

**INFRASTRUCTURE
IMPROVEMENTS PLAN AND
DEVELOPMENT FEE
STUDY**

**FOR THE
CITY OF BISBEE, ARIZONA**

**ADMINISTRATIVE DRAFT
JULY 2009**

FIRE PROTECTION AND EMERGENCY MEDICAL ♦ GENERAL GOVERNMENT ♦ LIBRARIES ♦ PARKS ♦

POLICE ♦ TECHNOLOGY IMPROVEMENTS ♦ TRANSPORTATION ♦ WASTEWATER

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1. SUMMARY

This report presents an analysis of the need for public facilities to accommodate new development in the City of Bisbee. The analysis documents the development fee that could be imposed on new development in the following facility categories:

- Fire Protection and Emergency Medical
- General Government
- Libraries
- Parks
- Police
- Technology Improvements
- Transportation (Airport and Roadways)
- Wastewater

BACKGROUND AND STUDY OBJECTIVES

The City of Bisbee, as outlined in its 5-year Capital Improvement Plan, intends to establish Development Fees to be levied upon new dwelling units and non-residential development to offset the capital costs of providing necessary public services to new development. The City will rely on its authority to levy development fees pursuant to Arizona Revised Statutes §9-463.05. This report provides the necessary documentation for the adoption of a development fee program. It serves both as the Infrastructure Improvements Plan and the Development Fee Report. Based on estimated growth and typical standards, this report identifies the infrastructure needs of the City, the net cost of the capital improvements, and the proportional amount of the cost to be allocated to new development. The development fee is then calculated based upon the cost and the relative demand between different land uses.

POPULATION PROJECTIONS

The report is based on projected growth within Bisbee as summarized in Table 1.1.

Table 1.1 Forecast Growth

	2008 Base Year	2030	Total Growth
Population	6,389	8,483	2,094
Housing Units	3,472	4,610	1,138
Jobs - Private/Public	3,292	4,371	1,079
Ratio of Jobs/population	0.52	0.52	0.52
Other	458	608	150
Government/Institutional jobs	1,338	1,777	439
Commercial jobs	1,273	1,690	417
Industrial jobs	223	296	73
Total	3,292	4,371	1,079

SUMMARY

To estimate non-residential development, the study assumes the population-to-job ratio remains constant over the planning horizon. Jobs are then converted to estimated non-residential building square feet described in further detail in the body of this report.

INFRASTRUCTURE IMPROVEMENTS PLAN AND FEE SCHEDULE

Table 1.2 summarizes the costs related to the Infrastructure Improvements Plan.

Table 1.2 Infrastructure Improvements Plan

	Total Funding Requirements	Other Funding Required	Projected Development Fee Revenue
Fire Protection and Emergency Medical	\$ 3,096,200	\$ 1,083,700	\$ 2,012,500
General Government	\$ 251,000	\$ 51,400	\$ 199,600
Library	\$ 1,025,800	\$ -	\$ 1,025,800
Parks	\$ 459,200	\$ -	\$ 459,200
Police	\$ 879,000	\$ 209,400	\$ 669,600
Technology Improvements	\$ 823,000	\$ 619,700	\$ 203,300
Transportation			
Airports	\$ 500,000	\$ 463,600	\$ 36,400
Roads	\$ 5,299,200	\$ 3,955,200	\$ 1,344,000
Wastewater	\$ 10,000,000	\$ 8,736,754	\$ 1,263,246
Total	\$ 22,333,400	\$ 15,119,754	\$ 7,213,646

Rounded to nearest \$100.

For Transportation (Roadways) and Wastewater, additional funding sources are included and/or anticipated as detailed in each chapter.

The "Other Funding Required" column identifies the additional funding that the City needs to obtain for the facilities shown to cover the City's share related to existing (or other) development. Approximately 1/3rd of the necessary funding may come from Development Fees.

Table 1.3 provides a summary of the proposed fee schedule based on the Infrastructure Improvements Plan. The fee shall be charged to all new development within the City to fund the infrastructure required to provide City services to new development.

Table 1.3 Fee Schedule

	Fire	General Govt	Library	Parks	Police	TI	Transportation			TOTAL
							Airports	Roads	WW	
Residential (per dwelling unit)										
Single Family	\$ 1,722	\$ 184	\$ 944	\$ 422	\$ 616	\$ 187	\$ 34	\$ 644	\$ 1,038	\$ 5,791
Multi-Family	\$ 1,199	\$ 128	\$ 657	\$ 294	\$ 429	\$ 130	\$ 23	\$ 451	\$ 723	\$ 4,034
Non-Residential (per 1,000 sf)										
Commercial	\$ 1,370	\$ 95	\$ 421	\$ 219	\$ 319	\$ 97	\$ 17	\$ 2,892	\$ 467	\$ 5,897
Industrial	\$ 223	\$ 15	\$ 68	\$ 36	\$ 52	\$ 16	\$ 3	\$ 470	\$ 322	\$ 1,205
Institutional/Government	\$ 2,199	\$ 153	\$ 675	\$ 351	\$ 512	\$ 155	\$ 28	\$ 1,880	\$ 540	\$ 6,493
Lodging (per room)	\$ 261	\$ 18	\$ 80	\$ 42	\$ 61	\$ 18	\$ 3	\$ 547	\$ 581	\$ 1,611

TI - Technology Improvements

WW - Wastewater facilities

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ORGANIZATION OF THE REPORT

Chapter 2 presents the population and employment assumptions used for the development fee analysis. Chapters 3 through 10 provide the documentation for establishing a development fee for each of the following services:

- Fire Protection and Emergency Medical
- General Government
- Libraries
- Parks
- Police
- Technology Improvements
- Transportation (Airport and Roadways)
- Wastewater

Future development will have a significant impact on the City's ability to provide services. The development fee will be used to fund infrastructure to accommodate development, facilitating the expansion of services, and alleviating some of the impacts associated with future development. The facilities were identified based on the quantity of existing and future deficiencies and the fair share of those costs allocated between existing and future development. Each chapter is generally organized using the following sections to identify the *demand* for new facilities, the *benefit* of the facilities upon new development and the *proportionality* of the proposed fees between development types to meet the legal standards required for development fees. In addition, future revenues are considered as a credit against the fee to ensure that a development project is not charged twice for the same facility.

- The *Introduction* identifies the City's current investment in facilities.
- The *Infrastructure Improvements Plan* section identifies the infrastructure necessary to provide services to future development based on typical standards, the City's CIP, the current level of service, or planned facilities identified by staff, thereby establishing a reasonable relationship between growth and the need for the facility. The section also identifies the estimated costs for such capital improvements and the proportionate share of costs related to new development. The development fee is then based on this, thereby establishing a reasonable relationship between future development and the fee amount.
- The *Development Fee Methodology* section outlines the fee approach and the steps necessary to determine the development fee. The four basic approaches considered in this report are 1) *Incremental Expansion*, 2) *Master Plan*, 3) *Modified Master Plan* and 4) *Excess Capacity* and are discussed in more detail later in this chapter. These approaches ensure that new development pays only its fair share of the facilities identified in the Infrastructure Improvements Plan.

SUMMARY

- The *Development Fee Calculation* section identifies the relative demand for services between land uses, typically between residential and non-residential land uses. The demand is measured by three methods: 1) Service call ratios for Fire and EMS services; 2) Generation rates for Wastewater and Roadways; and 3) Person Demand Hours for all other categories. A fee per capita, dwelling unit equivalent or average daily trip (as a measure of relative demand for non-residential land uses) is calculated.
- The *Fee Schedule* section uses, for example, the fee per capita to determine a typical fee per housing type or average daily traffic to determine a fee per 1,000 square feet for non-residential development. The fee schedule establishes a reasonable relationship between the amount of the fee and the cost of the facility attributable to development paying the fee. Using a common factor, such as, facility costs per capita, the schedule ensures that each development project pays its fair share of total facility costs.

The final chapter of the report, Chapter 11, provides a summary of fee implementation procedures and recommendations for the ongoing administration of the fee. The recommendations are provided to ensure compliance with Arizona Revised Statutes, and to ensure that fees are updated in the future for facility cost inflation.

STANDARDS AND FAIR SHARE OF COSTS

By policy, the City can adopt its own reasonable standard to reduce, maintain, or increase the current standard. However, basing a development fee on a standard that is higher than the existing standard is only fair to new development if the City uses alternative funds to expand existing facilities to the same standard for existing development. This extra funding is needed to correct the "existing deficiency". Each chapter identifies the staffing requirements and/or facility needs based on an identified standard, national or other, that is typically measured in staffing, facility square feet, or acreage per 1,000 residents and compares that to the current standard. These standards are then used to determine the infrastructure improvements needed.

Use of these standards is not meant to label them as City policy; they are a means to determine the facility needs based on planning level standards. These are then used to establish a fair-share of facility cost for new development through an appropriate allocation of existing and planned facilities.

Once the infrastructure improvements are identified, the report applies one of the following four approaches to determine a fair share of costs to allocate between existing and future development.

- Under existing (or incremental expansion) method, new development funds the expansion of facilities to accommodate added staff at the same level currently serving existing development. By definition then, this approach results in no facility deficiencies attributable to existing development and 100% of the costs identified in the Infrastructure Improvements Plan are allocable to future development. This method is used for General Government Vehicles and Equipment, Library Services, Park Services, and Police Equipment and Vehicles.
- Under the master plan method, new development funds the expansion of facilities to accommodate added staff at a higher level than currently serving existing development. Use of this approach requires expanding facilities for the existing service population to the same level. This method typically results in "existing deficiencies that must be funded outside of the development fee program. The Infrastructure

Improvements Plan identifies the cost of facility expansion and the fair share of costs to allocate between current and growth populations. The master plan method is used for General Government facilities, Fire/Emergency Medical Services and Police facilities because the City has identified via staff and/or its CIP the need to expand facilities and such expansion will likely improve the network of services for existing and future development.

- Under the modified master plan method, a variation on the Master Plan method, the facilities identified in the Infrastructure Improvements Plan are needed to accommodate growth but will also be part of a system that benefits existing development. This method typically results in “existing deficiencies that must be funded outside of the development fee program. The modified master plan method is used for Technology Improvements and Transportation Services. This is different than the above approach in that the current inventory is not considered when allocating costs between existing and future development.
- Under the excess capacity method, a variation on the Master Plan method, the facilities identified have been constructed but were sized to accommodate the needs of the existing development as well as having sufficient capacity to serve future development. Fees are collected from new development to reimburse the City, or ratepayers, its costs for having constructed a facility which has excess capacity sufficient to serve new development. The excess capacity method is used for Wastewater Services in combination with a Modified Master Plan Approach.

LAND USE ASSUMPTIONS AND POPULATION PROJECTIONS

2. LAND USE ASSUMPTIONS AND POPULATION PROJECTIONS

INTRODUCTION

This chapter explains how development projections are used to calculate development fees, and summarizes estimates of existing development and projections of growth used throughout this study.

POPULATION AND EMPLOYMENT ESTIMATES

Estimates of existing development and projections of growth are critical assumptions used throughout this report. Current and forecast residential population data within the City are based on estimates prepared by the Arizona Department of Commerce.

Jobs within the City are currently estimated at 3,292 based on figures prepared by the Arizona Department of Commerce under Local Area Unemployment Statistics. Forecast job estimates are based on maintaining a constant jobs-to-population ratio throughout the planning horizon. Jobs are then converted to estimated non-residential building square feet based on 2008 percentage of jobs by category and typical occupant densities (employees per square foot).

Table 2.1 summarizes the Population and Job Estimates and Projections.

Table 2.1 Forecast Growth

	2008 Base Year	%	2030 Total (7)	Total Growth
Population ¹	6,389		8,483	2,094
Housing Units ²	3,472		4,610	1,138
Jobs - Private/Public	3,292		4,371	1,079
Ratio of Jobs/population	0.52		0.52	0.52
Other jobs	458	14%	608	150
Government/Institutional jobs	1,338	41%	1,777	439
Commercial jobs	1,273	39%	1,690	417
Industrial jobs	<u>223</u>	7%	<u>296</u>	<u>73</u>
Total	3,292	100%	4,371	1,079
Government/Institutional (sf) - 173 sf/employee (3)	231,500		307,400	75,900
Commercial (sf) - 400 sf/employee (3)	509,200		676,000	166,800
Industrial (sf) - 433 sf/employee (3)	<u>96,500</u>		<u>128,200</u>	<u>31,700</u>
Total	837,200		1,111,600	274,400

Notes:

¹ Population for 2008 based on Arizona Dept. of Commerce July 1, 2008 estimate. Population for 2030 based on Arizona Dept. of Commerce 2006 Cochise ProjectionsSC.xls file.

² Housing units based on population estimates and the 1.84 persons/household per 2000 Census data.

³ Square-footage estimates are based upon the assumption that the balance of jobs between non-residential categories remains constant throughout the planning horizon. Square footage per employee estimates based on ITE Trip Generation, 7th Edition and Sierra Vista Impact Fee Report.

⁴ Revised 7-6-09.

LAND USE ASSUMPTIONS AND POPULATION PROJECTIONS

LAND USE CATEGORIES

Measuring the impact of growth requires identifying land use types for new development. The land use types used in this analysis are summarized as follows:

- **Single family:** Detached and attached (townhomes and condominiums) and one-family dwelling units including mobile and manufactured homes;
- **Multi-family:** All attached multiple-family dwellings such as duplexes, apartments, and dormitories;
- **Commercial:** Includes the various commercial designations which provides for a wide range of sales and service uses, educational, including hotel/motel development. (For fee schedule purposes hotel/motel development is separated from the general commercial category.)
- **Industrial:** Includes business parks, manufacturing, fabrication, food processing, motor vehicle repair, warehousing, truck yards and terminals.
- **Institutional:** All government offices, public schools, and hospitals.

Some developments may include more than one land use category, such as an educational institution with dormitories, or a mixed-use development with both residential and commercial uses. In these cases, the development fee would be calculated separately for each land use category.

The City may use its discretion to impose the development fee based on the specific aspects of a proposed development regardless of zoning. The fee imposed should be based on the land use category that most closely represents the probable occupant density (or other applicable factor) of the development.

DEMAND FOR SERVICES

Different types of development use public facilities at different rates in relation to each other, depending on the services provided.

This report estimates the demand for services between residential and non-residential at 86% and 14%, respectively, for General Government, Library, Parks, Police, Technology and Airport service based on hours of availability for residents, visitors and workers and at 80% and 20%, respectively, for fire protection/emergency medical services based on service call percentages. The demand for roadways is estimated at 52% residential and 48% non-residential based on typical average daily trip rates and for wastewater services at 90% residential and 10% non-residential based on typical sewage generation rates.

