

# **Mexican Visitors to Arizona:**

Visitor Characteristics and Economic Impacts, 2007-08

Arizona Office of Tourism
Phoenix, Arizona

December 2008



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#### **Acknowledgements**

A large number of individuals and organizations contributed their time, knowledge and resources to this project.

Our foremost appreciation goes to the Arizona Office of Tourism (AOT) and its Director, Margie A. Emmermann, for the initiation of the study and assembly of special permits from the U.S. Customs and Border Protection (CBP), which were necessary to conduct interviews at Arizona ports of entry in the post-9/11 environment.

The person we are most indebted to for the overall realization of this project is AnnDee Johnson, AOT's Director of Research and Strategic Planning, who managed to assemble the necessary research funds from a number of sponsors; arranged site visitations and meetings with directors of Arizona border ports of entry, including Phoenix and Tucson airports; organized meetings with community leaders in border cities; served as the link between research team and other sponsors, and was always there to help resolve unexpected challenges during a year long data collection. Our special thank you also goes to Melissa Elkins, AOT's Research Manager.

Special thanks also go to the funders who made this project possible: the Arizona Office of Tourism, Phoenix Sky Harbor International Airport, and the Metropolitan Tucson Convention and Visitors Bureau. In addition, a group of Maricopa County Destination Marketing Organizations helped fund the project through Proposition 302 tourism promotion dollars, which are derived from a car rental surcharge and a one percent tax on hotels in Maricopa County. We thank the City of Chandler, the City of Glendale, the City of Peoria, the Fountain Hills Chamber of Commerce, the Greater Phoenix Convention and Visitors Bureau, the Mesa Convention and Visitors Bureau, the Scottsdale Convention and Visitors Bureau, the Tempe Convention and Visitors Bureau, and the Wickenburg Chamber of Commerce.

Administration of interviews with the returning Mexican nationals at border crossings presented a special challenge in the post-9/11 environment because the concern with border security resulted in new procedures and a new institutional management of border crossings. First we thank former CBP Tucson Field Operations Director, Donna De La Torre for issuing the initial permit to use the eight Arizona ports of entry within the Tucson Field Office as survey sites; the permit was extended by her successor, David Higgerson, with assistance from Deborah Rodriguez, Assistant Director for Border Security. Joe Agosttini and Norma Stemple, Program Managers in the Tucson Field Office were instrumental in arranging site visitations at each of the eight ports. We also appreciate the support of Anthony van Ravenswaay, Assistant Director of Mission Support.

The collaboration with border ports of entry's directors and their personnel was especially important to ensure safe and undisturbed conditions for both the interviewer and interviewee. We thank the following officers for their understanding of the project's special needs and their collaboration throughout the length of surveying process: Chief Peter Bachelier at Nogales Port of Entry (encompassing Mariposa, DeConcini and Morley crossings); Officer Al Acuña, representing Supervisor Robert Frias at Naco Port of Entry; Supervisor Steven Rich at Douglas Port of Entry; Officer Rosa Salas at Sasabe Port of Entry; Acting Port Director Jeff Bequette at Lukeville Port of Entry; Chief Luz Galarza at San Luis Port of Entry; Officer Rick Blankas at Tucson International Airport, and Assistant Chief Warren Eales at Phoenix Sky Harbor International Airport.

At an early stage in the project, we met with community leaders in Douglas, Nogales and Yuma to inform them about the upcoming project and year-long survey of Mexican nationals in their areas. We thank the following community representatives from both Nogales, Arizona and Nogales, Sonora, who attended meetings and provided valuable inputs about local specificities: Nils Urman and Samantha Munguria with the City of Nogales Economic Development; Marco Nunez, Jr. with the City of Nogales; Tim Mello and Olivia Ainza Kramer with the Nogales/Santa Cruz County Chamber of Commerce; Kathleen Escalada of the Pimería Alta Historical Society and Museum; Jose Ruben Grijalva, representing the City of Nogales, Sonora, and Claudio Placencia, Chair of the City of Nogales, Sonora, Tourism Committee. In Douglas we met with: Victor Gonzalez, Director of Douglas Economic Development; Curtis Shook, City Manager, and Margaret Morales, President of the Chamber of Commerce. Our hosts in Yuma were: Chris Camacho, Director of Greater Yuma Economic Development; Jeff

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Philpott, City of Yuma Interim Manager; Ken Rosevear of the Yuma County Chamber of Commerce; Pete Erlenbach, Manager of the City of Yuma Economic Development; Carlos Lopez, Executive Director of the San Luis Chamber of Commerce and the San Luis Economic Development Corporation, and Cliff O'Neill, Somerton City Administrator.

We also thank Beatriz López Gargallo, General Consul, and Dalya Salinas, Documentation Consul with the General Consulate of Mexico in Nogales, Arizona, for arranging a permit with the Mexican border port authorities to allow our surveyor to conduct interviews on the Mexican side of Mariposa border crossings. This was necessary because the physical configuration of border access from the Arizona side and the high speed at which vehicles approached the border crossing did not provide enough safety for interviewers or potential interviewees.

For the most crucial part of the study – collecting data through about 3,000 interviews – we thank Eric Shapiro of the Marketplacer, Inc. and his professional team of field researchers, with whom the Economic and Business Research Center (EBRC) subcontracted services for a fee. We were impressed with the quality of returned questionnaires, the timelines and general administration of the survey.

Much gratitude goes to two Eller College students, Zachary Gerin and Nguyen H. Ho, who during the academic year 2007-08 worked on entering information from individual questionnaires into a database. Many of the calculations required for the study were pre-programmed in STATA by Chung Choe, who, since working on this study, has received his Ph.D. in economics. The program saved many hours of calculating and recalculating, each time we needed to make a change, such as correcting a data error or making small changes in methodology.

We also thank Brian D. Levin, chief CBP officer and OFO public affairs liaison in Tucson Field Office, for supplying us with data on border crossings and helping us navigate through a muddle created by institutional reorganization and the new ways border crossings are being reported.

Especially we are thankful to Alex Kovach, Director of the Air Service Department at the Tucson International Airport, who helped untangle a long-standing challenge of figuring out for how many Mexican nationals Phoenix and Tucson airports are final destinations versus those who are only passing through. These secondary data were of utmost importance for our ability to generate reasonable estimates of total economic impacts in combination with the survey data.

For advice on data and references on Mexico, as so many times in the past, we are indebted to our colleagues Pablo Wong Gonzalez and Patricia Salido, researchers at the Centro de Investigación en Alimentación y Desarrollo (CIAD) in Hermosillo, Sonora.

EBRC's Economist Lora Mwaniki-Lyman helped in many phases of the project, be it with access to special data sources or advising on IMPLAN modeling.

And there also is Valorie Rice, EBRC's irreplaceable Research Librarian with unmatchable knowledge of where and how to get secondary data, unearth relevant references, and keep track of daily events, all of which are instrumental for a successful and timely completion of a complex project like this.

Special thank you goes to Marshall Vest, Director of Economic and Business Research Center for his support of the project and his willingness to release substantial amounts of personnel time to complete the analysis.

We acknowledge the predecessors, Nat de Gennaro and Randall Hopkins. Nat's first study set the standard for those of us who followed, while Randy's study has been used as a blueprint for our last and this study. Of course, with valuable new inputs from many, we tried to improve along the way.

Finally, we are deeply indebted to the participants in this study – more than three thousand Mexican nationals returning from a visit to Arizona – who were willing to donate their time and provide information about

their places of origin, travel mode, Arizona's destination and attraction places, spending pattern and other characteristics of tourism behavior relevant to those involved in Arizona's tourism industry.

Vera Pavlakovich-Kochi and Alberta H. Charney December 2008

# MEXICAN VISITORS TO ARIZONA: VISITOR CHARACTERISTICS AND ECONOMIC IMPACTS, 2007-08

## **Executive Summary**

Travel and tourism continues to be among the most important export industries driving Arizona's economy, and Mexican visitors are an important contributor to this sector. This is the fourth study conducted by The University of Arizona since the late 1970s which assesses direct spending by Mexican visitors and estimates their total economic impact on Arizona. Primary data on expenditures were collected through a year-long survey starting in July 2007 and ending in June 2008. Mexican visitors were interviewed as they were returning to Mexico through one of the six Arizona border ports of entry – Nogales, Douglas, San Luis, Lukeville, Naco and Sasabe -- and two international airports in Phoenix and Tucson. Estimates of total economic impacts, including indirect and induced sales, jobs, and income were estimated using the IMPLAN input-output models for the State, metro areas and border counties. Tax revenues were estimated by state and county tax revenue models.

#### **MEXICAN VISITORS**

As in the three previous studies (1978, 1992,and 2002), visitors in this study include both the so-called traditional tourists, who generally visit another country for leisure, historical site visits, and similar reasons and who tend to stay overnight, and day visitors or the non-traditional tourists who cross the border but return the same day. There were total of 24.04 million alien crossings from Mexico to Arizona from July 2007 through June 2008; 84.24 percent were day visits and 15.76 percent were overnight visits.

#### SIZE OF VISITOR PARTIES AND TRAVEL MODE

The 24.04 million Mexican visitors came to Arizona in 13.37 million parties. They came in parties of 1.8 persons that include 1.47 adults and 0.33 children. About 55 percent of all visitor parties enter by car across the U.S. Mexico border and almost 45 percent are walkers. Less than one percent of all Mexican visitor parties to Arizona fly into the state.

#### REASONS FOR VISITING ARIZONA

Leisure, such as shopping, vacation, visiting friends and relatives, and personal health, is the primary reason for visit for 63.94 percent of all visitor parties. Business-related reasons, such as work, business convention, professional training, and business shopping, is the primary reason for visit for 36.06 percent of all visitor parties.

#### **LENGTH OF STAY**

Close to 16 percent of all Mexican visitor parties are overnight visitors; about 2 percent spend one night; about 4 percent spend two nights; close to 5.5 percent spend 3 nights. About 4 percent spend 4 or more nights. Of those who spend one or more nights in Arizona, 60.97 percent stay in hotels and 39.02 percent spend the night with family and friends.

#### **ORIGIN OF MEXICAN VISITORS TO ARIZONA**

Almost 99 percent of Mexican visitor parties come from the neighboring Mexican state of Sonora. Of those, 46.9 percent come from the border city of Nogales, the largest of Sonora's border cities; 24.1 percent come from San Luis Rio Colorado, and 13.37 percent from Agua Prieta, and 1.32 percent from the capital city of Hermosillo. The remainder comes from about 20 other cities in Sonora, but also from Baja California, Sinaloa, and the Mexico City metropolitan area.

#### SHOPPING DESTINATIONS AND ATTRACTIONS VISITED

Three Arizona malls -- Arizona Mills Mall in Metro Phoenix and Tucson Mall and Park Place Mall in Tucson – are the most popular shopping destinations. Among the non-mall stores, Wal-Mart is the most popular in every destination city. Casinos in Tucson and Phoenix are the most popular attractions; the zoo parks are the second most visited attraction.

#### **ECONOMIC IMPACT: JOBS, INCOME AND SALES**

The results of this study, as in the past, demonstrate the economic importance of Mexican visitor spending to Arizona's economy. Close to 23,400 wage and salary jobs in Arizona at eating and drinking establishments, retail establishments and other spending-related sectors are directly attributable to Mexican visitor spending. Through local purchases of supplies by businesses and the spending of income derived from visitor-related jobs, these visitors generated almost 7,000 additional jobs in Arizona in 2007-08. These jobs account for a total income of \$837.24 million and \$3.61 billion in sales.

#### **GEOGRAPHIC DISTRIBUTION OF ECONOMIC IMPACTS**

The largest economic impact of Mexican visitor spending occurred in Pima County. A county that includes Tucson and extends all the way to the U.S.-Mexico border, Pima County receives 41.21 percent of the total job impact, 37.68 percent of the total sales impact, and 39.79 percent of the total income impact. Maricopa County, containing the State's largest metropolitan area and the capital city, Phoenix, receives the second largest share of the total impact: 28.11 percent of total jobs, 26.57 percent of total sales, and 31.69 percent of total income.

Santa Cruz County, the border county that contains Nogales, the largest port of entry into Arizona, receives 14.81 percent of the total job impact, 16.35 percent of the total sales impact, and 13.03 percent of the total income impact. Yuma County receives 8.11 percent of the total job impact, 9.16 percent of the total sales impact, and 7.56 percent of the total income impact; Cochise County receives 5.81 percent of the total job impact, 6.18 percent of the total sales impact, and 4.93 percent of the total income impact.

## **CONTRIBUTION TO TAXABLE SALES**

Mexican visitor spending represents a staggering 48.62 percent of the total taxable sales in Santa Cruz County. Mexican visitor spending represents 6.27 percent of taxable sales in Yuma County, 5.34 percent in Cochise County, 5.20 percent in Pima County, and 0.77 percent in Maricopa County. The larger the county in terms of population and income and the further away the county is from the border, the smaller the share of total taxable sales attributable to Mexican visitor spending.

## **COMPARISON TO 2001 STUDY:**

## **Visitor volume**

The number of alien border crossings through six Arizona border ports of entry (BPOE) in 2007-08 was 4.92 percent above the 2001 level, reflecting an increase from 22.91 million crossings in 2001 to 24.02 million crossings in 2007-08. The number of Mexican air passengers arriving to Arizona through Phoenix and Tucson

airport was 33.5 percent higher, which reflects an increase from 15,075 Mexican air passengers in 2001 whose final destination was Arizona to 20,126 in 2007-08.

## Party size

The overall average party size has decreased from 2.2 to 1.8. This smaller party size contributed significantly to the increase in the number of parties in 2007-08. While the total number of aliens crossing (through BPOE and airports together) increased 4.92 percent, the total number of parties increased 28.37 percent because of the substantial decrease in party size.

#### Travel mode

While motor vehicle remains the primary mode of travel, the share of Mexican visitor parties crossing the border by car decreased from 70.34 percent in 2001 to 55.02 percent of all visitor parties in 2007-08. The share of pedestrian parties increased from 29.58 percent in 2001 to 44.88 percent in 2007-08, while the share of those arriving by air increased from 0.08 percent in 2001 to 0.10 percent in 2007-08.

## Share of overnight visitors

Overnight visitors' share increased from less than 4 percent in 2001 to about 16 percent in 2007-08; this is probably the largest change since the last study. Far more Mexicans are spending the night in Arizona, particularly the visitors that come to metro Tucson. Overnight visitors to the Tucson metropolitan area (Pima County) went from approximately 15 percent to 87 percent. This huge increase for metro Tucson is the primary cause of the overall increase in the share of overnight visitors. Metro Phoenix (Maricopa County) is 3 hours from the border, so almost all visitors who choose to go to metro Phoenix, by vehicle or by air, spend the night. Visitors to the border communities of San Luis, Yuma, Nogales and Douglas are almost all day visitors because of their proximity to the border. Tucson is in that midrange of travel time (one hour from the border) that permits both day visits and overnight visits.

#### Share and volume of overnight visitors staying in hotels

The percentage of visitors that spend the night in hotels has dropped from 79 percent in 2001 to 61 percent in 2007-08, although the total volume of visitor parties staying in hotels increased substantially between 2001 and 2007-08. In 2001, 79 percent of those who spent the night (just 3.2 percent of all visitors) stayed in hotels, so only 2.5 percent of all 2001 visitor parties spent the night in hotels. In 2007-08, 61 percent of those spending the night (15.76 percent of all visitor parties) stayed in hotels, so 9.6 percent of all visitor parties stayed in hotels. Further, the number of visitor parties increased from 10.41 million to 13.37 million parties. Therefore, the number of Mexican visitor parties that spend the night has increased from 260,350 parties in 2001 to almost 1.29 million parties in 2007-08.

## **Direct expenditures**

Direct expenditures in 2007-08 are 213.6 percent bigger than in 2001 (not adjusted for inflation). Even when adjusted for inflation of an average 3 percent annually, the increase is still substantial: 147.7 percent. This is likely to be a result of three main factors: the increase in the number of visitor parties; the increase in the share of visitors who chose to spend the night (coupled with a relative increase of visitor parties in higher income categories), and the strong Mexican peso during the year of this study. Therefore, this relatively high spending level found in 2007-08 may be just a one-time situation rather than a trend. The recent deterioration in the peso/dollar ratio in combination with global economic recession impacting both sides of the U.S.-Mexico border may have dramatic effects on both the number of Mexican visitors and/or spending for years to come.

## Geographic distribution of economic impacts

Although the three border counties (Cochise, Santa Cruz and Yuma) experienced substantial increases in Mexican visitor expenditures, their shares of total Mexican visitors' economic impact declined from 61.87 percent in 2001 to 35.38 percent in 2007-08. The largest absolute and relative increase in direct spending occurred in Maricopa County; consequently, its share of total direct sales increased from 4.26 percent in 2001 to 25.85 percent in 2007-08. Pima County's share of direct sales also increased from 33.76 percent to 36.32 percent.

#### Reasons for visiting

Shopping continues to be the main reason for visiting Arizona, with 57.44 percent of all visitor parties listing that as a reason. Visiting friends and relatives was also a very strong reason for visiting Arizona, cited by 5.81 percent of all visitor parties. These two portions are down somewhat since 2001 because the portion identified as coming for other business and/or work is higher (35.19 percent in 2007-08 vs. 14.41 percent in 2001). It is not believed that the portion of crossers who come for work has increased since 2001. Rather, a different survey question (previously in 2001, visitors were asked to list and prioritize two reasons for visiting) and a stronger focus on identifying crossers who worked, resulted in higher proportions in the business/other (including work) category than in 2001, which, in turn reduced the estimated percent that came primarily to shop and visit friends.

#### **CONCLUSIONS**

Each day, on average, more than 65,000 Mexican residents come to Arizona to work, visit friends and relatives, recreate and shop. Each day, they spend over \$7,350,000 in Arizona's stores, restaurants, hotels and other businesses, and thus contribute substantially to Arizona's export trade with Mexico. Familial ties, long-term friendships, work opportunities, leisure activities and shopping experiences not yet available in Mexico continue to support strong cross-border interactions between Arizona and its neighbor, Sonora.

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# MEXICAN VISITORS TO ARIZONA: VISITOR CHARACTERISTICS AND ECONOMIC IMPACTS, 2007-08

## I. Purpose and Research Design

Travel and tourism¹ continues to be among the most important export industries driving Arizona's economy.² While the travel industry is not statistically identified as a single industry, it includes several economic sectors where spending by visitors generates direct sales and jobs: lodging, food services, recreation, transportation, and retail businesses. A recent report, Arizona Travel Impacts 1998-2007p, prepared by Dean Runyan Associates for the Arizona Office of Tourism, estimated that direct travel industry employment in 2007 was 171,500 with earnings of \$5.1 billion. Direct tax revenue to the state and local governments was estimated at \$1.5 billion. According to the same source, this represented 5.0 percent of total Arizona's employment and 3.2 percent of total earnings in 2007.

Prior to the current study, the University of Arizona has assessed the spending by Mexican visitors to Arizona in 1977, 1991 and 2001. Results of each study have confirmed that Mexican visitors are an important component of Arizona's tourism industry.

While some basic characteristics of Mexican visitors have persisted, the changing economic, demographic and political landscapes in the U.S.-Mexico border region are directly and indirectly affecting the volume, frequency, travel mode, and destination pattern of border crossers. Studies in other border states have reported changing patterns especially in response to new border security measures and new documentation requirements for entry into the United States. In order to better understand how these new circumstances are affecting the pattern of Mexican visitors' travel and spending in Arizona, the Arizona Office of Tourism commissioned an update of the economic impact study.

#### **Purpose and Objectives**

The purpose of this study is to estimate the current impact of Mexican visitors on Arizona's economy.

Specific objectives of this study are to:

- Provide measures of Mexican visitors' expenditures by category;
- Provide measures of spending by location (counties, major cities);
- Provide data on origin of Mexican visitors (state of Sonora, rest of Mexico);
- Use expenditure data to assess total jobs and wages associated with Mexican visitors' spending;
- Use expenditure data and the economic impact data to determine revenue impacts to the State of Arizona; and
- Conduct a study that is comparable in scope to the previous studies of Mexican visitors' impact on Arizona's economy.

In general, the findings of this study will help to better understand the economic ties between Arizona and Mexico. More specifically, the findings will assist the Arizona Office of Tourism and other hospitality-related organizations, including retail and services that depend on Mexican visitors, to reevaluate current services and marketing practices and modify them to better respond to any new trends.

## Research Design

Mexican visitors were surveyed as they exited Arizona at all six border ports along the U.S.-Mexico border – Douglas, Lukeville, Naco, Nogales, San Luis and Sasabe -- and at Arizona's two major commercial airports, Sky Harbor International Airport in Phoenix, and Tucson International Airport. Surveys were administered via interviews in Spanish by professional team of interviewers under a service subcontract with a reputable local market research firm. The interviews were conducted between July 2007 and June 2008.

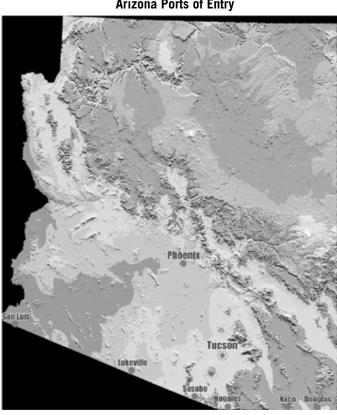


Figure 1a Arizona Ports of Entry

Figure 1b Arizona-Sonora Border Ports of Entry



## **Survey instrument**

The survey instrument used in this study closely resembles the one used in 2001 study. Most of the survey instrument that asks about visitor characteristics, reasons for visiting, cities visited, amount of spending per destination city, by category, is the same as in the 2001 study.

However, some modifications were made in order to obtain more detailed information about stores/malls shopped and attractions visited, while at the same time keeping the time necessary to complete each interview as short as possible. While these may be general concerns in any surveying, the fact that this survey took place at border ports of entry (including airports) in an environment of increased concerns about national border security, made this requirement especially valid.

To accomplish the above objective, 'modules' were introduced to gather detailed information about shopping patterns and visitor activities in the primary location visited. The primary location was defined as the Arizona destination area furthest from the border. Thus, a returning visitor who visited/shopped in both metro Phoenix and Nogales were asked questions about specific stores/malls they shopped and attractions they visited in the Phoenix area using questions in the metro Phoenix "module." If the visitor shopped only in the border area of Nogales, they were asked questions about the border area using questions in the Nogales "module." The use of modules minimized the completion time of each survey by asking each visitor party about shopping and visiting patterns for only one destination area. In addition, because a relatively small portion of border crossers continue beyond border communities as far as Tucson or Phoenix, administering the module for the destination area furthest from the border maximized the number of observations for those destinations.

A copy of the questionnaire is in the Appendix. Although the attached questionnaire is in English, the instrument was administered in Spanish.

#### Sample size and interview schedule

The sampling schedule used in this study follows the one used in 2001 studies with slight modifications (Table 1). In the 2001 study, bilingual students at the University of Arizona were used as surveyors, but at times it was difficult to maintain a regular interview schedule, particularly during mid-term and final exam weeks. Therefore, for this study, professional interviewers were used, largely because their schedules are more flexible then those of students' resulting in a better coverage of days and weeks. In addition, a few professional interviewers conducting all the interviews is believed to provide more consistent responses across days, weeks and ports of entry than several student interviewers surveying at different times at different ports of entry.

Table 1
Number of Days per Quarter the Interviews Were Conducted, by Port of Entry

Port of Entry	Q1	Q2	Q3	Q4	Total
Douglas	4	2	4	2	12
Lukeville	1	2	2	0	5
Naco	2	1	2	2	7
Nogales	8	7	6	7	28
San Luis	4	6	3	6	19
Sasabe	1	0	1	1	3
Phoenix Airport	11	8	6	6	31
Tucson Airport	4	3	3	3	13

Source: Marketplacer, Inc., monthly reports

The planned survey sample size was 2,664; however, 3,012 questionnaires were collected and entered into a databank for analysis. Table 2 shows the sample by port and by mode of travel.

Table 2
Sample Size by Port of Entry and Travel Mode

Port of Entry	Motor vehicle	Pedestrian	Air	Total
Douglas	244	99		343
Lukeville	103	7		110
Naco	100	13		113
Nogales	860	420		1,280
San Luis	336	209		545
Sasabe	111	0		111
Phoenix Airport			390	390
Tucson Airport			120	120
Total	1,754	748	510	3,012

Source: Marketplacer, Inc., monthly reports

Like in the previous study, the sample is not stratified to match actual border crossings by aliens at each port of entry. Rather, the traditional survey method is used: visitation data are analyzed by port and weighted across ports according to border crossing data obtained from secondary sources. This is comparable to conducting a stratified sample.

#### Weighting procedure

Determining weights was rather straightforward. Weights are based on the number of parties crossing at each port, by mode of travel (pedestrians, motor vehicles, and air). Customs and Border Protection (CBP) provided data on border crossings for both aliens and U.S. citizens, by mode of travel (pedestrians and motor vehicles) for the six southern land border ports of entry. The data on airport arrivals that was used in the past was discontinued in early 2008, so was unavailable for this study. The discontinued data series would have been difficult to use because it included both aliens and U.S. citizens, both visitors who pass through and whose final destination was Arizona, as well as international travelers from non-Mexican origins. Fortunately, good data was obtained from U.S. Department of Transportation, which detailed the numbers of persons whose trips originated in Mexico and who arrived at their final destinations in Phoenix and Tucson.

Table 3 summarizes border crossing figures for six Arizona ports of entry and air passenger arrivals from Mexico at two airports for 2007-08. The air passenger data used in 2007-08 study are considerably different from that used in the 2001 study, both in magnitude and in terms of what they measure. Data for 2001 included both final destination visitors to Arizona and visitors who arrived at Arizona airports but who boarded another plane and continued on to other destinations. Because 2001 data included both final destination visitors and visitors who were passing

through, both types of visitors were interviewed. In 2007-08 study air passenger data include final destination visitors only, and therefore, only airport passengers who actually visited Arizona were interviewed. We believe that the 2007-08 data for Mexican visitors arriving by air are more reliable than what were used in the 2001 study. This data change between 2001 and the 2007-08 study and the corresponding change in methodology affects passenger counts at the airports, the number of parties traveling by air, and per party spending. This will be discussed in section VI. Expenditures by Mexican Visitors in Arizona, when 2001 and 2007-08 results are compared.

