

Black Canyon Corridor

Estrella Laveen

Ahwatukee Foothills

Deer Valley

Desert View

North Gateway

Black Canyon Corridor

Estrella Laveen

Ahwatukee Foothills

Deer Valley

Desert View

North Gateway

Black Canyon Corridor

Estrella Laveen

Ahwatukee Foothills

Offsets Report

for the Development Impact Fee Areas of Phoenix



November 15, 2006

(Revised August 27, 2007)



Table of Contents

Table of Contents	2
List of Tables	3
List of Maps	4
Introduction	5
Summary Of Offsets From All Alternative Revenues Sources By Planning Area	7
Offsets To Costs Per EDU For Alternative Funding Sources	12
Offsets For Secondary Property Taxes	13
Offsets For Arizona Highway User Revenues (AHUR).....	15
Offsets For Solid Waste Fees	17
Offsets For Sewer Rates And Development Occupational Fees	19
Offsets For Water Rates And Development Occupational Fees	21
Offsets For Sales Tax.....	23
Appendix A - Growth Related Capital Facilities In 2006-20011 CIP Financed With 1984, 1988 or 2001 Bonds	
Appendix B - Calculation Of Secondary Property Tax Offsets By Land Use Category	
Appendix C - Calculation Of Water Rate Offsets Per EDU And Meter Size	
Appendix D - Calculation Of Wastewater Rate Offsets Per EDU And Meter Size	
Appendix E - Calculation Of Arizona Highway User Revenue (AHUR) Offsets By Land Use Category	
Appendix F - Calculation Of Solid Waste Revenue Offsets By Land Use Category	
Appendix G - Calculation Of Sales Tax Revenue Offsets By Land Use Category	
Appendix H - Glossary	
Appendix I - Tatum Ranch Community Facility District Offsets	



List of Tables

Table 1	Single Family Offset Summary	8
Table 2	Summary of Offsets to Costs per EDU From Alternative Funding Sources Except Water and Wastewater	9
Table 3	Wastewater Development Occupational Fee Offsets	10
Table 4	Water Rate and Development Occupational Fee Offsets	11
Table 5	Estimated Secondary Property Tax Rates per \$1000 of Assessed Value	14
Table 6	Summary of Secondary Property Tax Bond Proceeds Offsets per EDU.....	15
Table 7	Replacement and Central Portions of AHUR Funded Major Streets and Bridges Capital Improvement Program	16
Table 8	Determination of Per Capita AHUR Revenues	16
Table 9	AHUR Offsets for Future Development.....	16
Table 10	Use of Solid Waste Revenues and Debt Service.....	17
Table 11	Solid Waste Bond Proceeds Offsets for New Development.....	18
Table 12	Wastewater Growth-Related Debt Service (Fiscal Year 2001-2002)	19
Table 13	Sewer Rate Offset per Drainage Fixture Unit.....	19
Table 14	Offset for Sewer Development Occupational Fees	20
Table 15	Water Growth-Related Debt Service (Fiscal Year 2004-2005)	21
Table 16	Water Rate Offsets per EDU.....	21
Table 17	Total New Water Offsets by Meter Size	22
Table 18	Park Sales Tax Offsets for Future Development.....	23



List of Maps

- Map 1 Northern Impact Fee Areas - North Gateway, Desert View And Deer Valley.....6
- Map 2 Southern Impact Fee Areas - Estrella, Laveen And Ahwatukee Foothills7



Introduction

In the City of Phoenix Development Impact Fee program, offsets are the reductions in fees assessed in consideration of projections of taxes and fees to be paid by a development requesting construction permits. These offsets are required by ARS §9-463.05 and by Section 29-6.C. of the Phoenix City Code.

Capital costs used in calculating development impact fees are identified for infrastructure needs in the following areas: equipment repair facilities, fire protection, libraries, major streets and bridges, parks, police, open space, solid waste disposal, storm drainage, wastewater, and water. Subtracted from the costs in each category are the values of funding sources other than development fees available to pay for the facilities. These other funding sources include secondary property taxes, Arizona Highway User Revenues, water and sewer rate revenues and Development Occupational Fees, solid waste fees, retail sales taxes used for capital construction and federal and state grants.