For example, **Table 2.2** shows the relative demand for services for General Government based on hours of availability.

LAND USE ASSUMPTIONS AND POPULATION PROJECTIONS

Table 2.2 Service Population

	Population	Demand Hrs/Week	Person Hrs	Percentage
Residential				
Estimated Residents	6,329			
Residents Working	2,527	128	323,456	
Residents Not Working	3,862	168	648,816	
Annual Visitors				
Overnight in Housing	12,738	1.611	20,520	
		Subtotal	972,272	86%
Non-Residential				
Estimated Jobs	2,834	40	113,360	
Annual Visitors				
Overnight in Lodging	26,055	1.611	41,974	
Day Tourists	19,107	0.153	2,931	
		Subtotal	158,265	14%
		Total	1,130,537	100%

Demand hours/day rate for:

Workers as measured by jobs is based on 9 hours/day multiplied by 5 days/week divided by 7 days.

Visitors in overnight lodging and housing is based on average of 3.5 day stay multiplied by 24 hours/day divided by 365 days per year.

Day Tourists is based on 8 hours/day divided by 365 days.

Surrounding area visitors is based on the assumption of 1 hour/day.

Jobs reduced by 458 to account for estimated Other/Home-based businesses.

OCCUPANT DENSITIES AND ADT RATES

Occupant densities and ADT rates ensure a reasonable relationship between the increase in service population and amount of the fee. The fee must vary by the estimated service population generated by a particular development project. Developers pay the fee based on the number of additional housing units or building square feet, so the fee schedule must convert service population estimates to these measures of project size. For all fee categories, except wastewater and roadways, this conversion is done with the typical factors by land use category shown in **Table 2.3**. As shown in the table, non-residential services are estimated by average daily traffic factors, as a relative measure of persons and therefore demand between the non-residential uses.

LAND USE ASSUMPTIONS AND POPULATION PROJECTIONS

Table 2.3 Occupant Densities and ADT Rates

Land Use	Occupant Density	ADT
<i>Residential¹</i>		
Single Family Residential	2.24	
Multi-Family Residential	1.56	
<i>Non-Residential</i>		
Commercial		43
Lodging (per room)		8.2
Industrial		7
Institutional		69

¹ From US Census Bureau data for Bisbee City, Az, Census 2000 Summary File 3 Table H33

Source for trip generation factor: ITE, *Trip Generation, 7th Edition* (2003).
 Code 310 Hotel (room) 8.17 ADT
 Code 733 Government Office Complex (1,000 sf) 27.92 ADT
 Code 820 Shopping Center (1,000 sf GLA) 42.94 ADT
 Code 110 General Light Industrial (1,000 sf) 6.97 ADT

3. FIRE PROTECTION/EMS

INTRODUCTION

The City of Bisbee provides fire protection services within its jurisdictional boundaries, and emergency medical services within a larger geographical area. The Fire Department also provides fire coverage for brush fires under an agreement with the Arizona State Land Department. The Fire Department staffs two fire stations, and owns and operates the fire apparatus and equipment shown in Table 3.1.

Table 3.1 Existing Fire Protection Facilities and Equipment

Description	Quantity
Existing Fire Stations	
FS 1 - 192 W Hwy 92 (sf)	5,150
FS 2 - 645 Tombstone Cyn Rd (sf)	<u>3,348</u>
Total	8,498
Existing Vehicles/Equipment	
2004 GMC 8500, KME Structural Fire Engine	1
1991 Navistar Int'l Structural Fire Engine	1
1981 GMC Structural Fire Engine	1
2004 GMC Sierra 3500 Duramax 4x4 Brush Truck	1
1994 Chevy Type 6 Brush Truck	1
2004 GMC 3500 Duramax Rescue Truck	1
1999 Chevy Tahoe 1/2 ton Truck	2
1998 Ford F250 3/4 ton Truck	1
Ford 350 Coach ALS Ambulance	<u>4</u>
Total	13

FIRE AND EMS INFRASTRUCTURE IMPROVEMENTS PLAN (IIP)

This chapter estimates the fire protection/EMS needs for Bisbee and considers the current staffing levels per 1,000 residents. The Fire Department's staff includes 1 Fire Chief, 2 Captain EMTs, 1 Captain Paramedic, 1 Lieutenant Paramedic, 11 Firefighter Paramedics and 5 Firefighter EMTs. All 21 Fire Department personnel are Arizona State Certified Level II Firefighters. Based on the current residential population of 6,389, the City provides 3.3 fire/EMS career staff per 1,000 capita¹. The Fire Chief has indicated the need for a new 3-bay facility of approximately the same size as Fire Station #1 to serve the proposed San Jose Growth Area once it develops. Additional study is recommended regarding the need and siting of the additional station. Based on the Insurance Office (ISO) Fire Department Grading Schedule, first-due fire engine station should be spaced 1.5 miles apart². This preliminary planning level approach, consistent with the

¹ The staffing level per capita is comparable to Chino Valley and higher than Camp Verde, El Mirage and Somerton which have approximately 2.1 career firefighters per 1,000 residents.

² *Standards of Cover Study and Master Plan for City of Surprise, Arizona* by Citygate Associates, LLC dated October 4, 2007.

FIRE PROTECTION AND EMERGENCY MEDICAL SERVICES

Fire Chief's recommendation, suggests the need for an additional station in the San Jose Growth Area. Ultimately, coverage and response times will likely dictate the need and location.³

Based on the Fire Chief's recommendation that a 3-bay Fire Station be constructed, it is estimated that there be 7 to 13 firefighters/EMS persons staffing the facility. Staffing of the existing and planned facilities combined will provide approximately 3.3 to 4.0 fire/EMS staff per 1,000 capita when considering future growth. Ultimately then, 28 to 34 firefighter/EMS persons will be accommodated in 13,648 square feet of fire/EMS facilities.

Table 3.2 summarizes the future facility needs and the estimated cost based on the CIP. The planned fire station should enhance the overall fire protection of the City for both existing and future development. To determine a fair share of costs that will be assigned to new development in the form of a development fee, the square footage of the new building related to growth is calculated by applying the standard of 3.3 to 4.0 staff persons per 1,000 capita to the growth in population, and multiplying that by the average square foot per staff person.

Table 3.2 Planned Fire Station Facilities

Description	
Planned Fire Station (sf)	5,150
IIP Project Estimate ²	\$ 1,287,500
Existing and Planned Building (sf)	13,648
Total Staffing in 2030	34
Average sf/staff ¹	401
New Development Needs	
Growth population	2,094
multiplied by the Standard	4.0 staff/1,000 capita
New Development's Staffing Needs	8.4
multiplied by the Average sf needs	401 sf/staff
New Development's Share of building sf	3,368
Percentage Related to New Development (by sf)	65%
New Development's Share of IIP	\$ 836,875
¹ Alternately:	
Existing Building (sf)	8,498
Current Staffing Levels	21
Average sf/staff	405

² Based on an average per sf cost of \$250.

Specialized equipment and fire apparatus are integral capital assets in providing fire protection and emergency medical services. As provided in the CIP, the capital needs for the planned facility include equipment and apparatus. Based on the percentage of the new building that is related to new development, 65% of the equipment and fire apparatus costs are related to new development. **Table 3.3** quantifies those needs.

³ Refer to NFPA (2004 Edition) for advisory guidelines.

Table 3.3 Planned Fire Station Equipment and Apparatus

Description	Cost
Planned Vehicles/Equipment	
Equipment	\$ 60,000
Ambulance	\$ 73,700
Engine	\$ 750,000
Aerial Ladder Truck	\$ 850,000
Wildland Fire Truck	\$ 75,000
IIP Cost Estimate	\$ 1,808,700
Percentage Related to New Development	65%
New Development's Share of IIP	\$ 1,175,655
<i>Service area for EMS extends beyond Bisbee city limits. Approximately 67% of calls are within Bisbee. Ambulance values reflect adjustment of 67% for service area.</i>	

Timing of improvements and cash flow analysis are provided in the last chapter.

DEVELOPMENT FEE METHODOLOGY

As the planned 5,150 square foot facility is needed to provide services to growth and will improve the current level of service, the proportionate share of costs to be allocated to new development (65%) was determined by the Master Plan approach as shown in Tables 3.2 and 3.3. The development fee will be based only upon growth's proportionate share of costs of the Infrastructure Improvements Plan.

The following outlines the next steps in calculating the development fee:

1. Determine the residential and non-residential share of costs based on service call percentages.
2. Based on the residential share of the costs and residential population growth, determine a cost per capita. Then based on typical occupancy rates, determine a fee per dwelling unit type.
3. Based on the non-residential share of the costs and the estimated growth average daily trip (ADT), determine a cost per ADT. Using typical ADT rates, determine the fee per 1,000 square feet for various non-residential land uses. ADT provides a relative measure of persons, and therefore demand, between different non-residential land uses.

FIRE PROTECTION/EMERGENCY MEDICAL SERVICES DEVELOPMENT FEE CALCULATION

Residential and non-residential developments are provided protection by Fire and Emergency Medical Services. Based on service calls, the City's Fire Chief attributes 80% of all incidents to residential development and 20% of all incidents to non-residential facilities. The demand, and therefore the share of costs, will be based on these percentages. Using the cost associated with residential demand, a fee per resident is calculated. Using the cost associated with non-

FIRE PROTECTION AND EMERGENCY MEDICAL SERVICES

residential demand, a fee per average daily trip is calculated. It is reasonable to use ADT as a relative measure of persons, and therefore demand, between various non-residential land uses.

Table 3.4 reflects new development's share of costs and the allocation of those costs between Residential and Non-Residential development.

Table 3.4 Development Fee Share of Cost

Description	Cost	Development Fee %	Development Fee Share of Cost	Growth Capita or ADT	Cost per Capita or ADT
Fire Station	\$ 1,287,500	65.0%	\$ 836,875		
Equipment/Vehicles	\$ 1,808,700	65.0%	\$ 1,175,655		
Total	\$ 3,096,200		\$ 2,012,530		
Residential Share		80%	\$ 1,610,024	2,094	\$ 768.87
Non-Residential Share		20%	\$ 402,506	12,631	\$ 31.87

Based on a residential share of costs of \$1,610,024 and an estimated growth in residential population of 2,094, the cost per capita for fire protection infrastructure improvements equals \$768.87. Based on a non-residential share of costs of \$402,506 and an estimated increase in non-residential ADT of 12,631, the cost per ADT is \$31.87.

Based on Table 3.4, other funding estimated at \$1,083,670 (\$3,096,200 less \$2,012,530) should be identified to supplement the fee program.

FEE SCHEDULE

Table 3.5 shows the development fee schedule for Fire Protection and Emergency Medical Services to be charged to new development based on the cost per resident and cost per non-residential ADT.

Table 3.5 Fee Schedule

	Fee per Resident or ADT	Occupant Density or ADT/1,000 sf	Fee per Unit	Fee per 1,000 sf
Single Family Residential	\$ 768.87	2.24	\$ 1,722	
Multi-Family Residential	\$ 768.87	1.56	\$ 1,199	
Commercial	\$ 31.87	43		\$ 1,370
Lodging (per room)	\$ 31.87	8.2	\$ 261	
Industrial	\$ 31.87	7		\$ 223
Government/Institutional	\$ 31.87	69		\$ 2,199

Fee rounded to nearest dollar.

4. GENERAL GOVERNMENT FACILITIES

INTRODUCTION

The General Government category includes all City buildings, equipment and vehicles other than those included in the Library, Police, and Fire Protection categories. General Government facilities include the office space that houses the departments of Finance, Personnel, the City Manager and staff, the City Attorney, the City Clerk, City Council chambers and its offices. Also included are the Public Works offices, maintenance shops and storage buildings. Equipment and vehicles operated by general government, public works and parks maintenance, but not Police and Fire, are also included in this category. The facilities and equipment are listed in **Tables 4.1 and 4.2**, respectively.

Table 4.1 Existing General Government Facilities

Location	Dept.	Building sf	% Utilized	Occupied Building sf
Primary Buildings				
City Hall - 118 S Arizona St	55	10,644	70%	7,451
Public Works - Toveraville Rd		3,000	0%	-
Public Works - 404 Bisbee Rd	74	<u>3,750</u>	100%	<u>3,750</u>
Total		17,394		11,201
Accessory Buildings				
Garage	77	7,574	100%	7,574
Vehicle Storage	77	<u>3,125</u>	100%	<u>3,125</u>
Total		10,699		10,699

City Hall square feet adjusted for space currently used for City employees.

Toveraville Rd 3,000 sf facility is currently vacant.

Toveraville Rd facility to have \$50,000-\$80,000 in improvements made.

Table 4.2 Existing Investment in Vehicles and Equipment

Description	Dept	Current Value
Equipment		
Vehicle Hoist	77	\$ 7,000
Vehicle Hoist	77	\$ 3,500
Camcorder	55	<u>\$ 3,931</u>
Subtotal		\$ 14,431
Vehicles		
Loader	40	\$ 20,000
Backhoe (2)	40	\$ 100,000
Grader	40	\$ 118,000
Salt Spreader	40	<u>\$ 3,466</u>
Subtotal		\$ 241,466
Total		<u>\$ 255,897</u>

GENERAL GOVERNMENT INFRASTRUCTURE IMPROVEMENTS PLAN (IIP)

This chapter estimates the additional staffing that will be required to accommodate growth and determines the additional space that will be required to accommodate that staff. The City funds approximately 55 full-time equivalent (FTE) jobs, excluding library, sewer, police and fire staff.¹ The City currently staffs 8.6 employees per 1,000 residents. Based on this ratio and the residential growth of 2,094, it is estimated the City will need to add 18 employees. The City currently provides approximately 204 square feet per employee based on 11,201 square feet of overall office space currently being utilized. However, the City recently purchased the Toveraville facility, requiring tenant improvements estimated at \$50,000 to \$81,000, which will be available for current staff. Using this additional square footage in the calculation would increase the current standard of 204 square feet per employee to 258 square feet per employee. This latter figure is more consistent with a recent survey² of six other agencies where the average space provided per employee was 360 square feet, including agency chambers.

