

ECONOMY OF SAHUARITA (ZIP CODE 85629)

June 2004



ARIZONA DEPARTMENT OF COMMERCE
Our Job is JOBS!

Prepared by

Tom Rex
Research Manager, Center for Business Research
L. William Seidman Research Institute
W.P. Carey School of Business
Arizona State University



ECONOMY OF SAHUARITA

(ZIP CODE 85629)

June 2004

Prepared by

Tom Rex
Research Manager, Center for Business Research
L. William Seidman Research Institute
W.P. Carey School of Business
Arizona State University
Tempe, AZ 85287
(480) 965-3961

Peer reviewed by the Arizona Department of Commerce Economic Research Advisory Committee:

Dan Anderson
Assistant Executive Director for
Institutional Analysis
Arizona Board of Regents

Brian Cary
Principal Economist
Arizona Joint Legislative Budget
Committee

Lisa Danka
Director, Commerce & Economic
Development Commission
Arizona Department of Commerce

Kent Ennis
Economic Consultant
CH2M Hill

Wayne Fox
Director, Bureau of Business and
Economic Research
Northern Arizona University

James B. Nelson
Economic Development Manager
Salt River Project

William P. Patton, Ph.D.
Director of Economic Development
Tucson Electric Power

Elliott D. Pollack
Elliott D. Pollack & Co.

Brad Steen
Chief Economist
Arizona Department of
Transportation

Marshall Vest
Director, Economic and Business
Research
Eller College of Management
University of Arizona

Don Wehbey
Economist
Research Administration
Arizona Department of Economic
Security

Jim Wontor
Advisor, APS Forecasting
Arizona Public Service

© 2004 by the Arizona Department of Commerce. This document may be reproduced without restriction provided it is reproduced accurately, is not used in a misleading context, and the author and the Arizona Department of Commerce are given appropriate recognition.

This report was prepared for the Arizona Department of Commerce with funding from the Commerce and Economic Development Commission. Elements of this report may be presented independently elsewhere at the author's discretion. This report will be available on the Internet for an indefinite length of time at <http://www.azcommerce.com>. Inquiries should be directed to the Office of Economic Information and Research, Arizona Department of Commerce, (602) 771-1191.

The Arizona Department of Commerce has made every reasonable effort to assure the accuracy of the information contained herein, including peer and/or technical review. However, the contents and sources upon which it is based are subject to changes, omissions and errors and the Arizona Department of Commerce accept no responsibility or liability for inaccuracies that may be present. THIS DOCUMENT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THE ARIZONA DEPARTMENT OF COMMERCE PRESENTS THE MATERIAL IN THIS REPORT WITHOUT IT OR ANY OF ITS EMPLOYEES MAKING ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, OR ASSUMING ANY LEGAL LIABILITY OR RESPONSIBILITY FOR THE ACCURACY, COMPLETENESS, OR USEFULNESS OF ANY INFORMATION, APPARATUS, PRODUCT, OR PROCESS DISCLOSED, OR REPRESENTING THAT ITS USE WOULD NOT INFRINGE PRIVATELY OWNED RIGHTS. THE USER ASSUMES THE ENTIRE RISK AS TO THE ACCURACY AND THE USE OF THIS DOCUMENT AND ANY RELATED OR LINKED DOCUMENTS.

ECONOMY OF SAHUARITA (ZIP CODE 85629)

Copper mining and agriculture help drive the Sahuarita economy, but Sahuarita is partially dependent on the economy of the broader Tucson area. Mining provided the most employment of any sector in Sahuarita in 2001.

The availability of economic data by city and industrial sector is severely limited (see the “Data Sources” section on page 8). Zip code 85629 is used as an approximation for Sahuarita and includes the East Sahuarita Census Designated Place. The zip code area is more extensive and has a population greater than within the Town of Sahuarita and East Sahuarita. The 228-square-mile land area of the zip code compares to the combined 30 square miles of the Town of Sahuarita (15 square miles) and East Sahuarita. The 2000 decennial census count of 7,841 residents in the zip code was 68 percent more than the 4,661 combined population of the Town of Sahuarita (3,242 residents) and East Sahuarita.

