Fee Study
		Service Units	1 housing unit	1 square foot of building	Demand Units	persons	jobs	Unit of Measurement	square feet	Unit of Measurement	cost
Projection Year	Fiscal Year										
1	2012		195	237,402		491	583		617		$1,620
2	2013		195	240,310		494	591		622		$1,630
3	2014		196	243,254		496	598		627		$1,640
4	2015		197	246,233		499	605		631		$1,650
5	2016		198	249,249		501	613		636		$1,660
6	2017		199	252,303		504	620		641		$1,671
7	2018		200	255,393		506	628		646		$1,681
8	2019		201	258,521		509	635		651		$1,692
9	2020		202	261,688		511	643		656		$1,702
10	2021		203	264,894		514	651		661		$1,713
		10 YEAR TOTAL	1,989	2,509,247	10 YEAR TOTAL	5,026	6,167	10 YEAR TOTAL	6,386	10 YEAR TOTAL	$16,659

1. Land Use Assumptions document.
2. Taken from Figure 41.
3. Taken from Figure 42.

IIP Element #7

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.

TischlerBise has projected on-going and one-time revenues based on the development projections in the Land Use Assumptions document, characteristics of new development, and the City's current revenue structure and rates.

The revenues included in this analysis and the applicable rates and calculation methodologies are shown in the figure below.

Figure 45: Revenue Assumptions, Rates, Calculation Methodologies

Revenue Source	*Current Rate/ Formula*	*Applicability*
Property Tax	$1.5757 per $100 assessed value, 20% assessment ratio for nonresidential development, 10% assessment ratio for residential development	All development
Sales Tax	1.0% General Fund	Commercial development
	0.2% Public Safety Fund	
	0.5% Road Fund	
Construction Sales Tax	1.0% of 65% of market value - General Fund	All development
	0.2% of 65% of market value - Public Safety Fund	
	0.5% of 65% of market value - Road Fund	
State Shared Revenues[1]	2010 actual collections/2010 peak population = state shared rev/capita[2]	Residential development
State Grant Revenues[1]	Average of 10 years historic collections (CPI adjusted to 2010)/10 year peak population estimates = state grant rev/capita[2]	Residential development
Federal Grant Revenues[1]	Average of 10 years historic collections (CPI adjusted to 2010)/10 year peak population estimates = federal grant rev/capita[2]	Residential development

1. Includes Sales Tax, Revenue Sharing, Auto-in-Lieu, HURF. LTAF is not included since state now keeps these revenues and does not remit to the City.
2. TischlerBise calculation methodology.

The figure below lists the revenue characteristics of new development that is used to forecast revenues.

Figure 46: Revenue Characteristics of New Development

Residential Development	*Market Value per Unit*[1]	*Assessed Value per Unit (10% assessment ratio)*	*Construction Value per Unit for Construction Sales Tax Calculations*[2]	*Annual Retail Sales Generated per Unit for Sales Tax Calculations*[3]	*State Shared Revenue per Unit (revenues per capita x persons per household)*[4]	*State Grant Revenue per Unit (revenues per capita x persons per household)*[4]	*Federal Grant Revenue per Unit (revenues per capita x persons per household)*[4]
Single Family	$154,000	$15,400	$100,100	N/A	$742	$244	$183
Multi-family	$47,000	$4,700	$30,550	N/A	$585	$192	$144
All Other Types of Housing	$116,000	$11,600	$75,400	N/A	$449	$147	$111

Nonresidential Development	*Market Value per Square Foot of Building*[1]	*Assessed Value per SF (20% assessment ratio)*	*Construction Value per Square Foot for Construction Sales Tax Calculations*[2]	*Annual Retail Sales Generated per Square Foot for Sales Tax Calculations*[3]	*State Shared Revenue per Square Foot*	*State Grant Revenue per Square Foot*	*Federal Grant Revenue per Square Foot*
Commercial	$241	$48	$157	$425	N/A	N/A	N/A
Office/Institutional	$103	$21	$67	N/A	N/A	N/A	N/A
Industrial/Flex	$65	$13	$42	N/A	N/A	N/A	N/A

1. Examples of recent construction in City of Yuma from zillow.com, trulia.com, loopnet.com, pancrazirealestate.com.
2. 65% of market/assessed value.
3. Average based on data taken from annual reports from Wal-Mart, Safeway, Albertsons, and Target.
4. TischlerBise methodology and calcuation.

TischlerBise's forecast of revenues for the next ten years is shown in the figure below based on the development projections from the Land Use Assumptions, revenue assumptions and rates, and revenue characteristics of new development.