Table 4.3 identifies the future general government space needs based on several options for comparison purposes along with the estimated costs. Several standards have been provided because the City does not currently occupy and utilize 100% of the City Hall facility. The options provided in the table are summarized below:

1. **195 sf/staff:** Use the currently occupied space and the Toveraville facility for current and future staff.
2. **204 sf/staff:** Use the currently occupied space, the Toveraville facility and allocate more space within City Hall for city purposes for current and future staff. This is the square feet per staff currently provided to the 55 general government employees. Note that this option requires partial relocation of SEAGO and/or better utilization of unused space.
3. **238 sf/staff:** Use the currently occupied space, the Toveraville facility and allocate all the space within City Hall for city purposes for current and future staff. This would require relocation of SEAGO staff and utilization of unused space.
4. **258 sf/staff:** This level of service is based on the currently occupied space and improving the Toveraville facility for current staff. Then based on this level of service, determine the additional square footage needed for the additional 18 employees. This assumes no additional utilization of City Hall for city purposes and requires new construction or acquisition of an additional facility. This option may be preferred if the City determines that a branch facility would better serve the City as opposed to services being more centralized.
5. **360 sf/staff:** This option is provided for comparison purposes only, using a substantially higher level of service standard. It assumes all currently owned buildings are used for City purposes and then determines the additional square footage needed to provide 360 square feet per staff. This option requires new construction or acquisition of an additional facility.

¹ Based on data obtained from <http://www.city-data/city/Bisbee-Arizona.html>, accessed 6-25-09.

² Based on data provided to PMC for the Stockton Impact Fee.

The options presented do not outline all possible combinations; rather these demonstrate a range for Council to consider. Note also that this study assumes that there is no need to expand the accessory facilities to accommodate growth.

Table 4.3 Planned General Government Facilities

	Options				
	1 195 sf/staff	2 - Current 204 sf/staff	3 - Preferred 238 sf/staff	4 258 sf/staff	5 - Other agency 360 sf/staff
Total staffing	73	73	73	73	76
Multiplied by LOS (sf/staff person)	195	204	238	258	360
Building Needs (sf)	14,201	14,892	17,394	18,849	27,360
Currently occupied/improved (sf)	11,201	11,201	11,201	11,201	11,201
Currently owned, requiring TI	3,000	3,691	6,193	3,000	6,193
Future Construction	-	-	-	4,648	9,966
IIP Cost Estimate	\$ 81,000	\$ 99,657	\$ 167,211	\$ 1,010,600	\$ 2,160,411
New Development's sf					
Growth staffing	18	18	18	18	18
LOS (sf/staff person)	195	204	238	258	360
Building sf	3,501	3,691	4,289	4,648	6,480
Percentage Related to New Development	100%	100%	69.3%	61%	40%
New Development's Share of IIP	\$ 81,000	\$ 99,657	\$ 115,877	\$ 614,183	\$ 866,400
Other IIP Funding Requirements	\$ -	\$ -	\$ 51,334	\$ 396,417	\$ 1,294,011

Estimated \$27/sf for TI improvements, based on TI cost estimate for Toveraville. It excludes land costs.

Estimated \$200/sf for new construction.

Option 1: Use currently occupied space plus Toveraville facility.

Option 2: Use currently occupied space, Toveraville facility and utilize additional 691 sf of City Hall.

Option 3: Use currently occupied space, Toveraville facility and utilize entire City Hall facility for City purposes.

Option 4: Use a LOS to determine needs based on currently occupied space and Toveraville facility for 55 staff persons.

Option 5: Use currently occupied space plus entire City Hall facility, Toveraville facility, and construct 9,900+ sf facility.

As shown in Table 4.3, if the City of Bisbee chooses to impose a higher standard than the currently provided 204 sf/employee, then the City should identify additional funds to complement the fee program. At this point, it is recommended that the City base the IIP and development fee on Option 3, providing 238 square feet of general government office area per staff person which still provides additional space to employees but minimizes the need for additional funding (\$51,334) outside of development fees.

Measured another way, the City currently occupies 1.16 square foot per resident and job. Option 3 would increase that to 1.35 square feet per resident and job and Option 4 to 1.47 square feet per resident and job. By comparison, Casa Grande, Coolidge, Eloy and Queen Creek provide an average of 1.36 square feet per resident and job.³

³ Maricopa, Arizona Development Fee Study (undated).

Vehicles and equipment are necessary capital investments for employees to perform their work. **Table 4.4** identifies the current level of service (measured by equipment and vehicle value per "general government" employee) and applies that same standard to the growth population to determine the future needs.

Table 4.4 Planned Equipment and Vehicles

Description		
Existing Vehicles and Equipment Value	\$	255,897
Current number of staff		55
Level of Service (\$/staff person)	\$	4,653
New Development Needs		
Growth staff		18
multiplied by the Standard	\$	4,653 /staff
New Development's Estimated Costs	\$	83,754
Percentage Related to new Development		100%
New Development's Share of IIP	\$	83,754

Timing of improvements and cash flow analysis are provided in the last chapter.

DEVELOPMENT FEE METHODOLOGY

Under Option 3, the additional general government staff persons will be accommodated by tenant improvements to the Toveraville Road facility and to City Hall, requiring relocation of SEAGO staff. These improvements will provide slightly more space to current employees as well as providing adequate work space for future employees. The proportionate share of facility costs (69.3%) then will be based on the Master Plan approach as shown in Table 4.2, Option 3. The equipment and vehicles will be expanded at the same level as is currently provided to employees and therefore the proportionate share of costs is based on the Existing Standard approach. The development fee will be based only upon growth's proportionate share of costs of the Infrastructure Improvements Plan.

The following outlines the next steps in calculating the development fee:

1. Determine the residential and non-residential share of costs based on demand hours.
2. Based on the residential share of the costs and residential population growth, determine a cost per capita. Then based on typical occupancy rates, determine a fee per dwelling unit type.
3. Based on the non-residential share of costs and estimated growth in average daily trips (ADT), determine a cost per ADT. Using typical ADT rates, determine the fee per 1,000 square feet for various non-residential land uses. Average daily traffic provides a relative measure of persons, and therefore demand, between different non-residential land uses.

GENERAL GOVERNMENT SERVICES DEVELOPMENT FEE CALCULATION

General Government provides services primarily to residents, visitors and businesses within the City of Bisbee. To allocate a fair share between these users, the current weekly hours of availability are considered as shown in **Table 4.5** and then used to determine the residential and non-residential percentage of costs.

Table 4.5 Service Population and Demand Hours per Week

	Population	Demand Hrs/week	Person Hrs	Percentage
Residential				
Estimated residents	6,389			
Residents Working		2,527	128	323,456
Residents Not Working		3,862	168	648,816
Annual Visitors				
Overnight in Housing	12,738	1.611	20,520	
		Subtotal	992,792	86%
Non-Residential				
Estimated Jobs	2,834	40	113,360	
Annual Visitors				
Overnight in Lodging	26,055	1.611	41,974	
Day Tourists	19,107	0.153	2,931	
		Subtotal	158,265	14%
		Total	1,151,057	100%

Assumed benefit of services provided 24 hours/day, 7 days/week.

Demand hours/week for:

Workers as measured by jobs is based on 8 hours/day multiplied by 5 days per week.

Visitors in overnight lodging and housing is based on average of 3.5 day stay per year multiplied by 24 hours/day divided by 365 days multiplied by 7 days/week.

Day Tourists is based on 8 hours/day divided by 365 days multiplied by 7 days/week.

Estimated jobs excludes 464 jobs that are home-based or other.

The demand for general government services associated with residents and visitors in overnight housing is assigned to the Residential category as the costs related to these users would be recovered by the fee imposed on a dwelling unit. It is reasonable that the non-residential demand for general government services be based on workers as well as overnight visitors in lodging and day visitors. (Non-residential is considered visitor serving land uses and is therefore assigned the balance of visitor demand.)

Table 4.6 reflects new development's share of costs and the allocation of those costs between Residential and Non-Residential development.

GENERAL GOVERNMENT

Table 4.6 Development Fee Share of Cost

Description	Cost	Development Fee %	Development Fee Share of Cost	Growth Capita or ADT	Cost per Capita or ADT
Toveraville TI	\$ 81,000	69.3%	\$ 56,133		
City Hall TI	\$ 86,211	69.3%	\$ 59,744		
Equipment/Vehicles	\$ 83,754	100%	\$ 83,754		
Total	\$ 250,965		\$ 199,631		
Residential Share		86.0%	\$ 171,683	2,094	\$ 81.99
Non-Residential Share		14.0%	\$ 27,948	12,631	\$ 2.21

Growth employees excludes Home-based and Other categories.

Based on a residential share of costs of \$171,683 and an estimated growth in residential population of 2,094, the cost per capita for general government infrastructure equals \$81.99. For non-residential, average daily traffic (ADT) is used as a relative measure of persons for each land use category and consequently as a measure of services between the various non-residential land uses. Based on a non-residential share of costs of \$27,948 and an estimated 12,631 non-residential daily trips, the cost per trip is \$2.21.

Based on Table 4.6, other funding estimated at \$51,334 (\$250,965 less \$199,631) should be identified to supplement the cost of the Toveraville facility and City Hall tenant improvements.

FEE SCHEDULE

Table 4.7 shows the development fee schedule for general government services to be charged to new development based on the cost per capita and cost per non-residential ADT.

Table 4.7 Fee Schedule

	Occupant		Fee per Unit	Fee per 1,000 sf
	Fee per Resident or ADT	Density or ADT Rate		
Single Family Residential	\$ 81.99	2.24	\$ 184	
Multi-Family Residential	\$ 81.99	1.56	\$ 128	
Commercial	\$ 2.21	43		\$ 95
Hotel (by room)	\$ 2.21	8.2	\$ 18	
Industrial	\$ 2.21	7		\$ 15
Office/Institutional	\$ 2.21	69		\$ 153

Fee rounded to nearest dollar.

5. LIBRARY

INTRODUCTION

The City of Bisbee owns and operates the Copper Queen Library which includes equipment, library collections and databases. The facility and amenities are listed in Table 5.1.

Table 5.1 Existing Library Facility and Collections/Equipment

Location	Units
Copper Queen Library	
6 Main Street (sf)	8,070
Equipment	
Computers	20
1 Low Vision Reader	1
Public Access Printer	1
Printer	4
Media Projector	1
TV	1
VCR	1
DVD Player	1
Stereo	1
Barcode Readers	3
Photocopier	<u>1</u>
Total	35
Library Collections	
Video/Musical Recordings	1,900
Recorded Books	641
Books	<u>23,511</u>
Total	26,052
Databases	
myLibraryDV	1
Cochise County (City share)	4
Az State Library	<u>35</u>
Total	40

Number of computers based on data from City website.

Library collections represents City's share (76%) of 34,279 titles.

Cochise County Library databases to be funded by City in FY09/10.

The Arizona State Library databases are currently State funded.

Current LOS is

<i>Buildings</i>	<i>1.3 sf per capita</i>
<i>Equipment</i>	<i>5.5 units per 1,000 capita</i>
<i>Collections</i>	<i>4.1 units per capita</i>
<i>Databases</i>	<i>6.3 units per 1,000 capita</i>

LIBRARY INFRASTRUCTURE IMPROVEMENTS PLAN (IIP)

As shown in Table 5.1, the current level of library services provided, as measured in building square feet, equipment, collections and databases per capita (or per 1,000 capita) is 1.3 square feet, 5.5 units per 1,000 capita, 4.1 units and 6.3 units per 1,000 capita, respectively. For general planning purposes, encompassing average space needs for collection, training, storytelling, seating, community meeting rooms, study areas and staff work areas, 0.7 to 2.0 square feet per resident may be used.¹ The City's current level of service fits within this range. Note that the current trend regarding libraries is to consider the quality of the library which may not be simply measured in terms of number of books per capita or other such quantitative calculations; rather the library should be assessed from the standpoint of fulfilling the needs of its individual community. However, as a starting point for development fee study purposes, a quantitative approach is being used.

To maintain the current City level of service over the next 22 years, it is estimated that a branch library of a minimum of 2,720 square feet be constructed, likely sited near the projected San Jose Growth Area. In addition to facility square footage, 11.5 units of equipment, 8,585 volumes of books and 13.2 units of databases are estimated to be needed over the 22 year period based on maintaining the current service levels. **Table 5.2** summarizes the future facility needs including the estimated cost. (Note that the City's CIP indicates up to \$2 million needed.) The table also shows the fair share of costs that will be assigned to new development in the form of a development fee.

Table 5.2 Planned Library Facilities

Description	Quantity	Unit Cost	Total
Future Needs			
Branch Library (sf)	2,720	\$ 275	\$ 748,000
Equipment (units)	11.5	\$ 1,104	\$ 12,700
Collections (volumes)	8,585	\$ 27	\$ 232,600
Databases (units)	13.2	\$ 2,463	\$ 32,500
IIP Cost Estimate			\$ 1,025,800
Percentage Related to New Development			100%
New Development's Share of IIP			\$ 1,025,800

Equipment, Collections and Databases based on current value, see Appendix.

Timing of improvements and cash flow analysis are provided in the last chapter.

DEVELOPMENT FEE METHODOLOGY

The planned 2,720 square foot facility is needed to provide services to growth to maintain the current level of service based on the Existing Standard approach. As such, 100% of the cost will

¹ Thomas J. Hennen, Jr., *American Libraries*, October 2004, based on a survey, identified this range for libraries serving populations under 10,000 with 1.1 square feet per capita for the second quartile.

be allocated to new development. The development fee will be based only upon its proportionate share of costs of the Infrastructure Improvements Plan.

The following outlines the next steps in calculating the development fee:

1. Determine the residential and non-residential share of costs based on demand hours per day for residents, workers and visitors.
2. Based on the residential share of costs and residential population growth, determine a cost per capita. Then using typical occupancy rates, determine a fee per dwelling unit.
3. Based on the non-residential share of the costs and estimated growth in average daily trips (ADT), determine a cost per ADT. Using typical ADT rates, determine the fee per 1,000 square feet for various non-residential land uses. Average daily traffic (ADT) provides a relative measure of persons, and therefore demand, between different non-residential land uses.

LIBRARY SERVICES DEVELOPMENT FEE CALCULATION

Although the level of service is measured in units per resident, library facilities and amenities are available for use by residents, those employed within the City of Bisbee and by visitors. To allocate a fair share between these users, the current weekly hours of availability are considered as shown in **Table 5.3** and then used to determine the residential and non-residential percentage of costs. The calculation in Table 5.3 excludes any impact from the surrounding area residents. This is a reasonable assumption because it is assumed that that population is served primarily by the Cochise County Library system.