This report presents the results of an “economic base study” for Sahuarita, using employment by industry as the primary measure of the economy. The purpose of this analysis is to identify the area's leading economic activities and to provide useful information for decision-making. Comparing the sectoral distribution of employment in the community to state or national averages helps determine how different or similar the local economy is to the norm, giving some insight into how dependent the community is on certain economic sectors for employment or income. When the economic forces that mold the local economy are understood, strategic decisions for the area's economic future can begin to be made.

BACKGROUND

An economic base study is a description of an economy's structure and composition. Regional economic theory states that a local economy is driven by economic activities that import money into the local area through the sales of goods and services to customers who do not live in the area. Sahuarita's leading economic activities are identified in the economic base study, which compares economic activity (as measured by employment) in the local area to that in broader areas: Arizona and the nation.

Because of the vast differences in size between Sahuarita, Arizona and the United States, employment is divided by the 2000 census population count for each area. This “**per capita employment**” is expressed as employment per 1,000 residents.

To create a comparative measure, per capita employment in the local area is divided by the national average per capita employment. The result is called a “**location quotient**” — a figure greater than 1 indicates that per capita employment in the local area is greater than the national average. For example, a location quotient of 1.32 indicates that per capita employment in the local area is 32 percent *higher* than the national average, while a location quotient of 0.68 shows that per capita employment is 32 percent *less* than the national average. The location quotient calculated relative to the Arizona average typically is similar to the location quotient calculated against the national average, but in some industries it can be considerably different.

When a location quotient is greater than 1, “extra” jobs are present in the local area. This “**excess employment**” is the difference between actual employment and the employment that would exist if employment per capita had equaled the national average. Excess employment is of particular significance in industries that sell their goods and services to companies located

outside the city or to individuals who are not residents of the city (nonresidents include tourists and seasonal residents).

“**Basic**” or “**export**” activities are those involving sales to nonlocal businesses and individuals. Such activities drive the local economy by bringing money into the community. Basic industries with excess employment are the primary forces driving the local economy. Mining, most types of manufacturing, most agriculture, and tourism are classic examples of basic activities.

In contrast, some economic activities primarily serve local residents. Retail trade and services such as health care, finance, and real estate are examples of largely nonbasic, local-support activities, since most sales are to local residents. Similarly, most construction work is purchased by local residents and local businesses. While important components of a local economy, such largely nonbasic activities do not directly bring much money into the community and thus do not drive the local economy.

Excess employment can exist in local-support activities. In some cases, the excess results from local purchasing preferences. For example, per capita sales of air conditioning units are above the national average in much of Arizona because of climatic conditions. In other cases, an excess exists because some cities function as regional trade and service centers. While sales to residents of neighboring communities might be considered to be basic in a particular city, such sales are not basic in the broader area and are not considered to be a driving economic activity in the same way as mining, for example.

Many economic activities, such as wholesale trade and transportation, are a mixture of basic and nonbasic components. If a community has a substantial number of tourists and/or seasonal residents, even retail trade and such services as health care have a basic component. A portion of the construction industry is basic if purchases are made by companies that sell to an external market and/or by individuals migrating to the area to take a job at a basic employer or to retire. Some federal government activities and certain other government activities can be considered to be basic in a city, but most state and local government employment supports the local community primarily with funds raised locally and thus do not qualify as basic activities.

RESULTS

Total employment in Sahuarita is estimated to have been approximately 2,075 in 2001. This is the sum of nonagriculture private-sector employment in 2001 (the latest data available) reported by the U.S. Census Bureau, an estimate of agriculture employment in 2001, and an estimate of government employment in 2001-02. Total employment was only 265 per 1,000 residents — approximately 45 percent less than the national and state averages, and less than the median value of 82 Arizona cities.