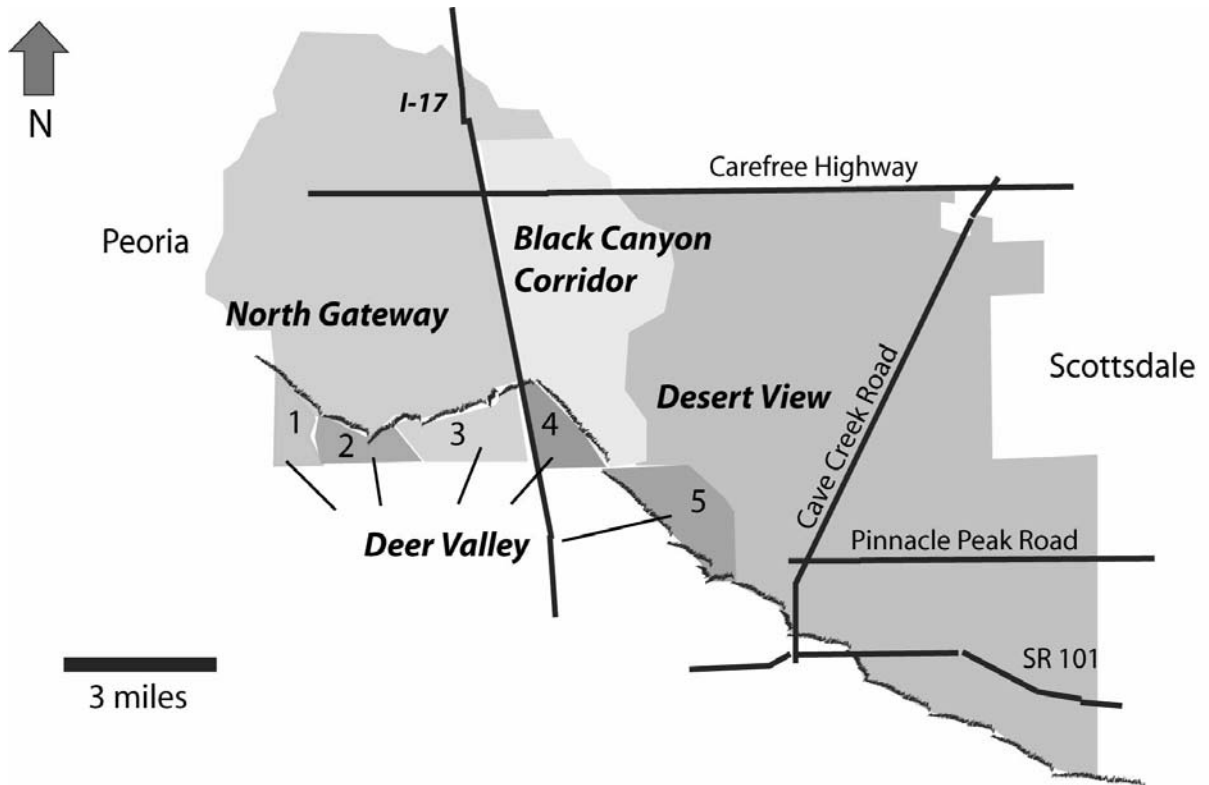
This report is intended to:

- Provide background on calculation of offsets for alternative revenue sources for existing and new development,
- Maintain data in a format that can be used by interested parties and in preparation of the triennial independent evaluation required by the City Code.

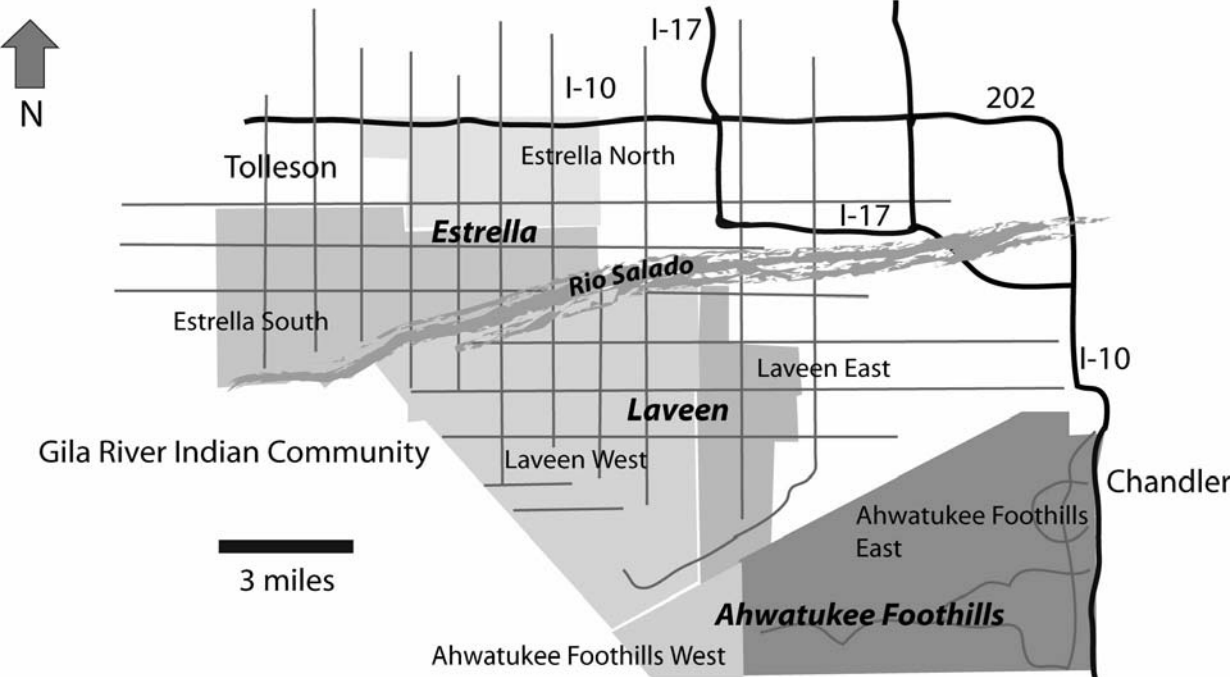
(Definitions of specialized terms used in this report are found in Appendix H.)

The areas where the City of Phoenix assesses or will assess impact fees are shown on the following two maps showing the northern and southern fee areas.