Table 5.3 Service Population and Demand Hours per Week

	Current Population	Demand Hrs/Week	Availability Factor	Person Hrs	Percentage
Residential					
Estimated residents	6,389				
Residents Working		2,527	0.20	65,461	
Residents Not Working		3,862	0.20	131,308	
Annual Visitors					
Overnight in Housing	12,738	1.611	0.20	4,153	
		Subtotal		200,922	86%
Non-Residential					
Estimated Jobs	2,834	40	0.20	22,942	
Visitors					
Overnight in Lodging	26,055	1.611	0.20	8,495	
Day Tourists	19,107	0.153	0.20	593	
		Subtotal		32,030	14%
		Total		232,952	100%

Adjustment Factor based on 34 hours of operation per week.

Demand hours/day rate for:

Workers as measured by jobs is based on an estimated 40 hours/week.

Visitors in overnight lodging and housing is based on average of 3.5 day stay multiplied by 24 hours/day divided by 365 days per year.

Day Tourists is based on 8 hours/day divided by 365 days.

Jobs reduced by 458 to account for estimated other/home-based businesses.

LIBRARY

The demand for library services associated with residents and visitors in overnight housing is assigned to the Residential category as the costs related to these users would be recovered by the fee imposed on a dwelling unit. It is reasonable that the non-residential demand for libraries be based on workers as well as overnight visitors in lodging and day visitors. (Non-residential is considered visitor serving land uses and is therefore assigned the balance of visitor demand.)

Table 5.4 reflects new development's share of costs and the allocation of those costs between Residential and Non-Residential development.

Table 5.4 Development Fee Share of Cost

Description	Cost	Development Fee %	Development Fee Share of Cost	Growth Capita or ADT	Cost per Capita or ADT
Branch Library	\$ 748,000	100%	\$ 748,000		
Equipment	\$ 12,700	100%	\$ 12,700		
Collections	\$ 232,600	100%	\$ 232,600		
Databases	\$ 32,500	100%	\$ 32,500		
Total	\$ 1,025,800		\$ 1,025,800		
Residential Share		86%	\$ 882,188	2,094	\$ 421.29
Non-Residential Share		14%	\$ 123,506	12,631	\$ 9.78

Based on a residential share of costs of \$882,188 and an estimated growth in residential population of 2,094, the cost per capita for library infrastructure improvements and amenities equals \$421.29. For non-residential, average daily traffic (ADT) is used as a relative measure of persons for each land use category and consequently as a measure of services between the various non-residential land uses. Based on a non-residential share of costs of \$123,506 and an estimated 12,631 non-residential daily trips, the cost per trip is \$9.78.

FEE SCHEDULE

Table 5.5 shows the development fee schedule for Library services to be charged to new development based on the cost per capita and cost per ADT.

Table 5.5 Fee Schedule

	Fee per Resident or ADT	Occupant Density or ADT Rate	Fee per Unit	Fee per 1,000 sf
Single Family Residential	\$ 421.29	2.24	\$ 944	
Multi-Family Residential	\$ 421.29	1.56	\$ 657	
Commercial	\$ 9.78	43		\$ 421
Lodging (per room)	\$ 9.78	8.2	\$ 80	
Industrial	\$ 9.78	7		\$ 68
Government/Institutional	\$ 9.78	69		\$ 675

Fee rounded to nearest dollar.

6. PARKS

INTRODUCTION

The City of Bisbee owns and operates 12 parks. A senior center and school district-owned tennis courts supplement the amenities. The parks are listed in **Table 6.1**.

Table 6.1 Existing Parks and Acreage

Park Name/Location	Acres
Briggs Park	0.11
City Park	0.21
Galena Park	0.52
Garfield	0.94
Goar Park	0.11
Grassy Park	0.23
Higgins	0.64
Saginaw Park	0.18
Sherman/Paul Park	0.05
Skate Park	0.15
Tintown Park	0.07
Vista Park	2.63
Total	5.84
<i>Current LOS is</i>	0.91 <i>acres per 1,000 residents</i>

PARKS INFRASTRUCTURE IMPROVEMENTS PLAN (IIP)

As shown in Table 6.1, the current level of park services provided, as measured in park acreage per 1,000 capita, is slightly less than 1 acre per 1,000 residents. This measurement does not recognize the unique conditions or needs of the community but does provide a rough measure for planning purposes. Nationally recognized guidelines such as those published by the National Recreation and Parks Association¹ (NRPA) suggested 6-10 acres per 1,000 population, substantially above what the City currently provides. However, the NRPA has abandoned this guideline in favor of an approach that provides “guidance for all communities so that they may work within their own unique social, economical and institutional structure to provide the park, recreation, and open space system that is best for their community and is within their economic and financial capability.”² The City has retained a consultant to further analyze the park needs and upon completion of that process, it may be necessary to update the analysis provided in this report.

To maintain the current City level of service, over the next 22 years, it is estimated that 1.9 acres of parkland would need to be acquired and improved. For comparison purposes, if the City

¹ *Parks, Recreation, Open Space and Greenway Guidelines*, NRPA, (1983), excerpt taken from Cheney Lake Park Master Plan Development (October 2003) prepared by Land Design North.

² *Parks, Recreation, Open Space and Greenway Guidelines*, NRPA (1996).

PARKS

were to use the NRPA lower range figure of 6 acres per 1,000 population, the City would need to acquire and improve 12.6 acres of parkland to accommodate growth. In addition to the 12.6 acres, the City would need to provide 32.5 acres to raise the standard for the existing population. Imposing a higher standard on new development is only fair if the same level of services is provided to existing development. This results in "existing deficiencies" that should be funded outside of the development fee program.

Table 6.2 identifies the future park needs based on the two standards and the estimated costs for a developed park. It also shows the fair share of costs that will be assigned to new development in the form of a development fee for each standard.

Table 6.2 Planned Park Acres

	0.91 ac/1,000	6 ac/1,000
Planned Park Acreage	1.9	45.1
Cost per Acre	\$ 241,000	\$ 241,000
IIP Cost Estimate	\$ 459,200	\$ 10,860,400
New Development's acreage	1.9	12.6
Percentage Related to New Development	100%	28%
New Development's Share of IIP	\$ 459,200	\$ 3,030,100

*Assume parkland price of \$100,000/acre, graded with utilities available.
Average park facility amenities estimated at \$141,000/acre per Appendix.*

As shown in Table 6.2, if the City of Bisbee chooses to impose the higher standard of 6 ac/1,000 residents, then the City should identify \$7.8 million in other funding sources to improve the level of service for existing development. At this point, it is recommended that the City base the IIP and development fee on providing 0.91 acres of parkland per 1,000 residents. As the City is updating its Parks Master Plan, providing a comprehensive process for determining park needs, (i.e. quality not just quantity), it is recommended that the NRPA guideline not be used as the basis for the IIP and development fees. If the updated Master Plan ultimately recommends a higher standard than the 0.91 acres per 1,000 residents, then the City may want to revise the IIP and development fee.^{3 4}

Timing of improvements and cash flow analysis are provided in the last chapter.

³ It should be noted that if the updated Parks Master Plan recommends a higher standard, the City has the option of applying the 0.91 acres per 1,000 residents standard for development fee purposes, and then identifying other funding sources to increase the overall standard for the City.

⁴ The City CIP reflects the need for a New Regional Park estimated at \$2 million. This should be programmed into the Development Fee Study pending the outcome of the Parks Master Plan.

DEVELOPMENT FEE METHODOLOGY

The planned 1.9 acres of improved parkland is needed to provide services to growth to maintain the current level of service based on the Existing Standard approach. As such, 100% of the cost of will be allocated to new development as shown in Table 6.2. The development fee will be based only upon its proportionate share of costs of the Infrastructure Improvements Plan.

The following outlines the next steps in calculating the development fee:

1. Determine the residential and non-residential share of costs based on demand hours for residents, workers and visitors.
2. Based on the residential share of costs and residential population growth, determine a cost per capita. Then based on typical occupancy rates, determine a fee per dwelling unit.
3. Based on the non-residential share of the costs and the estimated growth average daily traffic (ADT), determine a cost per ADT. Using typical ADT rates, determine the fee per 1,000 square feet for various non-residential land uses. Average daily traffic (ADT) provides a relative measure of persons, and therefore demand, between different non-residential land uses.

PARK SERVICES DEVELOPMENT FEE CALCULATION

Although the level of service is commonly measured in acres per 1,000 residents, park amenities and facilities are available for use by residents, those employed within the City of Bisbee and by visitors. To allocate a fair share between these users, the current weekly hours of availability are considered as shown in **Table 6.3** and then used to determine the residential and non-residential percentage of costs.

PARKS

Table 6.3 Service Population and Demand Hours per Week

	Current Population	Demand Hrs/Week	Adjustment Factor	Person Hrs	Percentage
Residential					
Estimated Residents	6,389				
Residents Working	2,527	128	0.71	229,115	
Residents Not Working	3,862	168	0.71	459,578	
Annual Visitors					
Overnight in Housing	12,738	1.611	0.71	14,535	
		Subtotal		688,693	86%
Non-Residential					
Estimated Jobs	2,834	40	0.71	80,297	
Annual Visitors					
Overnight in Lodging	26,055	1.611	0.71	29,731	
Day Tourists	19,107	0.153	0.71	2,076	
		Subtotal		112,104	14%
		Total		800,797	100%

Adjustment factor based on assumption of availability of 17 hours per 24-hour period.

Demand hours/day rate for:

Residents Working is based on 7 days multiplied by 24 hours less 40 hours for work.

Residents Not Working is based on 7 days multiplied by 24 hours.

Estimated Workers is based on 8 hour day, 5 days per week.

Overnight Visitors in Housing and Lodging is based on average of 3.5 day stay divided by 365 days/year multiplied by 7 days/week.

Day Tourists is based on 8 hours/day divided by 365 days, multiplied by 7 days/week..

It is assumed that surrounding area residents are served by County parkland and are therefore excluded.

Jobs reduced by 458 to account for estimated other/home-based businesses.

The demand for parkland associated with residents and visitors in overnight housing is assigned to the Residential category as the costs related to these users would be recovered by the fee imposed on a dwelling unit. It is reasonable that the non-residential demand for parks be based on workers as well as overnight visitors in lodging and day visitors. (Non-residential is considered visitor serving land uses and is therefore assigned the balance of visitor demand.)

Table 6.5 reflects new development's share of costs and the allocation of those costs between Residential and Non-Residential development.

Table 6.5 Development Fee Share of Cost

Description	Cost	Development Fee %	Development Fee Share of Cost	Growth Capita or ADT	Cost per Capita or ADT
Developed Parkland	\$ 459,200	100%	\$ 459,200		
Residential Share		86%	\$ 394,912	2,094	\$ 188.59
Non-Residential Share		14%	\$ 64,288	12,631	\$ 5.09

Based on a residential share of costs of \$459,200 and an estimated growth in residential population of 2,094, the cost per capita for parks and amenities equals \$188.59. For non-residential, average daily traffic (ADT) is used as a relative measure of persons for each land use category and consequently as a measure of services between the various non-residential land

uses. Based on a non-residential share of costs of \$64,288 and an estimated 12,631 non-residential daily trips, the cost per trip is \$5.09.

FEE SCHEDULE

Table 6.6 shows the development fee schedule for Park services to be charged to new development based on the cost per capita and cost per ADT.

Table 6.6 Fee Schedule

	Fee per Resident or ADT	Occupant Density or ADT Rate	Fee per Unit	Fee per 1,000 sf
Single Family Residential	\$ 188.59	2.24	\$ 422	
Multi-Family Residential	\$ 188.59	1.56	\$ 294	
Commercial	\$ 5.09	43		\$ 219
Lodging (per room)	\$ 5.09	8.2	\$ 42	
Industrial	\$ 5.09	7		\$ 36
Government/Institutional	\$ 5.09	69		\$ 351

Fee rounded to nearest dollar.

7. POLICE PROTECTION FACILITIES

INTRODUCTION

The City of Bisbee provides police services within its jurisdictional boundaries. It is staffed with 15 sworn officers and 9 other personnel. The functions of the Police Department include enforcement of City ordinances, federal and state laws, maintaining the peace and order of the City, and protecting life and the property of its citizens, businesses and visitors. The current facilities and equipment are shown in **Table 7.1**.

Table 7.1 Existing Police Protection Facilities and Equipment

Description	Building sf	Value
Existing Police Station		
1 W Hwy 92	4,330	
Existing Equipment		
Copy Machine		\$ 4,387
Copy Machine		\$ 13,884
Dispatch Console		\$ 31,522
Dispatch Console		\$ 60,000
Dispatch Console		\$ 21,156
Generator		\$ 15,000
Infrared Scope		\$ 35,000
Defibrillator (4)		\$ 1,687
Phone Recording System		\$ 19,065
Repeater		\$ 14,537
Antenna		\$ 5,765
Total		\$ 222,003
<i>Current staffing level is 24 employees.</i>		
<i>Current square feet provided per staff person:</i>		<i>180</i>
<i>Current value of equipment per staff person:</i>		<i>\$ 9,250</i>

POLICE INFRASTRUCTURE IMPROVEMENTS PLAN (IIP)

Although police staffing and facilities should ultimately be determined for each individual agency based on its unique features, this chapter estimates the police protection needs for Bisbee based on typical planning level staffing and facility requirements. Arizona's average number of sworn police officers per 1,000 residents is 2¹. Bisbee currently provides 2.4 sworn police officers per 1,000 residents, consistent with the national average (ranging between 2.4 and 3.0 depending on the source)² complemented with 1.4 support staff per 1,000 residents.

¹ From azdailysun.com, "Special Report," 2/8/09, http://www.azdailysun.com/articles/2009/02/08/news/20090208_front_190529.txt accessed 5/11/09, the state average is 2 sworn officers per 1,000 residents.

² From LA Times, "A Different Approach to Law Enforcement," 6/18/2000, <http://articles.latimes.com/2000/jun/18/local/me-42281> accessed 5/12/09, the National average is 2.4 sworn officers per 1,000 residents and from <http://www.city-data.com/city/Bisbee-Arizona.html> accessed 5/18/09 the US city average is 3 sworn officers per 1,000 residents.

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The latter figure is consistent with three similarly sized Arizona cities³ (by population). To maintain the current City level of service, over the next 22 years, it is estimated that an additional 8 employees (5.0 sworn personnel) should be added to the department.⁴ In addition, city staff has indicated the need for a second station of approximately 3,000 square feet, to be located in the San Jose Growth Area. The existing and planned facilities combined will provide 7,330 square feet for personnel providing police protection services, or 244 square feet per employee. Note that this figure is less than the 275 square feet per employee recognized by the International Association of Chiefs of Police⁵ for planning purposes but greater than the 180 square feet per employee currently provided.

