



MEMORANDUM

Date: June 7, 2016

To: The Honorable Chair and Members
Pima County Board of Supervisors

From: C.H. Huckelberry
County Administrator

A handwritten signature in black ink, appearing to read "CHH", is written over the printed name "C.H. Huckelberry".

Re: **Updated Analysis on Property Tax Base and Revenue Impacts Attributable to Pima County's 2004 Open Space Bond Program**

Over the years, concerns have been raised over the possible adverse impacts to the tax base from the County purchasing parcels for open space and removing them from the tax rolls. As you may recall, similar concerns were raised prior to voters approving \$164 million for the 2004 Open Space Bond Program. In early 2004, an analysis of the tax base and revenue impacts of parcels purchased by the County for open space with voter-authorized 1986 and 1997 bond funds found that the impacts were in fact miniscule.

With the recent completion of the voter-authorized 2004 Open Space Bond Program, a similar analysis was completed to assess tax base and revenue impacts of properties purchased by the County using 2004 open space bond funds between tax years 2004 and 2015. The attached analysis looks at the sum of the primary and secondary taxable net assessed property values for open space parcels purchased between these years and compares them to the total sum of primary and secondary net assessed values of all taxable property in Pima County for each tax year.

Similar to the early 2004 analysis, the findings show that the impacts to the tax base from open space acquisitions using 2004 bond funds were small and had almost no measurable impact. For example, the highest percent reduction in the primary tax base due to these acquisitions for tax years 2004 through 2015 was eight thousandths of one percent.

The analysis also examines the reduction in property tax revenue, the highest of which was a loss of \$20,306 in revenue in 2015, which also equates to six thousandths of one percent of the total County Primary Property tax revenue that year.

This updated analysis also includes information on the limitations associated with the lack of information on the significant economic benefits of open space conservation that are more difficult to quantify and not included in the analysis. While much information exists on the environmental benefits of open space conservation, fiscal benefits are not always captured or easily calculated. More local research is needed to quantify these benefits within Pima County.

CHH/dr

Attachment

c: Nicole Fyffe, Executive Assistant to the County Administrator
Diana Durazo, Special Staff Assistant to the County Administrator

Pima County's 2004 Bond Funded Open Space Acquisitions: An analysis of property tax base and revenue impacts

Background

In May 2004, voters approved \$164 million in bonds for the conservation of lands identified as having high resource and public value, which expanded upon the 1997 Open Space Bond Program acquisitions authorized by voters in May 1997. Between 2004 and 2014, the County purchased 53 properties with 2004 bond funds totaling 47,000 acres, including 192 miles of rivers and washes throughout Pima County, and almost 130,000 acres in State and Bureau of Land Management grazing leases. These grazing leases are part of working ranches managed by ranchers under conservation agreements with the County. Through these acquisitions, the County expanded our mountain parks system and other conservation areas creating many more opportunities for our residents and visitors to experience new and unique places across Pima County. Aside from conserving wildlife habitat, historic sites, and protecting and expanding recreation opportunities, acquisition of larger unfragmented landscapes, such as our working ranches, greatly contribute towards protecting our rivers and creeks and maintaining natural floodplain functions; replenishing our groundwater and increasing public safety by reducing the potential for flood damage. Additionally, the U.S. Fish and Wildlife Service recently announced its intent to issue Pima County a Section 10 permit under the federal Endangered Species Act in order to streamline federal endangered species compliance for certain new private development that occurs in unincorporated Pima County, as well as County governmental construction and maintenance projects. As part of the federal permit, the open space properties acquired will serve as the mitigation lands needed to offset impacts from activities covered under the permit for both the public and private sectors, which will reduce development costs and facilitate project completion.

During the planning of these conservation programs, concerns had been raised regarding potential loss of property tax revenue as well as adverse impacts to the County's property tax base related to purchasing land for open space due to their tax exemption status once private property is acquired by a government entity. A 2004 analysis of properties purchased with voter-authorized 1986 and 1997 bond funds found these concerns to be unfounded; the negative impacts to the tax base and tax revenues for those tax years were miniscule. Now that the 2004 Open Space Bond Program is complete, we can similarly report that the negative impacts to the County's tax base were also negligible. It should be noted that this analysis does not take into account or quantify the positive impacts to property values and economic benefits commonly attributable to open space. It is recommended that the County or other organization conduct such a benefit study in the near future.

