ATTACHMENT2

COUNTY ADMINISTRATOR'S TAX MEMORANDUM

MEMORANDUM

Date: October 22, 2003

To: Chair and Members
Pima County Bond Advisory Committee

From: C.H. Huckelberry
County Administrator

Re: **Analysis of a Possible Ceiling for the 2004 General Obligation Bond Ballot**

As of the meeting of October 17, 2003, the County Bond Advisory Committee heard funding requests totaling just over $722 million. It is likely that other local jurisdictions will submit requests on October 31, 2003, which will increase the total considerably more. The presentations already made and those to come present strong evidence of the need for the projects, but the Committee faces the task of reducing the requests to a more affordable investment, as has been accomplished by previous bond advisory committees.

The Chair of the Bond Advisory Committee has asked that I provide a written analysis of the various factors involved in establishing a reasonable ceiling for a General Obligation Bond ballot to be before the voters on May 18, 2004. The following is my analysis.

Magnitude Range of 2004 General Obligation Bond Authorization

Previously, based on discussions with the Committee by County staff, it had been indicated that the bond authorization in 2004 for general obligation bonded indebtedness could range from $300 million to $400 million.

Based on the analysis which follows, I now believe it is possible to increase the upper limit of this range to as high as $450 million.

This higher estimate is based on a number of assumptions: the secondary property tax rate for debt service would not exceed 85 cents per $100 assessed value; issuance of the debt would occur over a seven year period; growth in the assessed value would initially continue for the next two years at 7 percent, but then drop to a constant 5 percent; the bond interest rate over the period of issuance should not exceed 6 percent; and the size of annual sales would be lowered in the beginning and increase in magnitude over time.

Clearly, not increasing the tax rate is the primary control in bond debt issuance. For example, if the growth in assessed value were to somehow substantially drop, bond sales would be delayed rather than break the tax rate cap set by either the Committee or the Board.

Tax Rate Controls

Historically in voter bond issues an area of primary concern has been the secondary tax rate that is necessary to retire authorized public bond debt. Taxpayers do not respond favorably to widely varying, inconsistent and unpredictable tax rates. For this reason the Board of Supervisors has usually established, as a primary controlling factor in issuing new public debt through voter authorized bond issues, a tax rate limitation. This limitation is not statutorily required nor mandated by those who evaluate the creditworthiness of local governments. However, it is a recognition of the political reality that voters want predictability in taxes and do not tolerate surprises. In the 1997 General Obligation Bond Issue, $256,980,000 in debt was authorized. The Board pledged a tax rate ceiling of $1 per $100 of assessed value. Table 1 below gives the tax rate by fiscal year since 1998 and the corresponding levy to pay principal and interest on all outstanding and/or issued General Obligation Bonds of the County.

Table 1

Year	Tax Rate	Levy
1998	$1.0000	$37,002,183
1999	$0.9650	$37,177,339
2000	$0.9350	$37,405,835
2001	$0.9350	$30,607,255
2002	$0.8950	$40,197,988
2003	$0.8150	$39,409,824

As can be seen, the present tax rate to repay General Obligation Bond indebtedness is approximately 82 cents per $100 of assessed value. Given this rate, it is unlikely that the Board would make the same tax rate pledge made in 1997 where bonds would not exceed $1 per $100 of assessed value. It is likely the Board would choose to select a tax rate very near the current rate of 82 cents per $100 of assessed value. Assuming this to be the case, I would set the secondary property tax rate cap for any new bond issuance authorized by the voters in 2004 at 85 cents per $100 of assessed value.

Time Length of New Debt Issuance

Because of federal arbitrage rules, a voter authorization does not lead to an instantaneous issuance of the debts authorized. The debt is issued in increments over time, geared toward project or program cash flow demands. For example, the $256,980,000 in General Obligation Bond debt authorized by the voters in 1997 has been sold in a series of bond sales beginning in 1998, and expected to end by fiscal year 2004/05. Table 2 reports on the proceeds for five sales between 1998 and 2003. After these sales, there is a remaining authorization of $65,081,000 for the 1997 General Obligation Bonds.