Table 7.2 summarizes the future facility needs and the estimated cost based on the CIP. It also shows the fair share of costs that will be assigned to new development in the form of a development fee.

Table 7.2 Planned Police Protection Facilities

Description	
Planned Substation (sf)	3,000
IIP and CIP Cost Estimate	\$ 600,000
New Development Needs	
Staff persons	8
multiplied by the Standard	244 sf/employee
New Development's Share (sf)	1,952
Percentage Related to new Development	65.1%
New Development's Share of Cost	\$ 390,600

Specialized equipment and vehicles are integral capital assets in providing police protection services. It is estimated that each additional sworn officer will require one vehicle and that specialized equipment will be expanded on an incremental basis using the current level of service to determine the need. Tables 7.3 and 7.4 quantify those needs.

³ Based on data obtained for the cities of Camp Verde, Chino Valley, and Show Low from <http://www.city-data.com/city/Arizona.html>.

⁴ The figure is based on the residential growth population of 2,094, and the current standard of 2.4 and 1.4 sworn and non-sworn personnel per 1,000 residents.

⁵ Rebanks Pepper Littlewood Architects Inc., "Needs Assessment & Accommodation Plan for Bedford Police Department," page 31.

Table 7.3 Planned Vehicles

Description		
Future Vehicles Needed		
Cost per Equipped Vehicle	\$	41,000
Additional Vehicles Needed ¹		5
IIP Cost Estimate	\$	205,000
Percentage Related to new Development		100%
New Development's Share of Cost	\$	205,000

¹ Based on 5 sworn officers needed.

Table 7.4 Planned Equipment

Description	Quantity	Value
Existing Equipment Value		\$ 222,003
Current number of staff		24
Level of Service (\$/staff person)		\$ 9,250
New Development Needs		
Growth staff		8
multiplied by the LOS standard		\$ 9,250
IIP Cost Estimate		\$ 74,000
Percentage Related to new Development		100%
New Development's Share of Cost		\$ 74,000

Timing of improvements and cash flow analysis are provided in the last chapter.

DEVELOPMENT FEE METHODOLOGY

As the planned 3,000 square foot facility is needed to provide services to growth as well as enhance the current level of service, the proportionate share of the costs to be allocated to new development (65.1%) was determined by the Master Plan approach as shown in Table 7.2. Equipment needs are based on an Existing Standard approach and will be added as needed to serve the additional officers and support staff in the new facility. Vehicle needs are based on the assumption that each sworn officer requires one vehicle which will be purchased as sworn officers are added to the department. The proportionate share of the costs to be allocated to new development for Equipment and Vehicles is 100% as shown in Tables 7.3 and 7.4. The development fee will be based only upon growth's proportionate share of costs of the Infrastructure Improvements Plan.

The following outlines the next steps in calculating the development fee:

1. Determine the residential and non-residential share of costs based on demand hours for residents, workers and visitors.

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2. Based on the residential share of costs and residential population growth, determine a cost per capita. Then based on typical occupancy rates, determine a fee per dwelling unit.
3. Based on the non-residential share of the costs and estimated growth in average daily trips (ADT), determine a cost per ADT. Using typical ADT rates, determine the fee per 1,000 square feet for various non-residential land uses. Average daily traffic (ADT) provides a relative measure of persons, and therefore demand, between different non-residential land uses.

POLICE PROTECTION SERVICES DEVELOPMENT FEE CALCULATION

Although the level of service is commonly measured in staff per 1,000 residents, the services benefit residents, visitors and those employed within the City of Bisbee. To allocate a fair share between these users, the current weekly hours of availability are considered as shown in **Table 7.5** and then used to determine the residential and non-residential percentage of costs.

Table 7.5 Service Population and Demand Hours per Week

	Population	Demand Hrs/Week	Person Hrs	Percentage
Residential				
Estimated Residents	6,329			
Residents Working	2,527	128	323,456	
Residents Not Working	3,862	168	648,816	
Annual Visitors				
Overnight in Housing	12,738	1.611	20,520	
		Subtotal	972,272	86%
Non-Residential				
Estimated Jobs	2,834	40	113,360	
Annual Visitors				
Overnight in Lodging	26,055	1.611	41,974	
Day Tourists	19,107	0.153	2,931	
		Subtotal	158,265	14%
		Total	1,130,537	100%

Demand hours/day rate for:

Workers as measured by jobs is based on 9 hours/day multiplied by 5 days/week divided by 7 days.

Visitors in overnight lodging and housing is based on average of 3.5 day stay multiplied by 24 hours/day divided by 365 days per year.

Day Tourists is based on 8 hours/day divided by 365 days.

Surrounding area visitors is based on the assumption of 1 hour/day.

Jobs reduced by 458 to account for estimated Other/Home-based businesses.

The demand for police protection services associated with residents and visitors in overnight housing is assigned to the Residential category as the costs related to these users would be recovered by the fee imposed on a dwelling unit. It is reasonable that the non-residential demand for services be based on workers as well as overnight visitors in lodging and day visitors.

(Non-residential is considered visitor serving land uses and is therefore assigned the balance of visitor demand.)

Table 7.6 reflects new development's share of costs and the allocation of those costs between Residential and Non-Residential development.

Table 7.6 Development Fee Share of Cost

Description	Cost	Development Fee %	Development Fee Share of Cost	Growth Capita or ADT	Cost per Capita or ADT
San Jose Sub-station	\$ 600,000	65.1%	\$ 390,600		
Equipment	\$ 74,000	100.0%	\$ 74,000		
Vehicles	\$ 205,000	100.0%	\$ 205,000		
Total	\$ 879,000		\$ 669,600		
Residential Share		86%	\$ 575,856	2,094	\$ 275.00
Non-Residential Share		14%	\$ 93,744	12,631	\$ 7.42

Based on a residential share of costs of \$575,856 and an estimated growth in residential population of 2,094, the cost per capita for police protection infrastructure improvements equals \$275.00. For non-residential, average daily traffic (ADT) is used as a relative measure of number of persons by land use and consequently as a measure of services. Based on a non-residential share of costs of \$93,744 and an estimated 12,631 non-residential daily trips, the cost per trip is \$7.42.

Based on Table 7.6, other funding estimated at \$209,400 (\$600,000 less \$390,600) should be identified to supplement the funding of the San Jose Sub-station.

FEE SCHEDULE

Table 7.7 shows the development fee schedule for Police protection services to be charged to new development based on the cost per capita and cost per ADT.

Table 7.7 Fee Schedule

	Fee per Resident or ADT	Occupant Density or ADT Rate	Fee per Unit	Fee per 1,000 sf
Single Family Residential	\$ 275.00	2.24	\$ 616	
Multi-Family Residential	\$ 275.00	1.56	\$ 429	
Commercial	\$ 7.42	43		\$ 319
Lodging (per room)	\$ 7.42	8	\$ 61	
Industrial	\$ 7.42	7		\$ 52
Government/Institutional	\$ 7.42	69		\$ 512

Fee rounded to nearest dollar.

8. TECHNOLOGY IMPROVEMENTS

INTRODUCTION

Automation and technology systems are an integral part of providing all City services. For example, such systems may enable better response times in emergencies and more efficient use of government employee's time. It is reasonable to assume that as a City grows so does it need for technology, improving efficiency with limited resources or necessary to manage large amounts of information. The City of Bisbee owns and operates the existing information technology systems and equipment listed in **Table 8.1**. The equipment acquired and maintained by the Information Technology Division is used by all departments and is essential to the City's work. Consequently, these services are useful to residents, visitors and businesses.

Table 8.1 Existing Technology Improvements

Asset ID	Item	Value
Existing IT Improvements		
E00049	Computer Network	\$ 84,061
E0057	Digital Recording Equipment	4,273
E0023	Digital Camcorder	3,931
Total		\$ 92,265

TECHNOLOGY INFRASTRUCTURE IMPROVEMENTS PLAN (IIP)

This chapter estimates the additional technology needs that will be required over the next 22 years based on the City's approved CIP. Servers/software enhancements are estimated at \$20,000 over a 4-year period to accommodate the City's future needs; wireless internet improvements are estimated at \$100,000 over 4 years; record system improvements are estimated at \$21,000 over 3 years; GIS improvements at \$20,000 over 4 years; and scan equipment at \$300,000. As outlined in the City's CIP, technology improvements will provide benefits to new development such as minimizing the need for additional storage space to accommodate growth as well as making WIFI available, an incentive to attracting new businesses. **Table 8.2** lists the needs.

The planned technological improvements should enhance the overall services of the City to existing and future development. To determine a fair share of costs that will be assigned to new development in the form of a development fee, the percent of residential growth to total residential population is used. (Note that the ratio of employees and visitors are the same as residents, so it is appropriate to use the residential percentage in the calculation.)

TECHNOLOGY IMPROVEMENTS

Table 8.2 Planned Technology Improvements

Asset ID	Item	Cost
Future IT Improvements	Was 22 yrs x \$20k; ask city to confirm.	
	Servers/Software	80,000
	Wireless Internet	300,000
	Records System	63,000
	GIS	80,000
	Scan Equipment	300,000
IIP Cost Estimate	Total	\$ 823,000
Percent Related to New Development		24.7%
New Development Share of IIP		\$ 203,281
Other IIP Funding Requirements		\$ 619,719
<i>Future IT Improvements based on FY 09 through FY13 CIP.</i>		
<i>Servers/Software at \$20,000 for 4years.</i>		
<i>Wireless internet at \$100,000 for 4 years.</i>		
<i>Records System at \$21,000 for 3 years.</i>		
<i>GIS at \$20,000 for 4 years.</i>		
<i>Percent related to new development based on residential population growth of 2,094 to total population growth 8,483.</i>		

As shown in Table 8.2, it is anticipated that there will be an investment in automation substantially above that which is currently provided. If the City of Bisbee chooses to collect a development fee from new development based on this additional investment, then the City should identify additional funds of \$619,719 to complement the fee program.

Timing of improvements and cash flow analysis are provided in the last chapter.

DEVELOPMENT FEE METHODOLOGY

As the planned Technology improvements are needed to provide services to growth as well as enhance the current level of service, the proportionate share of the costs to be allocated to new development (24.7%) was determined by the modified Master Plan approach as shown in Table 8.2. The development fee will be based only upon growth's proportionate share of costs of the Infrastructure Improvements Plan.

The following outlines the next steps in calculating the development fee:

1. Determine the residential and non-residential share of costs based on demand hours for residents, visitors and workers.
2. Based on the residential share of costs and residential population growth, determine a cost per capita. Then based on typical occupancy rates, determine a fee per dwelling unit.
3. Based on the non-residential share of the costs and the estimated growth in Average Daily Trips (ADT), determine a cost per ADT. Using typical ADT rates, determine the fee per 1,000 square feet for various non-residential land uses. Average daily traffic (ADT)

provides a relative measure of persons, and therefore demand, between non-residential land uses.

TECHNOLOGY SERVICES DEVELOPMENT FEE CALCULATION

The technology improvements provide services primarily to residents, visitors and workers within the City of Bisbee. To allocate a fair share between these users, the current weekly hours of availability are considered as shown in **Table 8.3** and then used to determine the residential and non-residential percentage of costs.

Table 8.3 Service Population and Demand Hours per Week

	Population	Demand Hrs/week	Person Hours	Percentage
Residential				
Estimated Residents				
Residents Working	2,527	128	323,456	
Residents Not Working	3,862	168	648,816	
Annual Visitors				
Overnight in Housing	12,738	1.611	20,520	
Subtotal			992,792	86%
Non-Residential				
Estimated Jobs	2,834	40	113,360	
Annual Visitors				
Overnight in Lodging	26,055	1.611	41,974	
Day Tourists	19,107	0.153	2,931	
Subtotal			158,265	14%
Total			1,151,057	100.0%

Demand hours/week rate for:

Workers as measured by jobs is based on 8 hours/day multiplied by 5 days/week.

Visitors in overnight lodging and housing is based on average of 3.5 day stay multiplied by 24 hours/day divided by 365 days per year multiplied by 7 days per week.

Day Tourists is based on 8 hours/day divided by 52.1 weeks per year.

Jobs reduced by 458 to account for estimated Other/Home-based businesses.

The demand for technology services associated with residents and visitors in overnight housing is assigned to the Residential category as the costs related to these users would be recovered by the fee imposed on a dwelling unit. It is reasonable that the non-residential demand for services, on the other hand, be based on workers and the balance of visitors as shown in Table 8.3. (Non-residential is considered visitor serving land uses and is therefore assigned the balance of visitor demand.)

Table 8.4 reflects new development's share of costs and the allocation of those costs between Residential and Non-Residential development.

TECHNOLOGY IMPROVEMENTS

Table 8.4 Development Fee Share of Cost for Residential and Non-Residential

Technology Improvements	Cost	Development Fee %	Development Fee Share of Cost	Growth Capita or ADT	Cost per Capita or ADT
Servers/Software	\$ 80,000	24.7%	\$ 19,760		
Wireless Internet	\$ 300,000	24.7%	\$ 74,100		
Records System	\$ 63,000	24.7%	\$ 15,561		
GIS	\$ 80,000	24.7%	\$ 19,760		
Scan Equipment	\$ 300,000	24.7%	\$ 74,100		
Total	\$ 823,000		\$ 203,281		
Residential Share		86%	\$ 174,822	2,094	\$ 83.49
Non-Residential Share		14%	\$ 28,459	12,631	\$ 2.25

Based on a residential share of costs of \$174,822 and an estimated growth in residential population of 2,094, the cost per capita for technology services equals \$83.49. For non-residential, average daily traffic (ADT) is used as relative measure of persons for each land use category and consequently as a measure of services between the various non-residential land uses. Based on a non-residential share of costs of \$28,459 and an estimated 12,631 non-residential daily trips, the cost per trip is \$2.25.

Based on Table 8.4, other funding estimated at \$619,719 (\$823,000 less \$203,281) should be identified to supplement the fee program.

FEE SCHEDULE

Table 8.5 shows the development fee schedule for technology improvements to be charged to new development based on the cost per capita and cost per ADT.

Table 8.5 Fee Schedule

	Fee Per Resident/Worker	Occupant Density/ADT Rate	Fee per Unit	Fee per 1,000 sf
Single Family Residential	\$ 83.49	2.24	\$ 187	
Multi-Family Residential	\$ 83.49	1.56	\$ 130	
Commercial	\$ 2.25	43		\$ 97
Lodging (per room)	\$ 2.25	8.2	\$ 18	
Industrial	\$ 2.25	7		\$ 16
Institutional	\$ 2.25	69		\$ 155

Fee rounded to nearest dollar.