Map 1 Northern Impact Fee Areas - North Gateway, Black Canyon Corridor, Desert View and Deer Valley



Map 2 Southern Impact Fee areas - Estrella, Laveen and Ahwatukee foothills



Summary of Offsets from All Alternative Revenue Sources by Planning Area

Table 1 shows a summary of offsets for one single family dwelling. Table 2 shows a summary of offsets used in the development impact fee program for capital facility categories except wastewater and water. Water and wastewater offsets require the addition of the Development Occupational Fee offsets shown in Table 3 and 4. Table 4 also summarizes water offsets. Following these tables is a description of how the offsets are calculated and summary information for revenue sources. Detailed tables showing how each of the offsets is calculated are shown in the appendices.

Table 1 Single Family Offset Summary
(5/8" Water Meter and Inside Phoenix)

Capital Facility Category	Offset	Offset by Category
Open Space***	29	29
Equipment Repair	13	13
Fire	117	117
Library	54	54
Parks - Secondary Property Tax	143	
Parks - Sales Tax	324	
Parks Subtotal		467
Police	47	47
Solid Waste - Secondary Property Tax	0	
Solid Waste - Solid Waste Fee	449	
Solid Waste Subtotal		449
Streets - AHUR	388	
Streets - Secondary Property Tax	171	
Streets (Storm Sewers) - Secondary Property Tax*	80	
Streets Subtotal		639
Storm Drainage **	67	67
Wastewater - Rate Revenues	598	
Wastewater - DOF	600	
Wastewater Subtotal		1,198
Water - Rate Revenues	211	
Water - DOF	600	
Water Subtotal		811
TOTAL	3,891	3,891
TOTAL - Areas without storm sewers	3,811	3,811
TOTAL - Areas without storm drainage facilities	3,824	3,824
TOTAL - Areas without storm sewers or storm drainage fee	3,744	3,744
TOTAL - Areas without Open Space fee	3,862	3,862

*Offset provided in areas with storm sewers in street fee

**Offset provided in areas with storm drainage fee

*** Offset provided in areas with open space fee

Table 2 - Summary of Offsets to Costs per EDU From Alternative Funding Sources Except Wastewater and Water

Land Use	Equipment Repair	Fire	Libraries	Streets - Sec. Prop. Tax	Street Storm Sewers SPT*	Streets - AHUR	Streets - Subtotal	Parks - Sec. Prop. Tax	Parks - Sales Tax	Parks - Subtotal	Police	Solid Waste - SPT	Solid Waste - Fees	Solid Waste - Subtotal	Storm Drainage*	Open Space	Total Less Wastewater and Water
Single-Detached or Attached	\$13	\$117	\$54	\$171	\$80	\$388	\$639	\$143	\$324	\$467	\$47	\$0	\$449	\$449	\$67	\$29	\$1,614
Multifamily	\$7	\$42	\$31	\$61	\$28	\$388	\$477	\$97	\$324	\$421	\$27	\$0	\$449	\$449	\$33	\$10	\$1,649
Mobile Home	\$7	\$42	\$31	\$61	\$28	\$388	\$477	\$97	\$324	\$421	\$27	\$0	\$449	\$449	\$33	\$10	\$1,649
Bank, S&L w/ Drive Through	\$39	\$627	\$955	\$68	\$32	\$388	\$488	\$0	\$0	\$0	\$227	\$0	\$0	\$0	\$575	\$0	\$6,644
Conven. Market	\$17	\$273	\$417	\$38	\$18	\$388	\$444	\$0	\$0	\$0	\$99	\$0	\$0	\$0	\$251	\$0	\$3,391
Conv. Market w Gas Pumps	\$37	\$593	\$904	\$11	\$5	\$388	\$404	\$0	\$0	\$0	\$215	\$0	\$0	\$0	\$544	\$0	\$6,267
Gas Stations	\$88	\$1,403	\$2,137	\$9	\$4	\$388	\$401	\$0	\$0	\$0	\$508	\$0	\$0	\$0	\$1,287	\$0	\$13,603
Lodging	\$13	\$205	\$312	\$159	\$75	\$388	\$622	\$0	\$0	\$0	\$74	\$0	\$0	\$0	\$188	\$0	\$2,913
Restaurant w Drive Through	\$38	\$605	\$922	\$21	\$10	\$388	\$419	\$0	\$0	\$0	\$219	\$0	\$0	\$0	\$555	\$0	\$6,387
Restaurant, General	\$30	\$477	\$727	\$74	\$35	\$388	\$497	\$0	\$0	\$0	\$173	\$0	\$0	\$0	\$438	\$0	\$5,296
Retail Center	\$17	\$277	\$421	\$93	\$43	\$388	\$524	\$0	\$0	\$0	\$100	\$0	\$0	\$0	\$254	\$0	\$3,520
Theater, Motion Pict.	\$17	\$277	\$421	\$30	\$14	\$388	\$432	\$0	\$0	\$0	\$100	\$0	\$0	\$0	\$254	\$0	\$3,431
Office, General	\$17	\$238	\$261	\$100	\$47	\$388	\$535	\$0	\$0	\$0	\$86	\$0	\$0	\$0	\$218	\$0	\$2,737
Office, Medical	\$21	\$292	\$321	\$64	\$30	\$388	\$482	\$0	\$0	\$0	\$106	\$0	\$0	\$0	\$268	\$0	\$3,114
Manufacturing	\$25	\$159	\$311	\$117	\$55	\$388	\$560	\$0	\$0	\$0	\$58	\$0	\$0	\$0	\$146	\$0	\$2,821
Warehouse	\$30	\$188	\$1,291	\$116	\$54	\$388	\$558	\$0	\$0	\$0	\$68	\$0	\$0	\$0	\$173	\$0	\$7,414
Mini - Warehouse	\$15	\$97	\$190	\$877	\$412	\$388	\$1,677	\$0	\$0	\$0	\$35	\$0	\$0	\$0	\$89	\$0	\$2,894
Church	\$0	\$0	\$0	\$0	\$0	\$388	\$388	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$885
Day Care Center	\$32	\$148	\$369	\$58	\$27	\$388	\$473	\$0	\$0	\$0	\$54	\$0	\$0	\$0	\$136	\$0	\$3,029
Elementary School	\$48	\$228	\$568	\$372	\$174	\$388	\$934	\$0	\$0	\$0	\$82	\$0	\$0	\$0	\$209	\$0	\$4,568
High School	\$48	\$228	\$568	\$182	\$85	\$388	\$655	\$0	\$0	\$0	\$82	\$0	\$0	\$0	\$209	\$0	\$4,322
Golf Course	\$194	\$912	\$2,275	\$1,451	\$681	\$388	\$2,520	\$0	\$0	\$0	\$331	\$0	\$0	\$0	\$93	\$0	\$13,793
Hospital	\$76	\$357	\$890	\$57	\$27	\$388	\$472	\$0	\$0	\$0	\$129	\$0	\$0	\$0	\$327	\$0	\$6,075
Nursing Home	\$20	\$95	\$237	\$79	\$37	\$388	\$504	\$0	\$0	\$0	\$35	\$0	\$0	\$0	\$87	\$1	\$2,324

