

ARIZONA-SONORA BORDER ECONOMY

INTERDEPENDENCIES AND CONTRIBUTIONS TO INTERNATIONAL TRADE

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Arizona-Sonora Border Economy Highlights

- Overview
 - Definitions: Border Economy, Border Region
 - Shared ecosystems, resources and heritage
- Economic Interdependencies and Competitiveness
 - Economic factors: labor force, Infrastructure, among others
- Contributions to International Trade and Development
 - Case Studies of 3 cross border integrated economic activities
 - Manufacturing – Maquiladora Sector
 - Fresh Produce Industry
 - Tourism and Retail Exports

Arizona-Sonora Border Economy Overview

- Definitions:
 - Arizona-Sonora:
 - Border - 361 miles of the 1969 miles international border
 - Area - 183,460 square miles, 19.1 % of U.S.-Mexico border states
 - Border Economy
 - Border Region
 - Congressional definition – 100km north of border
 - Border Counties
 - Arizona: Cochise, Pima, Santa Cruz and Yuma
 - Sonora: Agua Prieta, Altar, Caborca, Cananea, General Plutarco Elías Calles, Naco, Nogales, Puerto Peñasco, San Luis Rio Colorado, Santa Cruz, and Saric

Source: International Boundary and Water Commission, INEGI

Arizona-Sonora Border Economy Overview

- Shared Ecosystems
 - The Sonoran Desert
 - Habitat for the Saguaro cacti, *Carnegiea gigantea*
- Shared Resources
 - Watersheds common to both Arizona and Sonora
 - Lower Colorado River, Santa Cruz River, San Pedro River flow
- Shared Heritage
 - Spanish influence: Nuevo Vizcaya Region
 - Hispanic and Latino cultures, Native American Indian heritage

Arizona-Sonora Border Economy Overview

Arizona's Border Region by Major Race and Age, Percent

Percent of 2008 Population Estimates	Cochise	Pima	Santa Cruz	Yuma	Border Region	Arizona
Persons under 18 years old	23.9%	23.6%	30.2%	28.2%	26.5%	26%
Persons 65 years old and over	17.9%	15.2%	13.1%	18.9%	16.3%	13%
White persons	88.9%	88.1%	97.0%	92.4%	91.6%	87%
Black Persons	5.1%	3.7%	0.7%	3.2%	3.2%	4%
Persons of Hispanic or Latino origin	31.7%	33.1%	80.2%	55.6%	50.2%	30%

Source: U.S. Census Bureau

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Arizona-Sonora Border Economy Economic Interdependences and Competitiveness

- Economic Factors
 - Human resources
 - Access to financing
 - Advanced physical infrastructure
 - Inputs and technology
 - A market or demand for the product
 - A good supplier base and other specific support services or cluster industries
 - A business and trade environment that promotes growth and development
 - Collaboration and support from local and federal government

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Arizona-Sonora Border Economy Economic Interdependence and Competitiveness

- Human resources
 - Working age Population

Arizona-Sonora Working Age Population, 2008

	Arizona	Sonora
Size, sq miles	113,635	69,825
Population (2008)	6,500,180	2,477,858
Persons per sq mile (2008)	57	35
Population Working Age (15-44 years)	41%	43%
Population below 18 years	26%	35%
Population growth (%) 2007-2008	2.3%	1.1%

Source: U.S. Census Bureau, National Council of Population (CONAPO)

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Arizona-Sonora Border Economy Economic Interdependence and Competitiveness

- Human resources
 - Transborder Twin Cities - 25 % of the Arizona-Sonora Border Counties population

Arizona-Sonora Border Community Population, 2008

Arizona	Population Estimates (2008)	Sonora	Population Projections (2008)	Arizona-Sonora Communities	Population Estimates (2008)
San Luis	24,909	San Luis Rio Colorado	162,950	San Luis/San Luis Rio Colorado	187,859
Nogales	19,573	Nogales	208,901	Nogales/Nogales	228,474
Douglas	17,515	Agua Prieta	73,281	Douglas/ Agua Prieta	90,796

Source: U.S. Census Bureau, National Council of Population (CONAPO)

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Arizona–Sonora Border Economy *Economic Interdependence and Competitiveness*

Source: <http://www.mexicoexpo.com/images/RockyPointMap.gif>

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Arizona–Sonora Border Economy *Economic Interdependence and Competitiveness*

- Human Resource:
 - Immigrant population (non-U.S. Citizens)
 - Labor force - 14 percent of Arizona's workforce
 - 65 % from Mexico (93,300)

County of Residence	
Maricopa	65%
Pima	11.8%
Yuma	7.3%
Cochise, Greenlee, Graham, Santa Cruz	4.2%

Source: U.S. Census Bureau, *Immigrants in Arizona: Fiscal and Economic Impacts, 2007*, Udall Center

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Arizona–Sonora Border Economy *Economic Interdependence and Competitiveness*

- Human resources
 - Immigrant population (non-U.S. Citizens)
 - Contribution to Economy

	Benefits	Costs
Arizona	Labor force	Health Care
	Income (spending)	Law Enforcement
	taxes	Education
Sonora	Remittances	Labor force

- Top 3 industries where immigrants worked in 2004 are:
 - Agriculture & Forestry (35.2 percent), Construction (18.6 percent), and Leisure & Hospitality (14.9 percent).