Table 2

Year	Amount of Bonds Sold
1998	$34,858,000
1999	$45,596,000
2000	$49,704,000
2002	$16,612,000
2003	$45,129,000

Once a bond sale occurs, a very specific debt retirement schedule is structured for the sale, comprised of principal and interest payments over a period of time. It is these series of sales and overlapping debt service schedules that combine to determine the secondary property tax levy to meet all principal and interest payments required for a series of bond sales or previously outstanding General Obligation Bond debt. Generally the program life of General Obligation Bond elections has been desired to be between five and seven years; however, they have varied in time between authorizations from as little as one and two years to as much as eleven years. Generally, the longer the time between voter authorization, the higher the authorization amount will be.

Prior and Remaining Debt Obligations

The amount of outstanding debt also has an influence over the issuance of new debt since both must be retired through the primary property tax. Fortunately for Pima County, we have had a very aggressive debt retirement project. In total, $671.7 million of General Obligation Bonds have been authorized by the voters since 1974. From that authorization, Pima County sold bonds and assumed principal debt in the amount of just over $606.6 million. As of July, 2003, Pima County retired $403.3 million in this principal debt, with a remaining principal debt of $203.3 million. The maximum bonded indebtedness life of a General Obligation Bond of Pima County has been set at fifteen years, and the schedule of annual debt service payments declines each year as principal and interest payments decline. However, if Pima County continued with a principal and interest levy in fiscal year 2002/03 of $39.2 million, we could retire this existing debt within six years and, without incurring future debt, could effectively be debt-free in that period of time.

Tax Base Influence on Public Debt Capacity

A growing tax base allows more public debt to be assumed, if desired, with a constrained and constant tax rate. Annual variations in the tax base are largely outside the control of the County, and hence a factor that must be judged conservatively to avoid sharp and unnecessary swings in the secondary property tax rate for public debt service. Table 3 indicates the value of the secondary tax base in Pima County over the last twenty years and the percent of growth from year to year of the tax base. As can be seen, the secondary tax

base has grown significantly over the last ten years. However, there was a period within the last twenty years when the base remained relatively constant, or even declined over a five year period.

Table 3

Fiscal Year	Secondary Assessed Value	Change	Percent
1982/83	$2,059,000,000		
1983/84	$2,207,000,000	$148,000,000	7.19
1984/85	$2,324,000,000	117,000,000	5.30
1985/86	$2,565,000,000	241,000,000	10.37
1986/87	$2,841,000,000	276,000,000	10.76
1987/88	$2,994,000,000	153,000,000	5.39
1988/89	$3,111,000,000	117,000,000	3.91
1989/90	$3,105,000,000	(6,000,000)	-0.19
1990/91	$3,045,000,000	(60,000,000)	-1.93
1991/92	$2,998,000,000	(47,000,000)	-1.54
1992/93	$2,993,000,000	(5,000,000)	-0.17
1993/94	$2,974,000,000	(19,000,000)	-0.63
1994/95	$3,150,000,000	176,000,000	5.92
1995/96	$3,219,000,000	69,000,000	2.19
1996/97	$3,248,000,000	29,000,000	0.90
1997/98	$3,700,000,000	452,000,000	13.92
1998/99	$3,853,000,000	153,000,000	4.14
1999/2000	$4,001,000,000	148,000,000	3.84
2000/01	$4,236,000,000	235,000,000	5.87
2001/02	$4,491,395,307	255,395,307	6.03
2002/03	$4,835,561,219	344,165,912	7.66

Constitutional Debt Limitations

The Arizona Constitution places General Obligation Bond debt limitations on Pima County and the Flood Control District. The constitutional debt limits are 15 percent of the secondary property tax base for General Obligation Bonds of the County and 5 percent of the Flood Control District, which total just over $1 billion based on the present secondary assessed value of the County. The Pima County Library District can issue general obligation bonds, which it has never utilized. Assuming a 6 percent debt limit, the Library District's constitutional debt limit is at least $313.3 million. Obviously, existing debt must be subtracted, leaving the ability of the County, Flood Control District, and Library District to issue $1.1 billion in public debt before exceeding the constitutional limitation. Other controlling factors, such as not exceeding the specified secondary property tax rate, will constrain the amount of bonds to be sold long before the constitutional debt limit takes effect.

Amortization Schedules

Amortization schedules are those computations associated with retiring public debt over a specified period of time, making principal and interest payments where interest paid in total amount declines over time with the principal increasing over time. Such is a typical schedule for standard debt retirement such as a standard home mortgage. These amortization schedules may be varied, depending upon the specific circumstances of the public borrower. They can be front loaded, where an entity has surplus cash so that amortization of principal occurs earlier, or they may also be back loaded, where interest payments are only made for the first few years with increasing principal payments in the latter years. In almost all cases, Pima County has used straight amortization schedules for our General Obligation Bonds. However, both front loading and back loading schedules are available if desired to accomplish a specific purpose.

