

A Brief Summary of the Economic Impact of ISDA on Ajo, Arizona

This brief report summarizes the economic impact that the International Sonoran Desert Alliance (ISDA) has on its local community of Ajo, Arizona. Models of economic impact such as we use typically focus on the county for analysis. It is possible, however, to ‘build’ an area by combining zip codes to form a region of interest. This approach may be taken to estimate economic impact on a metropolitan area, for instance.

The case of ISDA in Ajo, Arizona is just the opposite type of case. Ajo is small, rural, and isolated. The map in *Figure 1* shows the location of Pima County within Arizona and the location of Ajo in far western Pima County.

Figure 1: Arizona, Pima County, and Ajo



Map provided by: Pima Association of Governments

Source: <http://www.pima.gov/areainfo/area.html>

Not only is Ajo a small, rural town far from the county seat of Tucson, its isolation is increased by the fact that, as shown in *Figure 2*, between Ajo and Tucson is the 2.7 million acre Tohono O’odham reservation.

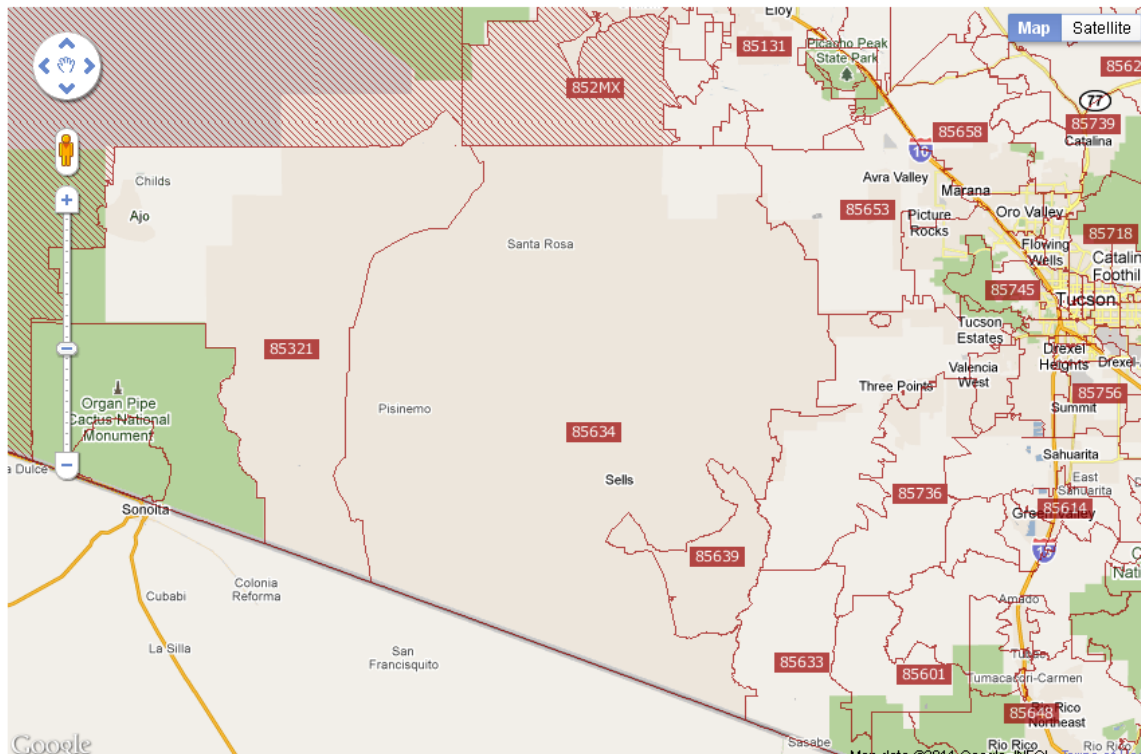
Figure 2: The Location of Tohono O’odham Reservation between Ajo and Tucson



Source: <http://www.itcaonline.com/azrezmap.jpg>

The special circumstances surrounding Ajo’s relationship to Pima County led us to develop an economic impact model for ISDA that was strictly local, indeed, based on Ajo’s single zip code of 85321. The map presented in *Figure 3* shows the area covered by zip code 85321.

Figure 3: Ajo’s Zip Code 85321



In estimating the economic impact of the International Sonoran Desert Alliance (ISDA), we used an approximate budget of \$1,000,000 per year.¹ We calculated the economic impact of 7,000 visitors to ISDA per year, with approximately 80% of visitors coming from outside Ajo.² These ‘nonlocal’ visitors (an estimated 5,600 per year) bring money, through their local expenditures, into the Ajo economy that most likely would otherwise have been spent in their own area.

The results below estimate the total economic impact of ISDA using an inter-industry model of the flow of goods and services between sectors of the economy in Ajo. Expenditures are made by ISDA; those monies circulate through the regional economy. The suppliers of goods and services to ISDA increase their own purchases to meet the new demand; increased employment results in additional expenditures by households. Similar modeling has been undertaken to estimate the impact of expenditures by nonlocal visitors as well.