Source: U.S. Census Bureau, *Immigrants in Arizona: Fiscal and Economic Impacts, 2007*, Udall Center

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Arizona–Sonora Border Economy *Economic Interdependence and Competitiveness*

- Access to financing
 - Remittances

	\$billions	% Change (07-08)
Mexico	25.1	↓ 3.6%
Sonora	\$.318	↓ 5.2%

- First decline in more than 10 years
- 2nd highest foreign exchange earner in Mexico (2008)
- \$235.7 per Mexican resident (2008)
- \$129 per Sonoran resident (2008)
- Sonora ranked 24th out of 31 states and 1 federal district

Source: INEGI

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Arizona-Sonora Border Economy *Economic Interdependence and Competitiveness*

- Access to financing
 - Foreign Direct Investment (FDI)

	FDI \$billions	% Change (07-08)
Mexico	\$22.4	↓ 18%
Sonora	\$1.3	↑ 132%
 - FDI to Mexico's top 3 industries – percent 2008, 2007
 - Manufacturing - 29% , 44%
 - Mining and Extraction - 19% , 6%
 - Agriculture - .1% , .05%

Source: INEGI

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Arizona-Sonora Border Economy *Economic Interdependence and Competitiveness*

- Advanced physical infrastructure
 - Nogales Customs District
 - 6 Border Ports of Entry: Douglas, Lukeville, Naco, Nogales, Sasabe, San Luis
 - 4 airports: Phoenix, Tucson, Nogales and Scottsdale Airports
 - Advanced transportation and warehousing facilities at POE
 - Transportation highway corridors
 - NAFTA Corridors: South-North trade flows
 - CANAMEX Corridor
 - East-West road ways
 - Economic Life Corridor - Interstate 40
 - East-West Transamerica Corridor

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Arizona-Sonora Border Economy *Economic Interdependence and Competitiveness*

- Inputs and Technology
 - Supply and management chain
- A market or demand for products
 - Global and National Markets
 - Sonora - U.S. major market
 - Arizona - Mexico major market
- A good supplier base and other specific support services or cluster industries
 - Network of producers, suppliers, buyers in close proximity.

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Arizona-Sonora Border Economy *Economic Interdependence and Competitiveness*

- A business and trade environment that promotes growth and development
 - NAFTA
 - Trade offices in both states
 - State Office in both states
 - Free Trade Zones
- Collaboration and support from local, states and federal government
 - Arizona-Mexico Commission
 - International Border and Waters Commission

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Arizona–Sonora Border Economy

Contributions to International Trade and Development

- ▣ Introduction
 - Arizona and Sonora Economies Transformation
 - Arizona
 - Share of Manufacturing to GDP sector increased (8.1%, 2006)
 - Share of Service sector to GDP increased (82.1%, 2006)
 - Share of Agriculture and Mining sectors to GDP decreased
 - Service sector most important
 - Sonora
 - Share of Manufacturing to GDP sector increased (19.1%, 2006)
 - Share of Service sector to GDP increased (66.8 %, 2006)
 - Share of Agriculture and Mining sectors to GDP decreased
 - Manufacturing sector most important

Arizona–Sonora Border Economy

Contributions to International Trade and Development

- ▣ Manufacturing – Maquiladora Sector
 - Maquiladora program began in 1965. It is based on a production sharing model where foreign companies import inputs duty free, assemble them into final goods and export them back to foreign country duty free.
 - Maquiladora
 - 3rd foreign exchange earner (2006)

	Establishments 2006	Employment 2006
Mexico	2,813	1,202,134
Sonora	210	86,874

Source: INEGI

Arizona–Sonora Border Economy

Contributions to International Trade and Development

- ▣ Manufacturing – Maquiladora Sector
 - Top Maquiladora sectors by employment
 - Electrical and electronics materials and accessories
 - Transportation equipment
 - Textile and apparel
 - U.S. – Mexico Interdependencies
 - 50% Mexico imports from the U.S., 80% Mexico exports to the U.S.
 - 50% of Mexico's manufacturing exports were Maquiladora exports
 - During the 2001 recession
 - Arizona manufacturing employment ↓ by 27,700 jobs
 - Sonoran Maquiladoras employment ↓ by 44,944 jobs, or 26%