9. TRANSPORTATION

TRANSPORTATION IMPROVEMENTS

This chapter addresses two components of transportation, roadways and the airport runway improvements. Roadway improvements are addressed first followed by the analysis for airport improvements.

INTRODUCTION – ROADWAYS

The Street Division¹⁷ of the Public Works Department is responsible for the City's streets and maintenance thereof. To this end, the City of Bisbee owns and operates the vehicles and specialized equipment listed in **Table 9.1**.

Table 9.1 Roadway Improvements, Vehicles and Equipment

Existing Vehicles/Equipment	Value
Truck	\$ 5,200
Pavement Patcher	\$ 6,100
Dump Trucks	\$ 44,900
Case 580SM T3	\$ 82,700
1/2 Ton Truck	\$ 3,400
Total	\$ 142,300
<i>Current LOS (\$/DUE) =</i>	<i>\$ 22.35</i>

ROADWAY INFRASTRUCTURE IMPROVEMENTS PLAN (IIP)

City staff, either through meetings or through the City's CIP has indicated the need for additional improvements to its roadway network as well as the need for additional equipment as the City grows.

Tables 9.2 and 9.3 identify the planned infrastructure and equipment needs.

¹⁷ The Street Division of Public Works, as well as the Wastewater and Airport Divisions, is an enterprise fund, meaning it is operated as an independent business and must generate adequate revenues to fund its expenditures.

TRANSPORTATION

Table 9.2 Roadway Infrastructure Improvements Plan

Description	Estimated Cost	State/Grant Funding	Allocate to IIP
SR 92	\$ 2,000,000	\$ 2,000,000	\$ -
Arizona Street Reconstruction	\$ 2,649,718	\$ 2,530,481	\$ 119,237
Street Drainage Improvements	\$ 750,000	\$ 750,000	\$ -
Bakerville Drainage/Paving	\$ 661,814	\$ 661,814	\$ -
Street Capacity Enhancement Projects	\$ 5,000,000	\$ -	\$ 5,000,000
Total	\$ 11,061,532	\$ 5,942,295	\$ 5,119,237
New Development's Share %			24.7%
New Development's Share of IIP			\$ 1,264,452
Other Funds Needed for IIP			\$ 3,854,785

Information based on City staff and/or CIP.

New development's percentage based on Table 9.4 DUEs of 2,087/8,455.

City staff has indicated that the roadway improvements are necessary to accommodate growth but will improve the transportation network for current development as well. To determine a fair share of costs that will be assigned to new development in the form of a development fee, the percent of growth to total average daily traffic (ADT) is determined. Table 9.2 reflects the (24.7%) proportionate share of the costs allocable to new development.

In general, local and minor collector improvements are not included in the IIP. Arizona Street may be an exception since it enhances the character of and access to the city government complex which provides services to all residents, workers and visitors of Bisbee. A Capacity Enhancement Project would be a more major project involving the addition of such improvements as through lanes, turning lanes, or traffic signals (that increase the capacity of the roadway). These typically would be improvements to major collector and to minor/major arterial streets and would likely benefit the mobility of all residents, workers and visitors (current and future). In addition, there may be enhancements necessary along major state highway corridors as these are integral components to Bisbee's local mobility, that are not 100% funded by the state and require a local share for funding. Such a project could be included in the infrastructure improvements plan and the local share funded, in part, by development fees.

Table 9.3 Infrastructure Improvements Plan for
Roadway Maintenance Equipment

Description	Cost	Enterprise Funds	Allocate to IIP
Dump Trucks	\$ 67,500	\$ 67,500	\$ -
Loader	\$ 150,000	\$ -	\$ 150,000
Paint Striper	\$ 30,000	\$ -	\$ 30,000
Total	\$ 247,500	\$ 67,500	\$ 180,000
Current LOS per DUE			\$ 22.35
Total equipment			\$ 322,300
Existing plus Growth DUEs			8,455
Proposed LOS per DUE			\$ 38.12
New Development DUEs			2,087
New Development's Share of IIP			\$ 79,556
New Development's Share %			44.2%
Other Funds Needed for IIP			\$ 100,444

See Table 9.4 regarding dwelling unit equivalents (DUEs).

Regarding maintenance equipment/vehicles, the current level of service (LOS) is \$22.32 per equivalent dwelling unit. With the additional equipment, the LOS is increased to \$38.08 per equivalent dwelling unit. Based on this LOS, new development's share of the Infrastructure Improvements Plan for equipment/vehicles is 44.2%. Based on Tables 9.2 and 9.3, development fees fund \$1,344,008 and other funds of \$3,955,229 are needed to complement the fee program (in addition to the listed Grants/Enterprise funds of \$6,009,795).

Timing of improvements and cash flow analysis are provided in the last chapter.

ROADWAY DEVELOPMENT FEE METHODOLOGY

Roadway facility standards are commonly based on maintaining a Level of Service standard. Such an approach requires specific traffic impact analysis which is not within the scope of this report. Instead, the improvements needed are based on the list of CIP improvements that have been identified by staff that are essential to providing an overall roadway network necessary to accommodate existing and future development. As the planned roadway improvements and the additional equipment/vehicles are needed to provide services to growth as well as enhance the current level of service, the proportionate share of the costs to be allocated to new development was determined by the modified Master Plan approach as shown in Tables 9.2 and 9.3. This approach ensures the development fee will be based only upon growth's proportionate share of costs of the Infrastructure Improvements Plan

The following outlines the next steps in calculating the development fee:

1. Total demand for the transportation network is estimated for all land use types using a "dwelling unit equivalent" (DUE) factor that sets the demand (9.57 average daily trips) from a single-family dwelling unit at 1.00 DUE.

TRANSPORTATION

2. Based on the estimated cost of the future improvements related to growth and the growth DUEs, determine a fee per DUE.
3. For residential, the development fee is based on the fee per DUE multiplied by the DUEs for that housing type.
4. For non-residential, the development fee is based on the fee per DUE multiplied by the DUEs per 1,000 square feet by land use category to obtain a fee per 1,000 square feet.

ROADWAY DEVELOPMENT FEE CALCULATION

Table 9.4 shows vehicular traffic demand for existing and future development. Total demand for new traffic facilities is estimated for all land use types using a “dwelling unit equivalent” (DUE) factor that sets the demand from a single-family dwelling unit at 1.00 DUE. For this study a single-family residence generates 9.57 average daily trips. A multi-family unit generates 6.72 average daily trips for a DUE of .70. DUE factors for all other land uses are calculated relative to the traffic demand from a single-family dwelling unit.

Table 9.4 Dwelling Unit Equivalents

	SFD	MFD	Govt/Inst.	Commercial	Industrial	
	Units			(sf)		TOTAL
Existing (2008)	3,021	451	231,500	509,200	96,500	
New Development (2008-2030)	990	148	75,900	166,800	31,700	
Total	4,011	599	307,400	676,000	128,200	
Generation Factor (per DU or per 1000 sf)	9.57	6.72	27.92	42.94	6.97	
DUE Factor	1.00	0.70	2.92	4.49	0.73	
Existing Trips Generated	28,911	3,031	6,463	21,865	673	60,943
New Trips Generated	9,474	995	2,119	7,162	221	19,971
Total Trips Generated	38,385	4,025	8,583	29,027	894	80,914
Existing DUEs	3,021	317	675	2,285	70	6,368
New DUEs	990	104	221	748	23	2,087
Total DUEs	4,011	421	897	3,033	93	8,455

Based on US Census 2000, SFDs are 83% and MFDs are 17% of housing.

Source for generation factor: ITE, *Trip Generation, 7th Edition* (2003) and PBS&J.

Code 210 Single Family Detached (unit) 9.57 ADT

Code 220 Apartment 6.72 ADT

Code 310 Hotel (room) 8.17 ADT

Code 733 Government Office Complex (1,000 sf) 27.92 ADT

Code 820 Shopping Center (1,000 sf GLA) 42.94 ADT

Code 110 General Light Industrial (1,000 sf) 6.97 ADT

The cost related to the demand for roadway network improvements and maintenance equipment/vehicles will be recovered by the fee imposed on a dwelling unit and on non-residential land uses. To determine the fee, the cost per DUE is calculated. **Table 9.5** reflects new development's share of costs and the cost per DUE for future development.

Table 9.5 Development Fee Share of Cost and Cost/DUE

Description	IIP Cost	Development Fee %	Development Fee Share of Cost
Roadway Network	\$ 5,119,237	24.7%	\$ 1,264,452
Equipment/Vehicles	\$ 180,000	44.2%	\$ 79,556
Total	\$ 5,299,237		\$ 1,344,008
Residential and Non-Residential Growth DUEs			2,087
Fee per DUE			\$ 643.99

Cost excludes grants and enterprise funding.

Based on a cost of \$1,344,008 and growth DUEs of 2,087, the cost per DUE is \$643.99.

Based on Table 9.5, other funding estimated at \$3,955,229 (\$5,299,237 less \$1,344,008) should be identified to supplement the fee program.

ROADWAY FEE SCHEDULE

Table 9.6 shows the Transportation – Roadway development fee for new development based on the fee per DUE shown in Table 9.5. Citywide residential and non-residential development would pay the fee based on the estimated DUEs.

Table 9.6 Roadway Fee Schedule

	Fee per DUE	DUE	Fee per Unit	Fee per 1,000 sf
Single Family Residential	\$ 643.99	1.00	\$ 644	
Multi-Family Residential	\$ 643.99	0.70	\$ 451	
Commercial	\$ 643.99	4.49		\$ 2,892
Hotel (per room)	\$ 643.99	0.85	547	
Industrial	\$ 643.99	0.73		\$ 470
Institutional	\$ 643.99	2.92		\$ 1,880

Fee rounded to nearest dollar.

INTRODUCTION - AIRPORT SERVICES

The City of Bisbee owns and operates the Municipal Airport. Expansion improvements have recently been funded to accommodate existing and future development. The City anticipates providing additional enhancement projects over the next 5 years. The expansion and enhancements are necessary to accommodate existing and future residential and non-residential development.

AIRPORT INFRASTRUCTURE IMPROVEMENTS PLAN (IIP)

City staff has indicated the need for additional airport improvements needed to serve growth as shown in **Table 9.7**.

Table 9.7 Airport Infrastructure Improvements

Description		
Planned Facilities		
Expansion Improvements	\$	500,000
IIP Cost Estimate	\$	500,000
Percentage Related to City Residents, Workers &Visitors		29.5%
IIP Cost Estimate Related to City	\$	147,500
Percent Related to New Development		24.7%
New Development Share of IIP	\$	36,433
Other IIP Funding Requirements	\$	463,568

*Improvement cost allocation based on modified master plan approach.
Total Runway improvements are estimated at \$1.4 million.
Percent related to City residents, workers and visitors per Table 9.8.
Percent related to new development based on residential population growth of 2,094 to total population of 8,483.*

The planned expansion should enhance the overall services to the existing and future development of those within and near the City. It is estimated that 29.5% of the airport services are provided to the City's residents, visitors and workers. Then, to determine a fair share of costs that will be assigned to new development in the form of a development fee, the percent of residential growth to total residential population is used. (Note that the ratio of employees and visitors are the same as residents, so it is appropriate to use the residential percentage in the calculation.)

If the City of Bisbee chooses to collect a development fee from new development based on these improvements, then the City should identify additional funds of \$463,568 to complement the fee program.

Timing of improvements and cash flow analysis are provided in the last chapter.

AIRPORT DEVELOPMENT FEE METHODOLOGY

As the planned Airport improvements are needed to provide services to growth as well as enhance the current level of service, the proportionate share of the costs to be allocated to new development (24.7%) was determined by the modified Master Plan approach as shown in Table 9.5. The development fee will be based only upon growth's proportionate share of costs of the Infrastructure Improvements Plan.

The following outlines the next steps in calculating the development fee:

1. Determine the residential and non-residential share of costs based on demand hours for residents, visitors and workers.
2. Based on the residential share of costs and residential population growth, determine a cost per capita. Then based on typical occupancy rates, determine a fee per dwelling unit.
3. Based on the non-residential share of the costs and the estimated increase in Average Daily Trips (ADT), determine a cost per ADT. Using typical ADT rates, determine the fee per 1,000 square feet for various non-residential land uses. Average daily trips (ADT) provide a relative measure of persons, and therefore demand, between different non-residential land uses.

AIRPORT DEVELOPMENT FEE CALCULATION

The airport serves the residents, businesses, and visitors within the City of Bisbee as well as the surrounding area residents. According to the City's website, "The role of the Bisbee Municipal Airport is service to the southeastern Arizona general aviation community, which includes business travel, charter, sport aviation, and training as well as private use of light aircraft. With continued scheduled maintenance and improvements, the airport will be able to continue to fulfill its role within its service area and the county's airport system." To allocate a fair share between these users, the current weekly hours of availability are considered as shown in **Table 9.8** and then used to determine the residential, non-residential and surrounding area percentage of costs.

TRANSPORTATION

Table 9.8 Service Population and Demand Hours per Week

	Population	Demand Hrs/Week	Person Hrs	Percentage	
Residential					
Estimated Residents	6,329				
Residents Working		2,527	128	323,456	
Residents Not Working		3,681	168	618,408	
Annual Visitors					
Overnight in Housing	12,738		1.611	20,520	
			Subtotal	941,864	25.3% 86%
Non-Residential					
Estimated Jobs	2,834		40	113,360	
Annual Visitors					
Overnight in Lodging	26,055		1.611	41,974	
Day Tourists	19,107		0.153	2,931	
			Subtotal	158,265	4.2% 14%
Other					
Surrounding Area Residents	17,645				
Residents Working		7,045	128	901,782	
Residents Not Working		10,262	168	1,724,097	
			Subtotal	2,625,879	70.5% Excluded
			Total	3,726,008	100.0% 100%

Demand hours/day rate for:

Workers as measured by jobs is based on 8 hours/day multiplied by 5 days/week.

Visitors in overnight lodging and housing is based on average of 3.5 day stay multiplied by 24 hours/day divided by 365 days per year multiplied by 7 days/week.

Day Tourists is based on 8 hours/day divided by 365 days x 7 days/week.

Jobs reduced by 458 to account for estimated Other/Home-based businesses.

Surrounding area based on 2000 US Census Bisbee CCD data. Working/non working figures based on ratio for City of Bisbee.