CHH/jj

c: The Honorable Chair and Members, Pima County Board of Supervisors
Jim Barry, Executive Assistant to the County Administrator

Pima County, Arizona

General Obligation Bonding Program 2004-2011

Fiscal Year	Projected Secondary Assessed Value [2]	Existing Debt Service	Projected Tax Rate	All Future Bonds Issues Series 2004 - 2011 Principal	Interest [1]	Total Debt Service	Aggregate Debt Service	Projected Tax Rate
2004 - 05	$5,482,334,547	$32,342,735	$0.5899	$9,530,000	$4,720,833	$14,250,833	$46,593,568	$0.8499
2005 - 06	5,756,451,274	30,228,835	0.5251	12,035,000	6,638,200	18,673,200	48,902,035	0.8495
2006 - 07	6,044,273,838	28,162,885	0.4659	13,525,000	9,406,100	22,931,100	51,093,985	0.8453
2007 - 08	6,346,487,530	23,156,230	0.3649	17,450,000	12,825,650	30,275,650	53,431,880	0.8419
2008 - 09	6,663,811,906	17,320,330	0.2599	22,000,000	16,311,250	38,311,250	55,631,580	0.8348
2009 - 10	6,997,002,502	16,338,930	0.2335	21,995,000	19,525,500	41,520,500	57,859,430	0.8269
2010 - 11	7,346,852,627	14,697,900	0.2001	23,420,000	22,591,750	46,011,750	60,709,650	0.8263
2011 - 12	7,714,195,258	13,080,000	0.1696	27,015,000	23,324,300	50,339,300	63,419,300	0.8221
2012 - 13	8,099,905,021	12,438,200	0.1536	28,585,000	21,743,050	50,328,050	62,766,250	0.7749
2013 - 14	8,504,900,272	9,659,250	0.1136	30,265,000	20,069,550	50,334,550	59,993,800	0.7054
2014 - 15	8,930,145,286	5,244,250	0.0587	32,030,000	18,297,350	50,327,350	55,571,600	0.6223
2015 - 16	9,376,652,550	4,652,750	0.0496	33,915,000	16,421,400	50,336,400	54,989,150	0.5864
2016 - 17	9,845,485,177	4,274,250	0.0434	35,905,000	14,434,650	50,339,650	54,613,900	0.5547
2017 - 18	10,337,759,436			37,995,000	12,330,950	50,325,950	50,325,950	0.4868
2018 - 19	10,854,647,408			40,225,000	10,104,350	50,329,350	50,329,350	0.4637
2019 - 20	11,397,379,778			32,810,000	7,746,600	40,556,600	40,556,600	0.3558
2020 - 21	11,967,248,767			30,065,000	5,778,000	35,843,000	35,843,000	0.2995
2021 - 22	12,565,611,206			25,585,000	3,974,100	29,559,100	29,559,100	0.2352
2022 - 23	13,193,891,766			19,835,000	2,439,000	22,274,000	22,274,000	0.1688
2023 - 24	13,853,586,354			13,810,000	1,248,900	15,058,900	15,058,900	0.1087
2024 - 25	14,546,265,672			7,005,000	420,300	7,425,300	7,425,300	0.0510
Total		$287,219,754		$515,000,000	$250,351,783	$765,351,783	$1,052,571,537	

(1) For the Series 2004 bond issue, the interest rates are assumed to be 5.00%. For all future issues interest in assumed at 6.00%

(2) Secondary Assessed Value is assumed to grow at 5% a year.

Prepared By:
RBC Dain Rauscher Inc.