Source: INEGI

Arizona–Sonora Border Economy

Contributions to International Trade and Development

- ▣ Manufacturing – Maquiladora Sector
 - Pre-NAFTA advantages to locating in Mexico
 - Low labor cost
 - Peso devaluation 1984, 1994
 - Liberalization of trade associated with Mexico – joined General Agreement on Tariffs and Trade in 1986
 - China effect:
 - China joined the World Trade Organization in 2000
 - Mexico's textile and apparel industry eroded

Arizona–Sonora Border Economy

Contributions to International Trade and Development

- ▣ Manufacturing – Maquiladora Sector
 - Structural adjustments since 2001 recession due to:
 - Increased competition
 - Peso appreciation 1998-2002
 - Lowering cost advantage compared to China’s devaluing yuan
 - Changes to Mexican government policies
 - NAFTA effect

Arizona–Sonora Border Economy

Contributions to International Trade and Development

- ▣ Future of the Maquiladora Sector
 - Structural changes to pre-existing Maquiladora entities include:
 - High technology processes targeted at medium to high value goods
 - Employing more technicians and engineers
 - Automated and semi-automated machinery
 - Improved protection of intellectual property rights
 - Focusing more on regional industry clusters
 - March 2007 - Maquiladora sector ceased to exist as a separate entity.

Arizona–Sonora Border Economy

Contributions to International Trade and Development

- ▣ Fresh Produce Industry
 - Degree of cross border, vertical integration is dependent on familiar ties, close friendships and economically beneficial relations
 - More high-tech and less labor intensive
 - Spanish and Israeli technologies
 - Produce: Tomatoes and winter vegetables
 - Farms: U.S. financed growers or Mexico-based
 - Location: Northern Sinaloa: Los Mochis and Culiacán
 - Markets: West America 70 %, East 30%
 - Financing: Mostly by U.S. based distributors (U.S. and Mexican)
 - Inputs: from U.S., Israel, Spain

Source: Fresh Produce Industry in Nogales, Arizona: An Economic and Revenue Impact Analysis, 1997

Arizona–Sonora Border Economy

Contributions to International Trade and Development

- ▣ Fresh Produce Industry
 - Economic Contribution
 - About 60 to 70 percent of all winter produce from Mexico
 - Nogales handles:
 - over 44 percent of all fresh produce from Mexico to the U.S. (2008)
 - Trucking is the preferred mode of transportation
 - 303,757 commercial trucks processed at Mariposa POE
 - \$4.4 billion worth agricultural imports from Mexico

Arizona–Sonora Border Economy

Contributions to International Trade and Development

- ▣ Fresh Produce Industry
 - Economic Contribution
 - The economic contribution in Nogales and Santa Cruz is enormous
 - Transportation and warehousing is the second largest industry by Location quotient (2007) after wholesale trade.
 - \$2.436billion fresh produce goes through Nogales Customs District
 - Economic Impact in Arizona
 - Employment – 16,851 jobs (1995/6 dollars)
 - Transportation and warehousing
 - Brokerage and insurance firms
 - Federal government (customs and inspection offices)
 - Sales/Output - \$2.3 billion (1995/6 dollars)

Source: Extrapolations from data in 'Fresh Produce Industry in Nogales, Arizona: An Economic and Revenue Impact Analysis, 1997'

Arizona–Sonora Border Economy

Contributions to International Trade and Development

- ▣ Tourism and Retail Export
 - Important export industry
 - Border crossings:
 - 30 million people (U.S. and legal aliens) 2008,
 - Legal aliens - 24 million (FY 2008) (we no longer receive this data) - 99 % living in Arizona
 - Economic Impact
 - Employment in Arizona- 30,400 jobs
 - Sales/Output - \$3.6billion
 - Tax Revenues - \$235.3million

Source: U.S. Customs and Border Protection, Mexican Visitors to Arizona: Visitor Characteristics and Economic Impacts, 2007-08

Arizona–Sonora Border Economy

Contributions to International Trade and Development

- ▣ Retail Export
 - Mexican visitors spent \$2.7 billion in FY 2008 in:
 - Retail, Lodging, Grocery stores and Restaurants
 - Retail Exports ~ \$1billion
 - Taxable Sales – Spending taxed under 'sales tax'
 - 48.6% spent in Santa Cruz
 - Spending in the Retail Sector – about \$1billion
 - Santa Cruz: 48.6%
 - Yuma: 6.3%
 - Cochise: 5.3%
 - Pima: 5.2%

Source: Mexican Visitors to Arizona: Visitor Characteristics and Economic Impacts, 2007-08

The End

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