Figure 47: IIP Element #7

Fiscal Year	*Property Taxes*[1]	*Transaction Privledge Tax-Retail Sales*[1]			*Transaction Privledge Tax-Construction*[2]			*State-Shared Revenues*[3]	*State Grant Revenues*[3]	*Federal Grant Revenues*[3]	*TOTAL*
		General Fund	*Public Safety*	*Roads*	*General Fund*	*Public Safety*	*Roads*				
2011	$13,895	$332,937	$166,469	$66,587	$57,211	$11,442	$28,605	$145,889	$37,001	$11,889	***$871,926***
2012	$27,936	$669,953	$334,976	$133,991	$57,811	$11,562	$28,906	$146,618	$37,186	$11,948	***$1,460,887***
2013	$42,125	$1,011,097	$505,548	$202,219	$58,418	$11,684	$29,209	$147,351	$37,372	$12,008	***$2,057,031***
2014	$56,462	$1,356,419	$678,210	$271,284	$59,032	$11,806	$29,516	$148,088	$37,559	$12,068	***$2,660,445***
2015	$70,951	$1,705,971	$852,986	$341,194	$59,654	$11,931	$29,827	$148,828	$37,747	$12,129	***$3,271,217***
2016	$85,592	$2,059,806	$1,029,903	$411,961	$60,282	$12,056	$30,141	$149,572	$37,935	$12,189	***$3,889,437***
2017	$100,387	$2,417,974	$1,208,987	$483,595	$60,917	$12,183	$30,459	$150,320	$38,125	$12,250	***$4,515,198***
2018	$115,339	$2,780,530	$1,390,265	$556,106	$61,560	$12,312	$30,780	$151,072	$38,316	$12,311	***$5,148,590***
2019	$130,448	$3,147,527	$1,573,763	$629,505	$62,210	$12,442	$31,105	$151,827	$38,507	$12,373	***$5,789,707***
2020	$145,717	$3,519,019	$1,759,509	$703,804	$62,867	$12,573	$31,434	$152,586	$38,700	$12,435	***$6,438,644***
2021	$161,147	$3,895,062	$1,947,531	$779,012	$63,532	$12,706	$31,766	$153,349	$38,893	$12,497	***$7,095,497***
TOTAL	***$949,999***	***$22,896,294***	***$11,448,147***	***$4,579,259***	***$663,494***	***$132,699***	***$331,747***	***$1,645,501***	***$417,340***	***$134,098***	***$43,198,578***

1. This is an on-going revenue source as illustrated by the cumulative increase over the projection period.
2. This is a one-time revenue source realized at the time of construction.
3. These revenues are considered one-time given the irregularity and uncertainty of the City receiving these funds.

Note: the above figure should not be interpreted as the total fiscal impact of new development as there is no forecast of on-going and one-time costs resulting from new development.

The debt service associated with City Hall is being repaid through property and sales tax revenues. Thus, these contributions from new development should be used in the IIP in determining the extent of the burden imposed by new development. The figure below calculates a credit for future property and sales tax contributions which will be applied against the cost of serving new development in the development fee calculations. A net present value calculation is used to account for the value of future revenues in current dollars.

Figure 48: Revenue Credit for City Hall

Fiscal Year	Principal	Interest	TOTAL	Residential Share 83%	Peak Population	Credit per Person	Nonresidenital Share 17%	Jobs	Credit per Job
2012	$1,340,000	$1,188,581	$2,528,581	$2,098,722	106,146	***$19.77***	$429,859	47,632	***$9.02***
2013	$1,375,000	$1,155,081	$2,530,081	$2,099,967	106,637	***$19.69***	$430,114	48,216	***$8.92***
2014	$1,425,000	$1,100,081	$2,525,081	$2,095,817	107,131	***$19.56***	$429,264	48,807	***$8.80***
2015	$1,465,000	$1,057,331	$2,522,331	$2,093,535	107,627	***$19.45***	$428,796	49,404	***$8.68***
2016	$1,840,000	$1,013,381	$2,853,381	$2,368,306	108,126	***$21.90***	$485,075	50,010	***$9.70***
2017	$1,910,000	$939,781	$2,849,781	$2,365,318	108,628	***$21.77***	$484,463	50,622	***$9.57***
2018	$2,010,000	$844,281	$2,854,281	$2,369,053	109,131	***$21.71***	$485,228	51,242	***$9.47***
2019	$2,110,000	$743,781	$2,853,781	$2,368,638	109,638	***$21.60***	$485,143	51,870	***$9.35***
2020	$2,210,000	$638,281	$2,848,281	$2,364,073	110,147	***$21.46***	$484,208	52,505	***$9.22***
2021	$2,305,000	$549,881	$2,854,881	$2,369,551	110,658	***$21.41***	$485,330	53,148	***$9.13***
2022	$2,400,000	$454,800	$2,854,800	$2,369,484	111,172	***$21.31***	$485,316	53,799	***$9.02***
2023	$2,500,000	$352,800	$2,852,800	$2,367,824	111,689	***$21.20***	$484,976	54,458	***$8.91***
2024	$2,610,000	$240,300	$2,850,300	$2,365,749	112,208	***$21.08***	$484,551	55,126	***$8.79***
2025	$2,730,000	$122,850	$2,852,850	$2,367,866	112,730	***$21.00***	$484,985	55,801	***$8.69***
TOTAL	***$28,230,000***	***$10,401,210***	***$38,631,210***			***$292.95***			***$127.27***
					Discount Rate	***4.00%***		Discount Rate	***4.00%***
					Net Present Value	***$220.16***		Net Present Value	***$96.10***

STREET FACILITIES

OVERVIEW

ARS 9-463.05 (T)(7)(f) defines the facilities and assets which can be included in the Street Facilities IIP:

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

The Street Facilities IIP includes components for arterial street improvement, arterial intersection improvements, and the cost of preparing the Street Facilities IIP and development fees. The plan-based methodology utilizing the City's *Capital Improvement Program, Fiscal Year 2012-2022* is used to calculate the Street Facilities IIP.