*Offset not provided in areas with no costs for storm sewers or storm drainage

Per Housing Unit or '000 sq.ft. except for: fueling stations (streets - service station, convenience market with gas pumps) or room (streets - hotel /motel).

Table 3 Wastewater Development Occupational Fee Offsets

	Meter Size	Meter Type	Wastewater Development Occupational Fee	
			Inside Phoenix	Outside Phoenix
Single-Family	Not Applicable		\$600	\$900
Multi-Family	Not Applicable		\$360	\$540
Mobile Home	Not Applicable		\$420	\$630
Commercial and Industrial	5/8"	Disk	\$600	\$900
	3/4"*	Disk	\$600	\$900
	1"	Disk	\$1,500	\$2,250
	1 1/2"	Disk	\$2,760	\$4,140
	2"	Disk	\$4,500	\$6,750
	2"	Turbine	\$7,200	\$10,800
	3"	Disk	\$9,000	\$13,500
	3"	Compound	\$9,240	\$13,860
	3"	Turbine	\$16,200	\$24,300
	4"	Compound	\$15,000	\$22,500
	4"*	Turbine	\$18,000	\$27,000
	6"	Compound	\$27,600	\$41,400
	6"	Turbine	\$37,500	\$55,500
	8"*	Compound	\$48,000	\$72,000
8"*	Turbine	\$54,000	\$81,000	

The Sewer Development Occupational Fees is the same as the Water Development Occupational Fees shown in Table 4.

Table 4 Water Rate and Development Occupational Fee Offsets

	Meter Size	Meter Type	Water Development Occupational Fee		Water Rate Offset	Total Offset	
			Inside Phoenix	Outside Phoenix		Inside Phoenix	Outside Phoenix
Single-Family	1" or Less		\$600	\$900	\$211	\$811	\$1,111
Multi-Family	Not Applicable		\$360	\$540	\$103	\$463	\$643
Mobile Home	Not Applicable		\$420	\$630	By Meter Size	\$420+ Rate Offset	\$630+ Rate Offset
Commercial for Development Occupational Fee and for all Rate Revenue Offsets	5/8"	Disk	\$600	\$900	\$211	\$811	\$1,111
	3/4"*	Disk	\$600	\$900	\$317	\$917	\$1,217
	1"	Disk	\$1,500	\$2,250	\$528	\$2,028	\$2,778
	1 1/2"	Disk	\$2,760	\$4,140	\$1,055	\$3,815	\$5,195
	2"	Disk	\$4,500	\$6,750	\$1,688	\$6,188	\$8,438
	2"	Turbine	\$7,200	\$10,800	\$1,688	\$8,888	\$12,488
	3"	Disk	\$9,000	\$13,500	\$3,165	\$12,165	\$16,665
	3"	Compound	\$9,240	\$13,860	\$3,376	\$12,616	\$17,236
	3"	Turbine	\$16,200	\$24,300	\$3,693	\$19,893	\$27,993
	4"	Compound	\$15,000	\$22,500	\$5,275	\$20,275	\$27,775
	4"*	Turbine	\$18,000	\$27,000	\$6,330	\$24,330	\$33,330
	6"	Compound	\$27,600	\$41,400	\$10,550	\$38,150	\$51,950
	6"	Turbine	\$37,500	\$55,500	\$13,188	\$50,688	\$69,438
	8"*	Compound	\$48,000	\$72,000	\$16,880	\$64,880	\$88,880
	8"*	Turbine	\$54,000	\$81,000	\$18,990	\$72,990	\$99,990



Offsets to Costs per EDU for Alternative Funding Sources

The Development Impact Fee Ordinance provides for reductions in infrastructure costs and development fees to acknowledge the availability of alternative revenue sources for infrastructure financing and potential contributions by developers.