The low per capita figure primarily resulted from the large number of Sahuarita residents who commuted into Tucson to work. The number of jobs located in Sahuarita was considerably less than the 3,250 employed Sahuarita residents counted in the 2000 census. In addition, a lower-than-average share of Sahuarita residents were of working age in 2000, with the percentages of both children and senior citizens slightly higher than average.

Agriculture and Government

Employment data by community are not available for the agriculture and government sectors. Thus, the data discussed in this section are estimates with less reliability than the data in

the following section on the nonagriculture private sector. See the “Data Sources” section for details on how agriculture and government employment were estimated.

Agriculture largely is a basic activity that includes agricultural support activities as well as farming and ranching. Agriculture employment in the Sahuarita zip code in 2001 is estimated to have been more than 250. With employment per 1,000 residents a high 33, agriculture’s location quotient was approximately 2.3 relative to the national average and 4.4 versus the state average. Excess employment was 150 calculated against the national average and 200 compared to the state average. Much of the employment was at an establishment providing postharvest crop activities and at the Farmers Investment Company.

The government sector represents a mix of basic and nonbasic activities, but nearly all of the 325 government employees in Sahuarita in 2001-02 supported the local population. Government employment per 1,000 residents was a low 42 in Sahuarita — 45-to-50 percent less than the state and national averages.

Combined federal, state and county government employment was less than 25, as was employment at the Town of Sahuarita. The Sahuarita Unified School District employed 300 and was the second largest employer in Sahuarita.

Nonagriculture Private-Sector Economy

Nonagriculture private-sector employment in Sahuarita was approximately 1,475 in 2001. Employment was only 190 per 1,000 residents — about 50 percent less than the national and state averages, but only slightly less than the median value of Arizona cities.

Employment estimates for 2001 for the broad sectors of the Sahuarita economy are shown in Table 1. Mining employed the most, followed by construction. Per capita employment was above the national average in these two sectors and in agriculture (see the “location quotient relative to nation” column of the table). In contrast, the location quotient was less than 0.5 in 16 of the 20 sectors. Mining employed considerably more than if the sector’s per capita employment had been equal to the national per capita average (see the “excess employment relative to nation” column of the table). Construction provided a lesser amount of excess employment. Compared to the per capita Arizona average, location quotients and excess employment generally were similar to those calculated against the national average, though construction’s figures were somewhat lower relative to the Arizona average.

Sahuarita had substantial excess employment in mining, but none in any other largely basic sector. Employment was minimal in manufacturing, wholesale trade, and transportation and warehousing. Tourism also had a limited presence in Sahuarita. Per capita employment in was 57 percent less than the U.S. average the accommodation subsector and 87 percent less in the food services subsector.

More sectorally detailed data show that 10 industries provided excess employment of at least 15 in Sahuarita in 2001, few of which have much of a basic component (see Table 2). Providing by far the most excess employment was the copper mining industry, which according to the Census Bureau consisted of one establishment of between 500 and 999 employees in 2001 — by far the town’s largest employer. The annual report of the Arizona State Mine Inspector indicates that ASARCO’s Mission Mine employed just over 600 in 2001. In 2002, however, the Mine Inspector reports employment was down to less than 400. (The 2001-02 Directory of Active Mines in Arizona, produced by the Arizona Department of Mines and Mineral Resources, put employment at 450.) Other than the Mission Mine, the only other mining employment was about a dozen people working in crushed stone quarrying. Thus, the impact of mining on the