SERVICE AREA

The "Guiding Policy" section of the City's *Major Roadways Plan* states the objective to "develop and maintain a transportation network that provides reasonable and efficient access throughout the community and supports existing and expanding economic activities." The Street Facilities IIP includes improvements to arterial streets and intersections. The *Major Roadways Plan* describes arterial streets as "carrying trips of longer length and distribute traffic to the greatest geographic area".

Since only arterials streets are included in the Streets IIP and Development Fees and given these characteristics of how the City plans and designs its arterial street network, the service area for the Street Facilities IIP is Citywide.

PROPORTIONATE SHARE

ARS 9-463.05 (B)(3) states that the development fee shall not exceed a proportionate share of the cost of necessary public services needed to provide necessary public services to the development.

Trip generation rates and trip adjustment factors, from *Trip Generation* published by the Institute of Transportation Engineers, are used to determine the proportionate impact of residential, commercial, office, and industrial land uses on the City's streets network.

IIP FOR STREET FACILITIES

For each necessary public service that is the subject of a development fee, ARS 9-463.05(E) requires the IIP to include seven elements. This section details each of these seven elements for the Street Facilities IIP.

IIP Element #1

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."*

The City's *FY2012-FY2022 Capital Improvements Program* identifies a total of $149,194,455 of capital needs for Streets. Of this total, $5,992,170 is the result of new development and included in the IIP and development fee calculations. The balance of these projects reflect the costs to upgrade, improve, expand, correct or replace street facilities to meet existing needs and usage and stricter safety, efficiency, environmental or regulatory standards.

Figure 49: IIP Element #1

	10 Year TOTAL
Total Transportation Capital Needs	***$149,194,455***
New Development Share	***$5,992,170***
Balance[1]	***$143,202,285***

Source: City of Yuma, Capital Improvement Program, Fiscal Years 2012 - 2021.

1. Reflects 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.

IIP Element #2

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."*

The City's current arterial network operates at a LOS D or better on an average weekday basis. Using the current number of 249.5 arterial lane miles in the City, current residential and nonresidential development estimates from the Land Use Assumptions, and vehicle trip generation rates from *Trip Generation*, it is possible to calculate the current average miles per trip on the City's arterial street network. The current average miles per trip from existing development on the City's existing arterial street network is 6.12 miles. The current LOS D and current average trip length will be used in calculating the Street Facilities IIP and development fees.

Figure 50: IIP Element #2

INPUT VARIABLES

Vehicle Trip Rates (Ave. Weekday)[1]	
Single Family (per unit)	9.57
Multi-Family (per unit)	6.65
All Other Housing (per unit)	4.99
Commercial (per 1,000 sf)	67.91
Office/Inst (per 1,000 sf)	18.35
Industrial Flex (per 1,000 sf)	6.97
Trip Rate Adjustment Factors	
Residential Development[3]	57%
Commercial Development	21%
All Other Nonresidential Development	50%
Trip Length Adjustment Factors[4]	
Residential Development	122%
Commercial Development	68%
All Other Nonresidential Development	75%
Street Information	
Arterial Capacity @ LOS D (Vehicles Per Lane Mile)	8,100
Current Number Arterial Lane Miles in City[5]	249.5
Avg Miles/Trip on Arterials	***6.12***

ARTERIAL STREETS CAPACITY ANALYSIS

Year->	Base
Yuma, Arizona	2011
DEMAND DATA[2]	
Single Family Units	20,395
Multi-family Units	7,400
All Other Housing Units	11,107
Commercial SF (1,000's)	6,395
Office/Inst SF (1,000's)	7,034
Industrial Flex SF (1,000's)	4,302
Single Family Trips	111,260
Multi-family Trips	28,050
All Other Housing Trips	31,592
Commercial Trips	91,204
Office/Inst Trips	64,534
Industrial Flex Trips	14,992
TOTAL TRIPS	341,633
CITY ARTERIAL VMT	2,020,608
CITY ARTERIAL LANE MILES	**249.5**

1. Institute of Transportation Engineers (ITE), *Trip Generation*, 2008.
2. Land Use Assumptions document.
3. U.S.Census Bureau, Longitudinal Employer-Household Dynamics,
4. Federal Highway Administration, *National Household Travel Survey*, 2001.
5. City of Yuma, City Engineering Department.