I. Analysis

A. Properties Included

Each of the parcels acquired in fee between 2004 and 2014, with the exception of a few exclusions, were included in this analysis, totaling approximately 37,600 acres (Attachment A - map). Parcels excluded from this analysis included: 1) properties that were already exempt from paying property taxes when purchased, such as the 6,800-acre A-7 Ranch,

which was previously owned by the City of Tucson; land that was previously State Trust land (Tortolita Mountain Park, Valencia Archaeological Site and Tumamoc Hill); and 2) newly created tax parcels due to instances where only portions of parcels were purchased.

B. Pima County’s Taxable Property Defined

Impacts to Pima County’s property tax base and property tax revenues were evaluated using both Primary Taxable Net Assessed property values (PNAV), which are the basis for levying taxes to fund County operations such as public safety, public health and parks and recreation services; and Secondary Taxable Net Assessed property values (SNAV), which are the basis for levying taxes to fund the County’s debt service on voter-approved bonds, the Library District, and the Regional Flood Control District.

Through tax year 2014, the limited and full cash property values were required to be used to determine the primary and secondary net assessed values of property, respectively. However, in tax year 2015, both the primary and secondary net assessed values were the same. This is due to the passage of Proposition 117, which essentially made the limited value the basis for both the primary and secondary net assessed values.

C. Impact of the Great Recession on the Property Tax Base

Below is a table showing the change in the County’s primary and secondary net assessed values for tax years 2004 through 2015. Tax year 2010 shows the beginning of the impact of the recession on property values. From 2010 to 2014, the County’s primary tax base declined by 10 percent, and the secondary tax base declined by 23 percent. Tax year 2015 shows the first small increase. The primary net assessed value was 1.36 percent greater than the prior year’s, the first increase in five years. Similarly, the secondary net assessed value in 2015 was 0.53 percent greater than the prior year’s.

Table 1: Change to Pima County Taxable Property Values for Tax Years 2004 to 2015

Primary Net Assessed Values			Secondary Net Assessed Values		
Tax Year	All Taxable Property	% Change	Tax Year	All Taxable Property	% Change
2004	\$5,412,550,080		2004	\$5,620,156,274	
2005	\$5,849,548,818	8.07%	2005	\$6,050,950,040	7.67%
2006	\$6,467,201,516	10.56%	2006	\$6,869,955,457	13.54%
2007	\$7,353,331,088	13.70%	2007	\$8,220,395,835	19.66%
2008	\$8,230,966,534	11.94%	2008	\$9,594,861,519	16.72%
2009	\$8,985,711,830	9.17%	2009	\$9,860,980,900	2.77%
2010	\$8,939,647,260	-0.51%	2010	\$9,342,561,193	-5.26%
2011	\$8,310,120,212	-7.04%	2011	\$8,448,281,586	-9.57%
2012	\$8,073,937,734	-2.84%	2012	\$8,171,211,922	-3.28%
2013	\$7,559,129,097	-6.38%	2013	\$7,623,691,280	-6.70%
2014	\$7,518,481,988	-0.54%	2014	\$7,579,898,868	-0.57%
2015	\$7,620,360,873	1.36%	2015	\$7,620,360,873	0.53%

D. Property Tax Base Impact Attributable to County Open Space Purchases

For purposes of this analysis, tax years 2004 through 2014 show the sums of the PNAVs and SNAVs of open space properties acquired by the County under the 2004 bond program. Properties are listed according to the tax year in which the tax exemption occurred, which was typically the tax year after the County's purchase. These sums are then divided by the total County net assessed values of all taxable property for each year. The tables below show the percent impacts to both the County's primary tax base and secondary tax base for tax years 2004 through 2015 from acquisitions made under the County's 2004 Open Space Bond Program.