11/4/2003

Pima County, Arizona

General Obligation Bonding Program 2004-2011

				$65,000,000 Pima County, Arizona June, 2004 - GO Bonds				
Fiscal Year	Projected Secondary Assessed Value [2]	**Currently Outstanding Debt Service**	Projected Tax Rate	Principal	Interest [1]	Total Debt Service	Aggregate Debt Service	Projected Tax Rate
2004 - 05	$5,482,334,547	$32,342,735	$0.5899	$6,000,000	$3,520,833	$9,520,833	$41,863,568	$0.7636
2005 - 06	5,756,451,274	30,228,835	0.5251	4,000,000	2,950,000	6,950,000	37,178,835	0.6459
2006 - 07	6,044,273,838	28,162,885	0.4659	3,105,000	2,750,000	5,855,000	34,017,885	0.5628
2007 - 08	6,346,487,530	23,156,230	0.3649	3,260,000	2,594,750	5,854,750	29,010,980	0.4571
2008 - 09	6,663,811,906	17,320,330	0.2599	3,425,000	2,431,750	5,856,750	23,177,080	0.3478
2009 - 10	6,997,002,502	16,338,930	0.2335	3,595,000	2,260,500	5,855,500	22,194,430	0.3172
2010 - 11	7,346,852,627	14,697,900	0.2001	3,775,000	2,080,750	5,855,750	20,553,650	0.2798
2011 - 12	7,714,195,258	13,080,000	0.1696	3,965,000	1,892,000	5,857,000	18,937,000	0.2455
2012 - 13	8,099,905,021	12,438,200	0.1536	4,160,000	1,693,750	5,853,750	18,291,950	0.2258
2013 - 14	8,504,900,272	9,659,250	0.1136	4,370,000	1,485,750	5,855,750	15,515,000	0.1824
2014 - 15	8,930,145,286	5,244,250	0.0587	4,585,000	1,267,250	5,852,250	11,096,500	0.1243
2015 - 16	9,376,652,550	4,652,750	0.0496	4,815,000	1,038,000	5,853,000	10,505,750	0.1120
2016 - 17	9,845,485,177	4,274,250	0.0434	5,060,000	797,250	5,857,250	10,131,500	0.1029
2017 - 18	10,337,759,436			5,310,000	544,250	5,854,250	5,854,250	0.0566
2018 - 19	10,854,647,408			5,575,000	278,750	5,853,750	5,853,750	0.0539
Total		$247,971,480		$65,000,000	$27,585,583	$92,585,583	$340,557,063	

(1) For the Series 2004 bond issue, the interest rates are assumed to be 5.00%. For all future issues interest in assumed at 6.00%

(2) Secondary Assessed Value is assumed to grow at 5% a year.

Prepared By:
RBC Dain Rauscher Inc.

11/4/2003

Pima County, Arizona

General Obligation Bonding Program 2004-2011

Fiscal Year	Projected Secondary Assessed Value [2]	Currently Outstanding Debt Service	Projected Tax Rate	$40,000,000 Pima County, Arizona January, 2005 GO Bonds Principal	Interest [1]	Total Debt Service	Aggregate Debt Service	Projected Tax Rate
2004 - 05	$5,482,334,547	$41,863,568	$0.7636	$3,530,000	$1,200,000	$4,730,000	$46,593,568	$0.8499
2005 - 06	5,756,451,274	37,178,835	0.6459	1,735,000	2,188,200	3,923,200	41,102,035	0.7140
2006 - 07	6,044,273,838	34,017,885	0.5628	1,840,000	2,084,100	3,924,100	37,941,985	0.6277
2007 - 08	6,346,487,530	29,010,980	0.4571	1,950,000	1,973,700	3,923,700	32,934,680	0.5189
2008 - 09	6,663,811,906	23,177,080	0.3478	2,065,000	1,856,700	3,921,700	27,098,780	0.4067
2009 - 10	6,997,002,502	22,194,430	0.3172	2,190,000	1,732,800	3,922,800	26,117,230	0.3733
2010 - 11	7,346,852,627	20,553,650	0.2798	2,325,000	1,601,400	3,926,400	24,480,050	0.3332
2011 - 12	7,714,195,258	18,937,000	0.2455	2,460,000	1,461,900	3,921,900	22,858,900	0.2963
2012 - 13	8,099,905,021	18,291,950	0.2258	2,610,000	1,314,300	3,924,300	22,216,250	0.2743
2013 - 14	8,504,900,272	15,515,000	0.1824	2,765,000	1,157,700	3,922,700	19,437,700	0.2285
2014 - 15	8,930,145,286	11,096,500	0.1243	2,930,000	991,800	3,921,800	15,018,300	0.1682
2015 - 16	9,376,652,550	10,505,750	0.1120	3,110,000	816,000	3,926,000	14,431,750	0.1539
2016 - 17	9,845,485,177	10,131,500	0.1029	3,295,000	629,400	3,924,400	14,055,900	0.1428
2017 - 18	10,337,759,436	5,854,250	0.0566	3,495,000	431,700	3,926,700	9,780,950	0.0946
2018 - 19	10,854,647,408	5,853,750	0.0539	3,700,000	222,000	3,922,000	9,775,750	0.0901
Total		$340,557,063		$40,000,000	$19,661,700	$59,661,700	$400,218,763	

(1) The interest rate is assumed to be 6.00%

(2) Secondary Assessed Value is assumed to grow at 5% a year.