IIP Element #3

ARS 9-463.05(E)(3) requires:

> *"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."*

Based on vehicle trips from new development over the next fifteen years (see *Land Use Assumptions* document), the City's Engineering Department growth share estimates, for the portion of the planned arterial street improvements that are necessitated and attributable to new development, are shown in Figure 51. The total number of lane miles and costs necessitated and attributable to new development

is 43.9 lane miles and $4,249,070. Note: The portions of the planned expenditures, which are to be funded with state or Federal revenues, are not included in the IIP calculations.

Based on the current LOS D, the arterial capacity standard of 8,100 vehicles per lane mile is multiplied by the planned 43.9 lane miles of planned arterial improvements attributable to new development. This results in 355,282 vehicle miles of travel (VMT) from new development to be accommodated by the planned arterial improvements (8,100 vehicles per lane mile x 43.9 lane miles = 355,282 vehicle miles of travel). The cost of the portion of the planned arterial improvements attributable to new development ($4,249,070) is divided by vehicle miles of travel from new development (355,282), yielding a cost per VMT of $11.95.

Figure 51: IIP Element #3 – Arterial Street Improvements

Project[1]	*Lane Miles*	*10 Year Cost to the City*[2]	*% Attributable to New Development*[3]	*Lane Miles*	*10 Year Cost Funded by Development Fees*
Yuma Expressway - ASH to I-8	74.0	$555,000	***55%***	***40.4***	***$303,030***
28th Street Constr. - Ave. B to Ave. C	1.3	$1,280,000	***20%***	***0.3***	***$256,000***
28th Street Constr. - Ave. C to Ave. C 1/2	1.0	$1,201,000	***56%***	***0.6***	***$672,560***
24th Street - North Frontage Road Widening	9.0	$2,918,000	***20%***	***1.8***	***$583,600***
Giss Parkway - 4th Avenue to I-8	0.3	$350,000	***20%***	***0.1***	***$70,000***
16th St & 4th Ave Intersection Improvements	0.9	$5,123,000	***20%***	***0.2***	***$1,024,600***
Arizona Avenue - 32nd to 40th Street	3.0	$6,696,400	***20%***	***0.6***	***$1,339,280***
TOTAL	***89.5***	***$18,123,400***		***43.9***	***$4,249,070***

10 Year Arterial Costs from New Development	***$4,249,070***
Lane Miles	43.9
Arterial Capacity (Vehicles per Lane per Day)	8,100
Vehicle Miles of Travel from New Development	***355,282***
Cost per VMT	***$11.95***

1. City of Yuma, FY2012-FY2022 Capital Improvements Plan.
2. Revenues from the Federal and State governments have been netted out to determine the cost to the City.
3. City Engineering Department based on projected vehicle trips for next 15 years from *Land Use Assumptions*.

City Engineering Department growth share estimates, for the portion of the planned arterial intersection improvements that are necessitated and attributable to new development, are shown in Figure 52. The total cost necessitated and attributable to new development is $1,743,100. Note: The portions of the planned expenditures, which are to be funded with state or Federal revenues, are not included in the IIP calculations.

Based on the current LOS D, the arterial capacity standard of 8,100 vehicles per lane mile is multiplied by the planned 43.9 lane miles of planned arterial improvements attributable to new development. This results in 355,282 vehicle miles of travel (VMT) from new development to be accommodated by the planned arterial improvements (8,100 vehicles per lane mile x 43.9 lane miles = 355,282 vehicle miles of

travel). The cost of the portion of the planned arterial intersection improvements attributable to new development ($1,743,100), divided by vehicle miles of travel from new development (355,282), yields a cost of $4.90 per VMT.

Figure 52: IIP Element #3 – Arterial Intersection Improvements

Project[1]	*10 Year Cost to the City*[2]	*% Attributable to New Development*[3]	*10 Year Cost Funded by Development Fees*
16th St & 4th Ave	$4,120,000	***20%***	***$824,000***
Ave C & 18th St traffic Signal	$175,000	***20%***	***$35,000***
20th St & 45th Ave Turn Signal	$370,700	***20%***	***$74,140***
32nd St & Ave 7E intersection	$129,100	***20%***	***$25,820***
32nd St & Ave 8E intersection	$129,100	***20%***	***$25,820***
4th Ave & Big Curve Turnlane	$110,700	***20%***	***$22,140***
32 St & Pacific Ave Improvements	$930,000	***20%***	***$186,000***
24th St & Arizona Ave turnlanes	$416,400	***20%***	***$83,280***
16th St & Pacific Ave turnlanes	$310,950	***20%***	***$62,190***
24th St & 1st Ave turnlanes	$660,700	***20%***	***$132,140***
32nd St & Ave 5E Turnlanes	$233,200	***20%***	***$46,640***
4th Ave & 8th St turnlanes	$310,950	***20%***	***$62,190***
Ave B & 16th St turnlanes	$818,700	***20%***	***$163,740***
TOTAL	***$8,715,500***		***$1,743,100***

10 Year Arterial Intersection Costs from New Development	***$1,743,100***
Lane Miles	*43.9*
Arterial Capacity (Vehicles per Lane per Day)	*8,100*
Vehicle Miles of Travel from New Development	***355,282***
Cost per VMT	***$4.90***

1. City of Yuma, FY2012-FY2022 Capital Improvements Plan.
2. Revenues from the Federal and State governments have been netted out.
3. City Engineering Department based on projected vehicle trips for next 15 years from *Land Use Assumptions*.