Table 2: Percent Reduction in Primary Tax Base (PNAV) Due to Acquisitions Under the 2004 Open Space Bond Program for Tax Years 2004 to 2015

Tax Year	Acres Acquired by Tax Year	Acquired Open Space Properties PNAV	Total County PNAV for All Taxable Property	% Reduction to PNAV by Tax Year
2004	78	\$ 77,309	\$5,412,550,080	0.0014%
2005	13,458	\$495,976	\$5,849,548,818	0.0085%
2006	629	\$287,293	\$6,467,201,516	0.0044%
2007	4,087	\$119,315	\$7,353,331,088	0.0016%
2008	340	\$ 40,871	\$8,230,966,534	0.0005%
2009	13,632	\$ 30,982	\$8,985,711,830	0.0003%
2010	4,115	\$444,962	\$8,939,647,260	0.0050%
2011	745	\$260,316	\$8,310,120,212	0.0031%
2012	247	\$ 19,941	\$8,073,937,734	0.0003%
2013	-	-	\$7,559,129,097	-
2014	-	-	\$7,518,481,988	-
2015	285	\$462,799	\$7,620,360,873	0.0061%

Table 3: Percent Reduction in Secondary Tax Base (SNAV) Due to Acquisitions Under the 2004 Open Space Bond Program for Tax Years 2004 to 2015

Tax Year	Acres Acquired by Tax Year	Acquired Open Space Properties SNAV	Total County SNAV for All Taxable Property	% Reduction to SNAV by Tax Year
2004	78	\$ 77,309	\$5,620,156,274	0.0014%
2005	13,458	\$623,278	\$6,050,950,040	0.0103%
2006	629	\$382,477	\$6,869,955,457	0.0056%
2007	4,087	\$155,846	\$8,220,395,835	0.0019%
2008	340	\$ 56,986	\$9,594,861,519	0.0006%

2009	13,632	\$ 35,175	\$9,860,980,900	0.0004%
2010	4,115	\$527,173	\$9,342,561,193	0.0056%
2011	745	\$296,839	\$8,448,281,586	0.0035%
2012	247	\$ 20,757	\$8,171,211,922	0.0003%
2013	-	-	\$7,623,691,280	-
2014	-	-	\$7,579,898,868	-
2015	285	\$462,799	\$7,620,360,873	0.0061%

Between years 2004 and 2015, the County's acquisition of 37,600 acres across Pima County had a miniscule impact to the tax base for each tax year. The highest percent impact to both the primary and secondary tax bases reflected in Tables 2 and 3 was the loss of \$495,976 of primary net assessed value and \$623,278 of secondary net assessed value from parcels purchased in 2005, which equates to eight thousandths of one percent and one hundredths of one percent, respectively, of the sum of the primary and secondary net assessed values of all taxable property in the County for tax year 2005. While tax year 2009 reflects the highest acreage acquired at 13,632, it shows one of the lowest percent impacts to the tax base due to the purchases primarily being two ranches that already had very low assessed valuations due to their rural and remote locations.

E. Property Tax Revenue Impacts Attributable to County Open Space Purchases

Property taxes are calculated by applying a tax rate to \$100 of net assessed values for all taxable property in the County. Pima County levies both primary and secondary taxes. Pima County's Regional Flood Control District and Library District also levy separate secondary taxes. There are other taxes levied by other state authorized taxing entities in the County, however, this analysis only included the County's portion of taxes. Below is a table showing the reduction in primary tax revenue for each tax year due to the purchase of parcels acquired with 2004 open space bond funds.

Table 4: Reduction of Primary Tax Revenue Due to Acquisitions Under the 2004 Open Space Bond Program for Tax Years 2004 to 2015

Tax Year	Primary Tax Rate	Acquired Open Space Properties PNAV	Primary Tax Revenue Reduction by Tax Year* Due to OS Acquisitions	Total Pima County Primary Tax Revenue	% Primary Tax Revenue Reduction by Tax Year
2004	4.072	\$ 77,309	\$ 3,148	\$220,399,039	0.0014%
2005	4.072	\$495,976	\$20,196	\$238,193,628	0.0085%
2006	3.842	\$287,293	\$11,038	\$248,469,882	0.0044%
2007	3.602	\$119,315	\$ 4,298	\$264,866,986	0.0016%
2008	3.3913	\$ 40,871	\$ 1,386	\$279,136,768	0.0005%
2009	3.3133	\$ 30,982	\$ 1,027	\$297,723,590	0.0003%