Prepared By:
RBC Dain Rauscher Inc.

11/4/2003

Pima County, Arizona

General Obligation Bonding Program 2004-2011

				$50,000,000 Pima County, Arizona January, 2006 GO Bonds				
Fiscal Year	Projected Secondary Assessed Value [2]	**Currently Outstanding Debt Service**	Projected Tax Rate	Principal	Interest [1]	Total Debt Service	Aggregate Debt Service	Projected Tax Rate
2004 - 05	$5,482,334,547	$46,593,568	$0.8499				$46,593,568	$0.8499
2005 - 06	5,756,451,274	41,102,035	0.7140	$6,300,000	$1,500,000	$7,800,000	48,902,035	0.8495
2006 - 07	6,044,273,838	37,941,985	0.6277	2,080,000	2,622,000	4,702,000	42,643,985	0.7055
2007 - 08	6,346,487,530	32,934,680	0.5189	2,205,000	2,497,200	4,702,200	37,636,880	0.5930
2008 - 09	6,663,811,906	27,098,780	0.4067	2,335,000	2,364,900	4,699,900	31,798,680	0.4772
2009 - 10	6,997,002,502	26,117,230	0.3733	2,475,000	2,224,800	4,699,800	30,817,030	0.4404
2010 - 11	7,346,852,627	24,480,050	0.3332	2,625,000	2,076,300	4,701,300	29,181,350	0.3972
2011 - 12	7,714,195,258	22,858,900	0.2963	2,785,000	1,918,800	4,703,800	27,562,700	0.3573
2012 - 13	8,099,905,021	22,216,250	0.2743	2,950,000	1,751,700	4,701,700	26,917,950	0.3323
2013 - 14	8,504,900,272	19,437,700	0.2285	3,125,000	1,574,700	4,699,700	24,137,400	0.2838
2014 - 15	8,930,145,286	15,018,300	0.1682	3,315,000	1,387,200	4,702,200	19,720,500	0.2208
2015 - 16	9,376,652,550	14,431,750	0.1539	3,515,000	1,188,300	4,703,300	19,135,050	0.2041
2016 - 17	9,845,485,177	14,055,900	0.1428	3,725,000	977,400	4,702,400	18,758,300	0.1905
2017 - 18	10,337,759,436	9,780,950	0.0946	3,945,000	753,900	4,698,900	14,479,850	0.1401
2018 - 19	10,854,647,408	9,775,750	0.0901	4,185,000	517,200	4,702,200	14,477,950	0.1334
2019 - 20	11,397,379,778			4,435,000	266,100	4,701,100	4,701,100	0.0412
Total		$363,843,828		$50,000,000	$23,620,500	$73,620,500	$437,464,328	

(1) The interest rate is assumed to be 6.00%

(2) Secondary Assessed Value is assumed to grow at 5% a year.

Prepared By:
RBC Dain Rauscher Inc.