Table 3
Summary of Entrants into Arizona from Mexico 2007-08, by Ports of Entry

Border Crossing Figures for six Arizona				Aliens as % of all	Aliens by port as % of
Cities 2007-08	Total	U.S.Citizens	Aliens	Crossers	Crossings
Douglas*	5,607,541	2,133,587	3,473,954	61.95	14.45
Lukeville	1,404,234	1,096,689	307,545	21.90	1.28
Naco	903,152	209,856	693,296	76.76	2.88
Nogales	16,469,067	3,496,722	12,972,345	78.77	53.96
San Luis	7,534,503	1,038,021	6,496,482	86.22	27.02
Sasabe	107,983	30,180	77,803	72.05	0.32

Air Passenger Arrivals from Mexico at Arizona Airports 2007-08 (Final Destination Passengers Only)	Total	U.S.Citizens	Aliens	Aliens as % of all Crossers	Aliens by port as % of Crossings
Phoenix Sky Harbor Int'l Airport**	119,674	101,998	17,676	14.77	0.07
Tucson International Airport**	11,128	8,680	2,448	22.00	0.01
Total	32,157,282	8,115,733	24,041,549	74.76	100.00

Source: Data on the six southern Arizona border ports of entry was obtained from the U.S. Department of Homeland Security, Customs and Border Protection and data on the two Arizona Airports was obtained from the U.S. Department of Transportation.

<sup>\*</sup>Alien crossers at Douglas figures for 3rd quarter 2007 were adjusted due to errors in the CBP data.

<sup>\*\*</sup>Airport passenger data is based on actual passengers flying to and from Mexico, whose final destination is Arizona.

Determination of U.S. Citizens vs. Aliens is based on where trips originated. Passengers whose trips started and ended in a Mexico airport are assumed to be Mexican visitors; passengers whose trips started and ended in an Arizona airport are assumed to be U.S. citizens.

Table 4 shows the computation of alien parties and the percentage of parties used to weight data by port of entry.

Table 4
Computation of Alien Parties and the Percent of Parties Used to Weight Data, by Port of Entry

					% Parties across
Port of Entry		Aliens	Persons/Party	Alien Parties	Ports
Douglas					
	Passengers	2,583,737	1.96	1,317,006	9.851
	Pedestrians	890,217	1.68	530,176	3.966
Lukeville					
	Passengers	249,870	1.90	131,776	0.986
	Pedestrians	57,675	1.43	40,369	0.302
Naco					,
	Passengers	611,465	2.05	298,870	2.236
	Pedestrians	81,831	1.46	55,978	0.419
Nogales				·	
· ·	Passengers	7,087,610	2.00	3,549,349	26.549
	Pedestrians	5,884,735	1.53	3,846,325	28.771
San Luis		, ,			
	Passengers	4,018,570	1.99	2,024,271	15.142
	Pedestrians	2,477,912	1.62	1,527,049	11.422
Sasabe					
	Passengers	77,803	2.25	34,629	0.259
	Pedestrians	*	*	*	*
Phoenix Sky Harbor Int'l Airport**		17,676	1.53	11,520	0.086
Tucson International Airport**		2,448	1.57	1,560	0.012
Totals		24,041,549	1.80	13,368,878	100.000
		7- 7- 1		-,,-	

Source: Mexican Visitor Survey, 2007-08.

Final weights used in the study combine survey results on party size with the CBP data for alien crossings and the alien portion of pedestrians. This is necessary because the survey was conducted as per party interviews at ports of entry/exit. Therefore, numbers of alien border crossings had to be converted to number of parties prior to developing the weights used to convert sample results to estimates of all Mexican visitors entering Arizona.

To compute the final weights, the number of aliens obtained from CBP by port, by travel mode (pedestrians vs. passengers) were divided by the corresponding party size computed from survey results to estimates the total number of parties. The first column in Table 5 repeats the CBP data on alien border crossings, disaggregated by travel mode, and the second column reports the persons per party figures obtained from the survey. The number of alien parties is computed in the third column. The shares of total parties, across ports, by travel mode, are used to weight survey results.

In this study, Mexican visitors were interviewed as they exit the United States through Arizona ports. Some travel studies have collected data as visitors enter a region, requiring visitors to projects their travel expenditures. However, exit interviews are considered a more accurate form of data collection.

The CBP data used to calculate the weights used in this study report number of entrants to the United States (the so-called northbound crossings), rather than the number of out-bound Mexican visitors. It is conceivable that Mexican visitors enter the United States through one port and leave through a different port, particularly for visitors arriving by air. Findings from 2001 study revealed that very few (0.3 percent) reported that they entered at a different port than where they were exiting. Therefore, as in the 2001 study, in this study we use entry data to weight survey data across ports with little loss of accuracy.

Another concern was whether there were significant numbers of aliens crossing the border who were not from Mexico. All indications are that this was an inconsequential issue.

<sup>\*</sup>Sasabe had relatively small numbers of pedestrians. Because no pedestrians were surveyed, they were included under passengers.

<sup>\*\*</sup>Airport data are air travelers whose trips originated in Mexico and whose final destinations are Arizona.

## II. Mexican Visitors to the United States

While the focus of this study is on economic benefits of Mexican visitors' spending in Arizona, it is important to place this activity in its wider economic and regional context. Mexican visitors are just one component of the two-way cross-border phenomenon known as border tourism (turismo fronterizo). Border tourism is one of the most important components of the services trade connection between U.S. and Mexico border states, encompassing both overnight visitors and same-day visitors (excursionistas). U.S border states serve as an important destination for Mexican visitors, and U.S. border states serve as an important source of U.S. visitors to Mexico. According to Banco de Mexico, more than 70 percent of all Mexican tourists to U.S. border states and of U.S. tourists to Mexican border states are from the adjacent border state.

According to Banco de Mexico data, Mexican resident travel to U.S. outnumbers the U.S. resident travel to Mexico. Of the total number of trips (i.e., crossings) in both directions by land, about 56 percent were Mexicans visiting the U.S. and 44 percent were U.S. residents visiting Mexico<sup>10</sup> (Figure 2). Another characteristic of border tourism is that a majority of travelers are day visitors (Figure 3); Mexican travelers to the U.S. are more likely to be day visitors – close to 90 percent of all land crossings, compared to 80 percent among U.S. visitors to Mexico.<sup>11</sup> Figure 4 compares the 1995-2006 trend in same-day travel of Mexican residents to the U.S. and U.S. residents to Mexico. According to the same source, Mexican visitors to the U.S. spend less per person on average than U.S. visitors to Mexico, but in aggregate, they spend more due to their larger numbers.

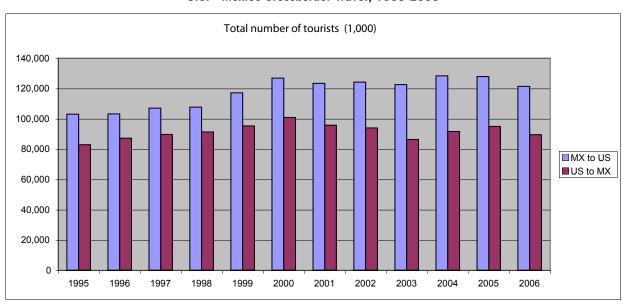


Figure 2
U.S. - Mexico Crossborder Travel, 1995-2006

Source: Banco de México. Table 9-1c.

Mexico-United States/United States-Mexico Travel by Mode of Transportation.

Retrieved April 7, 2008 at http://nats.sct.gob.mx/nats/sys/tables.jsp?i=3&id=22

The sheer numbers of travelers and their spending suggest that border tourism is an important economic activity in border states on both sides of the border.

North- & south-bound tourists (1,000) 250,000 200,000 150,000 ■ Overnight tourists ■ Same-day tourists 100,000 50,000 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 1995

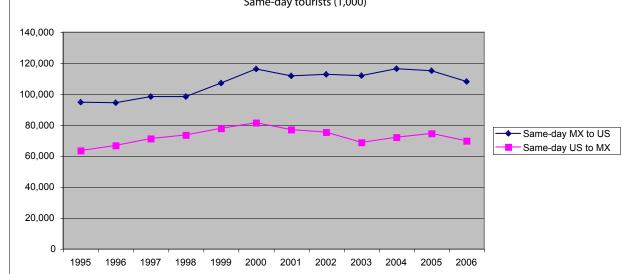
Figure 3 Same-day Travelers vs. Overnight Travelers, 1995-2006 (in 1,000)

Source: Banco de México. Table 9-1c.

Mexico-United States/United States-Mexico Travel by Mode of Transportation. Retrieved April 7, 2008 at http://nats.sct.gob.mx/nats/sys/tables.jsp?i=3&id=22

Same-day Visitor Trend, 1995-2006 Same-day tourists (1,000) 140,000 120,000

Figure 4



Source: Banco de México. Table 9-1c.

Mexico-United States/United States-Mexico Travel by Mode of Transportation.

Retrieved April 7, 2008 at http://nats.sct.gob.mx/nats/sys/tables.jsp?i=3&id=22

## **Economic Importance of Mexican Visitors**

The first studies to quantify the impact of Mexican nationals on retail trade on the U.S. side of the border date back to late 1970s.<sup>12</sup> The first study in Arizona was done in 1978. Interest in Mexican shoppers was spurred not only by their significant contribution to the retail sector in U.S. border communities, but also by increasing vulnerability of border economies to the Mexican peso devaluations. Each peso devaluation reduced the purchasing power of Mexican consumers and caused substantial losses in retail sales on the U.S. side.<sup>13</sup>

Most of the studies are region- and time specific, making comparisons across regions and over time difficult. For example, in the largest U.S. border city, San Diego, the impact of purchases by Mexican citizens in early 1990s was approximately 7.1 percent of retail sales. Elsewhere along the U.S. border, purchases by Mexican residents are even more noticeable. In the four largest Texas border cities –El Paso, Laredo, McAllen and Brownsville – the estimates of retail sales to residents of Mexico were estimated to range between 20 and 50 percent. Estimates for 2001 suggested that McAllen was the biggest net exporter of retail sales to Mexicans with almost \$1 billion in sales, representing 33 percent of its total local retail trade activity. Laredo came in second with \$540 million in exported retail sales or 39 percent of total retail sales. Brownsville registered \$256 million (16 percent of total retail sales), while El Paso, the biggest of the four cities in terms of population, exported only \$215 million (6 percent) to Mexican nationals.

In a recent study, researchers at the University of Texas-Pan American<sup>17</sup> attempted to synthesize the existing studies of the economic impact of Mexican visitors along the U.S.-Mexico border. They were able to estimate average expenditures per party per trip and by mode of border crossing (pedestrians, car, and bus) and then calculated total expenditures of Mexican shoppers for 2004.<sup>18</sup> According to their estimates, Mexican shoppers spent \$3.2 billion in Texas, \$3.8 billion in California, and \$0.86 billion in Arizona,<sup>19</sup> or a total of close to \$8 billion annually.

The above figures demonstrate that Mexican shoppers are big business for U.S. cities on or near the border. Economists with the Federal Reserve Bank of Dallas argue that stores in Laredo, El Paso, Nogales and other border towns are actually an export industry – in most years contributing to a U.S. trade surplus in cross-border shopping.<sup>20</sup> The retail export industry provides employment for workers with low and moderate skills, and helps explain why job growth in some areas along the border has been among the fastest in the nation since the 1980s. An estimated 122,800 direct jobs were generated in 2004 through Mexican shopping in border counties of Texas, California and Arizona combined.<sup>21</sup>

## **Reasons for Border Crossings**

Survey-based studies from different locations along the U.S.-Mexican border indicate that the majority of Mexican visitors to the U.S. arrive for the purpose of shopping. On average, shopping is the primary reason to cross into the U.S. for more than two-thirds of Mexican nationals. Other reasons are social in nature, like visiting friends and relatives, or are work related.<sup>22</sup>

However, characteristics of Mexican visitors vary widely from one border community to another. They stay anywhere from a few hours to several days, they spend little or considerable amounts of money, while their visiting frequency can range from once a year up to once a day. Mode of travel – by car, airplane or on foot – is another distinguishing feature. Pedestrians generally cross more frequently than those using other modes of travel. Pedestrians, along with bus crossers, are predominantly day visitors, while those who enter in their personal vehicles tend to stay overnight. Airplane travelers also tend to stay longer.

Location is another feature that may impact crossing pattern and spending characteristics. Around half of California visitors are crossing daily or on a weekly basis compared to 16 percent for Texas visitors. About a third of visitors to Texas, on the other hand, come from cities further from the border such as Monterrey so they come less frequently and stay longer.<sup>23</sup>

## Factors Influencing the Mexican Visitors' Border Crossings and Spending Pattern

The pattern of Mexican visitors' border crossing and spending in U.S. cities has been affected by a blend of two sets of factors. On one side are factors that affect travel and spending in general, such as the availability of products and services, better quality (real or perceived), and price in location A compared to location B. On the other side are factors unique to the border setting, such as exchange rate, familial crossborder ties, a tradition of commercial ties, as well as the uneven population growth in twin border cities.

## **Exchange rate**

Of all the factors, the impact of the exchange rate has been studied the most on the U.S. side of the border. This is understandable since there have been nine large-scale devaluations of Mexican peso in the period from 1925 to 1994, each of which reduced the purchasing power of Mexican consumers and caused substantial losses in retail sales across the border. As noted by Phillips and Coronado of the Federal Reserve Bank of Dallas, "border retailers know that sharp declines in the peso value result in a sharp drop in Mexican shoppers."

Since the last devaluation in 1994, Mexico has used a flexible exchange system, which helps to insulate the currency against sudden, deep declines in value. However, even if the last fourteen years were free of sudden changes in the value of the Mexican peso, retail sales on the U.S. side continue to be sensitive to swings in the peso's value. The results of a recent study by researchers at the Federal Reserve Bank of Dallas have shown that changes in the real exchange rate have statistically significant impacts on total retail sales in all metropolitan areas in Texas, except El Paso. Retail trade in Laredo, McAllen and Brownsville is highly affected by changes in the value of the peso.<sup>26</sup>

Another study in California has suggested that a 10 percent decline in the value of the peso depresses total taxable sales by approximately 1 percent in San Diego County and 2.22 percent in Imperial County.<sup>27</sup>

The sensitivity to swings in the peso's value is not uniform across the border region. It varies significantly by proximity to the border and by retailing sector, depending on type of products sold and the mix of consumers served.<sup>28</sup>

## Growth of maquiladora sector

Since its inception in 1965, the maquiladora program in Mexican border cities contributed to population growth south of the border and thus increased the consumer base for retail in U.S. border cities.<sup>29</sup> The first studies to address the issue of cross-border retail trade as part of a larger question of the maquiladora industry's impact on the regional economies of U.S. border cities date back to the early 1970s. The more recent studies have shown that maquiladora employees became a significant component of cross-border shopping. A significant portion of maquiladora salaries has been spent on the U.S. side of the border, mainly on food and clothing.<sup>30</sup>

Estimates for Texas border cities in the early 1980s suggested that a 10 percent increase in maquiladora employment translated into a 23 percent increase in retail sales in Brownsville, a 13 percent increase in Laredo, an 11 percent increase in El Paso and a 7 percent increase in McAllen.<sup>31</sup>

The maquiladora industry experienced its largest expansion in the mid 1990s, partly as a result of the 1994 peso devaluation, partly due to the inauguration of NAFTA. The devaluation drastically reduced labor costs for foreign parent companies, but at the same time, reduced the purchasing power of maquiladora workers. Thus, the impact of a potentially larger number of cross-border consumers was diminished by the effects of devaluation.

By 2001, the border economic landscape was profoundly changed. The recession in the U.S. economy was followed by a business cycle downturn in Mexico, causing a significant contraction in the maquiladora sector

employment.<sup>32</sup> Federal Reserve Bank of Dallas' study estimated that El Paso's figure for retail sales in 2001 was well bellow its average exported retail sales of 11.3 percent and concluded that this was primarily due to the contracted maquiladora activity south of the border. Ciudad Juarez registered its worst maquiladora performance in 2001 and 2002, with employment declining almost 25 percent.<sup>33</sup>

Since then the maquiladora sector has recovered, although in most places along the border the employment levels are below the pre-2001 figures. Certain shifts within the sector have also occurred, which might affect the cross-border spending. There has been a shift toward a more skilled labor force, although the majority is still low skill-low wage.

#### **NAFTA** effect

Since its inauguration in 1994, NAFTA has gradually eliminated tariffs on manufacturing and agricultural products. With more U.S. products available in Mexico, the general expectation was that NAFTA would hurt U.S. retailers in the border region as a consequence of reduced demand for retail goods on the U.S. side of the border.

A recent study in Texas found a drop in retail sales of some items on the U.S. side under NAFTA, particularly groceries and furniture. However, the authors pointed to several conflicting forces at work. Because the last peso devaluation occurred as NAFTA went into effect, it was difficult to determine whether the sales decline was due to NAFTA or the devaluation of Mexican peso.<sup>34</sup>

In many places south of the border, such as in Tijuana-Rosarito Beach area, south of San Diego, a retail boom has prompted the expansion of chains such as Costco, Wal-Mart, Home Depot and Office Depot that are providing consumers with a wide variety of goods that had only been available on the U.S. side. Combined with longer waiting times at the border crossings, these are new incentives for Baja California residents who are shopping for these kinds of products to stay put. In words of the president of a market research firm in San Diego, "They (Mexican shoppers) may still be crossing, but they may only be crossing once a week now... What people are doing is choosing their purchases, and their decision to cross the border, much more judiciously." 35

#### Transformation of Mexican retail industry

There has been an infusion of international capital into retailing and a subsequent boom in mall construction in Mexico.<sup>36</sup> This has been evident from the growing number of high-end stores in large Mexican cities, which gives their U.S. counterparts more competition. Experts believe that U.S. retailers still have the edge because they carry a greater variety of items, offer the latest styles, and often sell at significantly lower prices.<sup>37</sup> They also expressed the fear that these advantages might erode as Mexico's retail industry evolves.

A recent study focused on cross-border competition in the retail sector. The authors surveyed retailers in El Paso, and were surprised to learn that El Paso retailers didn't pay much attention to competitors on the Mexican side of the border.<sup>38</sup> In a follow-up survey they found that this was because they (retailers) "believed the Mexican stores cannot offer the same quality, range of merchandise, atmosphere and prices."

While there are pronounced differences between individual pairs of border cities, a general conclusion of the panel at the San Antonio conference was that the differences in retailing between U.S. and Mexico led to billions of dollars in business in the border region. However, as Mexico becomes more sophisticated, the gap between the two economies in retailing is shrinking, and this may eventually diminish revenues on the U.S. side.

Crossing borders usually involves inconveniences, but shoppers make the trip when retailers in another country offer better prices, selection or services. To remain competitive with Mexican stores and other U.S. markets, panelists at the 2006 San Antonio conference agreed that border cities and retailers seeking cross-border shoppers must focus on customer service. For example, San Antonio and Houston are among the

many U.S. cities with tourism bureaus or chambers of commerce that offer travel packages from Mexico that include airfare, hotel, shopping trips, and such extras as tourist activities and health care. "Such package deals, combined with personal customer services, will be a necessary component of marketing to the Mexican shopper in the future." <sup>39</sup>

## Post 9/11 border security policy

In the aftermath of the 9/11 terrorist attack, a series of new border security policies and procedures (screening and inspection) has been introduced. Aside from the recession, this was a major development that changed the entire border context.<sup>40</sup>

The participants at the 2006 conference<sup>41</sup> in San Antonio, Texas argued that 9/11 had a short-lived, negative impact on cross-border shopping. Between September and November 2001, the northbound traffic by foot fell 17.9 percent and by vehicle 24.4 percent. The recently published results from the Borderplex model<sup>42</sup> of the EI Paso/Ciudad Juárez metropolitan region, suggest that despite a decline in northbound border crossings, relatively little evidence of ongoing disruptions is uncovered for retail sales in EI Paso. There is a general absence of strong retail sales effects noted among most categories. This led the authors to conclude that "fewer shopping trips to EI Paso are potentially being offset by greater sales volumes once the consumers from Mexico do arrive."

On the south side of the border, retail sales in Ciudad Juárez seem to have benefited from the new administrative obstacles to crossing into El Paso. These outcomes, as suggested by the Borderplex authors, potentially reflect changes in household inventory management that takes into account the new regulatory environment affecting the border economy infrastructure.

Similarly, according to a recent article by Roberto Carreira at Cochise College in Douglas, Arizona, <sup>43</sup> the number of crossers from Mexico has declined, although this was not reflected in retail sales tax data. The city's retail sales tax revenue has continued to perform well, despite a decline in border crossings from Agua Prieta into Douglas at the Douglas port of entry. The city hosts a large number of day shoppers from south of the border.

However, many observers expect that the long-term impacts will come from new document requirements for entering the U.S. In particular, a potential long-term impact is expected from US-VISIT program, which checks the digital visa against a database of known criminals and suspected terrorist and increases the wait time at the border. Michael Patrick of the Texas A&M International University estimated that a 10 percent decline in northbound crossings due to US-VISIT would reduce retail sales in Texas border cities by \$760 million, or 2.2 percent.<sup>44</sup>

## **III. Mexican Visitors to Arizona**

## **Findings from Previous Studies**

The first study of economic importance of Mexican visitors to Arizona was conduced for the Arizona Office of Tourism during 1977-1978 by the University of Arizona's Nat de Gennaro and Robert Ritchey. They concluded that the economic impact of Mexican visitors to the state of Arizona was substantial. Over a one year period these visitors spent more than \$313 million for goods and services in the state. Most of the impact was realized in the border counties of Arizona with Santa Cruz receiving \$137.5 million or 43.6 percent of the total direct spending, Yuma \$93.5 million or 29.7 percent and Cochise \$28.8 million or 9.1 percent. Pima County<sup>45</sup> received \$46.9 million or 14.9 percent and Maricopa County received \$8.5 million or 2.7 percent. Survey results also showed that the state of Sonora was the overwhelming origin of Mexican visitors to Arizona, accounting for 95.9 percent of all visitors. Others came from Sinaloa, Jalisco, Baja California, and the Mexico City (DF) region.

In the 1991 update, Randall Hopkins estimated total direct expenditures of Mexican visitors in Arizona to be \$688.3 million, more than twice the estimated spending in 1977-78 study. However, prices of goods and services in the U.S. also more than doubled over the same period of time. After 1991 expenditure figures were adjusted for price changes, Mexican visitors purchase just \$306.2 million worth of 1991 goods at 1977 prices. Thus, Hopkins concluded, the real, inflation-adjusted expenditures decreased 2.9 percent from 1977-78 to 1991. The erosion of the peso's value (devaluations in 1982 and 1988, in particular), combined with 14 years of inflation, had undermined considerably the purchasing power of Mexican visitors to Arizona during that period. The 1991 estimates also indicated a geographical shift in spending from border counties (Santa Cruz and Yuma) to Pima County (Tucson).<sup>46</sup>

The 2001 update by Alberta Charney and Vera Pavlakovich-Kochi estimated total direct expenditures at \$857.4 million, a 28.3 percent increase from 1991 expenditures. The report did not adjust for inflation. However, when adjusted for inflation, Mexican visitors spent \$677.4 million in 1991 dollars, which is a decline of 1.6 percent.<sup>47</sup>

Mexican visitors' spending was characterized by distinctive regional patterns, both in terms of origin and place of consumption: in the 2001 study, over 99 percent of the Mexican visitors were from the neighboring state of Sonora; shopping was the primary reason for visiting (more than 70 percent), and two-thirds of all expenditures were in Arizona's general merchandise and grocery stores. The highest portion of direct sales to Mexican visitors was in Pima County (33.76%), followed by Santa Cruz County (28.29%) and Yuma County (22.30%). The largest absolute job impact was in Pima County while the relative job impact (in terms of percent of total employment depending on Mexican visitor spending) was the highest in the three border counties (Santa Cruz County, Cochise and Yuma).

The percent of taxable sales related to Mexican visitors' spending was the highest in Santa Cruz County, accounting for 47.3 percent of total sales. Visiting friends and relatives was a top trip purpose, which conforms to the overall notion of the importance of historical ties in the border region, which have been reinforced recently through increased migration. 50

The main changes that occurred between the 1991 and the 2001 study include a general decline in per party spending except for visitors returning through Phoenix, San Luis and Sasabe. Spending for medical-related services declined as well compared to 1991 study. There was a clear shift in geographical distribution of spending from border counties to Tucson/Pima County and Phoenix/Maricopa County; the three border counties – Santa Cruz, Yuma and Cochise – lost their combined share of total expenditures by Mexican visitors from 80 percent in 1991 to 62 percent in 2001. Cochise County and Santa Cruz County also experienced a decline in direct expenditures in comparison with 1991. Santa Cruz County has lost its first place to Pima County (in terms of total expenditures), while Maricopa County experienced the largest percentage increase in Mexican visitors' spending.

## **Border Crossing Dynamics: Empirical Evidence from Arizona's Ports of Entry**

Table 5 shows the number of non-U.S. citizens ("aliens" in the official statistics) crossing into Arizona from Mexico through Arizona's six border ports of entry during last 30 years, from 1977 to 2007. Figures 5 and 6 show annual numbers and percent change from the prior year, respectively.

In 2007, a total of 22.83 million non-U.S. citizens entered Arizona from Mexico, which is about 70,000 less than in 2001, when the last study was done. While 2007 numbers are higher than in 2005 and 2006, they are still below the highest number of 25.6 million crossings recorded in 2000.

Annual percentage change figures (Figure 6) clearly indicate that despite an overall upward trend in border crossings during last 30 years, the annual numbers vary substantially as the border residents and other visitors react to changes in economic conditions (currency devaluation, economic slowdowns), catastrophic events (9/11 terrorist attack), or changes in policies (new border crossing regulations).