Offsets to eligible costs for most alternative revenues are determined by calculating the present value of the future revenue stream using a discount rate and term equal to that of general obligation bonds. This procedure assumes that the revenue stream is an annuity and that a bond equal to the present value of that annuity can be purchased with the revenue. Offsets are calculated for secondary property tax, sales tax and water, sewer and solid waste rate revenues available to be used for construction of growth related capital facilities in the planning area.

The offsets are acknowledged during the calculation of development impact fees per EDU for each development. Then when builders in the new development apply for building permits, and the amount of their development fees is calculated, offsets based on the projected revenues from the new development are subtracted from the gross fee.

Offsets are only provided for that portion of revenues used for projects that are growth-related and non-central. Central projects are ones that are of benefit to all of the city and are unrelated to city growth. The Margaret T. Hance Park is an example of a project that is central and not growth related. In addition, costs for some facilities serving the whole city are not included in Infrastructure Financing Plans. Offsets for these costs are also not allowed. The City Hall is an example of this type of citywide facility.

The basic steps in calculating a development fee are as follows:

- Determine the number of EDUs in the development.
- Multiply the number of EDUs by the fee per EDU in the relevant Infrastructure Financing Plan.
- Add any additional costs per EDU made necessary by the development to the costs in the infrastructure financing plan.
- Subtract offsets from the costs equal to the value of alternative revenue sources such as property taxes and water development occupational fees.
- Subtract from the remaining costs the value of developer contributions for facilities included in the relevant infrastructure financing plan.
- Add administrative costs.

Offsets for Secondary Property Taxes

The following is an example of how a secondary property tax offset would be calculated for a development.

- a. Determine what part of that secondary property tax rate should be used to allocate tax revenue to the various capital facility categories.

For example:

Debt service funded by Secondary Property Tax (DS_T) = \$90,000,000

Total Secondary Assessed Valuation (SAVT) = \$8,323,000,000

Secondary Property Tax Rate per \$100 of assessed value ($SPTR_T$)

$$SPTR_T = DS_T \div (SAVT \div 100)$$

$$SPTR_T = \$90,000,000 \div (\$8,323,000,000 \div 100)$$

$$SPTR_T = 1.08$$

- b. Determine the part of the Secondary Property Tax used for growth related parks facilities

For example:

Total bond-funded projects in CIP supported by Secondary property tax ($SPTP_T$) = \$686,000,000

Growth related park facilities included in the CIP ($SPTP_P$) = \$29,000,000

Park percentage of total bond funded projects ($PBFP_P$)

Secondary property tax rate for parks ($SPTR_P$)

$$SPTR_P = (SPTP_P \div SPTP_T) * SPTR_T$$

$$SPTR_P = (\$29,000,000 \div \$686,000,000) * SPTR_T$$

$$SPTR_P = 0.05$$

- c. Determine the secondary assessed valuation per housing unit or 1000's or Square Feet for each category of new development. For this example use \$12,000 for the single family category ($SAVSF$).

- d. Multiply secondary assessed valuation per unit by the secondary property tax rate for parks to determine the secondary property tax revenue per unit available for parks facilities ($SPTREV_P$).

$$SPTREV_P = (SAVSF \div 100) \times SPTR_P$$

$$SPTREV_P = (\$12,000 \div 100) \times 0.05$$

$$SPTREV_P = \$6$$

- e. Calculate the value of bonds per EDU that could be serviced with the secondary property tax revenues for parks (SPTREV_P). This is done by multiplying SPTREV_P by a bond proceeds factor (BPF), commonly called a present-value-of-an-annuity factor, based on the life of general obligations bonds and the bond interest rate (now 25 years at 6.5% or 12.20)¹. This product is then divided by the park EDU factor (EDUF_P). For this example use a present-value-of-an-annuity factor of 12.

$BP_{PHU} = \text{Net secondary property tax revenues per housing unit for parks} \times \text{Bond Proceeds factor divided by parks EDU per single family housing unit.}$

$$BP_{PHU} = SPTREV_P \times BPF \div EDUF_P$$

$$BP_{PEDU} = \$6 \times 12 \div 0.95 = \$76$$

Table 5 Estimated Secondary Property Tax Rates per \$1000 of Assessed Value

Secondary Assessed Valuation (City of Phoenix) (1)	Budgeted Debt Service Funded From Secondary Property Tax (2)	Total Estimated Secondary Property Tax Rate per \$1 of Assessed Value	Total Estimated Secondary Property Tax Rate per \$100 of Assessed Value
\$12,261,133,760	\$119,509,270	0.009747	0.9747