11/4/2003

Pima County, Arizona

General Obligation Bonding Program 2004-2011

$65,000,000
Pima County, Arizona
January, 2007 GO Bonds

Fiscal Year	Projected Secondary Assessed Value [2]	**Currently Outstanding Debt Service**	Projected Tax Rate	Principal	Interest [1]	Total Debt Service	Aggregate Debt Service	Projected Tax Rate
2005 - 06	$5,756,451,274	$48,902,035	$0.8495				$48,902,035	$0.8495
2006 - 07	6,044,273,838	42,643,985	0.7055	$6,500,000	$1,950,000	$8,450,000	51,093,985	0.8453
2007 - 08	6,346,487,530	37,636,880	0.5930	2,785,000	3,510,000	6,295,000	43,931,880	0.6922
2008 - 09	6,663,811,906	31,798,680	0.4772	2,950,000	3,342,900	6,292,900	38,091,580	0.5716
2009 - 10	6,997,002,502	30,817,030	0.4404	3,130,000	3,165,900	6,295,900	37,112,930	0.5304
2010 - 11	7,346,852,627	29,181,350	0.3972	3,315,000	2,978,100	6,293,100	35,474,450	0.4829
2011 - 12	7,714,195,258	27,562,700	0.3573	3,515,000	2,779,200	6,294,200	33,856,900	0.4389
2012 - 13	8,099,905,021	26,917,950	0.3323	3,725,000	2,568,300	6,293,300	33,211,250	0.4100
2013 - 14	8,504,900,272	24,137,400	0.2838	3,950,000	2,344,800	6,294,800	30,432,200	0.3578
2014 - 15	8,930,145,286	19,720,500	0.2208	4,185,000	2,107,800	6,292,800	26,013,300	0.2913
2015 - 16	9,376,652,550	19,135,050	0.2041	4,435,000	1,856,700	6,291,700	25,426,750	0.2712
2016 - 17	9,845,485,177	18,758,300	0.1905	4,705,000	1,590,600	6,295,600	25,053,900	0.2545
2017 - 18	10,337,759,436	14,479,850	0.1401	4,985,000	1,308,300	6,293,300	20,773,150	0.2009
2018 - 19	10,854,647,408	14,477,950	0.1334	5,285,000	1,009,200	6,294,200	20,772,150	0.1914
2019 - 20	11,397,379,778	4,701,100	0.0412	5,600,000	692,100	6,292,100	10,993,200	0.0965
2020 - 21	11,967,248,767			5,935,000	356,100	6,291,100	6,291,100	0.0526
Total		$390,870,760		$65,000,000	$31,560,000	$96,560,000	$487,430,760	

(1) The interest rate is assumed to be 6.00%
(2) Secondary Assessed Value is assumed to grow at 5% a year.

Prepared By:
RBC Dain Rauscher Inc.

11/4/2003

Pima County, Arizona

General Obligation Bonding Program 2004-2011

				$75,000,000 Pima County, Arizona January, 2008 GO Bonds				
Fiscal Year	Projected Secondary Assessed Value [2]	**Currently Outstanding Debt Service**	Projected Tax Rate	Principal	Interest [1]	Total Debt Service	Aggregate Debt Service	Projected Tax Rate
2006 - 07	$6,044,273,838	$51,093,985	$0.8453				$51,093,985	$0.8453
2007 - 08	6,346,487,530	43,931,880	0.6922	$7,250,000	$2,250,000	$9,500,000	53,431,880	0.8419
2008 - 09	6,663,811,906	38,091,580	0.5716	3,225,000	4,065,000	7,290,000	45,381,580	0.6810
2009 - 10	6,997,002,502	37,112,930	0.5304	3,415,000	3,871,500	7,286,500	44,399,430	0.6345
2010 - 11	7,346,852,627	35,474,450	0.4829	3,620,000	3,666,600	7,286,600	42,761,050	0.5820
2011 - 12	7,714,195,258	33,856,900	0.4389	3,840,000	3,449,400	7,289,400	41,146,300	0.5334
2012 - 13	8,099,905,021	33,211,250	0.4100	4,070,000	3,219,000	7,289,000	40,500,250	0.5000
2013 - 14	8,504,900,272	30,432,200	0.3578	4,315,000	2,974,800	7,289,800	37,722,000	0.4435
2014 - 15	8,930,145,286	26,013,300	0.2913	4,575,000	2,715,900	7,290,900	33,304,200	0.3729
2015 - 16	9,376,652,550	25,426,750	0.2712	4,850,000	2,441,400	7,291,400	32,718,150	0.3489
2016 - 17	9,845,485,177	25,053,900	0.2545	5,140,000	2,150,400	7,290,400	32,344,300	0.3285
2017 - 18	10,337,759,436	20,773,150	0.2009	5,445,000	1,842,000	7,287,000	28,060,150	0.2714
2018 - 19	10,854,647,408	20,772,150	0.1914	5,775,000	1,515,300	7,290,300	28,062,450	0.2585
2019 - 20	11,397,379,778	10,993,200	0.0965	6,120,000	1,168,800	7,288,800	18,282,000	0.1604
2020 - 21	11,967,248,767	6,291,100	0.0526	6,485,000	801,600	7,286,600	13,577,700	0.1135
2021 - 22	12,565,611,206			6,875,000	412,500	7,287,500	7,287,500	0.0580
Total		$438,528,725		$75,000,000	$36,544,200	$111,544,200	$550,072,925	

(1) The interest rate is assumed to be 6.00%

(2) Secondary Assessed Value is assumed to grow at 5% a year.