Table 5
Alien Border Crossings at Six Arizona Border Ports of Entry, 1977-2007

Year	Alien Border Crossings	Annual Percent Change	Year	Alien Border Crossings	Annual Percent Change
1977	13,314,500		1993	18,845,883	5.01
1978	14,393,600	8.1	1994	23,198,614	23.1
1979	15,004,008	4.25	1995	22,347,355	-3.67
1980	16,229,700	8.16	1996	21,614,258	-3.28
1981	17,542,700	8.09	1997	23,241,839	7.53
1982	16,840,100	-4.01	1998	23,965,361	3.11
1983	14,734,500	-12.5	1999	24,318,630	1.47
1984	15,368,100	4.3	2000	25,651,566	5.48
1985	14,097,300	-8.27	2001	22,899,843	-10.73
1986	14,417,000	2.27	2002	25,598,819	11.79
1987	14,667,000	1.73	2003	23,279,290	-9.06
1988	17,438,900	18.9	2004	23,128,844	-0.65
1989	20,419,400	17.09	2005	21,047,193	-9.00
1990	20,821,800	1.97	2006	21,364,874	1.51
1991	19,648,799	-5.63	2007	22,828,527	6.85
1992	17,947,288	-8.66			

Source: U.S. Department of Homeland Security, Customs and Border Protection.

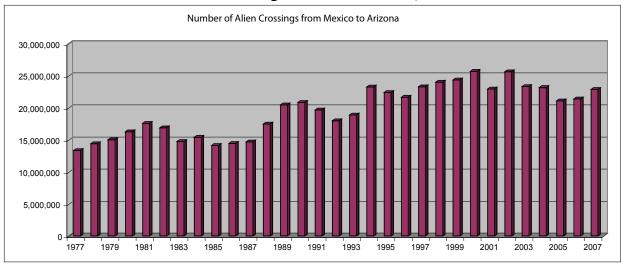


Figure 5
Number of Alien Crossings from Mexico to Arizona, 1977-2007

Source: U.S. Customs and Border Protection (CBP), and U.S. Immigration and Naturalization Services (INS)

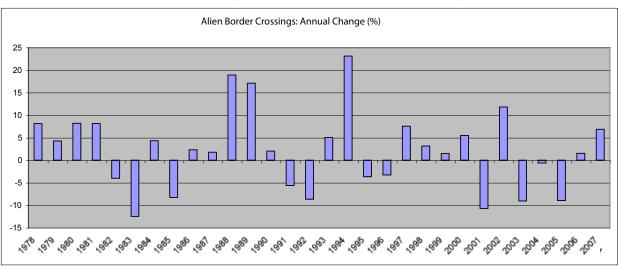


Figure 6
Alien Border Crossings to Arizona, 1977-2007: Annual Change (%)

Source: U.S. Customs and Border Protection (CBP), and U.S. Immigration and Naturalization Services (INS)

## Major Trends in the Arizona-Sonora Region Since 2001

As briefly outlined in one of the preceding sections, a number of changes occurred at the national and international levels since 2001 that might have affected the volume, geography and expenditure pattern of Mexican visitors to Arizona. Among the most important is the implementation of new border security policies after 9/11/2001. It is now harder and more expensive to obtain an entry visa, while increased border security at border crossings is causing delays at the border. Both are likely to have reduced the frequency of crossings (and the total number of border crossings), but at the same time, to have increased average spending per visit. There are also region-specific responses to the national and international trends that might have affected Mexican visitors to Arizona in a more or less pronounced way than in other parts of the U.S.-Mexico border. For example, it has been documented that the maquiladora sector in Sonora – an important component

of Mexican shopping in Arizona border cities – experienced a more pronounced decline in employment between 2001 and 2003 than in other Mexican border states: about 27 percent of maquiladora employment in Sonora was lost due to economic recession in the US economy and the competition from China. While the maquiladora sector has revived since then, the employment levels in 2006 were still below the 2001 peak. However, this negative impact might have been offset to some extent by the emerging new maquiladoras with higher skill level/higher wage employees.

Changes in Sonora's retail sector might also have discouraged potential shoppers from crossing the border. According to a story reported by Tucson's KOLD channel,<sup>54</sup> the first Nogales Mall, with more than 80 retail stores, opened for business in late August 2006 in Nogales, Sonora. The mall was developed and financed by a local commercial developer and all retail stores -- from trendy clothing boutiques to jewelry and music stores - were Mexican-owned. However, the Nogales, Arizona city mayor (at that time) was not concerned about possible competition with the retail stores on his side of the border, because he did not see a direct competition with American merchandise. This was echoed by mall's developer, who believed that only 30 percent of Nogales, Sonora residents cross the border to shop; therefore, the new mall was seen more as an alternative for people who do not cross the border. These new developments were yet another motivation for conducting the present study.

A different picture might be emerging in the case of U.S. retailers offering U.S. merchandise on the Mexican side. Since the signage of NAFTA, for example, Wal-Mart opened (or acquired through mergers) 15 stores in Sonora, three of which are located in border cities. <sup>55</sup>

At the same time, a number of new stores and shopping malls were opened up in Sierra Vista, Yuma, and Nogales, as well as on south side of Tucson with easy access from I-19. Unfortunately, besides anecdotal evidence, there are no systematic studies to show the real effect on Mexican shoppers.

The availability of shopping on the internet and through catalogs is another possible factor that might influence border shopping. For example, a 2007 survey of holiday shoppers entering the U.S. at Douglas border port of entry has shown that 2.8 percent of Mexico residents intended to conduct some holiday shopping over the internet. Most of those who planned to shop online expected to conduct about 10 percent of their shopping via the internet. About 4.5 of the interviewed indicated they intended to do some of their holiday shopping through catalogs.<sup>56</sup>

Surveys completed between July 2007 and June 2008 capture changes in the pattern of Mexican residents' travel and spending in Arizona. However, it still represents a one-time picture rather than a continuous monitoring process. Therefore, some changes may reflect a specific mix of conditions during 2007-08 rather than being signs of any major shifts.

## IV. Characteristics of Mexican Visitors to Arizona

As shown in Table 4, more than 24 million crossings (trips) of non-U.S. citizens entering Arizona from Mexico were reported during a 12-month period from July 2007 through June 2008. The official statistics provides data on number of "crossings." For the purpose of this study, each crosser is treated as a "visitor."

The overwhelming majority of Mexican visitors – 99.92 percent – enter Arizona through the six Arizona-Sonora border ports of entry (BPOE). Arizona's major international airports in Phoenix and Tucson accounted for less than one percent of the total number of trips from Mexico to Arizona.

When visitors who arrived by car or crossed the border on foot were asked if they flew to Arizona in the past, only 0.6 percent acknowledged flying before. For 71 percent of these visitors, the reason for not flying was because they needed a car, and for another 21 percent this was a short trip. The remaining 8 percent indicated that the air trip was too expensive.

Of those 99.4 percent who never traveled by air to Arizona, 68.8 percent indicated the shortness of their trip as the main reason. Another 7.8 percent needed a vehicle, while 13.7 percent thought that air travel was too expensive. About every tenth visitor party was coming from a location without an air connection.

Mexican nationals who cross the border through BPOE are predominantly day-visitors; many of them cross the border on a daily or weekly basis. In contrast, visitors arriving by air tend to come less frequently but tend to stay overnight.

This section provides basic characteristics of Mexican visitors to Arizona and explains how survey results are combined with the official count of border crossings to arrive at a profile of Mexican visitors and their spending behavior in Arizona.

## **Visitors, Parties and Party Size**

Party size is critical for converting the total number of Mexican visitors to visitor parties. Mexican visitor parties in the current survey consist of 1.8 persons per party, including 1.47 adults and 0.33 children (Table 6). This is smaller than that of 2001, which showed an average party size of 2.20, including 1.55 adults and 0.65 children. Thus, the major source of change between the two studies has to do with the number of children identified among the parties.

Table 6
Party Size, by Age Group, by Port of Entry (Averages)

Port of Entry	Adults	Children	Total
Douglas	1.48	0.41	1.89
Lukeville	1.49	0.32	1.81
Naco	1.60	0.37	1.98
Nogales	1.50	0.28	1.79
San Luis	1.57	0.27	1.85
Sasabe	1.76	0.49	2.25
Phoenix Airport	1.41	0.12	1.53
Tucson Airport	1.48	0.09	1.57
All Ports	1.47	0.33	1.80

Source: Mexican Visitor Survey, 2007-08

There are some variations in party size and composition of parties across ports of entry. Visitors entering through Sasabe have the largest party size (2.25 persons), while visitors entering at the Phoenix Sky Harbor International Airport and Tucson International Airport have the smallest party size (1.53 and 1.57 persons). In

comparison with 2001, party sizes have decreased at every port of entry except for Sasabe and Douglas. Using data from Table 4, the number of Mexican visitor parties arriving by each mode of travel (motor vehicle, pedestrian, and air) are summarized in Table 7. About 55 percent of all Mexican visitor parties arrive in Arizona by motor vehicle and about 45 percent walk across the border through one of the six ports of entry along the Arizona-Sonora border. Less than one percent (0.10 percent) of all parties arrives into Arizona by air. This is slightly more than in 2001, when 0.09 percent arrived by air.

Table 7
Mexican Visitor Parties, by Travel, by Port of Entry

	Number	Percent						
Port of Entry	<b>Motor Vehicle</b>	Pedestrian	Air	<b>Total Parties</b>	Motor Vehicle	Pedestrian	Air	<b>Total Parties</b>
Douglas	1,317,006	530,176		1,847,182	71.30	28.70	-	100.00
Lukeville	131,776	40,369	-	172,145	76.55	23.45	-	100.00
Naco	298,870	55,978	-	354,848	84.22	15.78	-	100.00
Nogales	3,549,349	3,846,325	-	7,395,674	47.99	52.01	-	100.00
San Luis	2,024,271	1,527,049	-	3,551,320	57.00	43.00	-	100.00
Sasabe	34,629	*	-	34,629	100.00	-	-	
Phoenix Airport	-	-	11,520	11,520	-	-	100.00	100.00
Tucson Airport	-	-	1,560	1,560	-	-	100.00	100.00
Total	7,355,901	5,999,897	13,080	13,368,878	55.02	44.88	0.10	100.00

Source: Mexican Visitor Survey, 2007-08.

Aside from Sasabe, Naco has the lowest percentage of parties walking across the border; the majority (84.22 percent) drive across the border. The twin border communities, Sasabe/Sasabe, and Naco/Naco are the smallest in terms of population among the six Arizona ports of entry. Both lack the typical near-border shopping area that usually attracts pedestrians across the border.

On the other hand, in Nogales, Arizona, which is adjacent to the largest border city in Sonora (Nogales, Sonora), 52.01 percent of crossers are pedestrians. San Luis and Douglas, which are adjacent to large Sonoran border cities of San Luis Rio Colorado and Agua Prieta, also have high percentages of pedestrian crossers (43 and 28.7 percent, respectively).

In comparison with the 2001 study, the most striking difference is an increase in percent of pedestrian crossers; from 29.35 percent in 2001 to 44.88 in 2007-08, for all ports of entry. Except for San Luis, which already had a high percentage of pedestrian crossers in 2001, all other ports experienced a substantial increase in pedestrian crossers among all Mexican visitor parties. This increase in share of pedestrian crossers is no surprise; it is most likely a reaction to increased waiting times for motor vehicles crossing the border from Mexico, as reported in other studies in Texas and California. The new post 9/11 border crossing procedures have increased waiting times for motor vehicles and discouraged vehicle crossers.

## Length of Stay in Arizona

Table 8 shows Mexican visitors by length of stay in Arizona. Day visitors (designated as spending zero nights in Arizona in Table 8) represent by far the largest group: more than 84 percent of all Mexican visitors are day visitors. In comparison with 2001 study, however, the percentage of day visitors has decreased from 96 percent in 2001 to 84.24 percent in 2007-08. Overnight visitors increased from under four percent in 2001 to 15.76 percent in the current study. This large increase in overnight visitors translates into a substantial increase in spending, as will be computed later in the report.

Table 8
Length of Stay in Arizona, by Travel Mode (Percentages)

	<u>P</u>	ercent of all Visitor	<u>rs</u>		
	Motor Vehicle	Pedestrian	Air	All Modes	
Type of Visitor	%	%	%	%	
Day Visitors	80.98	88.41	0.69	84.24	
Overnight Visitors	19.01	11.59	99.31	15.76	
Sum	100.00	100.00	100.00	100.00	

	Perce	Percent of Overnight Visitors						
	<b>Motor Vehicle</b>	Pedestrian	Air	All Modes				
Nights in Arizona	%	%	%	%				
1	10.57	20.62	1.58	13.83				
2	23.51	31.23	8.47	26.02				
3	35.46	33.56	18.97	34.71				
4	22.04	6.82	28.58	17.07				
5	7.84	4.31	18.90	6.73				
6	0.32	-	8.10	0.25				
7	0.26	-	5.01	0.19				
8 or more	-	3.45	10.39	1.21				
Total	100.00	100.00	100.00	100.00				

Source: Mexican Visitor Survey, 2007-08

As expected, the percentage of visitors spending one or more nights in Arizona differs according to the travel mode; 11.59 percent of pedestrian crossers spend one or more nights in Arizona, while 19.01 percent of visitors crossing in motor vehicles spend one or more nights in Arizona. Almost all air travelers (99.31 percent) spend at least one night in Arizona.

In interpreting Table 8, recall from Table 7 that 55.02 percent of all visitor travelers arrive by motor vehicle, 44.88 percent arrive on foot, and 0.10 percent arrives by air. Thus, approximately two-thirds of Arizona's overnight visitors arrive by motor vehicle (19.01 percent of the 55.02 percent arriving by motor vehicle is 10.45 percent of total visitors, which is 66 percent of the 15.76 percent of all visitors spending the night).

While over 99 percent of all air travelers spend the night, air travelers represent 0.10 percent of all Mexican visitors and only 0.63 percent of all overnight travelers.

Length of stay of overnight visitors is also affected by mode of travel. Relatively few air travelers spend only one or two nights in Arizona (10.05 percent, the sum of 1.58 and 8.47 in the table). The majority of air travelers (about 75 percent) spend between three and six nights in Arizona.

In contrast, pedestrians who spend the night stay for relatively short periods of time, with 85.4 percent spending three or fewer nights. Mexican visitors arriving by motor vehicle tend to spend more nights than pedestrians, but fewer nights than air travelers. Almost 92 percent of motor vehicle travelers spend four or fewer nights in Arizona.

Similar results are shown in Table 9, which provides the frequency of nights spent in Arizona by port of entry. Almost all visitors traveling through the two airports spend at least one night in Arizona. The two airport entries show a majority of visitors spending 3 to 6 nights, while other ports have mostly day visitors. The exception is the Sasabe port: only 52.94 percent of its crossers are day visitors. The populations of both Sasabe, Arizona, and Sasabe, Sonora, are small, so these visitors tend to come from further south of the border, with the result that they are more likely to spend the night.

Table 9
Nights Spent in Arizona, by Port of Entry (Percentages)

				Percent of Overnight Visitors								
Port of Entry	Day Visitors	Overnight Visitors	Sum	1	2	3	4	5	6	7	8 or more	Sum
Douglas	78.81	21.19	100	15.34	33.27	33.36	14.16	3.87	-	-	-	100
Lukeville	74.87	25.13	100	-	23.64	31.52	36.97	5.25	-	2.63	-	100
Naco	80.86	19.14	100	12.02	28.00	28.00	20.01	12.02	-	-	-	100
Nogales	86.52	13.48	100	14.09	29.01	38.87	13.80	3.86	-	0.30	0.07	100
San Luis	83.70	16.30	100	13.56	15.89	30.06	22.76	12.94	0.67	-	4.11	100
Sasabe	52.94	47.06	100	28.58	33.94	24.99	8.92	1.78	1.78	-	-	100
Phoenix Airport	0.78	99.22	100	1.57	7.35	18.37	28.61	18.64	8.40	5.25	11.81	100
Tucson Airport	-	100.00	100	1.67	16.67	23.33	28.33	20.83	5.83	3.33	0.01	100
TOTAL	84.24	15.76	100	13.83	26.02	34.71	17.07	6.73	0.25	0.19	1.21	100

Source: Mexican Visitor Survey, 2007-08

Of the Mexican visitors who spend the night in Arizona, 60.97 percent stay in hotels, while 39.03 percent stay with friends and relatives (Table 10). In comparison with 2001, this is a decline in percentage of Mexican parties staying in hotels (over 78 percent in 2001) and a commensurate increase in the percentage staying with friends and relatives (under 21 percent in 2001).

Although the percentage of overnight Mexican visitors spending the night in hotels has decreased somewhat since 2001, the proportion of Mexican visitors spending the night has almost quadrupled (from under four percent to 15.76 percent). This results in a substantial increase in the number of Mexican visitor parties (and the proportion of all visitor parties) staying in hotels. In 2001, an estimated three percent of all visitor parties spent the night in hotels (78 percent of 3.9 percent of visitor parties that spent the night). In 2007-08, 9.6 percent of all Mexican visitor parties spend the night in hotels (60.97 percent staying in hotels of the 15.76 percent of all Mexican visitor parties spending the night).

Surprisingly, 63.03 percent of overnight air travelers spend the night with friends and relatives and 36.97 percent in hotels. Overnight visitors traveling by motor vehicle are evenly split between hotels and friends/ relatives in their accommodations. Overnight visitors crossing on foot are the most likely to spend the night in a hotel (94.01 percent), but recall from Table 8 that only 11.59 percent of pedestrians spend the night.

Table 10
Overnight Visitor Type of Accommodation (Percentages)

Type of Accommodation	Motor Vehicle	Pedestrian	Air	All Modes
Hotel	50.39	94.01	36.97	60.97
Friends/Relatives	49.61	5.99	63.03	39.03
Other	0	0	0	0.00
Total	100	100	100	100.00

Source: Mexican Visitor Survey, 2007-08

# Did Mexican Visitors to Arizona Travel Less or More Frequently in 2007-08 than in Prior Year?

Visitors were asked if they traveled more or less frequently than in the prior year. This question was included in the questionnaire because of the observed decline in the border crossings between 2002 and 2006.

Only 1.5 percent of all parties indicated that they traveled less frequently in 2007-08 than a year ago. Reasons were financial, such as "having less money to spend" and personal such as "having less time" or "getting older and travelling less." About 1 percent indicated that they came more often, mostly for family-related reasons such as visiting relatives who moved to Arizona, or visiting a sick relative.

These findings are in general agreement with the CBP data that show the number of crossings actually increased in 2007 compared to 2006.

## **Income Categories**

Tables 11 and 12 show the income distribution of Mexican visitors, by mode and by port, respectively. The income categories for these tables were based on the average monthly household income data published by Instituto Nacional de Estadística, Geografía e Informática (INEGI), Mexico's official data collection and publication agency. The 2005 data were the most recent at the time of preparation of our survey instrument.

According to INEGI data, 70 percent of all households in Mexico had average monthly income of less than 10,000 pesos. Ten percent had more than 37,600 pesos a month. Average monthly household income for Mexico as a whole was 10,244 pesos in 2005.

Because Sonora, like other Mexican border states, has higher wages than the average for Mexico as a whole, it is expected that a larger percentage of households has monthly income of more than 10,000 pesos. According to researchers at Centro de Investigación en Alimentación y Desarrollo (CIAD),<sup>58</sup> people who can afford to cross the border (cost of the permit, transportation costs, proof of residence and other requirements) have higher incomes than the average households.

Therefore, in this study the lowest categories were aggregated as 'under 10,000 pesos,' while a number of categories on the high end were extended to gain a better understanding of our visitors. Visitors were asked to give monthly income in pesos, but income categories are presented throughout the report in both pesos and dollars. Income categories were converted to dollars using the average of the twelve monthly exchange rates for 2007-08.<sup>59</sup>

As shown in Table 11, 44.06 percent of all Mexican visitor parties have monthly household incomes under 10,000 pesos. The next largest group accounting for 36.32 percent of all visitors is in the category of 10,000 to 15,000 pesos a month. Thus, about 80 percent of all visitors have less than 15,000 pesos a month.

Table 11

Monthly Household Income Distribution, by Travel Mode (Percentages by row)

Income Categories (Pesos)									
	Under	\$10,000-	\$15,000-	\$20,000-	\$30,000-	\$40,000	\$50,000-	\$80,000	
	\$10,000	\$14,999	\$19,999	\$29,999	\$39,999	\$49,999	\$79,999	or over	
				Income Categ	ories (Dollars)				
	Under	\$929-	\$1,394-	\$1,860-	\$2,788-	\$3,717-	\$4,647-	\$7,435-	
Travel Mode	\$929	\$1,393	\$1,859	\$2,787	\$3,716	\$4,646	\$7,434	or over	Sum
Motor Vehicle	41.67	38.25	13.27	5.48	1.07	0.22	0.05	-	100.00
Pedestrian	47.20	33.82	14.66	4.04	0.07	-	0.10	0.10	100.00
Air	8.24	35.92	28.98	18.19	4.91	2.16	0.96	0.64	100.00
All Modes	44.06	36.32	13.89	4.86	0.64	0.12	0.07	0.04	100.00

Source: Mexican Visitor Survey, 2007-08

It is not surprising that air travelers have the highest incomes; 55.84 percent have incomes over 15,000 pesos a month. Less than 9 percent of all air travelers have incomes less than 10,000 pesos per month; close to 9 percent have incomes of more than 30,000 pesos per month. The two largest groups of air travelers earn 15,000 – 19,999 pesos per month (35.92 percent) and 20,000 – 29,999 pesos per month (28.98 percent).

Pedestrians show the lowest incomes of the three modes, as expected. The highest frequency of pedestrians' incomes is in the under 10,000 peso category (47.2 percent). Another 33.82 percent have incomes between 10,000 and 15,000 pesos monthly. Less than 5 percent have incomes higher than 20,000 pesos.

Among Mexican visitors entering the United States in motor vehicles, the largest group (41.67 percent) has monthly income of less than 10,000 pesos. The next largest group accounting for 38.25 percent of visitors

entering in motor vehicles is in the category of 10,000 to 15,000 pesos a month. Thus, close to 80 percent of all visitors entering by car have less than 15,000 pesos a month. About 13 percent have incomes of more than 15,000 but less than 20,000 pesos a month, while less than 7 percent have incomes of over 20,000 pesos.

The monthly income distribution of Mexican visitors in Table 12 shows some interesting differences across ports of entry.

Table 12

Monthly Household Income Distribution, by Travel Port of Entry (Percentages by column)

				Income Cate	ories (Pesos)	)			
	Under	\$10,000-	\$15,000-	\$20,000-	\$30,000-	\$40,000	\$50,000-	\$80,000	
	\$10,000	\$14,999	\$19,999	\$29,999	\$39,999	\$49,999	\$79,999	or over	
				Income Cated	ories (Dollars	s)			
	Under	\$929-	\$1,394-	\$1,860-	\$2,788-	\$3,717-	\$4,647-	\$7,435-	
Port of Entry	\$929	\$1,393	\$1,859	\$2,787	\$3,716	\$4,646	\$7,434	or over	Sum
Douglas	45.71	36.24	13.02	3.27	0.89	0.30	0.29	0.29	100.00
Lukeville	51.68	26.47	16.41	4.67	0.78	-	-	-	100.00
Naco	54.31	36.20	7.04	2.46	-	-	-	-	100.00
Nogales	44.30	37.12	13.94	3.74	0.70	0.14	0.05	-	100.00
San Luis	40.92	35.11	14.99	8.58	0.40	-	-	-	100.00
Sasabe	53.19	39.36	7.45	-	-	-	-	-	100.00
Phoenix Airport	8.73	35.27	30.55	17.82	4.00	1.82	1.09	0.73	100.00
Tucson Airport	4.65	40.70	17.44	20.93	11.63	4.65	-	-	100.00
All Vistor	44.06	36.32	13.89	4.86	0.64	0.12	0.07	0.04	100.00

Source: Mexican Visitor Survey, 2007-08

The highest percent of visitors through Naco, Sasabe and Lukeville are in the lower income category of less than 10,000 pesos per month; 54.31 percent at Naco, 53.19 percent at Sasabe and 51.68 percent at Lukeville.

As expected, visitors through Phoenix and Tucson airports have higher monthly incomes; 56.05 percent of air travelers to Phoenix and 54.65 percent of air travelers to Tucson have monthly incomes of 15,000 pesos or more.

# **Reasons for Visiting**

Among all visitor parties, 63.94 percent enter into Arizona primarily for leisure purposes (Table 13). The largest leisure segment is personal shopping (57.44 percent of all visitors). Visiting friends and relatives is the primary reason for 5.81 percent of all visiting parties.

Business reasons account for 36.06 percent of Mexican visitors. The bulk of those are workers, listed under "other" business reasons (35.19 percent). Business related reasons, such as business shopping, training, and attending convention, account for less than one percent.

Table 13
Reason for Visit, by Travel Mode (Percentages)

	Leisure Reason for Visit											
Leisure Leisure Leisure Leisure												
Travel Mode	Health	Vacation	Friends/Relatives	Shopping	Other	All						
Motor Vehicle	0.25	0.28	7.16	63.62	0.48	71.79						
Pedestrian	-	0.18	4.10	49.91	0.10	54.29						
Air	1.02	2.40	27.59	40.75	1.25	73.01						
Total	0.14	0.24	5.81	57.44	0.31	63.94						

	Business Reason for Visit											
	Business	Business	Business	Business	Business	Bus & Leisure						
Travel Mode	Convention	Training	Shopping	Other	All	Sum						
Motor Vehicle	0.07	0.04	1.17	26.93	28.21	100.00						
Pedestrian	-	-	0.32	45.39	45.71	100.00						
Air	15.75	6.25	1.15	3.85	27.00	100.00						
Total	0.05	0.03	0.79	35.19	36.06	100.00						

As expected, there are differences when travel mode is considered. Air travelers are the most likely to cite leisure reasons for traveling (73.01 percent) and pedestrians are the least likely to cross for leisure purposes (54.29 percent). For 63.64 percent of visitor parties arriving by car, shopping is the primary reason, compared for 49.91 percent among pedestrians. Air travelers are the most likely to list visiting friends and relatives as the primary reason for visiting (27.59 percent).

Mexican visitors, in general, are less likely to list business as reason for travel. Pedestrians are the most likely to come for "other" business reasons (i.e., work, 45.39 percent) than travelers arriving by motor vehicle or air. Of motor vehicle travelers, 28.21 percent come for business reasons (mostly for work). Among air travelers, 27 percent come for business, but most of them are to attend conventions (15.75 percent) or to receive training (6.25 percent).

The reason for the visit also varies by port (Table 14). Border crossers entering through Nogales and San Luis have the highest percentages of parties entering Arizona for "other" business reasons including work (over 40 percent). Among those entering through smaller ports – Sasabe, Naco and Lukeville – shopping is the primary reason (for about 70 percent and more parties).