The cost to prepare the Streets Facilities IIP and development fees totals $30,750. The City 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, the cost per trip is $1.93.

Figure 53: IIP Element #3 – IIP and Development Fee Report

Necessary Public Service	*Cost*	*Assessed Against*	*Proportionate Share*	*Demand Units*				*Cost per Demand Unit*
				Units	*FY2012*	*FY2017*	*Change*	
Parks and Recreational Facilities	$12,300	Residential	100%	Population	106,146	108,628	2,482	$4.96
Police Facilities	$15,375	Residential	53%	Population	106,146	108,628	2,482	$3.28
		Nonresidential	47%	Nonres Trips	170,731	182,397	11,666	$0.62
Fire Facilities	$15,375	Residential	75%	Population	106,146	108,628	2,482	$4.67
		Nonresidential	25%	Jobs	47,632	50,622	2,990	$1.27
General Government Facilities	$8,200	Residential	83%	Population	106,146	108,628	2,482	$2.74
		Nonresidential	17%	Jobs	47,632	50,622	2,990	$0.47
Street Facilities	***$30,750***	Res. and Nonres.	***100%***	Trips	341,633	357,536	***15,903***	***$1.93***
TOTAL	***$82,000***							

IIP Element #4

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."*

Adjusted vehicle trips multiplied by the adjusted average trip length yield vehicle miles of travel. VMT divided by the average lane capacity, results in lane miles of arterial improvements needed per residential and nonresidential service unit. To determine the ratio of a service unit to various types of land uses, the number of units of infrastructure needed by type of development is divided by the number of units of infrastructure needed to serve a single family house. For analytical purposes, this provides a basis for comparing the infrastructure needs of all land use categories and types to a single family house. However, it should be noted, this does not assume that the impacts of commercial, industrial, and residential land uses are the same. This again, is simply an analytical technique used to provide a common unit of measure.

Using the street facility needs of a multi-family unit as an example, the number of vehicle trips (3.76) multiplied by the average trip length (6.12 miles) and the residential trip length adjustment factor of 122% (1.22) results in 28 vehicle miles of travel per multi-family unit on an average weekday. The 28 vehicle miles of travel per multi-family unit divided by the average land capacity figure of 8,100 vehicles per day results in 0.0035 lane miles per multi-family unit. This figure divided by the number of lane miles needed to serve a single-family housing unit (0.0050 lane miles) results in a ratio of 0.69. This can be read as a multi-family unit having 69% of the needs of a single family unit. This calculation is repeated for all types of development and each component of the IIP.

Figure 54: IIP Element #4

RESIDENTIAL DEVELOPMENT

Type	*Service Unit*	# of Trip Ends (a)[1]	*Trip Adjustment Factor (b)[1]*	***Vehicle Trips (c) = a x b***
Single Family	Housing Unit	9.57	57%	***5.46***
Multi-family	Housing Unit	6.59	57%	***3.76***
All Other Types	Housing Unit	4.99	57%	***2.84***

NONRESIDENTIAL DEVELOPMENT

Type	*Service Unit*	# of Trip Ends (a)[1]	*Trip Adjustment Factor (b)[1]*	***Vehicle Trips (c) = a x b***
Average Size Commercial	Sq Ft of Bldg	0.0429	26%	***0.0112***
Average Size Office	Sq Ft of Bldg	0.0110	50%	***0.0055***
Light Industrial	Sq Ft of Bldg	0.0070	50%	***0.0035***
Warehousing	Sq Ft of Bldg	0.0050	50%	***0.0025***
Manufacturing	Sq Ft of Bldg	0.0038	50%	***0.0019***
Hotel	Room	5.63	50%	***2.82***

RESIDENTIAL DEVELOPMENT

Type	*Average Trip Length on Arterial Network (d)[1]*	*Trip Length Adjustment Factor (e)[1]*	*VMT (f) = c x d x e*	*Lane Capacity (g)[1]*	*Arterial Lane Miles (h) = f/g*	*Ratio to 1 Single Family Unit*
Single Family	6.12	122%	41	8,100	***0.005028***	***1.0000***
Multi-family	6.12	122%	28	8,100	***0.003463***	***0.6886***
All Other Types	6.12	122%	21	8,100	***0.002622***	***0.5214***