2010	3.3133	\$444,962	\$14,743	\$296,197,333	0.0050%
2011	3.4178	\$260,316	\$ 8,897	\$284,023,289	0.0031%
2012	3.4178	\$ 19,941	\$ 682	\$275,951,044	0.0003%
2013	3.6665	-	-	\$277,155,468	-
2014	4.2779	-	-	\$321,633,141	-
2015	4.3877	\$462,799	\$20,306	\$334,358,574	0.0061%

*Tax revenue was calculated by applying the primary tax rate for each tax year to \$100 of the primary net assessed value.

Table 4 shows the percent reduction of property tax revenue to Pima County for each tax year as a result of the open space purchases. Again, the percent impact of the primary tax revenue loss for tax years 2004 through 2015 was very small. The primary tax revenue loss ranged from a low of about \$700 to a high of \$20,300, with a percent impact range of three ten thousandths of one percent to eight thousandths of one percent as compared to the total County primary tax revenue for each tax year.

The County's secondary tax supports the Debt Service, the Library District and the Regional Flood Control District, which levy different tax rates. For ease of review, the secondary tax revenue reductions were calculated separately below.

Table 5: Reduction of Secondary Tax Revenue for Debt Service Due to Acquisitions Under the 2004 Open Space Bond Program for Tax Years 2004 to 2015

Tax Year	Debt Service Secondary Tax Rate	Acquired Open Space Properties SNAV	Debt Service Secondary Tax Revenue Reduction Due to Open Space Acquisitions*	Total Pima County Debt Service Secondary Tax Revenue	% Debt Service Secondary Tax Revenue Reduction
2004	0.8150	\$ 77,309	\$ 630	\$45,804,274	0.0014%
2005	0.7150	\$623,278	\$4,456	\$43,264,293	0.0103%
2006	0.7150	\$382,477	\$2,735	\$49,120,182	0.0056%
2007	0.6850	\$155,846	\$1,068	\$56,309,711	0.0019%
2008	0.6050	\$ 56,986	\$ 345	\$58,048,912	0.0006%
2009	0.7100	\$ 35,175	\$ 250	\$70,012,964	0.0004%
2010	0.7500	\$527,173	\$3,954	\$70,069,209	0.0056%
2011	0.7800	\$296,839	\$2,315	\$65,896,596	0.0035%
2012	0.7800	\$ 20,757	\$ 162	\$63,735,453	0.0003%
2013	0.7800	-	-	\$59,464,792	-
2014	0.7000	-	-	\$53,059,292	-
2015	0.7000	\$462,799	\$3,240	\$53,342,526	0.0061%

* The debt service tax rate for each tax year is applied to \$100 of the secondary net assessed value to calculate the revenue reduction.

Table 5 shows the County’s secondary property tax revenue that would have been generated for debt service from the open space parcels purchased. For the tax years above, the debt service tax revenue reduction for parcels purchased ranged from \$162 to \$4,456, with the percent impact ranging from a low of three ten thousandths of one percent to a high of one hundredths of one percent as compared to the overall total County debt service tax revenue generated for each tax year.

Table 6: Reduction of Secondary Tax Revenue for the Library District Due to Acquisitions Under the 2004 Open Space Bond Program for Tax Years 2004 to 2015

Tax Year	Library District Secondary Tax Rate	Acquired Open Space Properties SNAV	Library District Secondary Tax Revenue Reduction Due to Open Space Acquisitions*	Total Pima County Library District Secondary Tax Revenue	% Library District Secondary Tax Revenue Reduction
2004	0.2124	\$ 77,309	\$ 164	\$11,937,212	0.0014%
2005	0.2575	\$623,278	\$1,605	\$15,581,196	0.0103%
2006	0.3675	\$382,477	\$1,406	\$24,247,086	0.0056%
2007	0.3975	\$155,846	\$ 619	\$32,676,073	0.0019%
2008	0.3393	\$ 56,986	\$ 193	\$32,555,365	0.0006%
2009	0.2643	\$ 35,175	\$93	\$26,062,573	0.0004%
2010	0.3100	\$527,173	\$1,634	\$28,961,940	0.0056%
2011	0.3460	\$296,839	\$1,027	\$29,231,054	0.0035%
2012	0.3460	\$ 20,757	\$ 72	\$28,081,413	0.0003%
2013	0.3753	-	-	\$28,487,320	-
2014	0.4353	-	-	\$32,747,156	-
2015	0.5153	\$462,799	\$2,385	\$39,267,720	0.0061%

* The Library District tax rate for each tax year is applied to \$100 of the secondary net assessed value to calculate the revenue reduction.