Capital Facility Category	Total Estimated Secondary Property Tax Rate per \$100 of Assessed Value	Total Bond-Funded Projects in CIP Supported by Sec. Prop Tax (3)	Growth-Related & Bond-Funded Projects in 2006-11 CIP Supported by Sec. Prop Tax (4)	Percentage of Total Bond- Funded Projects in 2006-11 CIP Supported by Sec. Prop. Tax	Estimated Secondary Property Tax Rate per \$100 of Assessed Value
Equipment Repair	0.9747	\$1,632,400,000	\$8,545,037	0.52%	0.0051
Fire Protection	0.9747	\$1,632,400,000	\$78,954,801	4.84%	0.0471
Libraries	0.9747	\$1,632,400,000	\$36,700,592	2.25%	0.0219
Major Streets	0.9747	\$1,632,400,000	\$0	0.00%	0.0000
Parks	0.9747	\$1,632,400,000	\$97,142,298	5.95%	0.0580
Police	0.9747	\$1,632,400,000	\$31,510,550	1.93%	0.0188
Solid Waste	0.9747	\$1,632,400,000	\$0	0.00%	0.0000
Storm Drainage	0.9747	\$1,632,400,000	\$45,418,071	2.78%	0.0271
Storm Sewers in Streets	0.9747	\$1,632,400,000	\$0	0.00%	0.0000
Open Space	0.9747	\$1,632,400,000	\$19,419,147	1.19%	0.0116
Total	0.9747	\$1,632,400,000	\$317,690,496	19.46%	0.1897

The Phoenix Summary Budget 2002-03

2006-11

1 The Bonds Proceed Factor (BPF) is the same as the present value of an annuity of 1. It is derived using the following formula where r is the average interest rate on outstanding bonds and n is the average number of years remaining in outstanding bond terms.

$$BPF = ((1+r)^n - 1) \div (r * (1 + r)^n)$$

Appendix A lists the growth related projects and Appendix B calculates the offsets for land uses based on their assessed value. The following table shows the results of those calculations.

Table 6 Summary of Secondary Property Tax Bond Proceeds Offsets per EDU										
	Equipment Repair	Fire	Libraries	Major Streets	Major Streets - Storm Sewers	Parks	Police	Solid Waste	Storm Drainage	Open Space [Preserves]
Single Family per HU	\$13	\$117	\$54	****	****	\$143	\$47	\$0	\$67	\$29
Multifamily per HU	\$7	\$42	\$31	****	****	\$97	\$27	\$0	\$33	\$10
Mobile Home per HU	\$7	\$42	\$31	****	****	\$97	\$27	\$0	\$33	\$10
Bank with drive through	\$39	\$627	\$955	****	****	\$3,251	\$227	\$0	\$575	\$0
Convenience Market	\$17	\$273	\$417	****	****	\$1,418	\$99	\$0	\$251	\$0
Convenience Market with Gas Pumps	\$37	\$593	\$904	****	****	\$3,077	\$215	\$0	\$544	\$0
Gas Station	\$88	\$1,403	\$2,137	****	****	\$7,273	\$508	\$0	\$1,287	\$0
Lodging - Hotel, Motel	\$13	\$205	\$312	****	****	\$1,063	\$74	\$0	\$188	\$30
Restaurant with Drive Through	\$38	\$605	\$922	****	****	\$3,138	\$219	\$0	\$555	\$0
Restaurant General	\$30	\$477	\$727	****	****	\$2,474	\$173	\$0	\$438	\$0
Retail Center	\$17	\$277	\$421	****	****	\$1,434	\$100	\$0	\$254	\$0
Theater - Motion Picture	\$17	\$277	\$421	****	****	\$1,434	\$100	\$0	\$254	\$0
Office - General	\$17	\$238	\$261	****	****	\$907	\$86	\$0	\$218	\$0
Office - Medical	\$21	\$292	\$321	****	****	\$1,117	\$106	\$0	\$268	\$0
Manufacturing	\$25	\$159	\$311	****	****	\$1,048	\$58	\$0	\$146	\$0
Warehouse	\$30	\$188	\$1,291	****	****	\$4,556	\$68	\$0	\$173	\$0
Mini-Warehouse	\$15	\$97	\$190	****	****	\$639	\$35	\$0	\$89	\$0
Church	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Day Care Center	\$32	\$148	\$369	****	****	\$1,344	\$54	\$0	\$136	\$0
Elementary School	\$48	\$228	\$568	****	****	\$2,066	\$82	\$0	\$209	\$0
High School	\$48	\$228	\$568	****	****	\$2,066	\$82	\$0	\$209	\$0
Golf Course (Acres)	\$194	\$912	\$2,275	****	****	\$8,280	\$331	\$0	\$93	\$0
Hospital (for profit)	\$76	\$357	\$890	****	****	\$3,238	\$129	\$0	\$327	\$0
Nursing Home (for profit)	\$20	\$95	\$237	****	****	\$864	\$35	\$0	\$87	\$1

Offsets Arizona Highway User Revenues (AHUR)

AHUR used for growth related projects provide cash funding rather than debt service. The calculations in the following AHUR tables differ from the other offset calculations in that a net present value of the revenue stream is used rather than a determination of the amount of bonds that could be serviced with the revenues. Since development fees fund new rather than replacement projects and the life of a street is assumed to be 20 years, a 20-year revenue stream is used. A discount rate of 6.5 percent is used

assuming that the value of the revenues is equivalent to the value of outstanding AHUR serviced bonds to investors. The 6.5 percent average interest rate on AHUR bonds is provided by Barbara Alvarez, Deputy Finance Director, Finance Department.

Appendix E shows the use AHUR and where AHUR is used for central and replacement projects. The following tables show the results and the determination of AHUR per capita revenues. Offset data has not been updated in order to be consistent with 2003 streets and bridges impact fees.