Prepared By:
RBC Dain Rauscher Inc.

11/4/2003

Pima County, Arizona

General Obligation Bonding Program 2004-2011

Fiscal Year	Projected Secondary Assessed Value [2]	**Currently Outstanding Debt Service**	Projected Tax Rate	**$75,000,000 Pima County, Arizona January, 2009 GO Bonds** Principal	Interest [1]	Total Debt Service	Aggregate Debt Service	Projected Tax Rate
2007 - 08	$6,346,487,530	$53,431,880	$0.8419				$53,431,880	$0.8419
2008 - 09	6,663,811,906	45,381,580	0.6810	$8,000,000	$2,250,000	$10,250,000	55,631,580	0.8348
2009 - 10	6,997,002,502	44,399,430	0.6345	3,190,000	4,020,000	7,210,000	51,609,430	0.7376
2010 - 11	7,346,852,627	42,761,050	0.5820	3,380,000	3,828,600	7,208,600	49,969,650	0.6802
2011 - 12	7,714,195,258	41,146,300	0.5334	3,585,000	3,625,800	7,210,800	48,357,100	0.6269
2012 - 13	8,099,905,021	40,500,250	0.5000	3,795,000	3,410,700	7,205,700	47,705,950	0.5890
2013 - 14	8,504,900,272	37,722,000	0.4435	4,025,000	3,183,000	7,208,000	44,930,000	0.5283
2014 - 15	8,930,145,286	33,304,200	0.3729	4,265,000	2,941,500	7,206,500	40,510,700	0.4536
2015 - 16	9,376,652,550	32,718,150	0.3489	4,525,000	2,685,600	7,210,600	39,928,750	0.4258
2016 - 17	9,845,485,177	32,344,300	0.3285	4,795,000	2,414,100	7,209,100	39,553,400	0.4017
2017 - 18	10,337,759,436	28,060,150	0.2714	5,080,000	2,126,400	7,206,400	35,266,550	0.3411
2018 - 19	10,854,647,408	28,062,450	0.2585	5,385,000	1,821,600	7,206,600	35,269,050	0.3249
2019 - 20	11,397,379,778	18,282,000	0.1604	5,710,000	1,498,500	7,208,500	25,490,500	0.2237
2020 - 21	11,967,248,767	13,577,700	0.1135	6,050,000	1,155,900	7,205,900	20,783,600	0.1737
2021 - 22	12,565,611,206	7,287,500	0.0580	6,415,000	792,900	7,207,900	14,495,400	0.1154
2022 - 23	13,193,891,766			6,800,000	408,000	7,208,000	7,208,000	0.0546
Total		$498,978,940		$75,000,000	$36,162,600	$111,162,600	$610,141,540	

(1) The interest rate is assumed to be 6.00%

(2) Secondary Assessed Value is assumed to grow at 5% a year.

Prepared By:
RBC Dain Rauscher Inc.