Table 14
Reason for Visit, by Port of Entry (Percentages)

	Leisure Reason for Visit											
Port of Entry	Leisure Health	Leisure Vacation	Leisure Friends/Relatives	Leisure Shopping	Leisure Other	Leisure All						
Douglas	0.55	0.82	8.14	79.42	1.09	90.02						
Lukeville	-	-	14.05	69.19	3.37	86.61						
Naco	-	-	14.55	80.09	-	94.64						
Nogales	0.11	0.22	4.79	53.89	0.15	59.16						
San Luis	-	-	5.27	50.45	0.11	55.83						
Sasabe	-	-	15.13	76.47	0.84	92.44						
Phoenix Airport	1.04	2.61	27.15	39.95	1.31	72.06						
Tucson Airport	0.83	0.83	30.83	46.67	0.83	79.99						
Total	0.14	0.24	5.81	57.44	0.31	63.94						

			<b>Business Reason for Visit</b>			
Don't of Entry	Business	Business	Business	Business	Business	Bus & Leisure
Port of Entry	Convention	Training	Shopping	Other	All	Sum
Douglas	0.27	-	2.18	7.54	9.99	100.00
Lukeville	-	-	1.33	12.06	13.39	100.00
Naco	-	-	-	5.36	5.36	100.00
Nogales	-	0.04	0.64	40.15	40.83	100.00
San Luis	-	-	0.42	43.75	44.17	100.00
Sasabe	-	-	0.84	6.72	7.56	100.00
Phoenix Airport	16.19	6.53	1.31	3.92	27.95	100.00
Tucson Airport	12.50	4.17	-	3.33	20.00	100.00
Total	0.05	0.03	0.79	35.19	36.06	100.00

Source: Mexican Visitor Survey, 2007-08

For visitors traveling by air, 39.95 percent of those using the Phoenix airport and 46.67 percent of those using the Tucson airport, shopping is the primary reason. Visiting friends and relatives is also a more important reason for visiting Arizona for those arriving through Phoenix and Tucson airports than those crossing at border ports of entry.

The Phoenix airport has the highest percent of leisure visitors coming to Arizona for medical reasons, although this percentage is only about one percent. Less than one percent among Tucson air travelers comes for medical reasons; 0.55 percent in Douglas and 0.11 percent in Nogales. Compared to the 2001 study, smaller percentages of visitors now seem to come for medical reasons.

In comparison with 2001, shopping and visiting friends and relatives have declined, but this seems to be primarily a result of an increase in the portion identified as workers in 2007-08. However, it is not believed that the portion of workers has increased since 2001; rather a more focused effort was used to identify them.

The reason for visit determines, in part, length of stay (Table 15). Visitors who spend the night are likely to have come for leisure purposes (83.92 percent). The most likely leisure reason is shopping for overnight visitors (75.21 percent). Shopping is also the most important leisure reason for day visitors (54.11 percent), but only 60.19 percent of all day visitors come for leisure reasons.

Day visitors are more likely to come for business reasons (39.80 percent), primarily for work, than overnight visitors. Relatively few overnight visitors come for business (16.09 percent).

Table 15
Reason for Visit, by Type of Visitor (Percentages)

		Leisure Reason for Visit				
	Leisure	Leisure	Leisure	Leisure	Leisure	Leisure
Type of Visitor	Health	Vacation	Friends/Relatives	Shopping	Other	All
Overnight Visitors	0.01	0.78	7.90	75.21	0.02	83.92
Day Visitors	0.16	0.14	5.42	54.11	0.36	60.19
Total	0.14	0.24	5.81	57.44	0.31	63.94

Business Reason for Visit										
	Business	Business	Business	Business	Business	Bus & Leisure				
Type of Visitor	Convention	Training	Shopping	Other	All	Sum				
Overnight Visitors	0.10	0.04	0.39	15.56	16.09	100.00				
Day Visitors	0.04	0.03	0.86	38.87	39.80	100.00				
Total	0.05	0.03	0.79	35.19	36.06	100.00				

Source: Mexican Visitor Survey, 2007-08

The computed numbers of nights spent, by travel mode, by reason for visit, are presented in Table 16. The table presents the number of nights, by reason, by mode, for all visitors and for overnight visitors separately. The number of nights for all visitors averages in zero nights for day visitors so most of the entries in the upper portion of the table are much smaller than those in the lower portion. Because almost all air travelers are also overnight visitors, the two rows for air travelers are almost identical.

Table 16 Number of Nights, by Reason for Visit, by Travel Mode, for ALL Visitors and Overnight Visitors (Averages)

All Visitors, by Travel Mode, by Reason (number of nights)

Travel Mode	Leisure Health	Leisure Vacation	Leisure Friends/ Relatives	Leisure Shopping	Leisure Other	Leisure All	Business Convention	Business Training	Business Shopping	Business Other	Business All
Motor Vehicle	-	1.71	0.69	0.71	0.05	0.71		-	0.22	0.19	0.19
Pedestrian	-	2.50	0.44	0.30	-	0.31	-	-	-	0.93	0.93
Air	5.35	7.88	7.68	3.96	6.02	5.55	4.52	3.75	5.60	19.27	5.43
All Parties	0.04	2.04	0.64	0.55	0.07	0.56	1.31	0.84	0.19	0.63	0.28

Overnight Visitors, by Travel Mode, by Reason (number of nights)

Travel Mode	Leisure Health	Leisure Vacation	Leisure Friends/ Relatives	Leisure Shopping	Leisure Other			Business Training	Business Shopping	Business Other	Business All
Motor Vehicle	-	3.32	3.11	2.86	6.00	2.89	-	-	2.31	3.81	3.70
Pedestrian	-	5.00	2.37	2.14	-	2.19	-	-	-	4.19	4.19
Air	5.35	7.88	7.75	3.96	6.02	5.57	4.52	4.05	5.60	19.27	5.53
All Parties	5.35	3.96	3.00	2.68	6.01	2.72	4.52	4.05	2.37	4.08	4.04

Source: Mexican Visitor Survey, 2007-08

Pedestrians make almost all day trips, but for those who spend the night, they stay approximately two nights if the primary reason is visiting friends and relatives or shopping. Overnight Air travelers spend the most nights in Arizona if they are on vacation or visiting family (7.88 and 7.75 nights, respectively). Other leisure reasons, business shopping, medical purposes, and business convention also result in relatively long stays of air travelers (6.02, 5.6, 5.35 and 4.52 nights, respectively). Air travelers on "other" business travel spend an average of 19.27 nights in Arizona. This figure is skewed upward because a) there are very few observations in this group and b) among those were a couple who stayed for long periods of time (months).

### **Occupations and Economic Sectors**

In previous studies, the respondents were asked to state their occupation, which proved to be difficult to classify because they would give a mix of occupation and employment sector. For example, they may say 'factory worker,' but not say in what type of industry they worked. Similarly, a respondent may have said 'city worker,' but did not state his or her actual occupation.

In this study respondents were asked to provide information about both occupation and economic sector. Table 17 provides a breakdown of primary household occupations, by mode of entry.

The ten most prevalent occupations among all visitors are: agricultural worker/fisherman, business owner/self employed, waiter/waitress, factory manager/supervisor, secretary/receptionist, factory worker, construction worker/builder/contractor, cashier, cleaner, and chef/cook. Together, these reported occupations comprise 68.6 percent of all visitors. Among pedestrians, these occupations comprise 73.8 percent of all crossers.

Among visitors entering by motor vehicles the two largest groups are business owners/self-employed (14.21 percent) and agricultural workers (11.57 percent). The remaining top ten occupations include waiter/waitress, factory manager/supervisor, secretary/receptionist, construction builder/worker/contractor, cashier, cleaner, teacher, and factory worker. These ten occupations comprise 67.5 percent of car travelers.

Air travelers were most likely to be professionals, proprietors, or skilled workers. The ten most common occupations are: business owner/self employed (17.02 percent), engineer (14.18 percent), medical occupation (nurse, medical or dental assistant, doctor, dentist; 11.34 percent), and secretary/receptionist (10.79 percent). The remaining top ten cited occupations include architect, construction contractor/builder, factory manager/supervisor, lawyer and sales representative. More than 87 percent of air passengers were in one of these ten occupations.

Table 17
Reported Occupations of Mexican Visitors to Arizona (Percentages)

	Vehicle		Air	All
Occupation	Passengers	Pedestrians	Passengers	Modes
Business owner/self-employed	14.21	2.17	17.20	8.96
Accountant	0.49	0.90	1.17	0.67
Architect	1.05	0.42	6.06	0.78
Administrator/Executive	0.10	-	0.56	0.06
Administrative Assistant	-	0.24	-	0.11
Agricultural worker	11.57	21.14	0.39	15.73
Bank teller/manager/emp	2.27	1.03	-	1.73
Bartender	0.43	0.79	-	0.59
Beautician/aestetician/barber	3.22	1.14	0.17	2.31
Cashier	4.23	4.07	-	4.16
Cattleman/rancher	1.22	0.97	-	1.11
Cattle/ranch worker	1.93	1.11	0.39	1.57
Chef, cook	2.50	4.39	0.39	3.32
Childcare worker	0.18	0.31	0.39	0.23
Church pastor/priest	0.10	-	0.39	0.06
Cleaner	3.83	3.50	-	3.68
Clerk in store	1.13	4.04	-	2.40
Computer programmer, tech, systems	0.46	0.52	0.39	0.49
Construction worker/builder/contractor	4.81	4.53	5.22	4.69
Doctor/Dentist	0.39	0.17	10.79	0.30
Driver, cab, bus	1.44	3.88	-	2.50
Engineer	3.42	1.90	14.18	2.77
Factory worker	3.43	6.88	-	4.93
Factory manager/supervisor	7.21	9.34	5.17	8.14
Government worker	0.63	0.72	1.56	0.67
Hotel manager	0.02	0.13	-	0.07
Hotel receptionist	0.23	-	-	0.13
Lawyer	2.36	-	5.01	1.33
Legal Assistant	0.11	0.13	-	0.12
Maintenance/Repair worker	0.10	-	-	0.06
Manager	0.88	0.42	3.45	0.68
Manager, Assistant	0.27	-	-	0.15
Mechanic, Airplane	2.58	3.80	0.78	3.11
Miner	-	0.13	-	0.06
Nurse/Med Asst/Dental Asst	2.69	1.56	11.34	2.21
Phorographer	0.16	-	-	0.09
Police officer/Security	0.89	0.79	0.39	0.84
Salesperson/Sales Rep	1.16	2.54	4.00	1.76
Secretary/Receptionist	6.64	7.00	8.29	6.80
Social Worker	0.11	-	-	0.06
Teacher	3.65	0.35	2.33	2.21
Waiter/Waitress	7.89	8.50	-	8.15
Welder	0.01	0.49	-	0.22
	100.00	100.00	100.00	100.00

Table 18
Economic Sectors in which Mexican Visitors are Employed (Percentages)

	Vehicle		Air	All
<b>Economic Sector of Employment</b>	<b>Passengers</b>	Pedestrians	<b>Passengers</b>	Modes
Agriculture/Ranching	21.06	28.90	1.98	24.78
Mining	-	0.16	-	0.08
Construction	7.21	6.12	8.88	6.69
Manufacturing	12.75	18.60	6.61	15.53
Financial/Banking/Real Estate	3.36	1.26	1.89	2.36
Transportation/ Communications	2.06	5.53	3.30	3.71
Hospitality/Tourism	0.52	0.67	0.66	0.59
Retail/Wholesale	9.40	8.03	7.47	8.74
Restaurant/Bars	18.11	15.97	2.64	17.08
Medical Services	4.53	2.32	38.28	3.50
Beauty Salon/Barber Services	5.25	1.39	1.52	3.41
Personal Services except Beauty	5.35	4.65	0.66	5.01
Repair Services	4.10	4.63	2.64	4.35
Professional Services	5.85	1.77	21.48	3.92
Rental Services	-	-	1.32	0.00
Non-profit/Religious	0.15	-	0.66	0.08
Government/Security	0.31	-	-	0.16
	100.00	100.00	100.00	100.00

Table 18 shows economic sectors in which Mexican visitors' households earn their incomes. Agriculture/ ranching, restaurants/bars, and manufacturing account for 57.39 percent of economic activity. As expected, visitors arriving by air are primarily associated with medical and professional services sectors.

## **Origin of Visitors**

Table 19 and Figure 7 provide the states and cities from which Mexican visitors originate. Close to 99 percent of all Mexican visitors to Arizona are from the neighboring state of Sonora. Small percentages of visitors originate in states adjacent to Sonora: Baja California (0.89 percent), Sinaloa (0.10 percent) and 0.10 percent all other. Although small in terms of percentages (too small to be shown in the summary table), visitors to Arizona also come from Mexico City/D.F. (0.02 percent), Nuevo León (0.01 percent), and Yucatan (0.01 percent).

Figure 7
Origin of Mexican Visitors to Arizona, by State

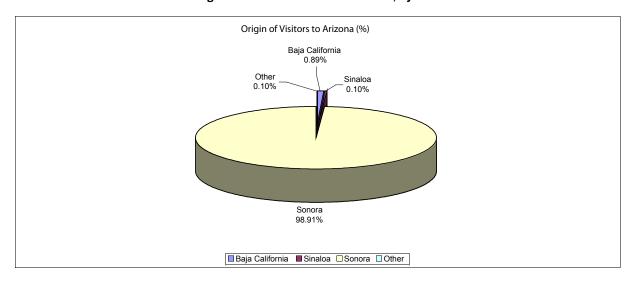
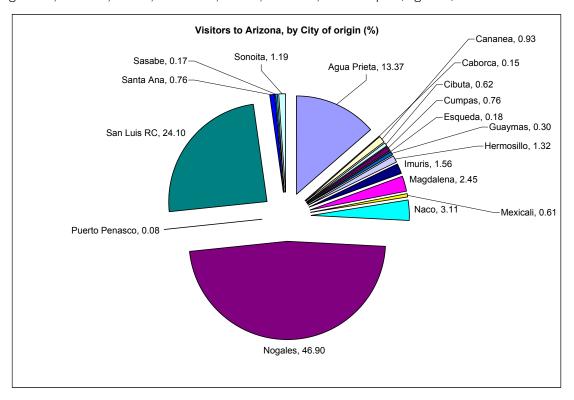


Table 19
Origin of Visitors and Monthly Income, by Place of Residence (Percentages)

		Under \$10,000	\$10,000- \$14,999	\$15,000- \$19,999	Income Cated \$20,000- \$29,999	gories (Pesos) \$30,000- \$39,999	\$40,000 \$49,999	\$50,000- \$79,999	\$80,000 or over	
Place of Residence	Percent of Visitor Parties	Under \$929	\$929- \$1,393	\$1,394- \$1,859	\$1,860- \$2,787	ories (Dollars \$2,788- \$3,716	\$3,717- \$4,646	\$4,647- \$7,434	\$7,435- or over	Sum
State in Mexico	Visitor r unics	<b>4323</b>	ψ1,000	Ψ1,000	ΨΞ,707	ψ0,7 10	ψ <del>1</del> ,040	ψ1, <del>-0-</del>	01 0401	oum
Baja California	0.89	3.95	30.25	53.95	11.85	_	_	_	_	100.00
Sinaloa	0.10	0.79	0.72	24.66	48.34	0.60	24.89	_	_	100.00
Sonora	98.91	44.64	36.48	13.49	4.54	0.64	0.10	0.07	0.04	100.00
Other	0.10	5.43	17.44	61.66	10.98	2.09	1.33	0.53	0.53	100.00
	100.00	0.40	17.44	01.00	10.90	2.55	1.55	0.00	0.00	100.00
	1 100.00									
City in Mexico										
Agua Prieta	13.37	49.51	36.82	9.92	1.72	1.03	0.34	0.33	0.33	100.00
Caborca	0.15	1.76	15.67	42.94	39.63	-	_	_	_	100.00
Cananea	0.93	7.55	27.39	50.18	14.88	_	_	_	_	100.00
Cibuta	0.62	63.60	36.40	-	-	-	_	_	_	100.00
Cumpas	0.76	39.81	48.07	6.06	6.06	-	-	-	-	100.00
Esqueda	0.18	25.00	25.00	25.00	25.00	-	_	_	_	100.00
Guavmas	0.30	_	57.78	33.77	-	8.44	_	_	_	100.00
Hermosillo	1.32	5.72	16.11	35.09	27.40	13.70	1.96	0.02	_	100.00
Imuris	1.56	31.84	53.30	11.55	3.30	_		_	_	100.00
Magdalena	2.45	7.09	47.25	35.16	8.39	2.10	_	_	_	100.00
Mexicali	0.61	-	27.20	55.70	17.10	-	-	-	-	100.00
Naco	3.11	54.13	36.63	6.84	2.39	-	-	-	-	100.00
Nogales	46.90	48.99	36.77	11.74	2.34	0.16	-	-	-	100.00
Puerto Penasco	0.08	-	50.00	37.50	-	12.50	_	_	-	100.00
San Luis RC	24.10	42.45	35.27	13.59	8.27	0.42	-	-	-	100.00
Santa Ana	0.76	13.21	53.10	26.95	6.74	-	-	-	-	100.00
Sasabe	0.17	65.63	29.69	4.69	-	-	-	-	-	100.00
Sonoita	1.19	57.12	25.34	13.17	4.37	-	-	-	-	100.00
SUM	98.56									

The three largest border cities in Sonora -- Nogales, San Luis Rio Colorado and Agua Prieta – generate the bulk of visitors to Arizona; 46.9 percent are from Nogales, 24.1 percent are from San Luis Rio Colorado and 13.37 from Agua Prieta. About 4.46 percent originate from the other three Sonoran border communities, – Naco, Sonoita and Sasabe combined, and the remaining 7.41 percent from other towns near the border such as Magdalena, Caborca, Imuris, Santa Ana, Cibuta, Cananea, and Cumpas (Figure 8).

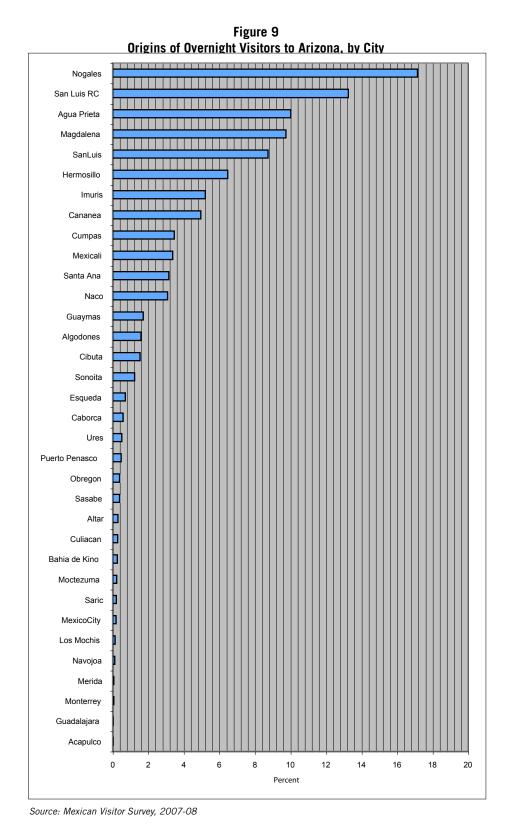


Hermosillo, Sonora's capital and the largest city, is the origin of 1.32 percent of all Mexican visitors to Arizona. The two other large cities located further south away from the border, Guaymas and Puerto Peñasco, contribute 0.3 and 0.08 percent of all Mexican visitors to Arizona.

Table 19 also shows visitors by origin and monthly income. Visitors from Sinaloa, have by far the highest incomes. More than 73 percent of all Sinaloa visitors have monthly incomes above 20,000 pesos.

As expected, visitors from border- and near-border localities have lower income distribution than visitors that have to travel longer distances to the border. Generally, this pattern holds. This is especially true for visitors from smaller towns, such as Altar, Cibuta, Sonoita and Sasabe, where more than 60 percent of border crossers have monthly household incomes of less than 10,000 pesos. Of all visitors from the three largest border cities -- Nogales, San Luis Rio Colorado and Agua Prieta -between 40 and 50 percent have monthly household incomes of less than 10,000. In comparison, more than 76 percent of visitors from Hermosillo have monthly incomes above 15,000 pesos.

The origin of overnight visitors is in Figure 9. As expected, the percentages of overnight visitors coming from the three major Sonoran border communities – Nogales, San Luis RC, and Agua Prieta - while still the largest are substantially smaller than the percentages of all visitors shown in Table 7. Overnight visitors tend to come from further south of the border. "Other" originating cities include: Puerto Penasco, 0.49 percent; Obregon, 0.40 percent; Sasabe, 0.39 percent; Altar, Culiacan, and Bahia de Kino, each at approximately 0.30 percent; Moctezuma, Saric and Mexico City, each at approximately 0.20 percent; Los Michis and Navajoa at approximately 0.15 percent; and Merida and Monterrey, each under 0.10 percent; and Acapulco and Guadalajara, each 0.03 percent.



# **Characteristics of Mexican Visitors to Arizona's Major Destinations**

The previous sections presented and discussed characteristics of Mexican visitors by port of entry (i.e., by port of exit) regardless of what was their final destination in Arizona. In this section characteristics of Mexican visitors are developed for six major destinations: Nogales, Douglas, San Luis, Yuma, metro Phoenix and metro Tucson. The original questionnaire asked all respondents which Arizona cities they visited. While visitors knew the names of border communities, majority of them could not identify individual cities within the two major metropolitan areas. Even though Phoenix metropolitan visitors could name specific malls scattered throughout the area, very few visitors identified any of the more than 20 cities other than "Phoenix."

Table 20
Reasons for Visit, by Destination (Percentages)

Leisure Reason for Visit						
Destination	Leisure Health	Leisure Vacation	Leisure Friends/Relatives	Leisure Shopping	Leisure Other	Leisure All
Douglas	0.36	0.72	8.21	79.18	1.43	89.90
Nogales	0.13	0.17	4.23	50.32	0.17	55.02
Metro Phoenix	0.02	0.05	11.26	87.46	0.08	98.87
San Luis	-	-	5.28	54.51	0.23	60.02
Metro Tucson	-	1.02	8.99	82.58	-	92.59
Yuma	-	-	4.79	41.01	-	45.80

			<b>Business Reason for Visit</b>	<u>i</u>		
	Business	Business	Business	<b>Business</b>	<b>Business</b>	Bus & Leisure
Destination	Convention	Training	Shopping	Other	All	Sum
Douglas	0.36	-	0.36	9.39	10.11	100.00
Nogales	-	0.04	0.64	44.31	44.99	100.00
Metro Phoenix	0.32	0.13	0.01	0.66	1.12	100.00
San Luis	-	-	0.20	39.78	39.98	100.00
Metro Tucson	0.02	0.01	0.67	6.71	7.41	100.00
Yuma	-	-	0.76	53.44	54.20	100.00

Source: Mexican Visitor Survey, 2007-08

Reasons for visit by destination city are shown in Table 20. Leisure is the primary reason for visiting for between 45.8 percent and 98.9 percent of all visitors, depending on the destination. Almost all visitors to the metro Phoenix and Tucson areas are leisure visitors (98.9 percent and 92.6, respectively). Visiting friends and relatives is often more important reason given by Mexican visitors to the Phoenix area (11.3 percent) and Metro Tucson area (9.0 percent). Shopping is the primary reason for visit between 50.3 and 82.6 percent of Mexican visitors to all destination cities, except Yuma. For visitors to Yuma, shopping is less important, representing the primary reasons for 41 percent of those visiting the Yuma area.

Business is cited by between 1.12 percent and 54.2 percent of visitors to Arizona. Most of these visitors are workers in Nogales, San Luis and Yuma. Business shopping is the primary reason for less than 1 percent in all destination cities.

Table 21 presents the number of parties visiting each destination area, party size, and length of stay.

Table 21
Party Characteristics and Length of Stay, by Destination

Destination	Number of Parties	Party Size	Average Length of Stay (nights)	Percent Stayed 1 or More Nights
Douglas	1,422,253	1.61	0.07	3.86
Nogales	6,588,778	1.44	0.08	3.86
Metro Phoenix	537,649	2.78	3.27	98.69
San Luis	1,694,225	1.58	0.73	4.71
Metro Tucson	1,008,176	2.68	2.55	87.52
Yuma	1,492,647	1.78	0.90	12.58

Metro Tucson's 1 million visitor parties and metro Phoenix 0.54 million visitor parties come in relatively large parties, with 2.68 and 2.78 persons per party, respectively. These parties are larger than those who stay in border cities. This may not be surprising; for Mexican visitors coming further north the trip may represent more of a family trip and thus is reflected in larger party sizes for non-border cities.

The longer the trip and the more expensive the trip, the longer the visitor party is expected to stay at the destination city. This is shown clearly in Table 21. Close to 99 percent of visitors to metro Phoenix and more than 87 percent of visitors in metro Tucson spend at least one night there. Average length of stay is 3.27 nights for visitors to metro Phoenix and 2.55 nights in metro Tucson. The comparison with the 2001 study suggests that overall the percentage of those visitors who spent the night has increased, and with the exception of metro Phoenix, the length of stay increased as well.

# V. Travel Behavior in Major Destinations

This section provides a snapshot of Mexican visitors in major Arizona destinations and information about shopping behavior and attractions visited. In the first part of this section shopping destinations are identified for each major destination, including Phoenix and Tucson metro areas, Yuma and border communities of San Luis, Nogales, Douglas, and Lukeville. Detailed account of attractions visited is provided for Phoenix and Tucson metro areas.

The second part of this section provides insight into how Mexican visitors learn about shopping and attraction destinations. One of the major changes in comparison to previous studies is the use of new technology – Internet. However, the majority of visitors use the information obtained through friends and relatives.

Throughout the section differences between visitors arriving by air, by car or as pedestrians, are highlighted. These differences are helpful in designing appropriate marketing strategies.

### **Phoenix Metro Area Visitors**

Of the Mexican visitors who travel to metro Phoenix, 98.87 percent come for leisure reasons, primarily for shopping and visiting friends and relatives. They travel in parties of 2.78 persons and stay an average of 3.27 nights. Of all visitors to metro Phoenix, almost all (98.69) spend the night. According to survey data, 4.39 percent of parties crossing at Nogales continue to metro Phoenix, 4.08 percent of those crossing at Douglas, and 5.7 percent at San Luis. A relatively higher percentage of crossers at Lukeville (11.82 percent), Sasabe (11.71 percent) and Naco (7.96 percent) continue to metro Phoenix, but these are Arizona's smallest border ports of entry, i.e., the absolute number of crossers is smaller.