Table 7 Replacement and Central Portions of AHUR Funded Major Streets and Bridges Capital Improvement Program

Total AHUR Funded Major Streets and Bridges CIP (2002-07)	\$162,300,399
Central and Replacement Costs in 2002-07 CIP	\$17,258,716
Total AHUR Funded CIP Allocated to Growth-Related Items	\$145,041,683
% of CIP Allocated to Growth-Related Items	89.37%

Table 8 Determination of Per Capita AHUR Revenues

Estimated 2002/03 Revenues*	\$105,500,000
Phoenix Population**	1,381,784
Revenues per Capita	\$76.35

*Includes only AHUR allocation from the state (estimated)

**Maricopa Association of Governments, 1997 projections for October , 2002

Table 9 AHUR Offsets for Future Development

	Population Change to 2030	Per Capita \$ AHUR	Total \$ AHUR	Change in Street EDU to 2030	\$ AHUR per EDU	% of AHUR Used for Major Streets	% of CIP for Non-Central Facilities	\$ AHUR per EDU for New Facilities	Offset / EDU*
Total	512,619	\$76.35	\$39,138,754	351,881	\$111.23	32.0%	89.4%	\$31.80	\$388

*Product of bond proceeds factor and \$ AHUR per EDU for New Facilities

The AHUR per capita revenues are converted to revenues per EDU in Appendix E based upon projected population and street EDUs in impact fee areas. The result is **\$388** per EDU.



Offsets for Solid Waste Fees

Bond proceeds for use of Solid Waste Fees for transfer stations and recycling facilities are calculated following a bond proceeds procedure as described above for secondary property tax revenues. Offsets for lease purchase payments for recycling facility equipment are calculated in the same way as debt service payments. Fees used for cash purchase of containers and collection vehicles are converted to offsets by calculating the present value of the revenue stream over the life of the equipment. The calculations are shown in Appendix F.

Table 10 Use of Solid Waste Revenues and Debt Service

FY 2006-07 Solid Waste Revenues ¹			\$116,461,000
FY 2006-07 Debt Service ¹			\$22,533,000
% of Solid Waste Revenue Used for Debt Service			19.35%
Net Solid Waste Fund Long Term Debt ²			\$146,983,000
Long Term Debt for Transfer Stations and Materials Recycling Facility ³			\$55,586,000
% of Solid Waste Debt Service used for Transfer Station and Materials Recycling Facility Construction			37.82%
Amount of lease purchase agreement for Materials Recycling Facility Equipment ³			\$1,385,000
Annual MRF Payments - Term in years and Rate	10	6.00%	\$510,351
Percent of Solid Waste Revenues to be used for MRF Equipment Lease Purchase			0.44%

¹ Source: Schedule 63, Solid Waste Fund, The Phoenix Budget (Detail) 2006-07

² Source: Exhibit E19, Page 145, Solid Waste Enterprise Fund Comparative Balance Sheets, City of Phoenix Arizona, Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2005.

³ Source: Public Works Department 06/2006

Table 11 Solid Waste Bond Proceeds Offsets for New Development

Annual Revenue per EDU -- Monthly Solid Waste Fee =		\$23.95	\$287.40
% of Solid Waste Revenue Used for Debt Service			19.35%
% of Solid Waste Debt Service used for Transfer Station and Materials Recycling Facility Construction			37.82%
Solid Waste Fee Available for Transfer Station and Materials Recycling Facility Debt Service			\$21.03
Bond Proceeds Factor			12.20
Net Bond Proceeds Offset to Total Solid Waste Fee per EDU			\$256.53
Percent of Solid Waste Revenues to be used for MRF Equipment Lease Purchase			0.44%
Annual Solid Waste Revenues Available for MRF Lease Purchase			\$1.31
Present Value of MRF Payments -- Term in Years and Rate	10	6.00%	\$9.65
Percent of Solid Waste Revenues to be used for Barrels -- Amount =		\$3,141,000	4.65%
Annual Solid Waste Revenues Available for Barrels			\$13.38
Present Value of Barrel Revenues -- Term in years and rate	15	6.00%	\$129.95
Percent of Solid Waste Revenues to be used for Field Services Vehicles -- Amount =		\$3,577,617	3.33%
Annual Solid Waste Revenues per EDU Available for Vehicles			\$9.56
Present Value of Vehicle Revenues -- Term in years and rate	7	6.00%	\$53.37
Total Value of Revenue Available for Barrels and Vehicles			\$183
Total Value of Revenue Available for Impact Fee Solid Waste Services			\$449

Source: Public Works Department 6/2006

Offsets for Sewer Rates and Development Occupational Fees

Bond proceeds for Sewer rate revenues are calculated following a bond proceeds procedure as described for secondary property tax revenues. The calculations are shown in Appendix D and summarized in the following tables.