NONRESIDENTIAL DEVELOPMENT

Type	*Average Trip Length on Arterial Network (d)[1]*	*Trip Length Adjustment Factor (e)[1]*	*VMT (f) = c x d x e*	*Lane Capacity (g)[1]*	*Arterial Lane Miles (h) = f/g*	*Ratio to 1 Single Family Unit*
Average Size Commercial	6.12	68%	0.0464	8,100	***0.000006***	***0.0011***
Average Size Office	6.12	75%	0.0252	8,100	***0.000003***	***0.0006***
Light Industrial	6.12	75%	0.0160	8,100	***0.000002***	***0.0004***
Warehousing	6.12	75%	0.0114	8,100	***0.000001***	***0.0003***
Manufacturing	6.12	75%	0.0088	8,100	***0.000001***	***0.0002***
Hotel	6.12	75%	13	8,100	***0.001595***	***0.3172***

RESIDENTIAL DEVELOPMENT

Type	*IIP and Dev Fee Study Cost per Trip[2]*	*Cost per Service Unit*	*Ratio to 1 Single Family Unit*
Single Family	$1.93	***$10.548***	***1.0000***
Multi-family	$1.93	***$7.264***	***0.6886***
All Other Types	$1.93	***$5.500***	***0.5214***

NONRESIDENTIAL DEVELOPMENT

Type	*IIP and Dev Fee Study Cost per Trip[2]*	*Cost per Service Unit*	*Ratio to 1 Single Family Unit*
Average Size Commercial	$1.93	***$0.022***	***0.0020***
Average Size Office	$1.93	***$0.011***	***0.0010***
Light Industrial	$1.93	***$0.007***	***0.0006***
Warehousing	$1.93	***$0.005***	***0.0005***
Manufacturing	$1.93	***$0.004***	***0.0003***
Hotel	$1.93	***$5.433***	***0.5151***

1. Taken from Figure 50.
2. Taken from Figure 53.

IIP Elements #5 and #6

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."*

The Land Use Assumptions projects an additional 1,989 housing units and 2,509,247 square feet of nonresidential buildings over the next ten years. Projected service units are multiplied by the current levels-of-service, indicating new development demands an additional 43.9 lane miles of arterial streets over the next ten years.

Figure 55: IIP Elements #5 and #6

		Projected Service Units Necessitated by New Development in Service Area[1]			*Projected Demand Units Necessitated by New Development in Service Area*[1]			*Projected Demand for Necessary Public Services or Facility Expansion*[2]	
	Type of Development	*Residential*	*Nonresidential*	*Type of Development*	*Residential*	*Nonresidential*	*Necessary Public Service*	*Arterial Streets*
	Service Units	Housing Unit	Sq Ft of Building	*Demand Units*	Vehicle Trips	Vehicle Trips	*Unit of Measure*	Lane Miles
Projection Year	*Fiscal Year*							
1	***2012***	***195***	***237,402***		***839***	***2,277***		***4.39***
2	***2013***	***195***	***240,310***		***843***	***2,305***		***4.39***
3	***2014***	***196***	***243,254***		***847***	***2,333***		***4.39***
4	***2015***	***197***	***246,233***		***852***	***2,361***		***4.39***
5	***2016***	***198***	***249,249***		***856***	***2,390***		***4.39***
6	***2017***	***199***	***252,303***		***860***	***2,420***		***4.39***
7	***2018***	***200***	***255,393***		***864***	***2,449***		***4.39***
8	***2019***	***201***	***258,521***		***869***	***2,479***		***4.39***
9	***2020***	***202***	***261,688***		***873***	***2,510***		***4.39***
10	***2021***	***203***	***264,894***		***877***	***2,540***		***4.39***
	10 YEAR TOTAL	***1,989***	***2,509,247***	***10 YEAR TOTAL***	***8,580***	***24,064***	***10 YEAR TOTAL***	***43.9***

1. Land Use Assumptions Document.
2. Taken from Figure 50.
3. Taken from Figure 53.

IIP Element #7

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."*

TischlerBise has projected on-going and one-time revenues based on the development projections in the Land Use Assumptions document, characteristics of new development, and the City's current revenue structure and rates.

The revenues included in this analysis and the applicable rates and calculation methodologies are shown in the figure below.

Figure 56: Revenue Assumptions, Rates, Calculation Methodologies

Revenue Source	*Current Rate/ Formula*	*Applicability*
Property Tax	$1.5757 per $100 assessed value, 20% assessment ratio for nonresidential development, 10% assessment ratio for residential development	All development
Sales Tax	1.0% General Fund	Commercial development
	0.2% Public Safety Fund	
	0.5% Road Fund	
Construction Sales Tax	1.0% of 65% of market value - General Fund	All development
	0.2% of 65% of market value - Public Safety Fund	
	0.5% of 65% of market value - Road Fund	
State Shared Revenues[1]	2010 actual collections/2010 peak population = state shared rev/capita[2]	Residential development
State Grant Revenues[1]	Average of 10 years historic collections (CPI adjusted to 2010)/10 year peak population estimates = state grant rev/capita[2]	Residential development
Federal Grant Revenues[1]	Average of 10 years historic collections (CPI adjusted to 2010)/10 year peak population estimates = federal grant rev/capita[2]	Residential development

1. Includes Sales Tax, Revenue Sharing, Auto-in-Lieu, HURF. LTAF is not included since state now keeps these revenues and does not remit to the City.
2. TischlerBise calculation methodology.