### **Shopping Destinations in Metro Phoenix**

As expected, there are differences in shopping destinations and attractions visited between visitors arriving by air and those arriving by car.

Table 22 presents shopping destinations of all Mexican visitors to the Phoenix metro area, as well as for those arriving by air and those arriving by car.

The most popular shopping destination among Mexican visitors arriving to Phoenix metro area by air is the Arizona Mills mall, which was visited by 87.20 percent of all visitors. Between 20 and 24 percent of Mexican visitors shop in one or all five of the following malls: Desert Sky Mall, Fiesta Mall, Arizona Center, Chandler Fashion Center, and Biltmore Fashion Park, followed by Superstition Springs Mall and Arrowhead Towne Center. At least one in ten Mexican visitors shopped in one (or all) of the following: Borgata at Scottsdale, Cabela's, Scottsdale Fashion Square, Desert Ridge Marketplace, and IKEA. The Metrocenter Mall, and Paradise Valley Mall attracted between five and 10 percent of Mexican visitors each, followed closely by Kierland Commons. Less than one percent visited other shopping centers, while 0.53 percent indicated no shopping in any of the malls or shopping centers while visiting friends and relatives.

Table 22
Where Mexican Visitors to Metro Phoenix Shopped (percent of parties)

Malls	All parties	Air travelers	Car travelers
Arizona Mills	86.68	87.20	85.64
Desert Sky Mall	17.94	23.47	6.91
Fiesta Mall	18.12	22.40	9.57
Arizona Center	15.99	20.80	6.38
Chandler Fashion Center	17.05	20.27	10.64
Biltmore Fashion Park	16.16	20.00	8.51
Superstition Springs Mall	14.92	18.13	8.51
Arrowhead Towne Center	12.61	17.07	3.72
Borgata at Scottsdale	11.19	14.13	5.32
Cabela's	10.12	12.27	5.85
Scottsdale Fashion Square	8.17	10.67	3.19
Desert Ridge Marketplace	8.17	10.40	3.72
IKEA	12.61	10.13	17.55
Metrocenter Mall	14.21	9.33	23.94
Paradise Valley Mall	5.15	6.40	2.66
Kierland Commons	3.73	4.53	2.13
Other	0.36	0.53	0.00

Non-mall Stores	All parties	Air travelers	Car travelers
Wal-Mart	33.04	24.53	50.00
Best Buy	21.49	21.87	20.74
Costo	22.38	19.47	28.19
Target	18.83	14.67	27.13
Circuit City	8.88	11.20	4.26
Walgreens	14.03	8.80	24.47
Mervyn's	12.97	8.53	21.81
Ross	14.39	6.40	30.32
K-Mart	5.51	5.07	6.38
Marshall's	6.93	4.80	11.17
Sam's Club	2.84	3.73	1.06
Home Depot	3.73	2.67	5.85
Lowe's	2.13	1.87	2.66
Food City	1.60	1.87	1.06
TJ Maxx	1.07	1.33	0.53
Jared's	0.71	1.07	0.00
Fry's	2.49	1.07	5.32
Albertson's	0.53	0.80	0.00
Rancho Market	0.36	0.53	0.00
Osco	0.53	0.27	1.06
7 Eleven	0.18	0.27	0.00
Safeway	0.18	0.27	0.00
Payless	0.18	0.27	0.00
Kohl's	0.18	0.27	0.00
Office Depot	0.18	0.27	0.00
Auto Zone	0.36	0.27	0.53
Checker Auto	0.18	0.27	0.00
Other	0.53	0.27	1.06

Among the non-mall stores, Wal-Mart is the most popular with 24.53 percent of Mexican visitors shopping there. It is followed by Best Buy where 21.87 percent of Mexican visitors shop and Costco with 19.47 percent. Between 10 and 15 percent of Mexican visitors shop at Target and/or Circuit City. Next come stores like Walgreens, Mervyn's, Ross and K-Mart with 5 to 9 percent of all Mexican visitors shopping there. Between one and five percent of all Mexican visitors shop at stores such as Marshall's, Sam's Club, Home Depot, Lowe's, Food City, TJ Maxx, Jared's and Fry's.

Less than one percent of Mexican visitors shop in other stores in the Phoenix metro area, among which are Albertson's, Rancho Market, Osco, 7 Eleven, Safeway, Payless Shoes, Kohl's, Office Depot, Auto Zone, Checker Auto, and used clothing stores.

The most popular shopping destination among Mexican visitors traveling to Phoenix metro area by car is the Arizona Mills mall, which was visited by 85.64 percent of all visitors. The Metrocenter is the second most popular shopping destination, although with 23.94 percent, it is far behind Arizona Mills. IKEA and Chandler Fashion Square attract between 10 and 20 percent of Mexican car travelers. Other shopping centers, including Fiesta Mall, Biltmore Fashion Park, Superstition Springs Mall, Desert Sky Mall, Arizona Center, Cabela's, and Borgata at Scottsdale, each attracted between five and 10 percent Mexican visitors traveling by car. Between two and five percent shop at Arrowhead Towne Center, Desert Ridge Marketplace, Scottsdale Fashion Square, Paradise Valley Mall, and/or Kierland Commons.

Among the non-mall stores (Table 22), Wal-Mart is the most popular among car travelers with 50 percent of Mexican visitors shopping there. It is followed by Ross with 30.32 percent shopping there. Between 20 and 30 percent shop in one or all of the following stores: Costco, Target, Walgreens, Mervyn's and Best Buy. About 10 percent shop at Marshall's.

Between one and 10 percent shop at K-Mart, Home Depot, Fry's, Circuit City, Lowe's, Osco, Sam's Club, and Food City.

Less than one percent of Mexican visitors shop in other stores in the Phoenix area, such as TJ Maxx, Toys R Us, and Auto Zone.

### **Attractions Visited in Metro Phoenix**

Table 23 presents survey results regarding which attractions in the Phoenix metro area were popular with Mexican visitors. It shows the overall popularity, as well as the differences between visitors arriving by air and those arriving by car.

Table 23
Metro Phoenix Attractions Attended by Mexican Visitors (percent of parties)

Attraction	All parties	Air travelers	Car travelers
Casino	22.74	25.07	18.09
Zoo	13.50	12.80	14.89
Museum	6.75	8.00	4.26
Tempe Town Lake	2.49	3.20	1.06
Downtown	2.13	2.93	0.53
West World Scottsdale	2.13	2.40	1.6
IMAX	1.24	1.87	0
Arizona Temple	0.89	1.07	0.53
Concert/Theater	1.24	1.07	1.06
Events/Sports	1.07	1.07	0
Science Center	0.18	0.27	0
University Art Center	0.18	0.27	0
South Mountain	0.36	0.27	0
Water Park	0.18	0.27	0
Other	0.71	0.00	0.53

Phoenix area casinos are the most popular attraction for air travelers, with 25.07 percent of Mexican travelers visiting at least one casino. Gila River Casinos (with several locations) are the most popular attracting 19.73 percent of Mexican visitors. Other casinos, including Fort McDowell Casino, Harrah's Ak-Chin casino, Casino Arizona and Vee Quiva Casino attracted less than one percent each.

Zoos were visited by 12.80 percent of Mexican visitors arriving by air, which makes them the second most popular type of attraction among Mexican visitors. About 8 percent mentioned visiting a museum, although no specifics were provided.

Between two and four percent of Mexican visitors attended one (or all) of the following attractions: Tempe Town Lake, Downtown Phoenix, and West World Scottsdale. IMAX and the Arizona Temple attracted between one and two percent each, as did concert/theater and sporting events.

About one percent attended sporting events, including a baseball game and/or a soccer game.

Other Phoenix area attractions, such as South Mountain and a water park were visited by 0.27 percent each; approximately the same percentage visited the Science Center and/or the University Art Center.

Casinos are the most popular attraction among visitors to Phoenix metro area traveling by car, with 18.09 percent of them visiting at least one casino. Gila River Casinos (with several locations) are the most popular, attracting 15.43 percent of Mexican visitors. Less than 3 percent visited another casino, although no specific names were provided.

Close to 15 percent of Mexican car travelers indicated visiting a zoo; more than 10 percent specifically mentioned visiting the Phoenix Zoo. About 4.26 percent mentioned visiting a museum, although no specifics were provided.

Between one and three percent of Mexican visitors traveling by car visited one (or all) of the following attractions: West World Scottsdale, concert/theater event, and Tempe Town Lake.

Downtown Phoenix, the Arizona Temple, and South Mountain attracted less than one percent each of those that traveled by car.

# **Tucson Metro Area Visitors**

The survey results have shown that visitors to metro Tucson arrive by car through each of the six border ports of entry as well as by air via Tucson and Phoenix airports. About 6.51 percent of visitor parties interviewed at Phoenix airport reported visiting the metro Tucson area.

Tucson is about 60 miles (100 kilometers) from the Nogales border port of entry (BPOE). Survey data suggest that more than 13 percent of parties coming through Nogales visit metro Tucson. Close to 13 percent of those crossing at Douglas BPOE, also visit metro Tucson. At San Luis BPOE, which is farthest away from the Tucson metro area, 6.97 percent of all parties continue to Tucson. The percentage of crossers who continue to Tucson is larger at Lukeville (15.45 percent) and Naco (17.70 percent), but these are relatively small border crossings. At Sasabe, the smallest of the Arizona-Sonora BPOE, more than 42 percent continue to the Tucson metro area.

Mexican visitors to the Tucson metro area travel in parties of 2.68 persons, on average, and spend an average of 2.55 nights. They come primarily for leisure reasons (92.59 percent), mainly for shopping and visiting friends and relatives. Most (87.52 percent) spend the night in the area when they visit.

As expected, there are differences between air travelers and car travelers in terms of shopping destinations and attractions visited.

### **Shopping Destinations in Metro Tucson**

Table 24 presents data on shopping destinations in the Tucson metro area as captured in 2007-08 survey. It shows results for all visitors (regardless of mode of transportation or port-of-entry), and compares them to visitors arriving by air, and those traveling by car. The results include visitors surveyed at the Tucson airport as well as all other visitors who exited Arizona by car through one of the six border crossings or via Phoenix airport. A smaller number of Mexican visitors to metro Tucson crossed the border on foot; these include shoppers who used bus or shuttle services from border towns to metro Tucson; for simplicity, in the remaining text they are included under "car travelers."

The Tucson Mall is the most popular shopping destination, with 72.56 percent of all Mexican visitors shopping there. It is followed by the Park Place Mall, with 55.67 percent. In comparison with the 2001 survey, it is interesting that the difference between Tucson Mall and Park Place Mall has narrowed in 2007-08. In 2001 the Tucson Mall was 1.78 times more likely to be shopped at than (then) Park Mall; in 2007-08, only 1.3 times. This is most likely the positive effect of the expansion and upgrade of the Park Place Mall that occurred since the last study.

The third place Foothills Mall attracts 13.72 percent of Mexican visitors. Other malls and shopping centers, attracting less than 8 percent of Mexican visitors, include Plaza Palomino, El Con Mall, St. Phillips Plaza, La Encantada, Casas Adobes and Crossroads shopping center.

Among the non-mall stores (Table 24), Wal-Mart is the most popular with 39.96 percent of Mexican visitors shopping there. It is followed by Costco with 31.61 percent, Best Buy with 21.67 percent, Target with 21.27 percent, Ross 19.88 percent, Mervyn's 17.69 percent, and Walgreens with 14.71 percent of Mexican visitors shopping there. Circuit City and Marshall's attract between 8 and 9 percent; Home Depot, Fry's, Food City, Lowe's, Babies R Us, and Sam' Club between 1 and 4 percent. Stores like K-Mart and TJ Maxx attract less than 1 percent.

Table 24
Where Mexican Visitors to Metro Tucson Shopped (percent of parties)

Mall/Shopping Center	All parties	Air travelers	Car travelers
Tucson Mall	72.56	80.00	69.55
Park Place Mall	55.67	52.41	56.98
Foothills Mall	13.72	29.66	7.26
Plaza Palomino	7.95	22.07	2.23
El Con Mall	6.96	6.21	7.26
St. Phillips Plaza	5.57	15.17	1.68
La Encantada	3.18	11.03	0.00
Casas Adobes Plaza	2.58	7.59	0.56
Crossroads	1.39	4.14	0.28

Non-mall stores	All parties	Air travelers	Car travelers
Wal-Mart	39.96	15.86	49.72
Costco	31.61	35.86	29.89
Best Buy	21.67	19.31	22.63
Target	21.27	13.10	24.58
Ross	19.88	7.59	24.86
Mervyn's	17.69	6.21	22.35
Walgreens	14.71	8.28	17.32
Circuit City	8.95	15.86	6.15
Marshall's	8.55	5.52	9.78
Home Depot	3.78	0.00	5.31
Fry's	3.38	0.00	4.75
Food City	2.98	0.00	4.19
Lowe's	1.99	0.00	2.79
Babies R Us	1.59	0.69	1.96
Sam's Club	1.39	1.38	1.96
Gas station	1.19	0.00	1.68
Jared's	0.80	2.76	0.00
Auto Zone	0.80	0.69	0.84
K Mart	0.60	0.00	0.84
TJ Maxx	0.40	1.38	0.00
Office Max	0.40	0.00	0.56
Family Dollar	0.40	0.00	1.96
American Home	0.20	0.00	0.28
Osco	0.20	0.00	0.28
K B Toys	0.20	0.00	0.28
Payless Shoes	0.20	0.00	0.28
Thrift store	0.20	0.00	0.28
Pep Boys	0.20	0.00	0.28
Kohl's	0.20	0.00	0.28
Office Depot	0.20	0.00	0.28
Sally's Beauty	0.20	0.00	0.28

Tucson Mall is the favorite shopping place for both groups; it is visited by 80 percent of all air travelers and 69.55 percent of car travelers. In contrast, the second favorite shopping mall, Park Place, is more often visited by car travelers than by those arriving by air: 56.98 percent and 52.41 percent respectively.

Foothills Mall and Plaza Palomino are favorite shopping destinations of Mexican air travelers with 29.66 and 22.07 percent shopping there. In contrast, these two shopping destinations attract only 7.26 and 2.23 percent of car travelers, respectively.

Similarly, the recently opened La Encantada shopping center and St. Phillips Plaza, both housing upscale stores, are more popular among air travelers attracting between 10 and 15 percent of Mexican visitors to metro Tucson. In comparison, very few car travelers shop there.

Among the non-mall stores, Costco is the most favorite store for Mexican air travelers; 35.86 percent shops there. It is followed by Best Buy (19.31 percent), and Wal-Mart and Circuit City (each attracting 15.86 percent of air travelers).

Wal-Mart is the most favorite store for Mexican car travelers; close to 50 percent shops there. An additional five stores attract between 20 and 30 percent of Mexican car travelers: Costco (29.89 percent), Ross (24.86 percent), Target (24.58 percent), Best Buy (22.63 percent), and Mervyn's (22.35 percent). These stores are followed by Walgreens with 17.32 percent.

Another difference between the two groups is a greater number and variety of stores visited by car travelers, which is expected. Among these are stores with home improvement materials, appliances and furnishings such as Home Deport (5.31 percent) and Lowe's (2.79 percent); food stores such as Fry's (4.75 percent), and Food City (4.19 percent); office supplies such as Office Max (0.56 percent) and Office Depot (0.28 percent).

It is interesting that the Costco stores are considerably more popular than Sam's Club stores among both groups.

### **Attractions Visited in Metro Tucson**

Table 25 presents survey results regarding which attractions were visited by Mexican visitors. The results include visitors surveyed who arrived by air (via Tucson or Phoenix airport) as well the visitors who came by car.

Table 25
Metro Tucson's Attractions Visited by Mexican Visitors

Attraction	All visitors	Air travelers	Car travelers
Casino	29.82	40.00	25.70
Reid Park Zoo	15.71	13.10	16.76
Old Tucson Studios	9.34	13.10	7.82
Arizona-Sonora Desert Museum	6.16	10.34	4.47
Museum	3.58	6.90	2.23
Saguaro National Park	1.99	6.21	0.28
San Xavier Mission	1.59	2.07	1.40
Tucson Convention Center	1.59	4.14	0.56
Concert/Theater	0.99	2.07	0.56
Colossal Cave	0.60	1.38	0.28
University of Arizona	0.40	1.38	0.13
Downtown	0.20	0.69	0.13

Tucson's casinos are the most popular attraction; they are visited by 29.82 percent of all Mexican visitor parties. However, when individual attractions are listed, Desert Diamond Casino is the number one attraction, mentioned by 11.58 percent of visitors, while Casino Del Sol was mentioned by 8.24 percent.

The second most visited attraction is Reid Park Zoo with 15.71 percent, followed by Old Tucson Studios with 9.34 percent, Arizona-Sonora Desert Museum with 6.16 percent and other museums with 3.58 percent. Pima Air Museum was specifically mentioned by 1.19 percent.

The list of other attractions cited in the survey included Saguaro National Park, Tucson Convention Center, Concert/Theater (not specified), San Xavier Mission, Colossal Cave, University of Arizona, and the downtown district.

Comparison with the 2001 study suggests that the attraction of casinos has relatively declined; in 2001, 46 percent of Mexican visitors visited Desert Diamond Casino or/and Casino Del Sol, while in 2007-08, less than 30 percent visited one or/and another casino. The latest survey also suggests that the Desert Diamond Casino surpassed Casino Del Sol as the more popular of the two.

As shown in Table 25, casinos are the most popular attraction for Mexican air travelers to Tucson; 40 percent of all Mexican visitor parties traveling by air mentioned visiting at least one casino. Desert Diamond Casino is more popular, but the difference is relatively small; 16.44 versus 14.38 percent of Mexican air travelers.

Casinos are also the main attraction of visitors traveling by car, but relatively less popular than for air travelers; 25.7 percent of car travelers visited at least one casino. Desert Diamond casino is also more frequently visited than Casino del Sol.

In addition to casinos, air travelers are also more likely to visit Old Tucson Studios (13.10 percent) and Arizona-Sonora Desert Museum (10.34 percent), than car travelers (7.82 percent and 4.47 percent respectively).

Air travelers are also more likely to visit Saguaro National Park (6.21 percent), Tucson Convention Center (4.14 percent) or a concert/theater event (2.07 percent) than car travelers (0.28, 0.56 and 0.56 percent, respectively).

Pima Air Museum is more attractive to air travelers; 4.11 percent of air travelers visited this museum compared to and 0.28 percent of car travelers.

Other attractions, such as, San Xavier Mission, University of Arizona and Colossal Cave are more often visited by air travelers than car travelers.

# **Visitors to Arizona's Border Cities**

### **Nogales Visitors**

Shopping destinations for Mexican visitors in Nogales are shown in Table 26. Only 5.16 percent of visiting parties indicated shopping at the Mariposa Mall in Nogales. The majority of shoppers in Nogales went to non-mall stores. Almost 50 percent of all shoppers in Nogales shop at Wal-Mart. The Food City and Factory 2–U follow with 38.08 and 31.67 percent, respectively. Family Dollar store, Ross, and JC Penney attract between 10 and 16 percent each of Mexican shoppers.

Table 26
Where Mexican Visitors to Nogales Shopped (percent of parties)

	% of
Malls/Shopping Centers	parties
Mariposa Mall	5.16
	•
	% of
Non-Mall Stores	parties
Wal-Mart	49.11
Food City	38.08
Factory 2-U	31.67
Family Dollar	15.12
Ross	14.86
JC Penney	10.59
Brackers	5.60
Big Lots	5.60
Safeway	5.52
Payless Shoes	5.25
Fashion store	4.63
Walgreens	4.09
Bazar	3.83
Home Depot	3.65
Radio Shack	3.11
Dollar Mart	2.67
KidsSupercenter	2.49
K Mart	2.22
Western Warehouse	1.60
Mazon	1.42
Duty Free	1.33
Stage	1.16
Other discount store	0.53
Auto Zone	0.36
True Value	0.18
Cindarela Shoe Store	0.18
La Familia	0.18
Osco	0.09
Market	0.09
Checkers	0.09
Other	0.18

Source: Mexican Visitor Survey, 2007-08

The remainder of the list contains various discount stores, mostly apparel, shoes and children's clothing stores. Buying gasoline is also a frequent expenditure for Mexican visitors to Arizona border cities; about every tenth visitor purchased gasoline in Nogales.

### **Douglas Visitors**

Table 27 presents shopping destinations for Mexican visitors to Douglas. Like in Nogales, Wal-Mart is the most frequent shopping destination for Mexican visitors to Douglas. One Wal-Mart store is located within the city limits, and three stores are in Sierra Vista

Table 27
Where Mexican Visitors to Douglas Shopped (percent of parties)

	% of
Malls/Shopping centers/Stores	parties
Wal-Mart	54.27
Safeway	33.17
Factory 2-U	24.87
Family Dollar	18.34
Food City	16.83
JC Penney	13.32
Gas station	12.56
Dollar Tree	9.30
Radio Shack	4.77
Payless Shoes	3.02
Stage	2.76
La Familia	1.76
Duty Free	1.26
Discount store	0.50
B&D Lumber	0.25
Midwest Pharmacy	0.25
Rite Aid	0.25
Double H	0.25
Checkers	0.25

Source: Mexican Visitor Survey, 2007-08

Interestingly, Safeway is the most popular among grocery stores; about every third Mexican visitor shops there. Close to 25 percent shop in Factory 2-U, while more than 18 percent shop in the Family Dollar stores, and close to 17 percent in Food City. More than every tenth visitor also shops at JC Penney's. Close to 13 percent purchase gasoline at Douglas gas stations.

The remainder of the list includes additional discount stores, such as Dollar Tree, drug stores, and auto parts stores.

### **Yuma Visitors**

Table 28 shows shopping destinations for Mexican visitors to Yuma, which is located about 25 miles north of the border, and accessed primarily through San Luis border port of entry.

Table 28
Where Mexican Visitors to Yuma Shopped (percent of parties)

Malls/shopping centers	% of parties
Yuma Historical Mall	6.10
Yuma Palms	0.39

Non-mall stores	% of parties
Wal-Mart	25.20
Sams Club	9.06
JC Penney	9.06
Target	6.69
Family Dollar	6.10
Factory 2-U	5.12
Safeway	4.33
Mervyn's	3.35
Best Buy	2.76
Big Lots	2.76
Home Depot	1.57
Albertson's	0.59
Lowes	0.39
Circuit City	0.39
Kohl's	0.39
Rite Aid	0.39
Western Warehouse	0.20

Source: Mexican Visitor Survey, 2007-08

Yuma has two main shopping malls, yet the non-mall stores are more frequent shopping destinations; about 6.1 percent of Mexican parties shop at Yuma Historical Mall and less than 1 percent at Yuma Palms.

Wal-Mart is the most frequent shopping destination, with 25.2 percent saying they shopped there. All other stores attract less than 10 percent of all Mexican visiting parties. Sam's Club and JC Penney attract about 9 percent of visiting parties, followed by Target, Family Dollar and Factory 2-U stores (6.69, 6.10 and 5.12 percent). Safeway is the most popular among food stores, with 4.33 percent shopping there. Between 1 and 4 percent shop in one or all of the following stores: Mervyn's, Best Buy, Big Lots and Home Depot. Less than one percent shop at Albertson's, Lowe's, Circuit City, Kohl's, Rite Aid, and Western Warehouse.

### **San Luis Visitors**

Table 29 shows shopping destinations for Mexican visitors to San Luis. The largest percent of Mexican visitors shop in discount stores such as Food City (41.73 percent), Factory 2-U (24.21 percent), or Family Dollar store (17.52 percent).

Table 29
Where Mexican Visitors to San Luis Shopped (percent of parties)

	% of
Stores	parties
Food City	41.73
Factory 2-U	24.21
Family Dollar	17.52
Kings Market	12.01
Discount store	11.42
Payless Shoes	10.43
Mercado del Sol	10.04
Fashion store	7.68
Gas station	7.48
Zody's	5.71
Rainbow Shoes	3.54
La Mexicana	1.57
Duty Free Shop	0.98
Other	0.60

Source: Mexican Visitor Survey, 2007-08

More than every tenth visitor also shops in one or all of the following stores: King's Market, general discount stores, Payless Shoes, and Mercado Del Sol. The names of some stores clearly indicate catering to Mexican shoppers.

### **Lukeville Visitors**

Table 30 shows where Mexican visitors shop in Lukeville. Being the smallest of Arizona's border ports of entry (aside from Sasabe), Lukeville offers limited choice of retail stores. Of those who do shop in Lukeville, more than two thirds shop in the general merchandise store; close to 13 percent shop in the duty free shop. More than a third purchase gasoline at the Lukeville gas station.

Table 30
Where Mexican Visitors to Lukeville Shopped (percent of parties)

	Number of	% of
Stores	parties	parties
General store	73	77.66
Gas station	33	35.11
Duty free store	12	12.77

# How Mexican Visitors Learned About Shopping Destinations and Attractions

Table 31 shows where Mexican visitors learned about Arizona's shopping destinations and attractions they visited. Data presents sources of information for different groups of visitors by mode of travel and destination city.

### Visitors to Metro Phoenix

About two thirds of all Mexican visitors arriving through the Phoenix airport and who responded to the question about how they learned about destinations and attractions indicated friends and relatives as the major source of information. About every fifth visitor did not know or did not remember. Less than a half percent indicated that they previously lived in Arizona.

Slightly more than 5 percent of visitors obtained the information on the internet, with Yahoo being the primary source. Television was the source of information for 2.40 percent, while periodicals and magazines were the source of information for about one percent of Mexican visitors, each. El Imparcial was mentioned as the main periodical.

Of the television channels, specifically mentioned were Discovery Channel and Channel 33.

Less than one in one hundred obtained information either from a radio announcement, Phoenix Center in Sonora, or a brochure/guidebook. The remaining sources, such as the Tucson Center in Sonora, hotel information or a coworker, each provided information for 0.26 percent of Mexican visitors.

In comparison, Mexican visitors arriving by car rely much more on information from friends and relatives than those arriving by air; 86.30 percent indicated friends and relatives as the major source of information about shopping/attraction destinations in the Phoenix area. They also seem to use the internet slightly more, but both rely heavily on Yahoo as a search engine. Metro Phoenix car/pedestrian travelers rely less on television for their information than air travelers, but slightly more on periodicals, in particular El Imparcial.