Table 12 Wastewater Growth-Related Debt Service (Fiscal Year 2001-2002)

Sewer Rate Revenue	\$120,463,740
Debt Service	\$45,163,775
% Debt Classified as Growth-Related	48.8%
Growth-Related Debt Service	\$32,021,132
Growth-Related Debt Service as % of Rate Revenues	26.6%

Table 13 Sewer Rate Offset per Drainage Fixture Unit

	Offset per Fixture Unit Based on 5/8" Meter Revenues
Annual Sewer Rate Revenue per 5/8" Account	\$206
% of Sewer Revenue used for Growth Related Debt Service	26.58
Annual per EDU Water Revenues Available for Growth Related Debt Service	\$55
Bond Proceeds Factor	11.019
Offset	\$606
Fixture Units per EDU	23.0
Offset per Fixture Unit	\$26

Table 14 Offset for Sewer Development Occupational Fees

		Meter Size	Meter Type	Sewer Development Occupational Fee	
				Inside Phoenix	Outside Phoenix
Single-Family		Not Applicable		\$600	\$900
Multi-Family		Not Applicable		\$360	\$540
Mobile Home		Not Applicable		\$420	\$630
Commercial and Industrial		5/8"	Disk	\$600	\$900
		3/4"*	Disk	\$600	\$900
		1"	Disk	\$1,500	\$2,250
		1 1/2"	Disk	\$2,760	\$4,140
		2"	Disk	\$4,500	\$6,750
		2"	Turbine	\$7,200	\$10,800
		3"	Disk	\$9,000	\$13,500
		3"	Compound	\$9,240	\$13,860
		3"	Turbine	\$16,200	\$24,300
		4"	Compound	\$15,000	\$22,500
		4"*	Turbine	\$18,000	\$27,000
		6"	Compound	\$27,600	\$41,400
		6"	Turbine	\$37,500	\$55,500
		8"*	Compound	\$48,000	\$72,000
		8"*	Turbine	\$54,000	\$81,000

Offsets for Water Rates and Development Occupational Fees

Bond proceeds for Water rate revenues are calculated following a bond proceeds procedure as described for secondary property tax revenues. The calculations are shown Appendix C and summarized in the following tables.

Table 15 Water Growth-Related Debt Service (Fiscal Year 2004-2005)

Water Rate Revenue	\$211,310,896
Debt Service	\$53,095,584
% Debt Classified as Growth-Related	13.90%
Growth-Related Debt Service	\$14,575,469
Growth-Related Debt Service as % of Rate Revenues	6.90%

Table 16 Water Rate Offsets per EDU

	Offset per EDU Based on 5/8" Meter Revenues
Annual Water Rate Revenue per 5/8" Account	\$278
% of Water Revenue used for Growth Related Debt Service	6.90%
Annual per EDU Water Revenues Available for Growth Related Debt Service	\$19
Bond Proceeds Factor	11.019
Offset	\$211
EDU by Meter Size	1.0
Offset per EDU	\$211

Table 17 Total New Water Offsets by Meter Size

	Meter Size	Meter Type	Water Development Occupational Fee		Water Rate Offset	Total Offset	
			Inside Phoenix	Outside Phoenix		Inside Phoenix	Outside Phoenix
Single-Family	Not Applicable		\$600	\$900	\$211	\$811	\$1,111
Multi-Family	Not Applicable		\$360	\$540	\$103	\$463	\$643
Mobile Home	Not Applicable		\$420	\$630	By Meter Size	\$420 + Rate Offset	\$630 + Rate Offset
Commercial for Development Occupational Fee and for all Rate Revenue Offsets	5/8"	Disk	\$600	\$900	\$211	\$811	\$1,111
	3/4"*	Disk	\$600	\$900	\$317	\$917	\$1,217
	1"	Disk	\$1,500	\$2,250	\$528	\$2,028	\$2,778
	1 1/2"	Disk	\$2,760	\$4,140	\$1,055	\$3,815	\$5,195
	2"	Disk	\$4,500	\$6,750	\$1,688	\$6,188	\$8,438
	2"	Turbine	\$7,200	\$10,800	\$1,688	\$8,888	\$12,488
	3"	Disk	\$9,000	\$13,500	\$3,165	\$12,165	\$16,665
	3"	Compound	\$9,240	\$13,860	\$3,376	\$12,616	\$17,236
	3"	Turbine	\$16,200	\$24,300	\$3,693	\$19,893	\$27,993
	4"	Compound	\$15,000	\$22,500	\$5,275	\$20,275	\$27,775
	4"*	Turbine	\$18,000	\$27,000	\$6,330	\$24,330	\$33,330
	6"	Compound	\$27,600	\$41,400	\$10,550	\$38,150	\$51,950
	6"	Turbine	\$37,500	\$56,250	\$13,188	\$50,688	\$69,438
	8"*	Compound	\$48,000	\$72,000	\$16,880	\$64,880	\$88,880
	8"*	Turbine	\$54,000	\$81,000	\$18,990	\$72,990	\$99,990

Offsets for Sales Tax

Offsets for sales tax are calculated in Appendix G and result in the following table and offset of \$537 per EDU.

Table 18 Park Sales Tax Offsets for Future Development

Total For All Impact Fee Areas	Increase in Retail Sq. Ft. to 2030	Per Sq. Ft. Annual Tax Revenue	Total \$ Annual Tax Revenue	Change in Parks EDU to 2030	\$ Park Tax per EDU	% of Park Tax Used for New Parks	% of CIP for Non-Central Facilities	\$ Park Tax per EDU for New Facilities	Offset/ EDU
	148,013,603	\$0.25	\$36,310,697	118,859	\$305.49	40.0%	100.0%	\$122.20	\$324