The figure below lists the revenue characteristics of new development that is used to forecast revenues.

Figure 57: Revenue Characteristics of New Development

Residential Development	*Market Value per Unit*[1]	*Assessed Value per Unit (10% assessment ratio)*	*Construction Value per Unit for Construction Sales Tax Calculations*[2]	*Annual Retail Sales Generated per Unit for Sales Tax Calculations*[3]	*State Shared Revenue per Unit (revenues per capita x persons per household)*[4]	*State Grant Revenue per Unit (revenues per capita x persons per household)*[4]	*Federal Grant Revenue per Unit (revenues per capita x persons per household)*[4]
Single Family	$154,000	$15,400	$100,100	N/A	$742	$244	$183
Multi-family	$47,000	$4,700	$30,550	N/A	$585	$192	$144
All Other Types of Housing	$116,000	$11,600	$75,400	N/A	$449	$147	$111

Nonresidential Development	*Market Value per Square Foot of Building*[1]	*Assessed Value per SF (20% assessment ratio)*	*Construction Value per Square Foot for Construction Sales Tax Calculations*[2]	*Annual Retail Sales Generated per Square Foot for Sales Tax Calculations*[3]	*State Shared Revenue per Square Foot*	*State Grant Revenue per Square Foot*	*Federal Grant Revenue per Square Foot*
Commercial	$241	$48	$157	$425	N/A	N/A	N/A
Office/Institutional	$103	$21	$67	N/A	N/A	N/A	N/A
Industrial/Flex	$65	$13	$42	N/A	N/A	N/A	N/A

1. Examples of recent construction in City of Yuma from zillow.com, trulia.com, loopnet.com, pancrazirealestate.com.
2. 65% of market/assessed value.
3. Average based on data taken from annual reports from Wal-Mart, Safeway, Albertsons, and Target.
4. TischlerBise methodology and calcuation.

TischlerBise's forecast of revenues for the next ten years is shown in the figure below based on the development projections from the Land Use Assumptions, revenue assumptions and rates, and revenue characteristics of new development.

Figure 58: IIP Element #7

Fiscal Year	*Property Taxes*[1]	*Transaction Privledge Tax-Retail Sales*[1]			*Transaction Privledge Tax-Construction*[2]			*State-Shared Revenues*[3]	*State Grant Revenues*[3]	*Federal Grant Revenues*[3]	*TOTAL*
		General Fund	*Public Safety*	*Roads*	*General Fund*	*Public Safety*	*Roads*				
2011	$13,895	$332,937	$166,469	$66,587	$57,211	$11,442	$28,605	$145,889	$37,001	$11,889	***$871,926***
2012	$27,936	$669,953	$334,976	$133,991	$57,811	$11,562	$28,906	$146,618	$37,186	$11,948	***$1,460,887***
2013	$42,125	$1,011,097	$505,548	$202,219	$58,418	$11,684	$29,209	$147,351	$37,372	$12,008	***$2,057,031***
2014	$56,462	$1,356,419	$678,210	$271,284	$59,032	$11,806	$29,516	$148,088	$37,559	$12,068	***$2,660,445***
2015	$70,951	$1,705,971	$852,986	$341,194	$59,654	$11,931	$29,827	$148,828	$37,747	$12,129	***$3,271,217***
2016	$85,592	$2,059,806	$1,029,903	$411,961	$60,282	$12,056	$30,141	$149,572	$37,935	$12,189	***$3,889,437***
2017	$100,387	$2,417,974	$1,208,987	$483,595	$60,917	$12,183	$30,459	$150,320	$38,125	$12,250	***$4,515,198***
2018	$115,339	$2,780,530	$1,390,265	$556,106	$61,560	$12,312	$30,780	$151,072	$38,316	$12,311	***$5,148,590***
2019	$130,448	$3,147,527	$1,573,763	$629,505	$62,210	$12,442	$31,105	$151,827	$38,507	$12,373	***$5,789,707***
2020	$145,717	$3,519,019	$1,759,509	$703,804	$62,867	$12,573	$31,434	$152,586	$38,700	$12,435	***$6,438,644***
2021	$161,147	$3,895,062	$1,947,531	$779,012	$63,532	$12,706	$31,766	$153,349	$38,893	$12,497	***$7,095,497***
TOTAL	***$949,999***	***$22,896,294***	***$11,448,147***	***$4,579,259***	***$663,494***	***$132,699***	***$331,747***	***$1,645,501***	***$417,340***	***$134,098***	***$43,198,578***