TABLE 1
EMPLOYMENT BY SECTOR
Sahuarita (Zip Code 85629), 2001

Sector	Number of		Relative to Nation		Relative to Arizona	
	Establishments	Employment	Location Quotient	Excess Employment	Location Quotient	Excess Employment
TOTAL	110	2,075	0.52	0	0.57	0
AGRICULTURE	8	260	2.34	149	4.39	201
GOVERNMENT	4	329	0.51	0	0.54	0
TOTAL, NONAGRICULTURE PRIVATE SECTOR	98	1,486	0.46	0	0.50	0
Mining	2	707	52.27	694	46.23	692
Utilities	1	2	0.09	0	0.11	0
Construction	37	363	2.01	182	1.41	105
Manufacturing	1	2	0.00	0	0.01	0
Wholesale Trade	2	9	0.05	0	0.06	0
Retail Trade	7	99	0.24	0	0.24	0
Transportation and Warehousing	6	44	0.42	0	0.39	0
Information	1	31	0.30	0	0.35	0
Finance and Insurance	1	2	0.01	0	0.01	0
Real Estate and Rental and Leasing	3	17	0.30	0	0.26	0
Professional, Scientific and Technical Services	3	4	0.02	0	0.02	0
Management of Companies and Enterprises	0	0	0.00	0	0.00	0
Administrative, Support, Waste Management, Remediation Services	9	55	0.22	0	0.19	0
Educational Services	1	14	0.19	0	0.34	0
Health Care and Social Assistance	8	54	0.13	0	0.17	0
Arts, Entertainment and Recreation	1	2	0.03	0	0.03	0
Accommodation and Food Services	6	52	0.19	0	0.16	0
Other Services (except public administration)	8	30	0.20	0	0.24	0
Auxiliaries (except corporate, subsidiary and regional management)	0	0	0.00	0	0.00	0
Unclassified Establishments	1	1	0.24	0	0.28	0

Source: Nonagriculture private sector estimated from U.S. Department of Commerce, Census Bureau, *Zip Business Patterns 2001*. Agricultural production employees, most government employees, railroad employees, self-employed individuals and employees of private households are not included in this data source. Government employment estimated from government agencies and local sources and may understate actual figures. Agriculture employment is a rough estimate — see the "Data Sources" section for details. The concept of establishment for government and agriculture differs from that used for the nonagriculture private sector.

TABLE 2
INDUSTRIES WITH EXCESS EMPLOYMENT OF AT LEAST 15*
Sahuarita (Zip Code 85629), 2001

Industry	Number of Establishments Employment		Relative to Nation		Relative to Arizona	
			Location Quotient	Excess Employment	Location Quotient	Excess Employment
Copper ore & nickel ore mining	1	693	2,862.61	692	73.86	683
Drywall, acoustical & insulation contractors	6	99	11.75	90	3.58	71
Postharvest crop activities (except ginning)	1	71	88.18	70	64.09	70
Gasoline stations with convenience stores	3	82	4.47	63	4.21	62
Excavation contractors	4	48	11.98	44	10.11	43
Single-family housing construction	8	60	3.25	41	2.25	33
Landscaping services	7	52	4.18	39	2.52	31
Motion picture theaters (except drive-ins)	1	31	8.52	27	7.76	27
All other special trade contractors	2	33	5.41	27	3.09	22
Carpentry contractors	3	35	4.71	27	1.75	15

* Relative to either the national or Arizona average

Note: Those entries in bold with a gray background have a high proportion of sales to customers outside the region and are considered basic (export) economic activities. Those not in bold with a gray background have a moderate proportion of sales to non-residents. Other industries largely serve local residents.

Source: Estimated from U.S. Department of Commerce, Census Bureau, *Zip Business Patterns 2001*. Agricultural production employees, most government employees, railroad employees, self-employed individuals and employees of private households are not included in this data source.

community currently is substantially less than it was in 2001, though it remains the primary economic activity.

Other than copper mining and the agricultural support industry of postharvest activities, the gasoline stations industry is the only one in Table 2 to have much of a basic component. Gasoline stations are partially basic since some of their sales are made to those traveling through the community. One gas station had between 50 and 99 workers in 2001. Five construction industries are included in Table 2. With the proportion of senior citizens in Sahuarita only a little above average and the percentage of seasonal residents below average, little of the construction activity is basic. Seven of the nine establishments that employed between 20 and 49 in 2001 were in the construction sector. The others were a movie theater and a landscaping company.

