

ARIZONA ECONOMIC BASE STUDY AND SPECIAL REPORTS: EXECUTIVE SUMMARY

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ARIZONA IS CHANGING

Arizona's population has grown by 40% from 3.7 million in 1990 to 5.1 million in 2000. The traditional five "C's" (cattle, citrus, cotton, copper and climate) of Arizona's traditional economic makeup are still important components of the overall economy, but are declining in significance relative to the emerging service and technology sectors. Population continues to migrate to urban centers, resulting in Arizona as one of the most urbanized states in the nation.

There has also been a shift in public policy issues in the 1990's. How should Arizona "grow smarter"? How should the State stimulate "new economy" jobs with their higher wages? What is the appropriate way to improve the quality of the workforce and secure accountability for this improvement in the schools? What is the economic future for the State's smaller communities?

Arizona is beginning to understand its position in a regional economy: as part of the Arizona-Sonora region through the efforts of groups like the Arizona Mexico Commission; as part of the multi-national CANAMEX Corridor; and as part of the Southwest Passage, linking the east and west coasts along Interstate 10.

INFORMATION IS CHANGING TOO

As Arizona changes, so does the need for different kinds of information. Economic data is needed to support decision making, to evaluate progress and as a foundation for a strategic approach to economic growth.

Most economic data are collected and organized on a county level. This provides useful information in states with many small counties, such as Arkansas (population 2.8 million, 75 counties) or Texas (population 20.9 million, 254 counties). It poses a challenge for Arizona with its 15 very large counties and complex land patterns.

There are many sources of economic information: the U.S. Bureau of Labor Statistics, the U.S. Bureau of Economic Analysis, the U.S. Bureau of the Census (Census 2000, County Business Patterns), etc. These sources can be difficult to integrate because of differences in collection and reporting, yet each represents an important source of information to understand the economic character of a region. This Statewide Economic Study (SES) brings together all major sources of economic information into one common assessment and organizes that information geographically for ease of use and future reference.

Initial socioeconomic data from the recently released 2000 decennial census are included in the SES. Some of these data, such as income and poverty, have no reliable alternative source at the state or local level.

The reporting of economic data by industry currently is in transition from the old Standard Industrial Classification (SIC) to the more modern North American Industrial Classification System (NAICS). We are entering into a period of "data turmoil" while the federal government

makes this transition, which is expected to take three to four years. The SES represents our last opportunity to analyze Arizona under SIC, and our first opportunity to do so under NAICS. Data from both classification systems are included in the SES to establish the benchmark for the past *and* the future.

BASIC ECONOMIC ACTIVITY

Regional economic theory states that a local economy is driven by activities that import money into the region through the sales of goods and services to customers who do not live in the region. Such “basic” or “export” activities differ from population-driven economic activities, which sell to and support the local population. “Export” in this usage is not limited to goods and services sold to customers from other countries, but includes all sales made to customers outside the local area – in other states, or in the case of county economies, to customers from other counties within the state.

The purpose of the economic base study is to identify an area’s leading economic activities – export activities that are significantly larger in the county, region or state than in the nation. To quantify activity for a sector in excess of the national average, “basic” economic activity is calculated from the sector’s location quotient (defined in the introduction to the Economic Base Study) and total activity in the county.

This report, as well as *Part 2: Arizona’s Economic Future* prepared by Economy.com, focuses on Arizona’s basic industries that bring money into our economy to understand what is driving Arizona’s economy and to identify the economic base upon which the State can build its future.

KEY FINDINGS

ECONOMIC BASE STUDY FINAL REPORT

Adjusting for population size, economic activity in Arizona is less than the national average. Arizona ranked 37th in per-capita earnings, 16% below the national average in 2000. Economic activity is spread unevenly throughout the state with approximately 70% occurring in Maricopa County. While construction and related sectors are significant in Arizona due to our population growth, only a small portion of this activity is considered basic. The importance of high-technology manufacturing stands out in two high-paying export activities: semiconductors and other electronic components, and aerospace. Maricopa County enjoys the most diverse economy of Arizona’s counties, with 12 of its 19 sectors providing excess employment.

DEMOGRAPHICS

Arizona’s population grew 1,465,313 from 3,665,339 in 1990 to 5,130,652 in 2000, a greater numeric gain than in any previous decade. Across the state, net migration accounted for nearly 75% of this population change. Most migrants are working age young adults who have moved to Arizona in search of employment. In 2000, Arizona’s Hispanic population comprised 25% of the total, double the national average. Arizona also had an above average proportion of Native Americans, but below average proportions of blacks and whites relative to the nation. Arizona’s poverty rate was higher than the national average and its per capita income was lower.

FORECASTS

Arizona’s population is projected to increase by 52% from 5,479,000 in 2002 to 8,305,000 in 2020, or approximately 157,000 persons per year. Two thirds of that population growth is projected to occur in Maricopa County with the balance distributed throughout the rest of the State. By 2026, wage and salary employment in the State are forecast to double.

SPECIAL SECTOR REPORTS

Arizona's Agriculture Sector

Farm acreage has fallen 26% statewide (1987-1997) as Arizona's agriculture sector faces increasing competition for water and land, most notably in the urbanized counties. Agriculture production has become a global industry. Regulatory changes and federal farm policy continue to challenge the industry. The opportunities lie in changing consumption patterns that allow the industry to add value by customizing products and in increasing efficiencies with technology such as GIS.