The demand for airport services associated with residents and visitors in overnight housing is assigned to the Residential category as the costs related to these users would be recovered by the fee imposed on a dwelling unit. It is reasonable that the non-residential demand for services, on the other hand, be based on workers and the balance of visitors as shown in Table 9.8. (Non-residential is considered visitor serving land uses and is therefore assigned the balance of visitor demand.) The airport also serves the surrounding area but this amount cannot be captured via the City development fee and is therefore excluded as *Other* in Table 9.8.

Table 9.9 reflects new development's share of costs and the allocation of those costs between Residential, Non-Residential and Other development.

Table 9.9 Development Fee Share of Cost

Description	Cost	Development Fee %	Development Fee Share of Cost	Growth Capita or ADT	Cost per Capita or ADT
Expansion/Enhancements	\$ 500,000	7.3%	\$ 36,433		
Total	\$ 500,000		\$ 36,433		
Residential		86%	\$ 31,332	2,094	\$ 14.96
Non-Residential Share		14%	\$ 5,101	12,631	\$ 0.40

Development Fee percentage based on 24.7% of 29.5%.

Based on a residential share of costs of \$31,332 and an estimated growth in residential population of 2,094, the cost per capita for airport improvements equals \$14.96. For non-residential, average daily traffic (ADT) is used as a relative measure of number of persons by land use and consequently as a measure of services. Based on a non-residential share of costs of \$5,101, and an estimated 12,631 non-residential daily trips, the cost per trip is \$0.40.

Based on Table 9.9, other funding estimated at \$463,567 (\$500,000 less \$36,433) should be identified to supplement the fee program.

AIRPORT FEE SCHEDULE

Table 9.10 shows the development fee schedule for Airport infrastructure improvements to be charged to new development based on the cost per capita and cost per ADT.

Table 9.10 Airport Fee Schedule

	Fee per Resident or ADT	Occupant		Fee per Unit	Fee per 1,000 sf
		Density or ADT Rate			
Single Family Residential	\$ 14.96	2.24		\$ 34	
Multi-Family Residential	\$ 14.96	1.56		\$ 23	
Commercial	\$ 0.40	43			\$ 17
Lodging (per room)	\$ 0.40	8.2		\$ 3	
Industrial	\$ 0.40	7			\$ 3
Institutional	\$ 0.40	69			\$ 28

Fee rounded to nearest dollar.

10. WASTEWATER

INTRODUCTION

The Bisbee Wastewater Treatment Plant (WWTP) is owned and operated by the city. It is available to treat all sewage generated by the City's residents and businesses. The WWTP has a treatment capacity of 1.22 million gallons per day (mgpd). However, additional improvements are required once the WWTP reaches 80% of capacity, or 0.976 mgpd. The current utilization, based on City data, is 0.4 mgpd and it is estimated that an additional 0.15 mgpd shall be reserved for future sewer connections of existing residences and businesses. The capacity reserved for growth, then, is 0.426 mgpd. The City currently imposes a connection fee of \$2,000 per residence pursuant to Ordinance ___ and collects monies for debt service for the improvements from rate payers.

WASTEWATER INFRASTRUCTURE IMPROVEMENTS PLAN (IIP)

The Public Works Division has outlined a program for the expansion of wastewater facilities which will provide capacity for future land development. **Table 10.1** lists the City's planned trunk line expansions that will be needed for current and future development.

Table 10.1 Planned Wastewater Expansion Improvements

Description	Cost
Proposed Sewer Line Expansion 1	\$ 5,000,000
Proposed Sewer Line Expansion 2	\$ 5,000,000
IIP Cost Estimate	\$ 10,000,000
Percentage Related to New Development	24.7%
New Development's Share of IIP	\$ 2,470,000
IIP to be funded from other sources	\$ 7,530,000

Excludes facilities funded via the Enterprise Zone rates.

Percentage related to new development based on Table 10.3.

As shown in Table 10.1, the City should identify \$7.5 million in other funding sources to complement the fee program for existing development's fair share of the improvements.

Timing of improvements and cash flow analysis are provided in the last chapter.

Table 10.2 shows the cost of the Wastewater Treatment Plant, funded with a combination of City funds, loans and grants.

Table 10.2 Wastewater Treatment Plant Upgrade

Description		Cost
WWTP Expansion	+	\$ 30,067,000
Grants	-	\$ 15,767,321
Total Project Costs		\$ 14,299,679
Allowable Capacity (mgpd)		0.976
Capacity for Existing Development (mgpd)	-	0.550
Available Capacity for Future Growth (mgpd)		0.426
Percentage Related to New Development		43.6%
New Development's Share of WWTP		\$ 6,241,458
<i>Growth DUEs equals 1,217 (0.273 mgd) which is less than available capacity of 1,902 DUEs.</i>		
<i>Percent for future growth based on 0.426/0.976.</i>		
<i>Grants/Other Funding Sources based on economists.com report for City of Bisbee, Wastewater</i>		
City of Bisbee		\$ 2,000,000
BECC/EPA Grant		\$ 506,780
RD Grant		\$ 3,050,000
NADB Grant		\$ 10,210,541

DEVELOPMENT FEE METHODOLOGY

As the planned sewer line improvements are needed to provide services to growth and existing development, the proportionate share of costs to be allocated to new development was determined by the Master approach as shown in Table 10.1. As the improved wastewater treatment plan (WWTP) was needed for existing development and for growth (a building moratorium had been in place pending resolution of wastewater treatment) and the WWTP provides capacity beyond what is needed for existing development, the Excess Capacity approach as shown in Table 10.2 is used to determine a proportionate share of costs. The development fee will be based only upon growth's proportionate share of costs of the Infrastructure Improvements Plan.

The following outlines the next steps in calculating the development fee:

1. Total demand for sewer expansion facilities is estimated for all land uses types using a "dwelling unit equivalent" (DUE) factor that sets the demand from a single-family dwelling unit at 1.00 DUE. For this study a single family residence generates 224 gallons per day (gpd). A multi-family unit generates 156 gpd for a DUE of 0.70. DUE factors for all other land uses are calculated relative to the sewage generation rates of a single-family dwelling unit using typical sewage generation factors.
2. Based on the estimated cost of the future improvements and the growth DUEs, determine a fee per DUE.
3. With the upgrade/expansion of the WWTP, excess capacity is available for future development that is also measured in DUEs. The proportionate share of actual costs is determined by the ratio of capacity available to future development to the total capacity of the WWTP (measured in mgpd). Based on the proportionate shares of actual costs less other funds used to offset the costs, the fee per DUE is determined.

4. The maximum allowable fee is then the sum of the fees per DUE of the future improvements and the buy-in for the excess capacity of the WWTP.
5. To determine the development fee, the maximum allowable fee is adjusted by what the City already collects for the improvements via the connection fee and monthly charges related to the debt service schedules.
6. For residential, the development fee per dwelling unit type is determined based on typical sewage generation rates.
7. For non-residential, the development fee per DUE is converted to a fee per 1,000 square feet based on typical sewage generation rates.

WASTEWATER DEVELOPMENT FEE CALCULATION

While specific sewer modeling is not within the scope of this report, the City has indicated that the improvements listed in Table 10.1 are necessary to provide an overall sewer system serving existing and future development. In addition, the WWTP was built with capacity to serve future development. To allocate a fair share of the cost of facilities between existing and future development as well as different land uses, typical generation rates are used to determine Dwelling Unit Equivalents. Use of Dwelling Unit Equivalents is a common method for determining the relative demand between land uses. The DUE estimates are shown in **Table 10.3**.

Table 10.3 Dwelling Unit Equivalents

	Single Family Dwelling Units	Multi-Family Dwelling Units	Institutional (1,000 sf)	Commercial (1,000 sf)	Industrial (1,000 sf)	Total
Existing (2008)	3,021	451	231.5	509.2	96.5	
New Development (2008-2030)	990	148	75.9	166.8	31.7	
Total	4,011	599	307.4	676.0	128.2	
Generation Rate (per DU or 1,000 sf)	224	156	116	100	69	
Equivalent Dwelling Unit (EDU)	1.00	0.70	0.52	0.45	0.31	
Existing Generated (gpd)	676,623	70,412	26,854	50,920	6,659	831,468
Growth Generated (gpd)	221,773	23,079	8,804	16,680	2,187	272,524
Total Generated (gpd)	898,397	93,491	35,658	67,600	8,846	1,103,992
Existing DUEs	3,021	314	120	227	30	3,712
Growth DUEs	990	103	39	74	10	1,217
Total DUEs	4,011	417	159	302	39	4,929

SF/MF percentage is 87% and 13%, respectively based on US Census Data from SF3, Table H33.

Source for generation rates: Arizona Administrative Code R-18-9-ES01 (January 1, 2001)

Residential: 100 gpd per person x occupant density

Commercial: Based on shopping center of 0.1 gpd/sf = 100 gpd/1000sf

Institutional: Based on office of 20 gpd/employee and 5.8 employees per 1000sf = 116 gpd/1000sf

Industrial: Based on average of with/without showers of 30 gpd/employee and 2.3 employees/1000sf = 69 gpd/1000sf

Note that the above calculated generation rate of 0.83 mgd for existing development does not match the previously estimated amount of 0.55 mgd. The 0.55 mgd is used to analyze remaining capacity of the WWTP based on actual flow data while the 0.83 mgd is based on typical design

WASTEWATER

flows. Using design flow criteria for fee calculation purposes is appropriate as the relative ratios between the land uses are assumed to be constant.

The demand for sewer facilities will be recovered by the fee imposed on a dwelling unit and non-residential land uses. The fee will be based on DUE which in turn is based on typical sewage generation factors. **Table 10.4** reflects new development's share of costs and the cost per DUE for future development.

Table 10.4 Future Development's Share of Cost

Description	Cost	Development Fee %	Development Fee Share of Cost	Growth DUE	Cost/DUE
Expansion/Enhancements	\$ 10,000,000	24.7%	\$ 2,470,000	1,217	\$ 2,030
WWTP Plant Upgrade	\$ 14,299,679	43.6%	\$ 6,241,458	1,902	\$ 3,282
Total	\$ 24,299,679		\$ 8,711,458		\$ 5,312

It is estimated, for development fee purposes only, that WWTP Plant Upgrade has additional capacity of 1,902 DUEs based on actual flow data. The cost to new development is then allocated based on these DUEs.

As previously discussed, the City currently imposes a connection fee of \$2,000 per single-family residence and charges rate payers on a monthly basis. As part of this study, the City requested analysis of the various fees to ensure that new development will not be charged twice for the same infrastructure or more than its fair share of the costs.

The City of Bisbee, via an Enterprise Fund, charges users of the Wastewater System on a monthly basis. The recently completed \$30 million WWTP is funded in part by the rate payers, grants and the established connection fee. Adding to that, there is the \$10 million in expansion improvements that are to be funded (only a portion of which are to be funded by development fees). To ensure that new development pays only its fair share of improvements, the cost of \$5,308 per DUE is reduced by 1) the \$2,000 connection fee and 2) the proportionate share of debt service payments (principal only) that new development is estimated to pay. **Table 10.5** shows the maximum development fee that may be imposed on new development for its fair share of the improvements considering the connection fee and monthly ratepayer charges.

Table 10.5 Development Fee Share of Cost

Description	Cost
Maximum Fee/DUE	\$ 5,312
Less Current Connection Fee per SFD	\$ (2,000)
Less Future Debt Service Payments per DUE	\$ (2,274)
Maximum Development Fee/DUE	\$ 1,038

See Appendix for estimated debt service payments via monthly rate charges.

Based on imposing a maximum development fee per DUE of \$1,038 and the potential for 1,217 growth DUEs, the City may capture an additional \$1.26 million for these improvements from development fees.

FEE SCHEDULE

Table 10.6 shows the Wastewater facilities development fee for new development based on the fee per DUE shown in Table 10.5. Citywide residential and nonresidential development would pay the fee based on the estimated DUEs.

Table 10.6 Fee Schedule

	Fee per DUE	DUEs/Unit or 1,000 SF	Fee per Unit	Fee per 1,000 sf
Single Family Residential	\$ 1,038	1.00	\$ 1,038	
Multi-Family Residential	\$ 1,038	0.70	\$ 723	
Commercial	\$ 1,038	0.45		\$ 467
Lodging (per room)	\$ 1,038	0.56	\$ 581	
Industrial	\$ 1,038	0.31		\$ 322
Institutional	\$ 1,038	0.52		\$ 540

Fee rounded to nearest dollar.

Lodging (per room) rate is 125 gpd or 0.56 DUE per 1,000 unit.

11. IMPLEMENTATION

This chapter identifies tasks that the City should complete when implementing the development fee program.

DEVELOPMENT FEE PROGRAM ADOPTION PROCESS

Development fee program adoption procedures are found in the Arizona Revised Statutes. Adoption of the development fee requires the City Council to follow certain procedures including holding a noticed public hearing.

FUNDS NEEDED TO COMPLEMENT DEVELOPMENT FEE PROGRAM

In adopting the fees as presented in this report, additional funds will need to be identified to fund the share of costs not related to new development. **Table 11.1** identifies the facilities studied in this report and the funding sources for the facilities. The "Other Funding Required" column identifies the additional funding that the City needs to obtain for the facilities shown to cover the City's share related to existing (or other) development.

Table 11.1 Total Project Funding

	Total Funding Requirements	Other Funding Required	Projected Development Fee Revenue
Fire Protection and Emergency Medical	\$ 3,096,200	\$ 1,083,700	\$ 2,012,500
General Government	\$ 251,000	\$ 51,400	\$ 199,600
Library	\$ 1,025,800	\$ -	\$ 1,025,800
Parks	\$ 459,200	\$ -	\$ 459,200
Police	\$ 879,000	\$ 209,400	\$ 669,600
Technology Improvements	\$ 823,000	\$ 619,700	\$ 203,300
Transportation			
Airports	\$ 500,000	\$ 463,600	\$ 36,400
Roads	\$ 5,299,200	\$ 3,955,200	\$ 1,344,000
Wastewater	\$ 10,000,000	\$ 8,736,754	\$ 1,263,246
Total	\$ 22,333,400	\$ 15,119,754	\$ 7,213,646

Rounded to nearest \$100.

For Transportation (Roadways) and Wastewater, additional funding sources are included and/or anticipated as detailed in each chapter.

Wastewater Treatment Plant has been constructed using loans and grant funding.

City collects for WWTP via rates and \$2,000 connection fee.