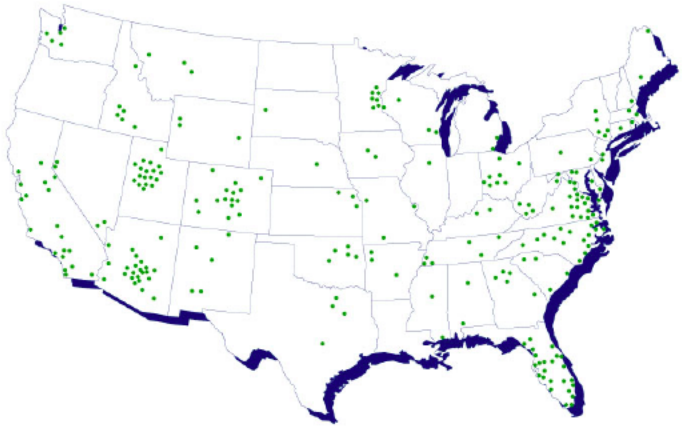
1. This is an on-going revenue source as illustrated by the cumulative increase over the projection period.
2. This is a one-time revenue source realized at the time of construction.
3. These revenues are considered one-time given the irregularity and uncertainty of the City receiving these funds.

Note: the above figure should not be interpreted as the total fiscal impact of new development as there is no forecast of on-going and one-time costs resulting from new development.

As previously noted, the portion of the planned costs to be funded with state and Federal funds has not been included in the IIP calculations. Thus, further credit for these revenues is not necessary. The planned street facilities improvements necessitated by new development from the City's *FY 2012- FY 2022 Capital Improvements Plan* are expected to be funded with development fees and are not anticipated to be funded from any of these revenue sources listed above. The Road Sales Tax revenues will be used to fund existing development's share of planned projects plus repair and maintenance projects which cannot be funded with development fees. Thus, these contributions from new development are not used in the IIP in determining the extent of the burden imposed by new development.

APPENDIX B – TISCHLERBISE EXPERIENCE

TischlerBise is a fiscal, economic, and planning consulting firm. Our qualified professionals specialize in impact fees, fiscal impact analysis, capital improvement planning, cost allocation plans, user fees, utility rate studies, and financial planning. Our firm has been providing consulting services to public agencies for over thirty years. In this time, we have prepared over 800 impact fee evaluations – more than any other firm. Through our detailed approach, proven methodology, and comprehensive product, TischlerBise has established itself as a national expert on impact fees, revenue enhancement and cost of growth strategies. The map below illustrates the broad geographic diversity of our client base.



Below is a summary of our development fee experience in the state of Arizona. Note: TischlerBise has had multiple engagements with many of these communities.

CLIENT	Feasibility Analysis	Roads/Transportation	Sewer	Water	Stormwater	Solid Waste	Law Enforcement	Fire/EMS	Parks and Recreation	Trails/Open Space	Libraries	General Government	Schools
Apache Co.	◆												
Apache Junction		◆					◆	◆	◆		◆	◆	
Avondale		◆	◆	◆			◆	◆	◆		◆	◆	
Buckeye		◆	◆	◆			◆		◆		◆	◆	
Bullhead City		◆					◆		◆			◆	
Casa Grande		◆					◆	◆				◆	
Camp Verde	◆						◆		◆		◆	◆	
Carefree	◆	◆		◆						◆		◆	

CLIENT	Feasibility Analysis	Roads/Transportation	Sewer	Water	Stormwater	Solid Waste	Law Enforcement	Fire/EMS	Parks and Recreation	Trails/Open Space	Libraries	General Government	Schools
Casa Grande		◆	◆				◆	◆	◆		◆	◆	
Cave Creek		◆	◆	◆					◆	◆		◆	
Cochise Co.	◆												
Coolidge		◆	◆			◆	◆	◆	◆			◆	
El Mirage			◆	◆			◆	◆	◆			◆	
Eloy			◆	◆			◆		◆		◆	◆	
Flagstaff	◆	◆					◆	◆	◆		◆	◆	
Fort Mojave Mesa Fire Dept.								◆					
Glendale			◆	◆	◆		◆	◆	◆		◆	◆	
Lake Havasu City		◆											
Maricopa (City)	◆	◆					◆	◆	◆	◆	◆	◆	
Maricopa County		◆					◆		◆				
Navajo Co.	◆	◆						◆					
Northwest Fire District								◆					
Peoria	◆	◆					◆	◆	◆	◆	◆	◆	
Pinal Co.	◆	◆					◆		◆				
Pinetop-Lakeside		◆					◆		◆	◆		◆	
Prescott	◆												
Queen Creek		◆	◆	◆			◆	◆		◆	◆	◆	
Scottsdale			◆	◆									
Sedona		◆			◆		◆		◆			◆	
Show Low	◆	◆	◆	◆			◆		◆		◆		
Sierra Vista		◆					◆	◆	◆	◆	◆		
Springerville	◆		◆	◆									
Surprise		◆	◆	◆			◆	◆	◆		◆	◆	
Taylor	◆	◆					◆	◆	◆			◆	
Tolleson	◆	◆	◆	◆	◆		◆	◆				◆	
Yuma		◆	◆		◆		◆	◆	◆	◆		◆	