Border Issues

Mexico and its economy exerts a strong influence on Arizona's border economy in three ways: the International Ports of Entry and presence of federal enforcement and security operations; historical retail patterns whereby Mexican and U.S. tourists cross the border daily to take advantage of price and quality differences; and the trade flow of the agricultural and maquiladora sectors that support distribution and transportation hubs in the region.

Cost of Doing Business and How does Arizona's Cost of Living Compare?

Cost of Doing Business measures company expenses: labor, energy, tax and rent. Overall, Arizona is virtually identical to the national average. Cost of Living measures household costs. Arizona metropolitan areas are generally considered to have similar costs of living to their peers, except that Pacific Coast locations are more expensive.

Arizona's International Exports

While Arizona's exports have grown by an average of 10.2% (1990-2001), they are concentrated in a few industrial sectors, with electrical machinery (which includes electronic components), other machinery and aerospace/aircraft, when combined, represent 69% of the total. Arizona's exports are regionally diverse, with a third going to the Americas, a third to Asia and a third to Europe. There is considerable concentration within those regions, with 76% of exports going to just ten countries.

Retirement Migration

Retirement migrants import wealth and income earned elsewhere into Arizona. Retirement-age migrants are more active and educated than their peers who do not move. Once older migrants move to Arizona, they are less likely to move again. The counties with the highest percentage of retirement age populations are: La Paz (40%), Yavapai (35%) Mohave (34%) and Gila (32%). The State average is 22%.

The Tourism Industry in Arizona

Tourism is spread over several sectors including lodging, restaurant/bars, amusements/recreation, retail shopping, public transportation and private transport. Visitation has increased an average of 3% per year (1995-2000). Domestic visitation has gone up while international visitors have declined, largely due to the strong dollar and economic weakness overseas during much of the 1990s.

INFRASTRUCTURE REPORTS

Arizona's Education & Workforce Infrastructure

Arizona has substantially increased education funding since 1999. However, the State continues to lag other states in virtually all education measures. There are three primary levels of

educational sectors: K-12, Higher Education and Workforce Development. While the majority of recent funding increases have gone to K-12, Arizona ranks last among U.S. states in terms of expenditures per student. Arizona graduates only 75% of its high school students, compared with a national average over 85%, and ranks 49th in the nation. While Proposition 301 (passed in 2000) dedicates more funding for the state universities, Arizona still ranks 45th in terms of state financial aid awarded to undergraduates. With respect to workforce development, Arizona currently does not have information linking business needs with workforce skills.

Arizona's Energy Infrastructure

Arizona is an energy efficient state, with per capita energy consumption that is third-lowest in the nation. Arizona has enough electricity generation under construction to ensure a supply of electricity for years to come. However, transmission constraints pose a potential threat to the ability of generators to deliver their power to market. Prices paid for electricity and natural gas depend not only on the customer's sector, but also the customer's location. Arizona electricity costs are slightly higher than the U.S. average. The State has the 12th highest price for natural gas in the nation, and the third highest price for petroleum products. Pipeline constraints in the delivery of natural gas and petroleum products to Arizona pose a potential issue for energy consumers in coming years.

Arizona's Telecommunications Infrastructure

Telecommunications infrastructure is distributed unevenly around the State, and is concentrated primarily in the greater Phoenix and Tucson areas. Wireless technology is increasing Internet connections in rural areas. However, there are still four counties in Arizona with high percentages of housing units without telephone service (Apache 46%, Navajo 25%, Coconino 12%, La Paz 10%).

Arizona's Transportation Infrastructure

Historically, population growth is used to project demand on the transportation system. As Arizona's population continues to grow, vehicle miles traveled are projected to grow at similar rates. Demand for all modes (rail, aviation) is expected to experience significant increases. In addition to the challenges of building new capacity, increasing operations and maintenance budgets is not keeping pace with needs. Besides funding, other important issues are corridor preservation and environmental concerns.

Arizona's Water Infrastructure

Arizonans primarily rely on three categories of water to meet their water demands: surface water, groundwater, and reclaimed water. Surface water includes Colorado River water, Salt and Verde River water, and other surface water. Quantity, quality, reliability, and economic feasibility of each type of water dictate its use. Water uses include agriculture, municipal and industrial. Agriculture has been and continues to be Arizona's largest water user, even though its share of water use is declining. The availability of water varies throughout the State due to the State's topography, economic history and geology. Un-adjudicated Native American water claims create uncertainty in some parts of the State. The 1980 Arizona Groundwater Management Code is the framework for managing the state's groundwater supply.

SUMMARIES OF ARIZONA STUDIES & RANKINGS

Recurring themes related to infrastructure and foundational issues appear throughout these Studies and Rankings. While the Studies examine these issues in detail for Arizona, the Rankings benchmark Arizona against other states. The needs to improve Arizona's education system and skill levels of its workforce are issues that appear throughout these reports. Others include: access to technology (telecommunications infrastructure) and capital (venture capital); the relationship of land use and growth; and the uneven economic balance within the state.