Table 6 shows the County’s secondary property tax revenue that would have been generated for each tax year for the Library District from the open space parcels purchased. For the tax years above, the Library District tax revenue reduction for parcels purchased ranged from \$72 to \$2,385, with the percent impact ranging from a low of three ten thousandths of one percent to a high of one hundredths of one percent as compared to the overall total County Library District tax revenue generated for each tax year.

Table 7: Reduction of Secondary Tax Revenue for the Regional Flood Control District Due to Acquisitions Under the 2004 Open Space Bond Program for Years 2004 to 2015

Tax Year	Flood Control District Secondary Tax Rate	Acquired Open Space Properties SNAV	Flood Control District Secondary Tax Revenue Reduction Due to Open Space Acquisitions*	Total Pima County Flood Control District Secondary Tax Revenue	% Flood Control District Secondary Tax Revenue Reduction by Tax Year
2004	0.3546	\$ 77,309	\$ 274	\$17,401,489	0.0016%
2005	0.3746	\$623,278	\$2,335	\$19,941,580	0.0117%
2006	0.3746	\$382,477	\$1,433	\$22,902,866	0.0063%
2007	0.3446	\$155,846	\$ 537	\$25,542,408	0.0021%
2008	0.2935	\$ 56,986	\$ 167	\$25,489,218	0.0007%
2009	0.2635	\$ 35,175	\$ 93	\$23,412,476	0.0004%
2010	0.2635	\$527,173	\$1,389	\$22,474,309	0.0062%
2011	0.2635	\$296,839	\$ 782	\$20,116,215	0.0039%
2012	0.2635	\$ 20,757	\$ 55	\$19,089,598	0.0003%
2013	0.2635	-	-	\$17,834,883	-
2014	0.3035	-	-	\$20,539,235	-
2015	0.3135	\$462,799	\$1,451	\$21,685,425	0.0067%

* The Regional Flood Control District tax rate for each tax year is applied to \$100 of the secondary net assessed value to calculate the revenue reduction.

Table 7 shows the County’s secondary property tax revenue that would have been generated for each tax year for the Regional Flood Control District from the open space parcels purchased. For the tax years above, the Regional Flood Control District tax revenue reduction for parcels purchased ranged from \$55 to \$2,335, with the percent impact ranging from a low of three ten thousandths of one percent to a high of one hundredths of one percent as compared to the overall total County Flood Control District tax revenue generated for each tax year.

II. Limitations of the Analysis

A. Cumulative Reduction of Property Tax Revenue Not Included

This analysis focuses on tax base impacts and loss of property tax revenue for the tax year each parcel became tax exempt. It should be noted that these property tax revenues are forfeited for all future years as well. This cumulative analysis was not included due to limitations associated with the way tax exempt properties are valued by the Assessor’s Office.

One such limitation relates to agricultural designations. Many of the properties acquired by the County had substantially lower assessed values prior to being purchased and exempted

due to their agricultural designations. Unlike private taxable property, tax exempted properties are not always valued every year by the Assessor's Office. When the values of these tax exempt properties were updated by the Assessor's Office, some of the agricultural designations were removed, resulting in higher assessed values. In turn, these updated higher assessed values make tabulating cumulative reductions to the tax base and tax revenues more difficult since these value increases would not have occurred if the agricultural designations would have continued to be retained post acquisition. As such, a straight comparison between these tax exempt parcels and total taxable property in Pima County over time would not be accurate.

B. Positive Effect of Open Space on Nearby Real Estate Values Not Captured in Analysis

This analysis aimed to quantify the reduction of the County's property tax base and property tax revenues as a result of removing property from the tax rolls for the purpose of natural area conservation. It is more difficult, however, to quantify how much the conservation of these properties enhanced the value of nearby properties, and whether the positive impact to nearby properties negated or outweighed the reductions to the tax base and tax revenues.