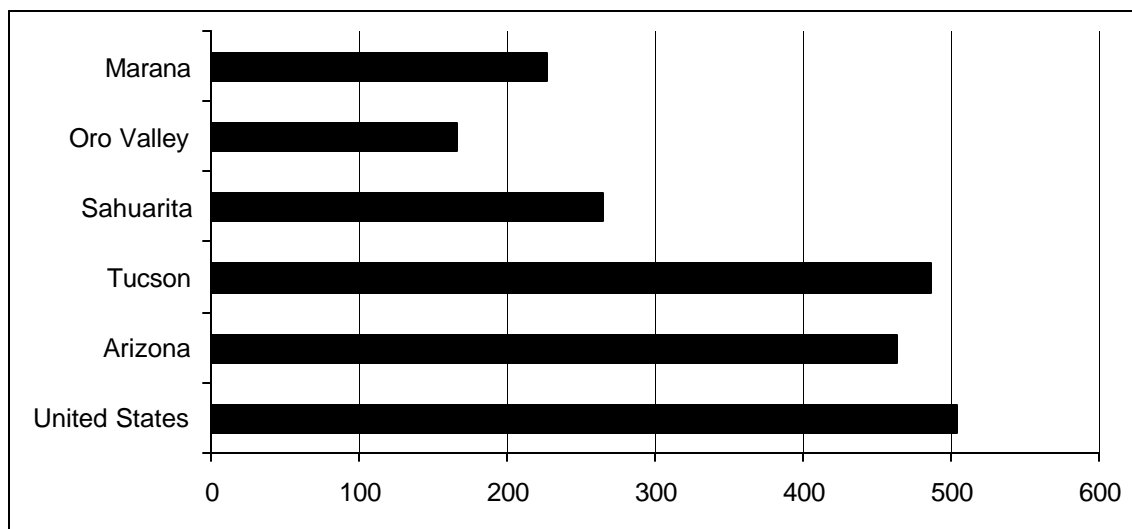
Because of the copper mine, Sahuarita had considerable excess employment in 2001 for a community of its size. Given the subsequent cutbacks at the mine, it no longer dominates the local economy. However, copper mining and agriculture are the main forces driving the Sahuarita economy. The mismatch between the number of jobs located in Sahuarita and the number of employed Sahuarita residents reveals a dependence on the economy of the broader Tucson area.

Sahuarita v. Comparison Cities

Sahuarita is one of four incorporated cities in the southern region of Arizona (Pima County). Per capita employment in Sahuarita in 2001, overall and in the nonagriculture private sector, was a distant second in the region to Tucson-South Tucson (see Chart 1). Per capita government employment was the third highest of the region's cities (more than in Oro Valley) and per capita agriculture employment was the highest in the region.

Average nonfarm private-sector payroll per employee in Sahuarita in 2001 was \$26,700 — 24 percent less than the national average and 13 percent less than the Arizona average, but

CHART 1
TOTAL EMPLOYMENT PER 1,000 RESIDENTS
Cities in Southern Region



Source: Estimated from U.S. Department of Commerce, Census Bureau, *Zip Business Patterns 2001* and 2000 census, and estimates of agriculture and government employment.

more than \$5,000 higher than the median value of Arizona cities. Sahuarita's figure was third highest in the region, more than in Tucson-South Tucson (see Chart 2).