### **Visitors to Metro Tucson**

More than half of all Mexican air passengers that visited the Tucson area and who provided information about how they learned of destinations/attractions, indicated friends and relatives as the major source of information. About 15 percent answered that they did not know or did not remember. About one percent indicated previous knowledge from living in Arizona.

The internet turned out to be the second major source of information with 6.85 percent of Tucson air passengers finding information on-line. Yahoo was listed in 80 percent of all internet sources.

Table 31
How Mexican visitors Learned About Destinations/Attractions in Arizona (Percent of Parties)

How Mexican Visitors	Metro Phoenix	Metro Tucson	Metro Phoenix	Metro Tucson	Border cities	Border cities
Learned about Destination	air travelers	air travelers	by car	by car	by car	pedestrians
Friends or relatives	69.07	57.53	86.30	82.37	61.38	52.93
Don't remember or don't know	21.87	15.07	10.96	12.20	27.78	40.15
Internet	5.60	6.85	6.16	3.05	0.51	2.11
Yahoo	3.73	5.48	4.79	2.71	0.36	1.35
Other	1.86	1.37	1.37	0.34	0.36	0.75
Television station	2.40	2.05	0.68	2.37	1.38	0.30
Univision MX	0.00	0.00	0.00	0.34	0.44	0.00
Discovery	0.53	0.68	0.00	0.00	0.07	0.00
De Las Estrellas	0.00	0.00	0.00	0.00	0.07	0.15
Channel 40	0.00	0.00	0.00	0.34	0.00	0.00
Galavision	0.00	0.00	0.00	0.00	0.00	0.15
Channel 33	0.53	0.00	0.00	0.00	0.00	0.00
Other/not specified	1.33	1.37	0.68	1.69	0.80	0.30
Periodical	1.07	3.42	2.74	1.36	3.85	3.91
El Imparcial	0.53	2.74	2.74	0.68	2.25	3.91
AZ Daily Star	0.00	0.00	0.00	0.00	0.07	0.00
Other/not specified	0.54	0.68	0.00	0.68	1.75	0.45
Magazine	1.07	0.00	0.00	0.00	0.22	0.00
Radio station announcement	0.80	0.68	0.68	2.71	7.35	1.50
105.1 FM	0.00	0.00	0.00	0.34	2.33	1.35
104.3 FM	0.00	0.00	0.00	0.68	0.51	0.00
105.3 FM	0.00	0.00	0.68	0.34	0.58	0.00
109.6FM	0.00	0.00	0.00	0.00	0.07	0.00
96.7FM	0.00	0.00	0.00	0.00	0.07	0.00
Xeni	0.00	0.00	0.00	0.00	0.07	0.15
Other/not specified	0.80	0.68	0.00	0.00	3.71	0.00
Phoenix Center in Sonora	0.53	0.00	0.00	0.00	0.00	0.00
Brochure/Guidebook	0.53	0.68	0.00	0.00	0.00	0.00
Lived in Arizona	0.27	1.37	0.68	1.02	3.56	7.67
Tucson Center in Sonora	0.27	0.68	0.00	0.34	0.07	0.30
Hotel information	0.27	0.00	0.00	0.00	0.00	0.00
Coworker	0.27	0.00	0.00	0.00	0.00	0.00

Note: Percentages are computed based on number of parties per destination per mode of travel.

About three percent of Tucson air visitors acquired the information from periodicals, mainly El Imparcial; television and radio were a source of information for 2.05 and 0.68 percent of Mexican visitors, respectively. No specific radio stations were mentioned, while only Discovery channel was mentioned among television channels.

In comparison, car travelers to metro Tucson relay more on information from friends and relatives than those visitors arriving by air. The internet is relatively less important as a source of travel information for car travelers to the Tucson area than for air travelers or car travelers to metro Phoenix. It is, however, relatively more important than radio or television. Yahoo was listed as the main internet source.

Close to 3 percent of all car and pedestrian crossers learned about shopping destinations/attractions from the radio. The most popular radio station was 104.3; other specifically mentioned stations include 105.1 FM and 105.3 FM.

Television was the source of information for 2.37 percent of Mexican car and pedestrian crossers; Univision Mexico and Discovery Channel were the most frequently mentioned. More than half, however, did not specify the TV channel.

### **Visitors to Border Cities**

Table 31 also shows information sources for visitors to Arizona border cities. While friends and relatives remain the major source of information, border visitors are more likely to have lived in Arizona, and therefore draw on "first-hand" experience, compared with visitors to metro Phoenix or Tucson. Also, border residents tend to cross the border more frequently and know the area simply by being there; this is why large percentage of those, particularly pedestrians, who "don't remember or don't know" where they obtained information.

Interestingly, for car crossers, the radio is significantly more important than for any other group of visitors; 7.35 percent mentioned radio announcement as the source of shopping information. Among radio stations, 105.1 FM, 105.3 FM and 104.3 FM are the most often mentioned. However, almost 50 percent did not indicate a specific radio station.

Periodicals are slightly more important for visitors to border cities than for visitors to metro Phoenix or Tucson; 3.85 percent of car crossers and 3.91 percent of pedestrians mentioned a periodical, in most cases El Imparcial.

Television is slightly more important for car crossers than pedestrians; Univision Mexico, Discovery Channel, De las Estrellas, and Galavison are specifically mentioned.

# VI. Expenditures by Mexican Visitors in Arizona

# **Direct Expenditures by Port of Entry**

Table 32 presents total direct expenditures of Mexican visitors to Arizona, by port of entry for 1977-78, 1991, 2001, and the current study year 2007-08.

Table 32

Total Direct Expenditures of Mexican Visitors to Arizona: 1977-78, 1991, 2001, and 2007-08, by Port of Entry (Millions of Dollars)

					Percent Change
Port of Entry	1977-78	1991	2001	2007-08	2001 to 2007-08
Douglas	26.1	140.9	98.8	466.4	372.1
Lukeville	7.3	17.7	13.8	58.0	320.3
Naco	6.7	31.0	30.8	98.4	219.6
Nogales	168.8	343.8	502.5	1,281.8	155.1
San Luis	99	131.1	194.2	735.3	278.6
Sasabe	0.8	0.5	4.7	16.1	242.5
Phoenix Airport	2	0.8	11.7	29.2	149.7 *
Tucson Airport	4.7	22.6	0.9	3.3	265.5 *
Total	315.3	668.2	857.4	2,688.7	213.6

<sup>\*</sup>Based on revised 2001 data for air passengers obtained in 2008. Revised data includes final destination travelers only.

Source: Mexican Visitor Survey, 2007-08

Total estimated direct expenditures by Mexican visitors to Arizona in 2007-08 were \$2.69 billion, an increase of 213.6 percent over estimated expenditures in 2001 (in current dollars). Adjusted for inflation direct spending was \$2.12 billion in 2001 dollars or 147.73 percent increase over spending in 2001. Direct expenditures estimated for 2001 for airport passengers were revised because of more precise data for 2001 that have recently become available. As discussed earlier in section I. Purpose and Research Design, the data used in the 2001 study included both visitors passing through Arizona as well as visitors whose final destination was Arizona. Although the methodology used in 2001 accounted for visitors passing through, the estimates are believed to be too high for that year. In order to make comparisons of expenditures, numbers of parties and expenditures per party between 2001 and 2007-08, the 2001 figures were revised to reflect the new airport data that include only final destination passengers. <sup>62</sup>

Total expenditures did not increase equally for visitors entering through all ports of entry. In particular, the highest percentage increase in direct expenditures is shown for visitors entering through Douglas and Lukeville, and the lowest relative increase for visitor parties entering through Nogales.

To better understand the source of these differing increases, expenditures are broken down into change in the number of parties and change in the expenditures per party as shown in Tables 33 and 34.

Table 33
Mexican Visitor Parties: 1977-78, 1991, 2001, and 2007-08, by Port of Entry (Thousands of Parties)

					Percent Change
Port of Entry	1977-78	1991	2001	2007-08	2001 to 2007-08
Douglas	713.6	1,251.1	1,995.2	1,847.2	-7.4
Lukeville	131.8	152.7	143.5	172.1	20.0
Naco	228.9	238.0	356.6	354.8	-0.5
Nogales	2,892.4	2,821.0	4,881.6	7,395.7	51.5
San Luis	2,333.9	2,405.6	2,988.0	3,551.3	18.9
Sasabe	25.4	6.7	40.2	34.6	-13.9
Phoenix Airport	2.9	0.7	7.9	11.5	45.8 *
Tucson Airport	7.3	19.9	1.0	1.6	56.0 *
Total	6,336.2	6,895.7	10,414.0	13,368.9	28.4

\*Based on revised 2001 data for air passengers obtained in 2008. Revised data includes final destination travelers only.

Source: Mexican Visitor Survey, 2007-08

Aside from Nogales, with a 51.5 percent increase in the number of visitor parties, Phoenix and Tucson airports have seen the highest increases in number of parties, 45.8 percent and 56 percent respectively. Overall, the number of Mexican visitor parties increased 28.4 percent since 2001, compared to 213.6 percent increase for total expenditures (Table 32). This pronounced difference in growth rates means that there had to be an overall increase in per party expenditures between 2001 and 2007-08. This finding echoes observations along the Texas-Mexico border, as mentioned earlier in one of the introductory sections. This is particularly the case with entrants through Douglas, Naco and Sasabe; in 2007-08 the number of visitor parties declined, while direct expenditures increased.

### Average per Party Expenditures, by Port of Entry

Table 34 shows an increase in per party expenditures of Mexican visitors compared to 2001. The past decade shows the highest relative increase in the last 30 years. Average per party expenditures increased for all border ports of entry, but most notably for Douglas and Sasabe. Visitors entering through Sasabe are spending more per party, but very few parties pass through the Sasabe port of entry so this increase has a very little impact on total Mexican visitor spending in Arizona. Note that these spending figures are by port of entry, not destination city. Portions of the people traveling through these ports go on to Tucson or Phoenix.

Table 34

Mexican Visitor per Party Expenditures in Arizona: 1977-78, 1991, 2001, and 2007-08, by Port of Entry (Dollars)

					Percent Change
Port of Entry	1977-78	1991	2001	2007-08	2001 to 2007-08
Douglas	36.63	112.63	49.51	252.51	410.02
Lukeville	55.57	115.80	96.39	336.95	249.57
Naco	29.16	130.34	86.47	277.42	220.83
Nogales	58.37	121.86	102.94	173.32	68.37
San Luis	42.41	54.50	65.01	207.05	218.49
Sasabe	29.73	68.05	115.97	464.88	300.86
Phoenix Airport	674.04	1,164.11	1,484.80	2,535.65	70.77
Tucson Airport	639.68	1,135.24	895.50	2,108.57	135.46
Total	49.77	99.82	91.75	201.11	119.20

Mexican parties exiting through Phoenix and Tucson airports have always had the highest average per party expenditures and therefore the increases are relatively small in comparison to changes to other ports of entry.

The difference in per party expenditures between Phoenix and Tucson airport travelers can partly be explained by reasons for visit and place of origin of Mexican visitors. Travelers to metro Phoenix tend to come from longer distances (Mexico City, Yucatan) than those to metro Tucson; visitors to metro Phoenix also stay longer than those in Tucson; visitors who come to Phoenix and/or Tucson also demonstrate higher expenditures per party.

### **Expenditure Categories**

Table 35 presents expenditures, by category for 1991, 2001, and 2007-08. Store purchases make up by far the largest expenditure category representing 57.5 percent of all Mexican visitor expenditures. Food purchases make up the second largest category (20.4 percent), of which more than 50 percent is comprised of grocery purchases. Transportation-related expenditures represent 7.4 percent of the total, with gasoline and automobile related expenses representing more than 80 percent of this category.

Table 35 Expenditure Categories: 1991, 2001, and 2007-08 (Thousands of Dollars)

Expenditure Ty	pe	1991		2001	2007-08	% of Column Total	Percent Change 2001 to 2007-08
Lodging		12,9	34	9,094	182,895	6.8	1,911.2
Total Food		173,9	71	321,742	547,333	20.4	70.1
	Restaurants	28,7	88	81,750	241,610		
	Groceries	145,1	83	240,065	305,723		
Total Transport	ation	24,6	27	85,235	198,270	7.4	132.6
	Gasoline & Auto	20,9	87	68,706	170,253		
	Air travel	2,9	69	4,620	5,727		
	Car rental	6	71	11,909	1,919		
	Bus, taxi	na	na		20,371		
Stores		222,3	12	373,541	1,546,257	57.5	313.9
Total Medical		24,1	05	6,388	12,504	0.5	95.7
	Doctors	15,7	45	1,837	2,086		
	Hospitals	5,2	05	3,597	2,047		
	Medicine	3,1	55	954	8,370		
Entertainment		na	na		111,140	4.1	
Total Business		148,2	38	45,032	37,000	1.4	(17.8
All Other		82,0	63	14,125	51,443	1.9	264.2
Total		688,2	56	857,402	2,688,670	100	213.6

Source: Mexican Visitor Survey, 2007-08

Business-related expenditures declined from 2001 about 17.8 percent. Medical expenditures increased 95.7 percent, although their share in total expenditures remains only about 0.5 percent.

Lodging expenditures in 2007-08 show the highest percentage increase among all categories. This corresponds to the increase in the portion of Mexican visitors spending at least one night in Arizona.

As expected, both per party expenditures and expenditures by category differ substantially by mode of travel (Tables 36 and 37).

Pedestrians spend an average of \$71.99 per party compared to \$302.40 per party for visitors entering by motor vehicles and \$2,484.71 for visitors traveling by air. Pedestrians spend more than 80 percent on purchases in department and other merchandise stores, and on food. As in the past, pedestrians spend relatively larger shares of their money on shopping in grocery stores than other two groups. On average, a pedestrian party spends \$36.27 in department and other merchandise stores, \$17.07 in grocery stores, and \$7.52 in restaurants.

Parties traveling by motor vehicle spend most of their money in merchandise stores, and relatively less on food. Spending on food is almost equally divided between grocery stores and restaurants. On average, they

spend \$178.88 in merchandise stores, \$27.57 in grocery stores, and \$26.33 in restaurants, per party.

Table 36
Per Party Expenditures, by Category, by Travel Mode (Dollars per Party)

Categories		Motor Vehicle	Pedestrian	Air	All Modes
Lodging		23.16	1.32	352.84	13.68
Total Food		53.90	24.59	255.59	40.94
	Restaurants	26.33	7.52	216.20	18.07
	Groceries	27.57	17.07	39.39	22.87
Total Transport	tation	22.08	4.52	666.98	14.83
	Gasoline	21.52	1.39	93.57	12.56
	Auto expenses	0.32	-	2.49	0.18
	Air Travel	-	-	437.85	0.43
	Car Rental	-	0.04	130.13	0.14
	Buses, cabs	0.24	3.09	2.94	1.52
Stores		178.88	36.27	981.18	115.66
<b>Total Medical</b>		1.52	0.16	27.11	0.94
	Doctors	0.28	-	4.66	0.16
	Hospitals	0.19	0.09	7.21	0.15
	Medicine	1.06	0.07	15.24	0.63
Entertainment		13.67	1.57	88.73	8.31
Other goods		4.53	2.73	18.87	3.73
Other services		0.18	-	3.58	0.10
<b>Total Business</b>		4.20	0.85	75.87	2.77
All Other		-	-	12.27	0.01
Total		302.40	71.99	2,484.71	201.11

Source: Mexican Visitor Survey, 2007-08

Air travelers spend a little more than one third of all expenditures in stores and about one quarter on transportation. Lodging expenses account for larger share than food expenses. An average party spends \$981.18 in stores and other merchandise stores, \$666.98 on transportation, \$255.59 on lodging, and \$216.20 on food.

### **Expenditures by Travel Mode and Reason for Visit**

Per party expenditures vary both by mode of travel and by reason for visit (Table 37). Per party expenditures range from \$84.75 for a pedestrian traveling to visit friends and relatives to \$7,022 for air passenger visiting Arizona for business-related shopping. Leisure visitor parties traveling by motor vehicle spend, on average, \$409.95, pedestrian leisure visitor parties spend \$122.83, and leisure visitor parties traveling by air spend \$2,247.73. Business travelers (including workers) spend \$29.64 if traveling by motor vehicles, \$11.52 if traveling by foot, and \$3,114.95 if traveling by air. Overall, Mexican visitors who come to Arizona spend the most if they are here for business shopping or for a business convention. These two categories, however, represent a small portion of overall expenditures.

Table 37
Per Party Expenditures, by Reason for Visit, by Travel Mode (Dollars)

Leisure Reason for Visit										
Travel Mode	Leisure Health	Leisure Vacation	Leisure Friends/Relatives	Leisure Shopping	Leisure Other	Total Leisure Average				
Motor Vehicle	154.99	327.18	337.05	422.23	58.66	409.95				
Pedestrian	- 1	180.00	84.75	125.99	-	122.83				
Air	2,953.27	2,299.94	1,748.69	2,577.75	1,829.39	2,247.73				
All Parties	174.91	296.58	263.60	308.37	57.47	302.45				

	Business Reason for Visit								
Travel Made	Business	Business	Business	Business	Total Business				
Travel Mode	Convention	Training	Shopping	Other	Average				
Motor Vehicle	50.00	250.00	440.44	11.41	29.64				
Pedestrian	-	-	250.63	9.85	11.52				
Air	2,858.22	2,133.85	7,022.00	4,591.26	3,114.95				
All Parties	862.69	672.49	415.39	11.00	21.59				

### **Expenditures by Income Group**

It is interesting to analyze total expenditures by income group. Table 38 shows that per party spending ranges from \$79.28 for parties with household incomes of less than \$10,000 pesos (per month) to \$1,769.65 for parties earning between 40,000 and 49,999 pesos (per month). Parties in households earning between 40,000 and 49,999 (pesos per month) represent only 0.12 percent of total visiting parties, and little bit more than 1 percent of total spending in Arizona by Mexican visitors.

Table 38
Spending per Party, Total Spending, by Monthly Income Group (Pesos/Dollars)

		Income Categories (Pesos)								
	Under	\$10,000-	\$15,000-	\$20,000-	\$30,000-	\$40,000	\$50,000-	\$80,000		
	\$10,000	\$14,999	\$19,999	\$29,999	\$39,999	\$49,999	\$79,999	or over		
				Income Catego						
	Under	\$929-	\$1,394-	\$1,860-	\$2,788-	\$3,717-	\$4,647-	\$7,435-		
	\$929	\$1,393	\$1,859	\$2,787	\$3,716	\$4,646	\$7,434	or over	Sum	
Per Party Expenditures \$	79.28	222.05	446.97	396.89	1,351.33	1,769.65	1,311.38	117.80	na	
Percent of Total Parties (% of Row Total)	44.06	36.32	13.89	4.86	0.64	0.12	0.07	0.04	100	
Percent of Total Expenditures (% of Row Total)	16.74	38.64	29.74	9.25	4.12	1.05	0.44	0.03	100	

Source: Mexican Visitor Survey, 2007-08

Parties earning less than 10,000 pesos a month constitute 44.06 percent of visitor parties, but represent less than 17 percent of total expenditures. Parties with 15,000 pesos or more represent 13.89 percent of visitor parties, but account for 29.74 percent of total expenditures in Arizona.

### **Expenditures, Distances Traveled, and Length of Stay**

Table 39 demonstrates that per party expenditures increase with distance traveled. Visitors traveling more than 500 miles spend \$1,287 per party while those traveling less than 10 miles spend between \$74 and \$85 per party. This table also demonstrates that fewer parties visit Arizona the further they have to travel.

Table 39
Spending per Party, Total Spending, by Distance Traveled

	Expenditures	% of Total	% of Total	
Distance Traveled	per Party (\$)	<b>Parties</b>	Expenditures	
Under 5 miles	74	64.60	20.49	
Over 5 and under 10 miles	85	11.38	4.15	
Over 10 and under 50 miles	228	7.50	7.36	
Over 50 and under 100 miles	447	3.61	6.93	
Over 100 and under 250 miles	1,010	8.66	37.61	
Over 250 and under 500 miles	1,285	3.96	21.86	
Over 500 miles	1,287	0.29	1.61	
		100.00	100.00	

Less than five percent of all visitors to Arizona travel more than 250 miles, but account for 24 percent of all Mexican visitors' spending in Arizona. The majority -- an 83 percent of all parties travel less than 50 miles. They account for 32 percent of total Mexican visitors' spending.

Since 2001, the share of visitors traveling longer distances has increased in both the total number of visitors and total spending. Residents of border cities within 10 miles of the border still comprise the core of cross-border visitors; they account for 75.98 percent of all visitor parties but 24.64 percent of all Mexican visitor spending in Arizona.

An analysis of per party expenditures, number of parties and total expenditures for day visitors also show the importance of the higher income, and longer stay in Arizona (Table 40).

Table 40
Spending per Party, Total Spending, Overnight vs. Day Visitors

	Overnight Visitors	Day Visitors	Sum
Per Party Expenditures \$	838.62	81.22	na
Percent of Total Parties (% of Row Total)	15.86	84.14	100.00
Percent of Total Expenditures (% of Row Total)	66.07	33.93	100.00

Source: Mexican Visitor Survey, 2007-08

Overnight visitor parties (one or more nights) spend an average of \$838.62 per trip while day-visitors spend an average of \$81.22 per party per trip. Thus, although overnight visitors represent 15.86 percent of all visitor parties, they account for 66.07 percent of all Mexican visitor expenditures in Arizona.

In comparison with 2001 study, the percentage of overnight visitors increased from 4 percent to almost 16 percent. The share of spending attributable to overnight visitors increased substantially, from 10.85 percent in 2001 to 66.07 percent in 2007-08. A relatively small change in the share of visitor parties that spend the night can have a substantial impact on the share of overnight visitor expenditures because they spend more than 10 times per trip than day visitors.

### **Seasonality of Travel**

Table 41 shows the seasonality of Mexican visitors' travel to Arizona. The first column shows the total number of non-U.S. citizens entering Arizona, by month, as reported by CBP. Average party size per month was computed from survey data and used to convert total number of non-U.S. citizens, by month, to total parties. Total expenditures and expenditures per party are also computed from survey data and presented by month.

Table 41
Seasonality of Mexican Visitors' Travel to Arizona

	Total Crossers		Average	Total		Total Exp		\$ per
Month	Non-US Citizen*	%	Party Size	Parties	%	(\$ 000s)	%	Party
January	1,867,018	7.77	1.74	1,074,477	8.04	149,083	5.54	138.75
February	2,143,495	8.92	1.81	1,183,952	8.86	224,834	8.36	189.90
March	1,995,582	8.30	1.73	1,153,065	8.62	232,076	8.63	201.27
April	1,916,423	7.97	1.57	1,224,249	9.16	218,349	8.12	178.35
May	2,043,631	8.50	1.64	1,247,109	9.33	176,498	6.56	141.53
June	1,822,292	7.58	1.72	1,060,686	7.93	171,560	6.38	161.74
July	2,140,921	8.91	1.83	1,168,321	8.74	127,671	4.75	109.28
August	1,932,870	8.04	2.04	946,099	7.08	130,838	4.87	138.29
September	1,887,613	7.85	2.08	907,791	6.79	163,179	6.07	179.75
October	2,030,726	8.45	1.95	1,043,033	7.80	184,883	6.88	177.25
November	2,042,019	8.49	1.79	1,142,313	8.54	347,666	12.93	304.35
December	2,218,959	9.23	1.82	1,217,782	9.11	562,033	20.90	461.52
Total	24,041,549	100	1.80	13,368,878	100	2,688,670	100	201.11

<sup>\*</sup>Source of monthly crossers: U.S. Department of Homeland Security, Customs and Border Protection. Source: Mexican Visitor Survey, 2007-08

December shows the highest number of border crossings of non-U.S. citizens, the largest per party expenditures, and the largest expenditures. Over 1.2 million parties enter Arizona during month of December and each of these parties spends on average \$461.50 per party, for a total of \$562 million in expenditures.

August and September have the smallest number of parties, in part, because party sizes are the biggest. The lower number of visitor parties for these months may reflect the low season for activities associated with agricultural sector, such as agricultural production in Yuma area and warehousing and distribution of fresh produce from Mexico in Nogales.

The highest total spending is in months of November, December, March and February. These coincide with major holidays in U.S. and Mexico.

### **Geographic Distribution of Expenditures in Arizona**

Table 42 provides information on where Mexican visitors spend their money within Arizona; the results of this study are compared to findings of 1991 and 2001 studies.

Note that this table differs from previous results presented by port. Data presented by port in previous tables summarized the characteristics and spending of persons who enter through each port, while Table 42 shows expenditures according to where expenditures were stated to have occurred.

In 1991, Santa Cruz County had the highest share of direct expenditures of Mexican visitors. By 2001, Pima County took over as the place with highest direct expenditures by Mexican visitors. Pima County's share of total direct expenditures increased from 33.76 percent in 2001 to 36.32 percent in 2007-08. The share of Maricopa County increased from 4.26 percent in 2001 to 25.82 percent of all direct Mexican expenditures in 2007-08. On the other hand, all three border counties – Santa Cruz, Yuma and Cochise -- saw their shares of total Mexican expenditure decline from 61.87 percent in 2001 to 35.38 percent in 2007-08.