11/4/2003

Pima County, Arizona

General Obligation Bonding Program 2004-2011

Fiscal Year	Projected Secondary Assessed Value [2]	Currently Outstanding Debt Service	Projected Tax Rate	$75,000,000 Pima County, Arizona January, 2010 GO Bonds Principal	Interest [1]	Total Debt Service	Aggregate Debt Service	Projected Tax Rate
2008 - 09	$6,663,811,906	$55,631,580	$0.8348				$55,631,580	$0.8348
2009 - 10	6,997,002,502	51,609,430	0.7376	$4,000,000	$2,250,000	$6,250,000	57,859,430	0.8269
2010 - 11	7,346,852,627	49,969,650	0.6802	3,380,000	4,260,000	7,640,000	57,609,650	0.7841
2011 - 12	7,714,195,258	48,357,100	0.6269	3,580,000	4,057,200	7,637,200	55,994,300	0.7259
2012 - 13	8,099,905,021	47,705,950	0.5890	3,795,000	3,842,400	7,637,400	55,343,350	0.6833
2013 - 14	8,504,900,272	44,930,000	0.5283	4,025,000	3,614,700	7,639,700	52,569,700	0.6181
2014 - 15	8,930,145,286	40,510,700	0.4536	4,265,000	3,373,200	7,638,200	48,148,900	0.5392
2015 - 16	9,376,652,550	39,928,750	0.4258	4,520,000	3,117,300	7,637,300	47,566,050	0.5073
2016 - 17	9,845,485,177	39,553,400	0.4017	4,790,000	2,846,100	7,636,100	47,189,500	0.4793
2017 - 18	10,337,759,436	35,266,550	0.3411	5,080,000	2,558,700	7,638,700	42,905,250	0.4150
2018 - 19	10,854,647,408	35,269,050	0.3249	5,385,000	2,253,900	7,638,900	42,907,950	0.3953
2019 - 20	11,397,379,778	25,490,500	0.2237	5,710,000	1,930,800	7,640,800	33,131,300	0.2907
2020 - 21	11,967,248,767	20,783,600	0.1737	6,050,000	1,588,200	7,638,200	28,421,800	0.2375
2021 - 22	12,565,611,206	14,495,400	0.1154	6,415,000	1,225,200	7,640,200	22,135,600	0.1762
2022 - 23	13,193,891,766	7,208,000	0.0546	6,800,000	840,300	7,640,300	14,848,300	0.1125
2023 - 24	13,853,586,354			7,205,000	432,300	7,637,300	7,637,300	0.0551
Total		$556,709,660		$75,000,000	$38,190,300	$113,190,300	$669,899,960	

(1) The interest rate is assumed to be 6.00%

(2) Secondary Assessed Value is assumed to grow at 5% a year.

Prepared By:
RBC Dain Rauscher Inc.

11/4/2003

Pima County, Arizona

General Obligation Bonding Program 2004-2011

				$70,000,000 Pima County, Arizona January, 2011 GO Bonds				
Fiscal Year	Projected Secondary Assessed Value (2)	**Currently Outstanding Debt Service**	Projected Tax Rate	Principal	Interest (1)	Total Debt Service	Aggregate Debt Service	Projected Tax Rate
2009 - 10	$6,997,002,502	$57,859,430	$0.8269				$57,859,430	$0.8269
2010 - 11	7,346,852,627	57,609,650	0.7841	$1,000,000	$2,100,000	$3,100,000	60,709,650	0.8263
2011 - 12	7,714,195,258	55,994,300	0.7259	3,285,000	4,140,000	7,425,000	63,419,300	0.8221
2012 - 13	8,099,905,021	55,343,350	0.6833	3,480,000	3,942,900	7,422,900	62,766,250	0.7749
2013 - 14	8,504,900,272	52,569,700	0.6181	3,690,000	3,734,100	7,424,100	59,993,800	0.7054
2014 - 15	8,930,145,286	48,148,900	0.5392	3,910,000	3,512,700	7,422,700	55,571,600	0.6223
2015 - 16	9,376,652,550	47,566,050	0.5073	4,145,000	3,278,100	7,423,100	54,989,150	0.5864
2016 - 17	9,845,485,177	47,189,500	0.4793	4,395,000	3,029,400	7,424,400	54,613,900	0.5547
2017 - 18	10,337,759,436	42,905,250	0.4150	4,655,000	2,765,700	7,420,700	50,325,950	0.4868
2018 - 19	10,854,647,408	42,907,950	0.3953	4,935,000	2,486,400	7,421,400	50,329,350	0.4637
2019 - 20	11,397,379,778	33,131,300	0.2907	5,235,000	2,190,300	7,425,300	40,556,600	0.3558
2020 - 21	11,967,248,767	28,421,800	0.2375	5,545,000	1,876,200	7,421,200	35,843,000	0.2995
2021 - 22	12,565,611,206	22,135,600	0.1762	5,880,000	1,543,500	7,423,500	29,559,100	0.2352
2022 - 23	13,193,891,766	14,848,300	0.1125	6,235,000	1,190,700	7,425,700	22,274,000	0.1688
2023 - 24	13,853,586,354	7,637,300	0.0551	6,605,000	816,600	7,421,600	15,058,900	0.1087
2024 - 25	14,546,265,672			7,005,000	420,300	7,425,300	7,425,300	0.0510
Total		$669,899,960		$70,000,000	$37,026,900	$107,026,900	$776,926,860	

(1) The interest rate is assumed to be 6.00%

(2) Secondary Assessed Value is assumed to grow at 5% a year.

Prepared By:
RBC Dain Rauscher Inc.

11/4/2003