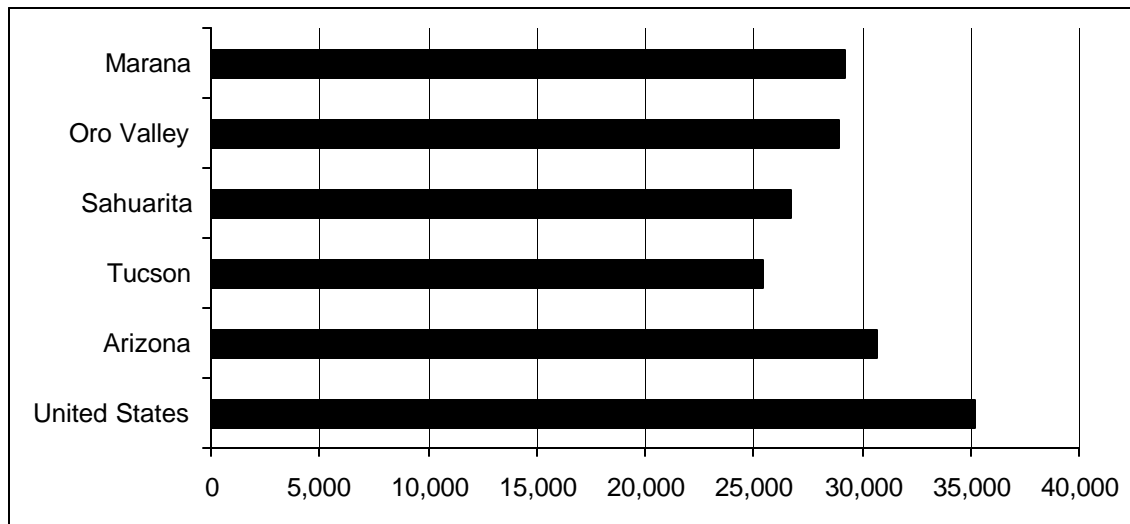
In most sectors, location quotients in Sahuarita ranked third or fourth in the region. However, Sahuarita had the highest location quotients in mining and construction. Looking specifically at basic activities at the industry level, Sahuarita had a very high location quotient in copper mining.

Comparison cities were selected in four categories, based largely on population size and proximity though industrial mix also was considered:

- Nearby city (within 50 miles) of similar size (a resident count between 50 and 150 percent of Sahuarita's population): Benson.
- Nearby larger city (a population two-to-five times as large): Marana is not quite four times as populous as Sahuarita.
- Other proximate cities: Oro Valley is a larger city and neighboring Tucson is much larger. Unincorporated Green Valley is somewhat more populous.
- Similarly sized city farther away: Queen Creek is at the fringe of the Phoenix urbanized area.

Per capita employment in Sahuarita was the third highest of the seven places in this comparison group, less than in Tucson-South Tucson and marginally less than in Queen Creek. Per capita nonfarm private-sector employment in Sahuarita was fourth highest, much less than in Tucson, less than in Green Valley, and barely less than in Queen Creek. Sahuarita's location quotient was the highest of the group in mining and second highest in agriculture, but near the bottom in the other major sectors shown in Chart 3. Average nonfarm private-sector payroll per employee in Sahuarita was in the middle of this group, lower than in Queen Creek, Marana and Oro Valley.

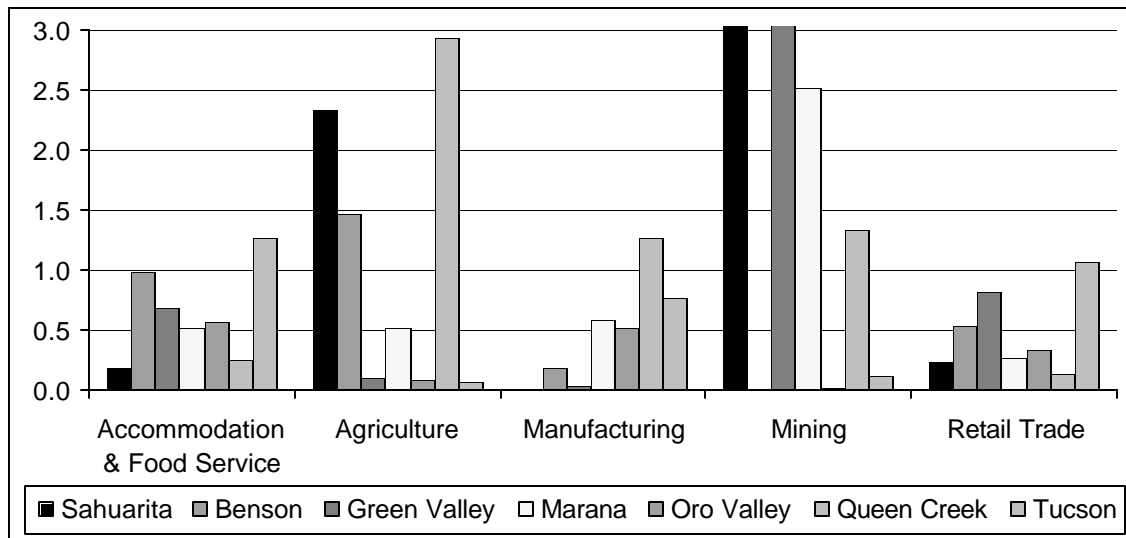
CHART 2
AVERAGE NONFARM PRIVATE-SECTOR PAYROLL PER EMPLOYEE (\$) IN 2001
Cities in Southern Region