688,256

57

9.777

13,368,878

74 57

82 95

636.23

201.11

0.00

99.93

1991 2001 2007-08 2001 to 2007-08 Exp. Per Percent Percent Percent Change of Total of Total Expenditures Expenditures Expenditures 2007-08 (\$ 000s) (\$ 000s) (\$ 000s) Cochise 164 263 96 753 186 376 92 63 6.93 1 817 042 13 59 36,535 1,800.02 25.82 538,094 1,290.06 Maricopa 16,419 694,173 4.02 108,506 289,460 976,434 237.33 36.32 1,148,152 8.59 850.44 6,588,778 Santa Cruz 268 470 242 542 491 300 102.56 18 27 49.28 130,598 191.158 270,991 41 76 10.08 3.266.978 24 44

(96.20)

213.58

0.00

97.42

36

69,360

2,688,670

Table 42 Expenditures by County and City, 1991, 2001, and 2007-08

					2007-08		2007-08	2007-08
	1991	2001	2007-08	2001 to 2007-08	Percent		Percent	Exp. Per
	Expenditures	Expenditures	Expenditures	Percent Change	of Total	2007-08	of Total	Visitor
City*	(\$ 000s)	(\$ 000s)	(\$ 000s)	Expenditures	Expenditures	Visitor Parties	Vis. Parties	Party (\$)
Douglas	141,631	79,423	123,300	55.24	4.59	1,422,253	10.64	86.69
Nogales	268,470	242,542	491,300	102.56	18.27	6,588,778	49.28	74.57
Metro Phoenix	16,419	30,502	693,500	2,173.62	25.79	537,649	4.02	1,289.87
San Luis	61,960	67,104	95,352	42.10	3.55	1,694,225	12.67	56.28
Metro Tucson	98,760	280,257	968,700	245.65	36.03	1,008,176	7.54	960.84
Yuma	68,637	123,772	173,900	40.50	6.47	1,492,647	11.17	116.50
Other Cities	32,379	27,802	73,258	163.50	2.72	615,373	4.60	119.05
Unallocated			69,360		2.58	9,777		
Total	688,256	851,402	2,688,670	215.79	100.00	13,368,878	99.93	201.11

<sup>\*</sup>City allocation is based on respondent identification of the city in which they shopped Respondents do not always know where city limits are, so allocations among cities are not considered as accurate as among counties

954

857.402

Source: Mexican Visitor Survey, 2007-08

Pima

Yuma

Other Counties

Unallocated Total

The relative decline in the shares of total expenditures is not necessarily associated with a decline in number of parties. In fact, Santa Cruz County has higher share of visitor parties in 2007-08 than in 2001, which means that per party spending either declined or increased much slower than that of visitors to other counties. In contrast, Pima County share of total parties declined, but per party expenditures are four times the average; in 2001 it was only twice the average for all counties.

Expenditures by city show basically the same trend. Note that expenditures for the largest cities coincide closely with the corresponding county figures. For example, Maricopa County is estimated to have received \$694.2 million of Mexican visitor spending and metro Phoenix slightly less in the amount of \$693.5 million.

Similarly, expenditures in 'Tucson' represent the bulk of expenditures in Pima county. The difference between Pima county and Tucson is that other Pima County destinations were mentioned, such as Ajo, Sasabe, and Lukeville.

The questionnaire asked for all cities visited. However, very few Mexican visitors could name specific cities within metro areas, other than the name of the major city, i.e., Phoenix and Tucson. For example, many visitors to the Phoenix metro area mentioned shopping at Arizona Mills, but very few identified Tempe (the address of Arizona Mills) as a destination city.

Unallocated expenditures in Table 42 relate to a small portion of respondents who provided spending information, but failed to identify the city in which the spending occurred. It is believed that the bulk of these expenditures occurred within the border communities closest to where they crossed.

### Expenditures in Major Destination Cities: Per Party Spending and Place of Origin

Table 43 presents the cities of origin for the visiting parties to each of the six major destination cities in Arizona, provides average per party expenditures, and calculates their respective shares of expenditures in destination cities.

As indicated earlier, the bulk of Mexican visitors to Arizona come from the neighboring state of Sonora. Between 98.91 and 100 percent of visitors to Yuma, San Luis, Nogales and Douglas come from Sonora; close to 95 percent of visitors to Tucson are from Sonora. Because a majority of metro Phoenix's visitor parties fly into Phoenix, a larger percent comes from other Mexican states; 7.59 percent from Baja California, 1.06 percent from Sinaloa and 0.57 percent from Federal District (Mexico City), 0.31 from Yucatan, and 0.60 from other Mexican states.

Table 43
Origin, per Party Expenditure, and Share of Expenditures by Destination

Arizona Destination	Mexico State of Origin	% Parties Across States	Mexico City of Oriign	% Parties Across Cities	% Exp. Across Cities	Per Party Exp (\$)
Douglas						
Douglas	Sonora	100.00	Agua Prieta	92.10	83.67	85
			Naco	4.65	6.91	139
			Cumpas	2.19	5.68	243
			Cananea	0.70	0.41	110
			Hermosillo	0.35	3.08	412
			Other	0.01	0.25	2,737
Nogales	Sonora	99.86	Nogales	93.19	80.46	74
	Sinaloa	0.14	Imuris	1.86	5.72	263
	Other	-	Magdalena	2.11	6.42	261
			Cibuta	1.01	2.31	196
			Santa Ana	0.37	1.10	256
			Caborca	0.14	0.29	179
			Los Mochis	0.51	0.39	65
			Benjamin Hill Other	0.14 0.67	0.44 2.86	263 20
Metro Phoenix						
	Sonora	89.87	San Luis RC	18.35	21.59	1,541
	Baja California	7.59	Nogales	15.54	13.85	1,168
	Sinaloa	1.06	Agua Prieta	11.50	12.27	1,397
	District F.	0.57	Magdalena	8.34	6.38	1,000
	Yucatan	0.31	Hermosillo	7.52	7.63	1,328
	Other	0.60	Mexicali Naco	5.58 4.51	8.96 4.11	2,103 1,193
			Guaymas	3.98	3.22	1,060
			Cananea	3.80	3.00	1,032
			Imuris	3.50	1.53	572
			Sonoita (oyta)	2.89	1.94	880
			Cumpas	2.75	2.18	1,039
			Santa Ana	2.07	1.76	1,112
			Algodones	2.01	1.77	1,149
			Puerto Penasco	1.24	1.12	1,180
			Cibuta	0.85	0.22	330
Matur Turner			Other	5.57	8.48	2,005
Metro Tucson	Sonora	94.75	Nogales	22.40	12.67	553
	Baja California	4.67	Magdalena	10.44	10.24	959
	Chihuahua	0.50	Agua Prieta	9.87	9.55	946
	Other	0.08	San Luis RC	8.97	15.46	1,685
			Hermosillo	8.22	12.83	1,528
			Cananea	7.36	5.24	696
			Santa Ana	5.04	4.49	871
			Naco	4.85	4.45	897
			Imuris	4.74	4.59	948
			Mexicali	3.22 2.41	4.72	1,433 676
			Cumpas Sonoita	1.69	1.67 1.36	788
			Esqueda	1.49	1.74	1,141
			Algodones	1.45	2.08	1,404
			Guaymas	1.35	1.57	1,136
		1	Ures	1.04	0.87	821
		1	Obregon	0.84	1.75	2,045
			Sasabe	0.68	0.57	810
			Cibuta Other	0.45 3.49	0.14 4.02	300 1,129
San Luis		1	Julei	5.49	4.02	1,129
Guil Eulo	Sonora	99.50	San Luis RC	99.46	95.91	69
	Baja California	0.50	Mexicali	0.34	2.32	492
	Other	-	Algodenes	0.16	1.65	725
			Cumpas Other	0.04	0.12	220
Yuma		1	Ottlei	-	-	na
ıulla	Sonora	98.91	San Luis	98.35	95.31	146
	Baja California	1.09	Mexicali	0.62	1.88	458
	Other	-	Algodones	0.48	1.40	441
		1	Hermosillo	0.32	1.07	500
			Cumpas	0.23	0.34	220
			Other	-	-	

In the case of the three Arizona border cities – Douglas, Nogales and San Luis – the highest percentage (92.1, 93.19 and 99.46 percent) of their visitors is from the neighboring city just south of the border: Agua Prieta, Nogales and San Luis Rio Colorado, respectively. In Yuma, about 25 miles north of the border, 98.35 percent are from San Luis Rio Colorado.

As distance increases, the percentage coming from the closest border city decreases. About 22 percent of visitors to Metro Tucson come from Nogales, Sonora. All six Sonora border cities, including Nogales, account for more than 48 percent of Mexican parties to Metro Tucson. Slightly more than 8 percent or about every 11th visitor party to Tucson comes from Hermosillo.

Slightly more than 18 percent of metro Phoenix' visitors come from San Luis Rio Colorado; all six Sonora border cities, including San Luis Rio Colorado, account for 53 percent. About 7.5 percent come from Hermosillo. Mexicali and Algodones are major origin cities in Baja California accounting together for 7.6 percent of visitor parties to metro Phoenix.

Generally, expenditures per party are related to the distance traveled. Visitors from Mexican cities located the farthest from the border tend to spend the most per party. Distance decreases the number of trips a party will make, but it tends to increase the amount spent when it makes a trip.

For example, visitors from Nogales, Sonora spend on average \$74 in Nogales, Arizona, but Nogales, Sonora visitors to metro Tucson spend on average \$553 per party per trip. There are exceptions to this general rule, of course, but spending per party and distances traveled are clearly related in Table 43.

### Expenditure Categories (i.e., sales to Mexican Visitors) by Destination County

In Table 44, expenditures are broken down by category for Arizona's five counties that are major destinations for Mexican visitors.

As expected, 'stores' (stores in malls and shopping centers, and non-mall stores) are the major beneficiaries of Mexican visitor spending; of total direct sales to Mexican visitors they account for between 50.44 percent in Yuma County to 57.95 percent in Santa Cruz County. They are followed by grocery stores and restaurants, although differences between counties are more pronounced. Of total sales to Mexican visitors in Maricopa and Pima counties, total food sales are less than 15 percent, with restaurants accounting between 10 to 11 percent and grocery stores between 2 and 3.5 percent. In contrast, in border counties – Cochise, Santa Cruz and Yuma – total food sales are over one third of all sales, with grocery stores accounting for between 24 and 30 percent of total sales, and spending at restaurants is well below ten.

Table 44
Percent of Expenditures by Destination County (Percentages), by Spending Category

Expenditures	Cochise	Maricopa	Pima	Santa Cruz	Yuma
Lodging	0.67	11.54	9.50	0.25	1.53
Total Food					
Restaurants	7.34	10.54	10.08	6.66	6.61
Groceries	24.13	2.23	3.21	24.63	29.86
Total Transportation					
Gasoline	4.47	7.37	7.72	3.03	5.30
Vehicle related	0.06	0.25	0.04	0.01	0.03
Air travel	-	0.71	0.07	-	-
Car Rental	-	0.21	0.04	0.01	-
Buses, taxis	0.64	0.92	0.69	0.89	0.46
Stores	54.98	57.71	59.89	57.95	50.44
Total Medical					
Doctors	0.40	0.09	0.07	-	-
Hospitals	-	0.09	0.06	0.16	-
Medicine	0.19	0.78	0.14	0.13	0.17
Entertainment	0.50	5.75	6.69	0.23	0.70
Other goods	0.55	1.59	1.37	2.83	3.38
Other Services	-	0.10	0.06	0.01	-
Business	6.09	0.12	0.38	3.22	1.53
Other	-	0.02	-	-	-
SUM	100.00	100.00	100.00	100.00	100.00

Source: Mexican Visitor Survey, 2007-08

Maricopa and Pima counties have relatively larger percentages of total sales to Mexican visitors in transportation, lodging, and entertainment sectors, while border counties have relatively larger percentages of sales in the business category.

#### Expenditures per Party: Overnight vs. Day Visitors by Destination Area

Table 45 shows the portion of overnight and day visitor parties and the corresponding portion of expenditures for each of the largest destination cities.

Table 45
Expenditures of Overnight vs. Day Visitors by Destination City

Destination City	% Parties Overnight Visitors	% Parties Day Visitors	Sum	Exp/party Overnight Visitors	Exp/party Day Visitors	% Exp Overnight Visitors	% Exp Day Visitors	Sum
Douglas	3.86	96.14	100.00	257	84	10.96	89.04	100.00
Nogales	3.86	96.14	100.00	180	72	9.13	90.87	100.00
Metro Phoenix	98.69	1.31	100.00	1,316	823	99.18	0.82	100.00
San Luis	4.71	95.29	100.00	128	58	9.73	90.27	100.00
Metro Tucson	87.52	12.48	100.00	1,081	253	96.77	3.23	100.00
Yuma	12.58	87.42	100.00	188	111	19.62	80.38	100.00

Source: Mexican Visitor Survey, 2007-08

Very few Mexican visitors spend the nights in the three border communities of San Luis, Nogales, or Douglas (less than 5 percent for each). A higher portion of visitors to Yuma spend the night (over 12 percent). Almost all visitors to metro Phoenix (98.69 percent) and the bulk of metro Tucson visitors (87.52 percent) spend at least one night.

Overnight visitors spend more than day visitors in all the destination cities, which is reflected in the percent of total expenditures made by overnight vs. day visitors. In Douglas, San Luis, and Nogales, overnight visitors represent approximately 10 percent of total expenditures; in Yuma, overnight visitors account for almost 20 percent of total expenditures. Over 96 percent of total expenditures are made by overnight visitors in both metropolitan Tucson and Phoenix.

# VII. Total Economic Impacts of Mexican Visitors

To estimate the impact of Mexican visitor spending on the economy of Arizona, a state-wide and five county-level input-output models were used. An IMPLAN input-output model was used that is comparable to IMPLAN version used in 2001 study; however, the latest version includes updated county data, which means that they reflect changes in economic structure such as employment by sector, wages, productivity, and the ratio of what is produced locally versus what is imported -- all of which affect the estimates of jobs, wages and output. In other words, the same type and volume of expenditures may not produce the same number of jobs, wages and output in 2001 and 2007-08.

Input output-models are used to estimate two basic things. First, using direct spending by Mexican visitors (in section VII) the model estimates number of jobs and labor income (wages and salaries) associated with direct sales. Second, the model estimates multipliers for jobs, labor income and sales, or what is better known as indirect and induced impacts.

# **Direct Sales, Jobs and Income**

Direct sales, income and employment generated directly by dollars spent by Mexican visitors, e.g., restaurant sales, jobs and income, are considered 'direct impact.' Indirect impacts are the sales, income and employment that results from other businesses in the local economy selling to the restaurants, such as food distributors. Induced impacts are the sales, income and employment generated as workers in the first two categories spend their wages and salaries locally. Total impacts are the sum of the direct, indirect, and induced impacts.

Direct economic impacts, by county are reported in Table 46. In total, direct Mexican visitor spending of \$2.69 billion creates 23,385 direct jobs and pays \$527.04 million in direct wages in Arizona. Total direct spending is 279% higher in 2007-08 than in the previous study for 2001.

Direct economic impacts vary across counties, from 1,498 jobs in Cochise County to 9,426 jobs in Pima County.

Table 46
Direct Economic Impacts of Mexican Visitors to Arizona 2007-08, by County

County	Direct Spending (\$000s)	Direct Jobs	Direct Income (\$000s)
Cochise	186,376	1,498	28,795
Maricopa	694,173	5,800	143,409
Pima	976,434	9,426	190,228
Santa Cruz	491,300	3,762	75,210
Yuma	270,991	2,016	41,512
Other&Unallocated	69,397	883	47,889
SUM	2,688,670	23,385	527,043
Arizona	2,688,670	23,385	527,043

#### Percent Distribution

	Direct	Direct Direct	
	Spending	Jobs	Income
County	%	%	%
Cochise	6.93	6.41	5.46
Maricopa	25.82	24.80	27.21
Pima	36.32	40.31	36.09
Santa Cruz	18.27	16.09	14.27
Yuma	10.08	8.62	7.88
Other&Unallocated	2.58	3.78	9.09
SUM	100.00	100.00	100.00
Arizona	100.00	100.00	100.00

Source: Mexican Visitor Survey, 2007-08

The size of the direct job impact in a county depends on the mix of expenditures in that county, and county's average wages. For example, Cochise County's share of direct sales to Mexican visitors is 6.93 percent, while only 5.46 percent of direct labor income generated in Arizona by Mexican visitors' spending. Average wages in Maricopa County are above state's average, and thus Maricopa accounts for 27.21 percent of direct labor income, while its share of direct jobs is 24.80 percent. The "Other & Unallocated" amount includes a small amount for northern Arizona (less than 1% of this category). Unallocated includes spending by visitors who did not declare where they shopped in Arizona. The bulk of this is believed to have occurred in border communities.

# The Multiplier Effect: Total Sales, Jobs and Income

The size of a multiplier depends on two factors: the extent of inter-industry linkages within the region and the amount of leakage from the region at each round of spending. Inter-industry linkages have to do with how much businesses purchase from one another within the local economy. Generally, these linkages are much stronger for large metropolitan areas or states than they are for small counties.

Leakage refers to the portion of dollars spent by consumers that is retained in the community for the next round of spending. The smaller the county or region is, the larger the leakage, and therefore, the smaller the multiplier.

Total economic impacts are reported in Table 47. The \$2.69 billion in direct Mexican visitor spending (i.e., direct sales to Mexican visitors) in Arizona 'multiplies' to a total sales impact of \$3.61 billion, 30,354 jobs, and \$837.2 million in income. 65

Table 47
Total Economic Impacts of Mexican Visitors to Arizona 2007-08, by County

County	Total Sales (\$000s)	Total Jobs	Total Income (\$000s)
Cochise	211,772	1,763	36,508
Maricopa	963,236	8,066	234,895
Pima	1,291,350	12,509	294,920
Santa Cruz	560,393	4,496	96,599
Yuma	314,016	2,463	56,026
Other&Unallocated	85,930	1,058	22,209
SUM	3,426,697	30,355	741,158
Arizona*	3,613,128	30,355	837,244

#### **Percent distribution**

County	Total Sales %	Total Jobs %	Total Income %
Cochise	6.18	5.81	4.93
Maricopa	28.11	26.57	31.69
Pima	37.68	41.21	39.79
Santa Cruz	16.35	14.81	13.03
Yuma	9.16	8.11	7.56
Other&Unallocated	2.51	3.49	3.00
SUM	100.00	100.00	100.00

<sup>\*</sup>The sum of impacts by county is smaller than the total for Arizona; individual county I-O models do not take into account intercounty impacts (spill-overs).

Source: Mexican Visitor Survey, 2007-08

Again, economic impacts vary across counties. Each county has a different expenditure mix and different multipliers so the impacts are not proportional to the distribution of the initial sales.

For example, Maricopa County receives 25.82 percent of direct expenditures, but through a combination of the expenditure mix and multipliers, accounts for 26.67 percent of total sales impact, 26.57 percent of job impact, and 28.05 percent of income impact.

Among border counties, Santa Cruz accounts for the largest share of total sales impact (15.50 percent); Yuma County accounts for 8.69 percent, and Cochise County for 5.86 percent of total sales impact in Arizona.

Compared to 2001, or direct spending has increased in both Maricopa and Pima counties; together these two counties received 62.14 percent of all direct spending by Mexican visitors in 2007-08 compared to 38.02 percent in 2001. In contrast, the share of border counties (Santa Cruz, Cochise and Yuma combined) has declined from 61.87 percent in 2001 to 35.28 percent in 2007-08. Larger shares of direct spending for both Pima and Maricopa Counties translate into even larger shares of total impact because of the comparatively larger multipliers in these two counties compared to the smaller border counties. These two counties together receive 62.4 percent of total sales, 67.78 percent of total jobs and 63.28 percent of total income generated in Arizona as a result of Mexican visitors' spending.

# Mexican Visitor Spending as a Percent of Taxable Sales and Revenue Impacts

Table 48 shows the percent of taxable sales in each county that is attributable to Mexican visitor spending. In this table, Mexican visitor spending, by county, is compared to Arizona Department of Revenue taxable sales figures. In order to make this comparison, several steps had to be taken to be sure the two sets of numbers are compatible.

First, gasoline sales are removed from the Mexican visitor spending. Gasoline sales are taxable under the fuel tax, but they are not taxable under 'sales tax' of Arizona. Second, each expenditure category was multiplied by a percentage that represents the portion that is taxable in Arizona. For example, medically-related expenditures (doctors, medicine and hospitals) and groceries are not taxable in Arizona, but groceries are taxed by most border communities. For comparison purposes, groceries are excluded.

Table 48

Mexican Visitor Spending as a Percent of Taxable Sales 2007-08, by County (Percentages)

County	Taxable Sales Attributed to Mexican Visitors
Cochise	5.34
Maricopa	0.77
Pima	5.20
Santa Cruz	48.62
Yuma	6.27

Source: Mexican Visitor Survey, 2007-08

When all adjustments were made, the resulting 'taxable' Mexican visitor expenditures were compared to total taxable sales in each county, reported by the Arizona department of revenue. In Maricopa County, Mexican visitor spending represents approximately 0.77 percent of total taxable sales. This relatively low percentage is not surprising, given the extremely large size of Maricopa County economy.

In contrast, 'taxable' Mexican visitor spending represents 48.62 percent of the sales tax base of Santa Cruz County. Clearly, this county is very dependent on the spending of Mexican residents. Mexican visitors' spending represents 6.27 percent of Yuma's sales tax base, 5.34 percent of Cochise County's sales tax base and 5.20 percent of Pima County's sales tax base.

Revenue impacts associated with Mexican visitors are computed for the State, counties and cities and summarized in Table 49. They are computed using the Arizona Tax Revenue Model. This model is an extensive spreadsheet that embodies: state and local tax rates; state to local revenue sharing formulas; current and recent tax collections from a variety of revenue sources for cities, counties and state; parameters delivered from economic theory and analysis; and state, county and city economic characteristics, such as population, employment, and income. By inputting Mexican visitor expenditures and total wages generated by those expenditures, the revenue model computes several categories that accrue to the State of Arizona, county and city governments. In addition, several hand calculations were made for each of the counties for taxes such as county excise taxes, local city revenues and induced county and city tax revenues.

The model computes both direct and induced revenue impacts. Direct revenue impacts are revenues paid by the Mexican visitors when they make purchase. While direct revenues are generated by the industry analyzed, induced revenues are generated when local income is spent in the county. When an industry hires workers, the payroll is spent and taxes are paid in the form of income taxes, sales taxes, property taxes, vehicle license taxes, etc. In addition, when a basic industry (such as restaurants that sell to Mexican residents) expands, the output and work force of other industries that sell to the basic industry also expand. Workers in these technically linked industries also spend their money in the community and generate revenues. These revenues associated with the total change in wages affected by tourism are 'induced' revenues.

Table 49
Revenue Impacts of Mexican Visitor Spending 2007-08, by level of Government

	Direct	Induced	Total
Level of	Revenues	Revenues	Revenues
Government	(\$000s)	(\$000s)	(\$000s)
State of Arizona	93,200	27,836	121,035
Counties	36,129	10,126	46,254
Cities	57,504	10,503	68,006
TOTAL	186,832	48,464	235,296

#### **Percent Distribution**

Level of Government	Direct Revenues (\$000s)	Induced Revenues (\$000s)	Total Revenues (\$000s)
State of Arizona	49.88	57.44	51.44
Counties	19.34	20.89	19.66
Cities	30.78	21.67	28.90
TOTAL	100.00	100.00	100.00

Source: Mexican Visitor Survey, 2007-08

As shown in Table 49, the State of Arizona receives \$93.2 million directly from Mexican visitor spending. Arizona counties receive \$36.1 million and cities \$57.5 million. The largest direct revenue sources for all levels of government are associated with the city sales tax and the state sales tax, which is also shared with counties and cities. Smaller amounts of revenues are generated by state-shared revenues, such as state-shared sales taxes and HURF (the Highway User Revenue Fund), and county excise taxes.

Induced revenues, generated through employee spending are also presented in Table 49. The State of Arizona receives \$27.8 million in induced revenues from Mexican visitor spending, while counties receive \$10.1 million and cities \$10.5 million.

In total, Mexican visitor spending generates \$235.3 million to the State of Arizona, its counties and cities. Of this amount, the State receives 51.4 percent, counties 19.6 percent and cities 28.9 percent.

# **VIII. Summary and Conclusions**

Travel and tourism continues to be one of the most important export industries driving Arizona's economy, and Mexican visitors are an important contributor to this sector. This is the forth study conducted by The University of Arizona since the late 1970s which assesses characteristics of Mexican visitors and estimates their economic impact on Arizona. Primary data on destinations, travel mode, length of stay, reasons for coming, spending and other characteristics of shopping behavior were collected through a year-long survey from July 2007 through June 2008. Mexican visitors were interviewed as they were returning to Mexico through one of the six Arizona border ports of entry – Nogales, Douglas, San Luis, Lukeville, Naco and Sasabe — and two international airports in Phoenix and Tucson. Estimates of total economic impacts, including indirect and induced sales, jobs, and income were estimated using the IMPLAN input-output models for the State, metro areas and border counties. Tax revenues, an important component of the total economic impact, were estimated by state and county tax revenue models.

As in the three previous studies, oxisitors in this study include both the so-called traditional tourists, who generally visit other country for leisure, historical site visits, and similar reasons, and who tend to stay overnight, and day-visitors or the non-traditional tourists who cross the border but return the same day. Of a total of 24.04 million alien crossings from Mexico to Arizona reported by U.S Customs and Border Protection from July 2007 through June 2008, this study results suggest that 84.24 percent of trips are associated with day-visits and 15.76 percent with overnight visits.

The results of this study, as in the past, demonstrate the economic importance of Mexican visitor spending to Arizona's economy. An estimated 23,385 wage and salary jobs in Arizona at eating and drinking establishments, retail establishments and other spending-related sectors are directly attributable to Mexican visitor spending. Through local purchases of supplies by businesses and the spending of income derived from visitor-related jobs, Mexican visitors generate 6,970 additional jobs in Arizona in 2007-08. These jobs account for a total income of \$837 million and \$3.61 billion in sales.

The largest economic impact of Mexican visitor spending occurred in Pima County. A county that includes Tucson and extends all the way to the U.S.-Mexico border, Pima County receives 41.21 percent of the total job impact, 37.68 percent of the total sales impact, and 39.79 percent of the total income impact. Maricopa County, containing the State's largest metropolitan area and the capital city, Phoenix, receives the second largest share of the total impact: 28.11 percent of total sales, 26.57 percent of total jobs, and 31.69 percent of total income.

Santa Cruz County, the border county that contains Nogales, the largest port of entry into Arizona, receives 14.81 percent of the total job impact, 16.35 percent of the total sales impact, and 13.03 percent of the total income impact. Yuma County receives 8.11 percent of the total job impact, 9.16 percent of the total sales impact, and 7.56 percent of the total income impact; Cochise County receives 5.81 percent of the total job impact, 6.18 percent of the total sales impact, and 4.93 percent of the total income impact.

Mexican visitor spending represents a staggering 48.62 percent of the total taxable sales in Santa Cruz County. Mexican visitor spending represents 6.27 percent of taxable sales in Yuma County, 5.34 percent in Cochise County, 5.20 percent in Pima County, and 0.77 percent in Maricopa County. The larger the county in terms of population and income and the further away the county is from the border, the smaller the share of total taxable sales attributable to Mexican visitor spending.