CASH FLOW PROJECTIONS AND TIMING OF IMPROVEMENTS

The Arizona Revised Statutes require that before the assessment of a new or modified development fee, the governing body of the municipality shall adopt or amend an Infrastructure Improvements Plan. This report serves as the Infrastructure Improvements Plan.

The City should reflect a reasonable set of projects that could be constructed over a 5-year period based on current revenue and cost projections in its CIP. **Table 11.2** projects the anticipated revenues over the planning horizon at 5-year intervals. Actual revenues will depend on development market conditions and may be higher or lower than projected in any one year.

IMPLEMENTATION

Table 11.2 Estimated Revenues for CIP Planning

<i>Fiscal Year:</i>	2009-2015	2016-2020	2021-2025	2026-2030	Average Annual Revenues
<i>Time Frame in years:</i>	7	5	5	5	
<i>Services</i>					
Fire/EMS	\$ 640,500	\$ 457,500	\$ 457,500	\$ 457,500	\$ 91,500
General Government	\$ 63,700	\$ 45,500	\$ 45,500	\$ 45,500	\$ 9,100
Library	\$ 326,200	\$ 233,000	\$ 233,000	\$ 233,000	\$ 46,600
Parks	\$ 146,300	\$ 104,500	\$ 104,500	\$ 104,500	\$ 20,900
Police	\$ 212,800	\$ 152,000	\$ 152,000	\$ 152,000	\$ 30,400
Technology Improvements	\$ 64,400	\$ 46,000	\$ 46,000	\$ 46,000	\$ 9,200
Transportation					
Roadways	\$ 427,700	\$ 305,500	\$ 305,500	\$ 305,500	\$ 61,100
Airport	\$ 11,900	\$ 8,500	\$ 8,500	\$ 8,500	\$ 1,700
Wastewater	\$ 401,800	\$ 287,000	\$ 287,000	\$ 287,000	\$ 57,400
Total	\$ 2,295,300	\$ 1,639,500	\$ 1,639,500	\$ 1,639,500	\$ 327,900

Based on assumption that year over year growth is constant.

Average Annual Revenues estimated to nearest \$100, based on total fee revenue divided by 22 year planning horizon.

It should be noted that the planning horizon for this study is 22 years and that facilities will be needed incrementally over that timeframe. However, construction of buildings typically occurs in stages, not annually. To ensure that new development receives the benefit of timely improvements, and that levels of service do not fall to unacceptable levels, it is likely that the City will need to advance the funds at some point for the construction of the highest priority improvements. (A summary of the building facility needs is provided in the appendix.) Other items, such as technology improvements, library collections, and vehicle/safety apparatus and equipment can be added as needed.

Once the City has prioritized its list of improvements, the improvements should be added to the City's CIP along with identification of any other funding sources necessary as identified in this report. Once the City determines that it will need to borrow funds to advance construction, the City should consider updating the development fee program to include debt financing costs.

INFLATION ADJUSTMENT

The costs in this report are shown in current year dollars based on planning level costs. To ensure that the fee program stays current with costs, an adjustment factor based on three indices are recommended: 1) the *Engineering News Record Construction Cost Index* (annual, 20-city average) for transportation (roadways and airport), wastewater and park improvements; 2) the *Engineering News Record Building Cost Index* (annual, 20-city average) for fire protection and emergency medical, general government, libraries, and police; and 3) the U.S. Bureau of Labor Statistics Consumer Price Index (All Urban Consumers) – CPI-U, U.S., All Items annual average for technology. The beginning Building Cost Index (annual 20-city average) for 2008 is 4691; the beginning Construction Cost Index (annual 20-city average) for 2008 is 8310; and the beginning Consumer Price Index is 215.303. The annual adjustment shall be applied to the development fee beginning July 1, 2010 and every July 1 thereafter or until the fee program is revised or updated.

COMPLIANCE REQUIREMENTS

Non-discrimination. Arizona Revised Statutes (ARS 9-463-05(B)5) requires that if development fees are assessed by a municipality, such fees shall be assessed in a nondiscriminatory manner.

Credits. Arizona Revised Statutes (ARS 9-463.05(B)3) requires that the municipality provide a credit toward the payment of a development fee for the required dedication of public sites, improvements and other necessary public services included in the Infrastructure Improvements Plan and for which a development fee is assessed, to the extent the public sites, improvements and necessary public services are provided by the developer.

Revenue Credits. Arizona Revised Statutes (ARS 9-463.05(B)4) requires the municipality, in determining the extent of the burden imposed by the development, consider, among other things, the contribution made or to be made in the future in cash or by taxes, fees or assessments by the property owner toward the capital costs of the necessary public service covered by the development fee. This development fee study assumes that future tax revenues are not utilized to construct capital facilities identified in this Infrastructure Improvements Plan. Infrastructure Improvements Plan projects reflect a reduction in project cost when revenues from grants or other agencies have been made available.

Chapter 10 on Wastewater provides a credit for the outstanding debt that new development will contribute via sewer rates.

Earmarking of fee revenue. Arizona Revised Statutes (ARS 9-463-05(B)3) requires that monies received from development fees be placed in a separate fund and accounted for separately and may only be used for the purposes for which it was collected. Monies received from a development fee identified in an Infrastructure Improvements Plan adopted or amended shall be used to provide the same category of necessary public service for which the development fee was assessed. Interest earned on monies in the separate fund shall be credited to the fund.

Annual Report. Arizona Revised Statutes (ARS 0-463-05(G)-(K)) requires each municipality that assesses development fees submit an annual report accounting for the collection and use of the fees. Specific reporting requirements may be found in the Statutes. The Statutes further require that the annual report be submitted to the city clerk within ninety days following the end of each fiscal year. A municipality that fails to file the required report shall not collect development fees until the report is filed.

WASTEWATER TREATMENT PLANT DEBT SERVICE

Table A.1 shows the estimated debt service payments (principal only) for the WWTP and calculates the net present value for payments considered for the calculations in Chapter 10.

Table A.1 Debt Service Payments

Fiscal Year	Debt Service Payments	Projected DUEs	Credit Per DUE
na		3,712	
2009	\$ 667,245	3,767	\$ 177
2010	\$ 682,504	3,823	\$ 179
2011	\$ 698,146	3,878	\$ 180
2012	\$ 714,184	3,933	\$ 182
2013	\$ 730,627	3,988	\$ 183
2014	\$ 747,489	4,044	\$ 185
2015	\$ 764,781	4,099	\$ 187
2016	\$ 782,515	4,154	\$ 188
2017	\$ 800,705	4,210	\$ 190
2018	\$ 819,363	4,265	\$ 192
2019	\$ 838,503	4,320	\$ 194
2020	\$ 858,139	4,376	\$ 196
2021	\$ 878,287	4,431	\$ 198
2022	\$ 898,961	4,486	\$ 200
2023	\$ 920,176	4,541	\$ 203
2024	\$ 941,949	4,597	\$ 205
2025	\$ 964,297	4,652	\$ 207
2026	\$ 179,014	4,707	\$ 38
2027	\$ 186,398	4,763	\$ 39
2028	\$ 194,087	4,818	\$ 40
2029	\$ 202,093	4,873	\$ 41
2030	\$ 210,429	4,929	\$ 43
2031	\$ 219,109	4,929	\$ 44
2032	\$ 228,148	4,929	\$ 46
2033	\$ 237,559	4,929	\$ 48
2034	\$ 247,358	4,929	\$ 50
2035	\$ 224,472	4,929	\$ 46
Total	\$ 15,836,538		\$ 3,683

Debt service shown includes principal only.

Assumed no DUE growth from 2030 to 2035 which is conservative.

Estimated DUEs per year = 55.3

Discount Rate	5%
Net Present Value	\$2,274

INFRASTRUCTURE IMPROVEMENTS PLAN PLANNED BUILDING NEEDS

The infrastructure building needs are summarized below in **Table A.2**.

Table A.2 Future Infrastructure Needs

	Future Bldg Needs (sf)	Acres
Fire	5,150	
General Government		
Primary Building (Tenant Improvements)	6,193	
Library	2,720	
Parks		1.91
Police	3,000	
Technology Improvements	<i>na</i>	
Transportation		
Airports	<i>na</i>	
Roads	<i>na</i>	
Wastewater	<i>na</i>	
New Construction	10,870	
Tenant Improvements	6,193	
Total Building square footage added	17,063	
Total Park acreage added		1.91

TOURISM

There is a substantial visitor presence in the City of Bisbee. Visitor estimates are based on the following:

Table A.3 Visitor Estimates

		Annual Visitors
Visitor Center Visits		57,900
Day %	33%	19,107
Overnight %	45%	26,055
Vacation Housing %	22%	12,738
Estimated Length of Day Trip (in days)		0.33
Average Length of Overnight Stay (in days)		3.5
Estimated Visitor-Days (in 1 year)		142,081

Annual visitors based on Bisbee Economic Outlook 2008 Report, pg. 47 for Bisbee Visitor Center counts.

Percentage for type of stay is based on Bisbee Economic Outlook 2008 Report, page 51, for Cochise County.

Average Length of Stay for Overnight Visitors based on Arizona 2007 Tourism Facts for Tucson and Southern Arizona.

Growth in visitors is based on non-residential growth which in turn is based on residential population growth.

Library collections

Table A.4 lists the value of the library collections and the average cost per unit.

Table A.4 Library Collections

Description	Units	Replacement Unit Cost	Total
Equipment			
Computers	20	\$ 1,500	\$ 30,000
1 Low Vision Reader	1	\$ 1,200	\$ 1,200
Public Access Printer	1	\$ 1,000	\$ 1,000
Printer	4	\$ 500	\$ 2,000
Media Projector	1	\$ 1,500	\$ 1,500
TV	1	\$ 500	\$ 500
VCR	1	\$ 150	\$ 150
DVD Player	1	\$ 300	\$ 300
Stereo	1	\$ 300	\$ 300
Barcode Readers	3	\$ 400	\$ 1,200
Photocopier	1	\$ 500	\$ 500
Total	35		\$ 38,650
Average Cost per Unit			\$ 1,104
Library Collections			
Video/Musical Recordings	1,900	\$ 20	\$ 38,000
Recorded Books	641	\$ 125	\$ 80,085
Books	<u>23,511</u>	\$ 25	<u>\$ 587,784</u>
Total	26,052		\$ 705,869
Average Cost per Unit			\$ 27
Databases			
myLibraryDV	1		\$ 1,000
Cochise County (City share)	4		\$ 10,000
Az State Library	<u>35</u>		<u>\$ 87,500</u>
Total	40		\$ 98,500
Average Cost per Unit			\$ 2,463

PARKS – AVERAGE COST PER ACRE

Table A.5 summarizes the average cost per developed acre of parkland based on the current level of amenities provided in the City's parks.

Table A.5 Park Unit Costs

Location/Amenities	Units	Unit Cost	Total Cost	Acres
Briggs Park				0.11
Basketball Assembly	1	\$ 2,000	\$ 2,000	
City Park				0.21
Band Stand	1	5,000	\$ 5,000	
Bleachers	1	7,400	\$ 7,400	
Ramada	1	10,000	\$ 10,000	
Kiddie Slide System	1	2,300	\$ 2,300	
Basketball Assembly	1	2,000	\$ 2,000	
Benches	3	300	\$ 900	
Water Fountain	1	2,500	\$ 2,500	
Galena Park				0.52
Ramada (1) with Table	1	10,800	\$ 10,800	
Water Fountain	1	2,500	\$ 2,500	
Stationary Trash Receptacle (1)	1	700	\$ 700	
Trail	1	na	\$ -	
Garfield				0.94
Ramadas with Tables	4	10,800	\$ 43,200	
Slides	2	2,300	\$ 4,600	
2-Unit Swing Set	2	1,600	\$ 3,200	
4-Unit Swing Set	2	2,600	\$ 5,200	
Benches	2	300	\$ 600	
Basketball Court	1	40,000	\$ 40,000	
Volleyball Court	1	40,000	\$ 40,000	
Goar Park				0.11
Restrooms	2	28,000	\$ 56,000	
Tables	2	800	\$ 1,600	
Benches	2	300	\$ 600	
Stationary Trash Receptacles	2	700	\$ 1,400	
Grassy Park				0.23
Restrooms	3	28,000	\$ 84,000	
Benches	8	300	\$ 2,400	
Higgins				0.64
Swimming Pool	1	(See note)	\$ -	
Ramadas with Tables	2	10,800	\$ 21,600	
Ramada	1	10,000	\$ 10,000	
Poolside Ramada	1	10,000	\$ 10,000	
Pool Building	1	(See note)	\$ -	
Volleyball Court	1	40,000	\$ 40,000	
Basketball Court	1	40,000	\$ 40,000	
Benches	2	300	\$ 600	

Continued on next page.

Table A.5 Park Unit Costs (cont.)

Location/Amenities	Units	Unit Cost	Total Cost	Acres
Saginaw Park				0.18
Ramada with Table	1	10,800	\$ 10,800	
Playground System with Slide	1	12,300	\$ 12,300	
4-Unit Swing Set with Slide	1	4,900	\$ 4,900	
Spring horse	1	600	\$ 600	
Basketball Assembly	1	2,000	\$ 2,000	
Stationary Trash Receptacle (1)	1	700	\$ 700	
Water Fountain	1	2,500	\$ 2,500	
Sherman/Paul Park				0.05
Ramada (1) with Table	1	10,800	\$ 10,800	
4-Unit Swing Set	2	2,600	\$ 5,200	
Skate Park				0.15
Skateboard Park/Concrete Platform	1	60,000	\$ 60,000	
Tintown Park				0.07
Ramada with Table	1	10,800	\$ 10,800	
Playground System	1	10,000	\$ 10,000	
Water Fountain	1	2,500	\$ 2,500	
Stationary Trash Receptacle (1)	1	700	\$ 700	
Vista Park				2.63
Restrooms	4	28,000	\$ 112,000	
Benches	9	300	\$ 2,700	
Ramadas with Tables	3	10,800	\$ 32,400	
Playground Systems	4	10,000	\$ 40,000	
Volleyball Court	1	40,000	\$ 40,000	
Stationary Trash Receptacles	3	700	\$ 2,100	
Gazebo	1	10,000	\$ 10,000	
Tennis Courts (2) - School District			\$ -	
Total			\$ 824,100	5.84

Average value of amenities per park acre \$ 141,000

The Swimming Pool and the Senior Center have been excluded from the average value. These types of amenities generally serve large populations and could be considered in the cost if the updated Parks Master Plan determines additional pool or senior center amenities are needed.

DEVELOPMENT FEE METHODOLOGY CHART

The following chart outlines the basic approach taken to determine the Development Fee.