Note: The figures for Marana and Tucson-South Tucson are estimated.

Source: Estimated from U.S. Department of Commerce, Census Bureau, *Zip Business Patterns 2001*.

**CHART 3
LOCATION QUOTIENTS IN 2001
Selected Sectors in Comparison Cities**



Note: The location quotient for mining was 52.3 in Sahuarita and 21.0 in Green Valley.

Source: Estimated from U.S. Department of Commerce, Census Bureau, *Zip Business Patterns 2001* and 2000 census, and estimates of agriculture employment.

DATA SOURCES

National and state economic data were obtained from the latest edition (2001 data released in 2003) of *County Business Patterns*, which is produced annually by the U.S. Department of Commerce's Census Bureau. Data for Sahuarita came from a companion product of the Census Bureau, *Zip Business Patterns*; one zip code (85629) approximates the town.

County Business Patterns and *Zip Business Patterns* use the hierarchical North American Industry Classification System to provide data by industrial category: broad sectors, subsectors, industry groups, and specific industries. Agricultural production employees, most government employees, railroad employees, self-employed individuals, and employees of private households are not included in either Census Bureau report.

The number of establishments (by employment size: 1 to 4, 5 to 9, 10 to 19, etc.), employment, and payroll are reported in *County Business Patterns* by industrial category. An establishment is a physical location at which business is conducted; a company may consist of one or more establishments. When only a small number of establishments are present in an industrial category (particularly if one establishment within the category is dominant), the Census Bureau withholds the employment and payroll data to protect company confidentiality. Undisclosed data are most frequent at the industry level, but in less populous areas even sectoral data may be withheld. Unlike *County Business Patterns*, employment and payroll data are released *only* for the zip code total in *Zip Business Patterns*.

For industrial categories for which data were not disclosed (including all categories at the city level), employment by sector, subsector, industry group, and industry had to be estimated. For Sahuarita, these estimates were made using the establishment by employment-size class data for each industrial category for the zip code and average employment per establishment by

employment-size class by sector for the state. The estimates by industrial category for Sahuarita's zip code then were forced to add to the total employment of the zip code.

The data from *Zip Business Patterns* were supplemented by *estimates* of employment in the agriculture and government sectors. No source of either agriculture or government employment by zip code or city exists.

The agriculture sector has two major parts: agricultural production (farms and ranches), and agricultural support, which consists of such activities as cotton ginning and crop harvesting. Forestry, logging, fishing, hunting and trapping activities also are included in the agriculture sector. *Zip Business Patterns* includes only a portion of the agricultural support category.

Agriculture employment at the county level is available for 2001 from the U.S. Bureau of Economic Analysis (BEA), divided into the categories of farm proprietors, farm workers, and agricultural support and other agricultural employment. Some figures had to be estimated in some counties because of the federal government's disclosure restrictions. The county totals were allocated to cities and unincorporated areas within each county by a combination of methods.