The results are calculated for the specific case of ISDA in Ajo, Arizona. Estimates of average spending by each nonlocal visitor are based upon an extensive national survey by Americans for the Arts of expenditures made by nonlocal visitors on the day of attendance to a cultural site or event.³

Results:

- The \$1,000,000 in annual expenditures by ISDA has an estimated economic impact of \$1,213,426. Sectors of the Ajo, Arizona regional economy (beyond the social and environmental advocacy sector) that experience a significant increase in economic activity due to the presence of ISDA are rental value, telecommunications, food and drinking places, newspapers, state and local enterprises, and medical labs. In addition, the expenditures of ISDA result in an estimated 10 jobs in Ajo.
- The local expenditures made by 5,600 visitors from outside Ajo, Arizona to ISDA have a total economic impact of approximately \$315,609. Sectors of the economy that benefit most from visitor expenditures are food and drinking places, hotels and motels, gasoline stations, retail stores, rental value, power generation, and newspapers. The expenditures of 5,600 nonlocal visitors to ISDA result in an additional 4 jobs in Ajo.
- The total economic impact of ISDA consists of the impact of its own annual expenditures and the local expenditures made by visitors who reside outside Ajo, Arizona. ***The total economic impact***

¹ Annual expenditures of \$1,000,000 are based on documents received from ISDA.

² Our figure of 7,000 visitors to ISDA annually with 80% nonlocal is based on ISDA’s programming as discussed on its web site. To estimate the economic impact of ISDA based on alternative visitation figures please visit our interactive web page at <http://web.williams.edu/web/Economics/ArtsEcon/econpages/c3ddisplay.php?file=ISDAEconModelZips.xml> where you can update visitor and budget numbers to calculate different economic impact scenarios.

³ Information on the Americans for the Arts study is available for download at http://www.artsusa.org/information_services/research/services/economic_impact/default.asp. The survey was carefully designed to count only the expenditures directly tied to visiting a cultural organization on a specific day, so as not to ‘take credit’ for expenditures primarily resulting from an extended vacation or other reasons for traveling.

of ISDA is approximately \$1.5 million annually. The total impact in terms of employment in Ajo, Arizona is an estimated 15 jobs.⁴

The presence of ISDA in Ajo results in benefits to the town far beyond its economic impact. This summary is only an estimate of the economic impact of ISDA on the local economy of Ajo.

About ISDA

The International Sonoran Desert Alliance (ISDA) was founded in 1993 to promote conservation, develop solutions to local issues, and provide opportunities for individual and community action. Based in Ajo, Arizona, ISDA seeks to protect and enhance the 10,000 square mile region that encompasses the Sonoran Desert. ISDA's programs are centered on desert conservation, cultural preservation, and economic development. Live/work artist space has been developed at the former Curley School in Ajo, and ISDA is in the process of restoring and revitalizing the historic Ajo town plaza.

About the Williams College Center for Creative Community Development (C³D)

The Center for Creative Community Development (C³D) was founded in June 2004 with an initial grant from the Ford Foundation and subsequent funding from the Institute of Museum and Library Services (IMLS), Leveraging Investments in Creativity (LINC), Massachusetts Cultural Council (MCC) and others. This report is part of a research initiative on organizations awarded Space for Change planning and pre-development grants. The Space for Change program is funded by LINC in partnership with the Ford Foundation. C³D is a research organization working to better quantify and characterize the impacts of neighborhood-based arts and cultural organizations on their surrounding communities. The Center provides sound data and case studies that can be used for case-making as well as for planning and evaluation purposes. Such measurements are essential for communities to manage the process of change, and to ensure equitable distribution of the benefits created by cultural economic development.

C³D is located on the campus of Williams College in Williamstown, Massachusetts, and is directed by Stephen Sheppard, Class of 2012 Professor of Economics. Professor Sheppard (PhD from Washington University in St Louis) is an economist who specializes in urban and regional economics and the use of economic geography to analyze the impacts of cultural and environmental amenities on housing markets, job creation, and neighborhood development.

More information about C³D and its analyses is available³ at www.c-3-d.org.

About this Study

The economic impacts reported above are based on standard input/output analysis. This type of model has been in use at least since the publication in 1960 of Walter Isard's important book *Methods of Regional Analysis: an Introduction to Regional Science* (M.I.T. Press). An input/output model is a set of mathematical formulas whose values are based on statistical analysis of actual observations. In this case, the formulas are designed to present the workings of the regional economy. The economic impact estimates provided here are the result of a predictive model that estimates the amount of aggregate regional income and employment that is attributable to expenditures by a particular cultural organization

⁴ The fact that ISDA expenditures support 10 jobs in Ajo, nonlocal visitors support 4 jobs, and combined the impact is 15 jobs is due to rounding errors, especially when reporting in whole numbers.

and its nonlocal visitors (visitors living outside the county). The model discussed in this report is designed for analysis at the county level, meaning the estimates cover impacts occurring throughout the county.

The input/output model utilizes data from a variety of sources (including the US Bureau of Economic Analysis, the US Bureau of Labor, and the US Census Bureau) to characterize the flow of goods and services among sectors of the economy and the employment and consumption patterns of different sectors of the regional economy. The sectors are identified by NAICS (North American Industry Classification System) codes. Much of the data is collected at the county level through a survey process that examines the spending patterns of representative firms in every sector of the economy in every county in the US. The data collected are used to provide estimates of the purchasing patterns of each sector of the county economy, identifying how much of every dollar spent in one particular sector is received as income in every other sector of the county economy, and how much of every dollar 'leaks' outside the county economy or is considered 'final consumption'. The input/output economic model divides the economy into over 400 sectors ranging from 'Abrasive products' to 'Wood window and door manufacturing'. Not all of these sectors are present in every region. The model also draws heavily on data from the federal ES202 database of unemployment insurance filings and the 'Regional Economic Information System' of the US Bureau of Economic Analysis.

This study was supported by a research grant from LINC in partnership with the Ford Foundation.

For more detailed background information on our input/output model for cultural organizations, we encourage you to visit <http://www.williams.edu/Economics/ArtsEcon/econpages/FAQ.html>.