Research shows that homebuyers pay premiums for homes that are adjacent to or near protected natural areas. According to the National Association of Realtors (NAR), homebuyers and owners are willing to pay premiums to live near a variety of open spaces. A study conducted in 2013 in Portland, Oregon found that public parks or other open space boosts the property value of nearby homes at a range of 8 to 20 percent. That same year, the Urban Land Institute (ULI) reported that a study conducted by Colorado State University found that Colorado homebuyers are willing to pay a premium to live on property with or near protected open space, with premiums on these properties ranging from 20 to 29 percent on average. The highest percent boost was found to come from natural open space areas over other types of public spaces.

Questions posed by the ULI in 2014 to real estate experts on how open space can add value to real estate development, elicited similar responses. One respondent cited a study by Professor John Compton from Texas A&M University, who has studied this topic extensively, that found that in the vast majority of cases where properties or residential developments were in close proximity to open space, property values would consistently be higher. He also found that in some instances, the higher property taxes levied on properties near open space were often enough to pay the debt charges on bonds used to purchase the open space.

In 2010, the Economy League of Greater Philadelphia prepared a comprehensive report for the Delaware Valley Regional Planning Commission titled Economic Value of Protected Open Space in Southeastern Pennsylvania. The report found that their open spaces:

"...contribute to our way and quality of life, our open spaces are productive assets that generate significant economic value for our regions. They contribute to our local economies and property values, and they help us save on everything from health care to recreation. They also naturally improve the air we breathe and the water we drink, reducing the cost of providing these basic needs."

Similar to reports cited above, the Pennsylvania report further states that homes in close proximity, or with access to open space, have higher property values. According to their analysis, "open space adds \$16.3 billion to the value of southeastern Pennsylvania's housing stock...and protected open space generates \$240 million annually in property tax revenues to support county and municipal governments and local school districts."

This also applies to certain commercial properties. Locally, hotels such as Westin La Paloma and Marriott Starr Pass Resorts promote their locations near open space areas to attract guests and visitors. In the case of the Starr Pass Resort, they have trails that directly link to the County's Tucson Mountain Park from the resort and promote their adjacency to the park as part of the guests' hotel stay experience. These two resorts are two of Pima County's top ten highest property taxpayers. Their ability to attract more guests and visitors not only generates more revenue for the resorts, but also for Pima County.

C. Tourism and Economic Development

Travel is one of the most important industries in Arizona and relies on the health of our natural environment. In 2012, Visit Tucson found that the top two reasons people travel here is our natural environment. In 2013, more than 4 million people visited this region, spending more than \$2 billion in direct travel spending, generating \$150 million in tax revenue and supporting nearly 22,000 jobs. These are economic returns from investing in our natural environment. However, these values are not captured in the tax base impacts analysis above.

Economic development through expansion of existing and recruitment of new employers relies on several factors, one of which is the quality of life and amenities available to their employment base. Our vast system of natural areas and access to them is cited as a factor in attracting employers and a strong workforce. In a BizTucson interview in 2011, the president of Raytheon, the largest private employer in Tucson, stated that one of the strengths of operating in Tucson was the weather and beautiful mountains and the remarkable amount of outdoor activities available. Likewise, Sun Corridor Inc., our region's economic development organization, promotes the acres of natural parkland, diversity of landscapes and the endless outdoor recreational opportunities available in the region to attract professionals and new businesses. These are benefits related to our natural open space areas that are difficult to quantify and are not included in the analysis above.

Conclusion

The County's acquisition of open space has not significantly reduced the County's overall tax base or property tax revenues. This information is important to policy decision makers as debates surrounding the costs of land conservation persist. What is still needed is further research on both the monetary and non-monetary benefits of open space conservation that extend well beyond just the extensive natural benefits from protected open space. As much of the literature and studies show, protected open space contributes to local economies, property values, community well-being and economic futures. The significant economic and fiscal benefits of open space conservation must be part of this discussion in order to understand the full spectrum of what open space conservation brings to our community.