To estimate farm and ranch employment in cities and unincorporated areas, the number of farms and ranches by zip code from the 1997 agricultural census (the 2002 census data are not yet available) of the U.S. Department of Agriculture were used. The zip code data were found to be incomplete, with some farms assigned to incorrect zip codes, when the sum of the zip code data by county was compared to the county total provided separately by the Department of Agriculture. Thus the zip code data were adjusted to sum to the county total. Only those farms and ranches with agricultural sales of at least \$10,000 in 1997 were included, but even some of these farming operations likely do not provide the main source of income for their owners, much less employ others. Thus, average employment (proprietors and farm laborers) per farm and ranch was only 6.6 in Arizona (calculated as 2001 employment divided by the number of farms and ranches in 1997). In each county, average employment per farm and ranch was multiplied by the number of farms and ranches in each city or unincorporated area. The city and unincorporated county estimates were adjusted in some counties if farming operations with significant employment were reported by local sources in particular communities.

County employment in agricultural support and other agricultural activities reported by the BEA were allocated to cities and unincorporated areas using the ratio of BEA agricultural support employment to the agricultural support employment included in *Zip Business Patterns*.

For this report, the government sector was divided into several levels of government: federal (including civilian and military), state, county, municipal or tribal government, school district, and special district (such as an irrigation or fire district). Universities and community colleges are shown as a separate category; depending on the source of government data, they may be included either in state government or as a school district. The inclusion of all or a portion of tribal operations in government varies by source of data.

Several methods had to be used to estimate government employment by city and unincorporated area. The 2002 Census of Governments provides employment by level of government, but does not allocate that employment by community if the government entity crosses jurisdictional boundaries. For example, it provides no indication of federal government employment in Arizona and provides only the overall state government figure (which includes universities). Community colleges are included as a school district and tribal government is not included.

The census figures were used as the starting point for school district employment, special district employment, municipal employment, and county employment. If a school district extends across city boundaries, Arizona Department of Education employment data by individual school were used to allocate the overall school district employment by city. Most of the community colleges have multiple campuses. Data on employment at each campus was collected from the community college district office, and used to allocate the overall community college employment by community.

While most county government employment is located within the boundaries of the county seat, county offices commonly are found in other communities as well. Generally, county governments in Arizona could not provide employment by location, so county offices outside the county seat were individually contacted to obtain employment. In most counties, employment in the county seat was calculated as the difference between the county total from the 2002 census and the number tallied in other locations. This process probably understates county government employment outside the county seat and overstates it at the seat.

State government employment figures by city also are not available. County totals for 2001 were obtained from the Arizona Department of Administration (DOA). State offices were contacted across the state to obtain employment, but in most counties it was not possible to identify all of the county employment reported by the DOA. In these counties, each community's estimate was increased so that the sum of state employment by community equaled the DOA county total.

Military employment figures at each of the major facilities were obtained from the May 2002 report "Economic Impact of Arizona's Principal Military Operations," prepared by the Maguire Company. Smaller military facilities were contacted directly. Similarly, federal civilian employment was collected directly from local federal offices. Like state government, it was not possible to identify all federal workers by this process. The community estimates were increased to sum to the 2001 BEA county totals.

Complete economic data for Sahuarita are available in an EXCEL file consisting of two spreadsheets. The first sheet provides the number of establishments by employment-size class for those sectors, subsectors, industry groups, and industries with at least one establishment in Sahuarita. Estimated employment also is shown.

The second spreadsheet compares employment in Sahuarita to that in Arizona and the nation. All sectors, subsectors, industry groups, and industries are included. For the United States, Arizona, and Sahuarita, per capita employment (expressed as employment per 1,000 residents) is calculated for each industrial category. The per capita figures for Sahuarita (and Arizona) are divided by the national average for each industrial category to create the location quotient. For industrial categories with location quotients greater than 1, excess employment in Sahuarita (and Arizona) is calculated from employment and the location quotient. For Sahuarita, the location quotient and excess employment by industrial category also is calculated relative to the Arizona average.