Over 24 million Mexican visitors came to Arizona in 13.37 million parties. They came in parties of 1.8 persons that include 1.47 adults and 0.33 children. About 55 percent of all visitor parties enter by car across the U.S. Mexico border and 44.88 percent are walkers. Less than one percent of all Mexican visitor parties to Arizona fly into the state.

Day visitors comprise 84.24 percent of all Mexican visitor parties; 15.76 percent stay overnight. About 2

percent spend one night; 4.1 percent spend two nights; 5.47 percent spend 3 nights; 4.01 percent spend 4 or more nights. Of those who spend one or more nights in Arizona, 60.97 percent stay in hotels and 39.03 percent spend the night with family and friends.

The primary reason for visiting is shopping which accounts for 57.44 percent of all visitor parties. Business-related reasons, which include work (but exclude business convention, professional training, and business shopping) was cited as the primary reason for visiting by 35.19 percent of all visitor parties. Visiting friends and relatives was the primary reason, cited by 5.81 percent of all visitor parties. Other reasons, such as vacation, medical, personal, business shopping and other represented between 0.14 and 0.79 percent of the primary reasons for their visits.

Almost 99 percent of Mexican visitor parties come from the neighboring Mexican state of Sonora. Of those, 46.9 percent come from the border city of Nogales, the largest of the Sonora's border cities; 24.1 come from San Luis Rio Colorado, and 13.37 percent from Agua Prieta, and 1.32 percent from the capital city of Hermosillo. The remainder comes from about 20 other cities in Sonora, but also from Baja California, Sinaloa, and the Mexico City metropolitan area.

Three Arizona malls -- Arizona Mills Mall in Phoenix and Tucson Mall and Park Place Mall in Tucson – are the most popular shopping destinations. Among the non-mall stores, Wal-Mart is the most popular in every destination city. Casinos in Tucson and Phoenix are the most popular attractions; the zoo parks are the second most visited attraction.

### The 2007-08 Results in Comparison to 2001 Study

One of the purposes of this study was to identify if any changes have occurred in the patterns of Mexican visitors' travel and spending in Arizona. For that reason, the methodology of data collection and estimation of economic impacts have been kept as close as possible to the methodology used in the previous studies. However, changes in the contextual situation at the border (for example, new regulations for border crossings, general concerns with border security since 9/11, and new Arizona labor laws affecting some Mexican workers), as well as increasing cost of personal interviews, dictated slight modification in the methodology applied to data collection.

Another important point is that this kind of study, only conducted every five to six years reflect primarily the situation within a given a 12-month period instead of a continuous monitoring over a longer period of time. Thus, for example, a relatively favorable peso-dollar exchange might have encouraged more spending in Arizona for certain groups of Mexican visitors; on the other hand, longer wait times at border ports of entry together with new document requirements for entering the United States might have discouraged other groups of Mexican visitors from visiting as often or visiting at all.

In interpreting the differences between 2001 and 2007-08 studies, we also consulted similar studies conducted along Texas-Mexico and California-Mexico border to see if the changes in the Arizona-Sonora region are similar to those detected in other border states.

#### What has changed?

#### Increase in the share of overnight visitors

Overnight visitors' share of total visitors increased from less than four percent in 2001 to almost 16 percent in 2007-08; this is probably the largest change since the last study. Far more Mexicans are spending the night in Arizona, particularly the visitors that come to Tucson.

Overnight visitors to the Tucson metropolitan area (Pima County) went from approximately 15 percent to 87 percent. This huge increase for Tucson is the primary cause of the overall increase in the share of overnight visitors. Phoenix (Maricopa County) is 3 hours from the border, so almost all visitors who choose to go to metro Phoenix, by vehicle or by air, spend the night. Visitors to the border communities of San Luis, Yuma, Nogales

and Douglas are almost all day-visitors because of their proximity to the border. Tucson is in that midrange of travel time (one hour from the border) that permits both day-visits and overnight visitors. There are several possible reasons why this big shift toward overnight visitors occurred for Tucson, but they are speculative.

First, there may be a selection bias in which Mexican visitors are crossing the border. New documentation requirements and a higher cost of getting visas may have eliminated some of those who were formerly day-visitors to Tucson. From the survey data it is clear that overnight visitors have much higher incomes than day-visitors. Well over half of day-visitors have incomes in the lowest category (less than 10,000 pesos per month), but only 7 percent of the overnight visitors are in the lowest category. It is possible that visa requirements are reducing the number of visitors in the lower income groups with the result that the remaining visitors have higher incomes and are more likely to spend the night.

The total number of parties visiting Tucson (Pima County) has dropped by approximately 22.5 percent since the 2001 study (a decrease of approximately 333,000 parties). If most or all of the reduction is due to fewer people in the lower income groups coming to Tucson because of visa requirements, this could account for a substantial part of the increase in the portion of Tucson visitors that spend the night. Consequently, to the extent that lower-income visitors are screened out, day-visitors are also likely screened out.

There is also the possibility that trip scheduling issues or increased time at the border has decreased the number of day-visitors. If Mexican visitors want to shop in Tucson and return the same day, they would want to cross the border before 9 am so they can begin shopping when stores open at 10 am. This means they are at the border during the busiest time of the day. It has been reported that lines at the border and waits are longer than they have been in the past because of added security and card scans for background/criminal checks. So either they begin their trip much earlier so they fit in a full day of shopping, or they choose to come during more convenient times at the border and spend the night or more than one night when they come. As a result of long-lines or the time-of-day problem, visitors may have been choosing to travel to Tucson less often and spend more time in Tucson when they do go.

We have also learned, anecdotally, that during the study year a number of Tucson hotels advertised aggressively in Mexico and offered some good promotional prices. This may have had some impact on overnight visitors. An ad campaign by one hotel can increase overnight visitors to other hotels and can even impact overnight visitors to friends/family.

It should also be noted that there was a substantial increase (688 percent increase, or approximately 470,000 parties) in the total number of parties traveling to Phoenix (Maricopa County) between 2001 and 2007-08. Because of the distance from the border, Mexican visitors who go to the Phoenix area almost always spend the night (except for a very few air passengers in for a day on business). A round-trip day visit from Mexico to Phoenix and back by vehicle is simply not feasible. The simple fact that more parties are choosing to go to the Phoenix area automatically increases the number of and the portion of parties who spend the night.

One possible explanation for the increase in the number of parties to metro Phoenix and a smaller, but largely offsetting, decrease in the number of parties to Tucson is that, once visitors choose to spend the night in Arizona, it matters less whether they travel to the Tucson or Phoenix area. Unless they are planning on visiting friends or family in metro Tucson, then metro Phoenix becomes a viable option for shopping once the visitor has made the decision to stay overnight.

<u>Increase in the number of visitors staying in hotels despite decline in percentage of overnight visitors staying in hotels</u>

The percentage of visitors that spend the night in hotels dropped from 79 percent in 2001 to 61 percent in 2007-08 and it is not clear why. Despite the decline in the portion of visitors who spent the night in hotels (among those who spent the night), the total number of visitor parties staying in hotels increased substantially between 2001 and 2007-08. In 2001, 79 percent of those who spent the night (just 3.2 percent of all visitors) stayed in hotels, so only 2.5 percent of all 2001 visitor parties spent the night in hotels. In 2007-08, 61 percent of those spending the night (15.76 percent of all visitor parties) stayed in hotels, so 9.6 percent of all

visitor parties stayed in hotels. Further, the number of visitor parties increased from 10.414 million to 13.368 million parties. Therefore, the number of Mexican visitor parties that spend the night has increased from 260,350 parties in 2001 to almost 1.29 million parties in 2007-08.

#### Increase in volume of air passengers

The number of Mexican air passengers arriving to Arizona through Phoenix and Tucson airport was 33.5 percent higher in 2007-08 reflecting an increase from 15,075 Mexican air passengers in 2001 whose final destination was Arizona to 20,126 in 2007-08.

#### The highest increase in direct spending between two consecutive studies

Direct expenditures in 2007-08 are 213.6 percent bigger than in 2001 (not adjusted for inflation). Even when adjusted for inflation of an average 3 percent annually, the increase is still substantial: 147.7 percent.

We think that this is a result of three main factors. One, as discussed earlier, is the fact the number of visitor parties has increased 27 percent. Second, also discussed above, is related to the increase in the share of visitors who chose to spend the night. The increase in overnight visitors, coupled with a relative increase of visitor parties in higher income categories, has substantially increased per party spending. Third, and no doubt affecting both the increase in the number of parties and spending levels, the Mexican peso was quite strong during the year of this study. Throughout 2007-08, the peso/dollar exchange was under or close to 11 pesos per one dollar. Only for a short time in the fall of 2007 did the peso/dollar ratio exceed 11.

However, this relatively high spending level found in 2007-08 may be just a one-time situation rather than a trend. The recent deterioration in the peso/dollar ratio may have dramatic effects on both the number of Mexican visitors and/or spending in FY 2008-09. Recently the peso/dollar ratio has been over 13, which represents a substantial decrease in the purchasing power of all Mexicans, except those who get paid in U.S. dollars. This could have the effect of a) decreasing border crossings, b) decreasing spending per party, and/or c) reducing proportion of those who spend the night. Further, the recent deterioration of the American economy will have substantial economic impacts on both sides of the U.S.-Mexico border, affecting jobs and incomes, impacting the purchasing power of Mexican throughout the border region.

Finally, June 2009 is the deadline for compliance with new documents for border crossings, which also may cause a decline in border crossings, most likely of visitors in lower income categories.

#### Increase in direct spending in counties further away from the border (Maricopa and Pima)

The largest absolute and relative increase in direct spending occurred in Maricopa County; consequently, its share of total direct sales increased from 4.26 percent in 2001 to 25.85 percent in 2007-08. Pima County's share of direct sales also increased from 33.76 percent to 36.32 percent.

Although the three border counties (Cochise, Santa Cruz and Yuma) experienced substantial increases in Mexican visitor expenditures, their shares of total Mexican visitors' economic impact declined. For example, Mexican visitor direct spending in Cochise County increased almost 92.63 percent, but its share decreased from 11.28 percent in 2001 to 6.93 percent of the total direct expenditures in 2007-08. Expenditures in Yuma County increased by 41.76 percent, but Yuma's share of total Mexican visitor direct spending decreased from 22.30 percent in 2001 to 10.08 percent in 2007-08. Santa Cruz's share of expenditures fell from 28.29 percent to 18.27 percent, despite the fact that direct spending by Mexican visitors in Santa Cruz County more than doubled (102.56 percent increase compared to 2001).

#### Decline in average size of visitor parties

Party size of visitors passing through all ports has declined except for visitors entering through Douglas and Sasabe. The overall average party size has decreased from 2.2 to 1.8. This smaller party size contributed significantly to the increase in the number of parties in 2007-08. The total number of aliens crossing increased by only 4.29 percent, but the total number of parties increased by 27.37 percent because of the substantial decrease in party size.

#### Decline in percentage of visitor parties arriving by car

While motor vehicle remains the primary mode of travel, the share of Mexican visitor parties crossing the border by car decreased from 70.34 percent in 2001 to 55.02 percent of all visitor parties in 2007-08. The share of pedestrian parties increased from 29.58 percent in 2001 to 44.88 percent in 2007-08, while the share of those arriving by air increased from 0.08 percent in 2001 to 0.10 percent in 2007-08.

#### What seem to be unchanged (persistent) patterns?

#### The origin of Mexican visitors shows little change

The neighboring state of Sonora continues to be the main origin of Mexican visitors to Arizona, with almost 99 percent of all visitors to Mexico from that state. The three largest border communities of Agua Prieta, Nogales, and San Luis RC contribute 93 percent of all Mexican visitors, a percentage almost identical to that in 2001.

The only noticeable change regarding the origin of visitors is among visitors to metro Phoenix. Because more visitors entering through the six southern BPOE are traveling to metro Phoenix, the portion of visitor parties to metro Phoenix from Sonora has increased from 52 percent in 2001 to almost 90 percent in 2007-08. Previously, in 2001, proportionately more metro Phoenix visitors came by air from other Mexican states.

#### Shopping is the main reason for visiting

Shopping is the main reason for visiting Arizona, with 57.44 percent of all visitor parties listing that as a reason. Visiting friends and relatives, listed by 5.81 percent of all visitor parties as the primary reason for visiting, was also a very strong reason for visiting Arizona. These two portions are down somewhat since 2001 because the portion identified as coming for other business and/or work is higher (35.19 percent in 2007-08 vs. 14.41 percent in 2001). It is not believed that the portion of crossers who come for work has increased since 2001. Rather, a different survey question (previously in 2001, visitors were asked to list and prioritize two reasons for visiting) and a stronger focus on identifying crossers who worked, resulted in higher proportions in the business/other (including work) category than in 2001, which, in turn reduced the estimated percent that came primarily to shop and visit friends.

For some ports, shopping was listed by a very high portion of visitors as a primary reason. In particular, shopping was identified as the primary reason by shoppers who crossed into Douglas and what we refer to as the "pass-through" ports of Naco, Lukeville and Sasabe, by 79.42, 69.19, 80.09, and 76.47 percent, respectively.

Shopping (40.75 percent), followed by visits to friends/relatives (27.59 percent), were the primary reasons for visiting by air travelers. In addition, air travelers attended conventions/conferences (15.75 percent), received business training (6.25 percent).

Overall, very few came for what they describe as a vacation (0.24 percent), personal health reasons (0.14 percent), other personal (0.31 percent), business convention (0.05 percent), business training (0.03) percent.

In conclusion, this study has attempted to quantify the economic aspects of Mexican visitors to Arizona. Each day, more than 65,000 Mexican residents came to Arizona to work, visit friends and relatives, and shop. Each day, they spend over \$7,350,000 in Arizona's stores, restaurants, hotels and other businesses, and thus contribute substantially to Arizona's export trade with Mexico. Familial ties, long-term friendships, work opportunities and shopping experiences not yet available in Mexico continue to support strong cross-border interactions between Arizona and its neighbor, Sonora.

# **Questionnaire**

Survey Conducted by:				
City: Type(select):	Car	Pedestrian		irline)
OLIESTIONINAIDE	2 10 07			<del>-</del>
QUESTIONNAIRE	3-19-07			
	ation is comple	etely confidential and		a survey for the University of any border organization of the
		25 ASK: Are you 18 y if no, end interview)	rears of age or older?	
Are you a permanent		exico? if no, end interview)		
1. Where in Mexico of	do you reside?		State	
2b. Are there any oth Heal Vaca Visit Perso Othe	ner reasons for th/Medical tion friends/relative onal shopping r personal (spe	ecify)		
Work Shop	related trainin ping for work	nal convention g) )		
IF WORK RELATED: industry.			u to Arizona? PROBE i	f necessary to get sector/
3a. Including yourse	f, how many p	eople are traveling wi	th you?	
IF MORE THAN ONE	E: 3b. How mar	ny are under 18 years	s of age?	
4a. Please think of th	nis trip to Arizon	na, what cities or othe	er places in Arizona did	you visit?
4b. Did you stay over	rnight in Arizon	a?()no()yes		

# IF YES: 4c. Which cities or towns did you stay overnight? PROBE: Any others?

Number of Nights		
Ajo		
Bisbee		
Benson		
Chandler		
Douglas		
Flagstaff		
Fountain Hills		
Glendale		
Grand Canyon		
Lake Havasu		
Lukeville		
Mesa		
Naco		
Nogales		
Phoenix		
Peoria		
Pinetop		
Prescott		
San Luis		
Sasabe		
Scottsdale		
Sedona		
Show Low		
Sierra Vista		
Tempe		
Tucson		
White Mountains		
Wickenburg		
Yuma		
Other (list)		
ASK ONLY IF STAYED OVERNIGHT [check all that	apply]:	
4d. Where did you stay?		
Friends/Relatives		
Paid Hotel/Motel (indicate proper	ty name)	
2nd Home/Condo in AZ		
Other		
5. How much did you spend, including all charges	s. in Arizo	ona on this trip?
	,	P
(in dollars) \$	OR	(in pesos) \$
6. During your stay in(name places in o	question	9), how much did you spend on (
(if the total in question 5 is in dollars indicate in do		

How much did you spend on the following items (excluding business purchases).

City Name	1.	2.	3.	4.
Lodging	\$	\$	\$	\$
Food/Drink				
Restaurants	\$	\$	\$	\$
Groceries	\$	\$	\$	\$
Transportation				
Gasoline	\$	\$	\$	\$
Auto Spending	\$	\$	\$	\$
Flight	\$	\$	\$	\$
Auto Rental	\$	\$	\$	\$
Bus/Taxi	\$	\$	\$	\$
Retail Stores				
Amount	\$	\$	\$	\$
Health and Medicine				
Hospitals/Clinics	\$	\$	\$	\$
Doctors/Dentists	\$	\$	\$	\$
Medicines	\$	\$	\$	\$
Other Spending				
Entertainment	\$	\$	\$	\$
Other Goods	\$	\$	\$	\$
Other Services (haircuts)				

7a. IF WORK RELATED TRAVELER: Did you spend any money on work related expenses in Arizona? No ( ) Yes ( ).

IF YES: 7b. How much?

7c. Where?

7d. What?

How much did you spend for your business in Arizona?

Business		
Goods	\$ \$	\$ \$
Services	\$ \$	\$ \$

8a. Before this trip, how many trips did you take to Arizona in the last 12 months? \_\_\_\_\_ # of Trips

8b. Is this more or less than in the year before that? More Less No Change
IF MORE OR LESS: 8c. Why is that?
ASK ONLY OF PEDESTRIAN OR CAR TRAVELERS:
9a. Have you flown by plane to Arizona in a past visit? No Yes
IF YES: 9b. Why didn't you fly this trip? Too expensive No flights available from Mexico (list location flight is desired) Short distance travel Need vehicle to travel Other (indicate reason)
IF NO: 9bb. Why do you choose to walk/drive to Arizona? Too expensive No flights available from Mexico (list location flight is desired) Short distance travel Need vehicle to travel Other (indicate reason)
ASK ONLY OF AIR TRAVELERS:
9c. How did you book your trip?  Planned yourself Booked Online Tour operator Travel Agent Other
GO TO APPROPRIATE MODULE
DECISION RULE FOR USE OF QUESTIONAIRE MODULES:
If they traveled to Phoenix, they get the Phoenix module
If they traveled to Tucson, but not to Phoenix, they get the Tucson module.
Otherwise, they get the module for the border town they came through.

# TUCSON MODULE

10a. What stores or malls did you shop at while in Tucson?	
No shopping	
Casas Adobes Plaza Foothills Mall Plaza Palomino Crossroads La Encantada St. Philip's Plaza El Con Mall Park Place Mall Tucson Mall	
CostcoHome DepotK-MartLowe'sMervyn'sTarget CIRCLE ADDITIONAL STORES: (American Home, Best Buy, Circuit City, Jared's, Marshall's, Osco, Ross, Sam's Club, TJ Max, Walgreens, Walmart)Other (specify)	
10b. Besides malls and stores, please tell me what other places or attractions you went to while you were the Tucson area. PROBE: Any others? NoneFriend's/relative's houseRestaurantOther	in
AZ-Sonora Desert Museum Casino Concert/performance Colossal Cave Downtown Tucson Museum Old Tucson Pima Air &Space Museum Reid Park Zoo Saguaro National Park San Xavier Mission Tucson Convention Center University of Arizona Other (specify)	

# PHOENIX MODULE

10a. What stores or malls did you sh No shopping	op at while in Phoenix?	
Arizona Center Arizona Mills Arrowhead Towne Combile Biltmore Fashion Pa Borgata at Scottsdal	rk Desert Sky Mall	<ul> <li>Kierland Commons</li> <li>Metrocenter</li> <li>Paradise Valley Mall</li> <li>Scottsdale Fashion Square</li> <li>Superstition Springs Mall</li> </ul>
Other (specify)		
Walgreens, Walmart)Other (specify)	uy, Circuit City, Jared's, Marshall's, O	
Friend's/relative's h Restaurant other? Arizona Temple Casino Concert/performance Downtown (city) IMAX Museum Rawhide South Mountain Sporting event		
Tempe Town Lake WestWorld of Scottsda Zoo	ale	

#### **NOGALES MODULE:**

	stores or malls did you shop at while you were here? No shopping
	Mariposa Mall Sierra Vista Mall
	Other (specify)
_ 	Brackers Home Depot K-Mart
-	Ross Walmart
- - (	Western Warehouse CIRCLE ADDITIONAL STORES:
( J	AZ Sonora Supply, Bazar, Big Lots, California Furniture, Dollar mart, factory 2 U, family Dollar, ICPenney, Mission, Osco, radio Shack, Safeway, Sofa mart, Stage, True value, Walgreens)Other (specify)
PROBE: Ar	es malls and stores, please tell me what other places or attractions you went to while you were here.  y others?  None
-	Friend's/relative's house Restaurant
_	other?

# YUMA MODULE:

10a. What stores or malls did you shop at while you were here? No shopping
Yuma Historic Mall Yuma Palms
Other (specify)
Bealls Home Depot Lowe's Sam's Club Target Walmart Westwood CIRCLE ADDITIONAL STORES: (99 cent mart, Ashley Barnes & Noble, best Buy, Big Lots, Circuit City, factory 2 U, Family Dollar, Furniture Row, JCPenney, Kachina, Kirstens, Kohl's, Merwyn's, Oak Tree, Rite Aid, Sav-on) Other (specify)
10b. Besides malls and stores, please tell me what other places or attractions you went to while you were here. PROBE: Any others?
None
Friend's/relative's house Restaurant
other?

# DOUGLAS/NACO MODULE:

	es or malls did you shop at while you were here? No shopping
	Sierra Vista Mall Other mall (specify)
CIRCLE (B&l	_ Cato _ Dollar Tree _ Factory 2-U _ JcPenney _ Safeway _ Stage _ Walmart E ADDITIONAL STORES: D Lumber, Beyond Technology, Digital Odyssey, Family Dollar, La Familia, Midwest Pharmacy, o Shack, Rite Aid, Rustic Second hand, Starlight, Thomas) _ Other store (specify)
10b. Besides n PROBE: Any of	nalls and stores, please tell me what other places or attractions you went to while you were here. thers? _ None
	_ Friend's/relative's house _ Restaurant
	_ other?

# LUKEVILLE/SASABE MODULE:

10a. \	What stores or malls did you shop at while you were here? No shopping
	Besides [malls and] stores, please tell me what other places or attractions you went to while you were PROBE: Any others?  None
	Friend's/relative's house Restaurant
	other?

# ASK OF ALL:

Friend or Family Lived in Arizona Descubre Phoen Tucson Visitor Ce Don't know/reme			ng in Arizona	?	
Radio Television Pamphlet or Gui	Which newspaper was What magazine was that? What radio station was that? What tv station was that? de book What was the title? What was the website called?	( ) ( )	()	() DK () DK () DK	() DK
interviewee to indicate  A. Less than \$10 B. \$10,000 - \$14 C. \$15,000 - \$19 D. \$20,000 - \$29 E. \$30,000 - \$39, F. \$40,000 - \$49, G. \$50,000 - \$79 H. \$80,000 and n	,999 pesos 999 pesos ,999 pesos 999 pesos 999 pesos ,999 pesos	ds to his	/her income o		d ask the
IF YES: 12b. What do	you do?		_		
Thank you for your pa	rticipation!				

# **Endnotes**

- <sup>1</sup> While tourism is not identified in the official statistical data as an industry or sector, a number of service industries, such as hotels and restaurants, retail, entertainment and recreation, directly depend upon selling their goods and services to visitors.
- <sup>2</sup> According to Cheryl Cothran's report "The Tourism Industry in Arizona March 2002," Arizona's tourism industry is a major driver of the state's economy, based on its total annual economic impact and employment. The same report also states that the Joint Legislative Budget Committee of the Arizona Legislature concluded (that tourism is) Arizona's largest industry by far. Similarly, Dean Runyan Associates in their most recent report, Arizona Travel Impacts 1998-2007p, prepared for the Arizona Office of Tourism (June 2008), argued that travel and tourism is one of the most important "export-oriented" industries in Arizona.
- <sup>3</sup> De Gennaro, N. and R.J. Ritchey, *The economic impact of Mexican visitors to Arizona*, The University of Arizona College of Business and Public Administration, Division of Economic and Business Research, prepared for Arizona Office of Tourism, 1978; Hopkins, R.G., The economic impact of Mexican visitors to Arizona, University of Arizona, College of Business and Public Administration, Economic and Business Research Program, funded by the Arizona Office of Tourism through Northern Arizona University, 1992; Charney, A.H. and V. Pavlakovich-Kochi, The economic impacts of Mexican visitors to Arizona: 2001, The University of Arizona: Economic and Business Research Program, prepared for the City of Tucson's Tucson-Mexico Trade Office, 2002. A copy of the 2001 study and "Revisions of 2001Study" (December 2008) are available at http://ebr.eller.arizona.edu.
- <sup>4</sup> Based on the results for 2001 in combination with Dean Runyan Associates' estimates for that same year, it was possible to estimate the contribution of Mexican visitors to Arizona's economy: they accounted for an estimated 7.2 percent of all visitors' direct spending and 16.4 percent of all direct employment in Arizona's travel industry. Compiled by authors based on Dean Runyan Associates, Arizona Travel Impacts 1998-2007p, prepared for the Arizona Office of Tourism (June 2008).
- <sup>5</sup> Bringas Rábago, N.L., "Un asercamiento al turismo fronterizo y los obstáculos para su consolidación," paper presented at VI Congreso nacional de Investigación Turística, organizado por el Centro de Estudios Superiores de Turismo, Secretaría de Turismo en la Ciudad de México, del 22 al 24 de septiembre de 2004. Retrieved March 26, 2008 at http://www.colef.mx.
- <sup>6</sup> Shatz, H.J. and L.F. López-Calva, The emerging integration of California-Mexico economies. San Francisco: Public Policy Institute of California, 2004.
- <sup>7</sup> Realizing the economic importance of day-visitors, in 1994, Banco de México adjusted its definition and started to count day-visitors in the tourism statistics. In 1994, Mexico officially brought the importance of border tourism (and the need to include day-visitors) to the attention of the United Nations' World Organization of Tourism (ONU-OMT 1994 in Bringas Rábago, N.L., "Un asercamiento al turismo fronterizo y los obstáculos para su consolidación," paper presented at VI Congreso nacional de Investigación Turística, organizado por el Centro de Estudios Superiores de Turismo, Secretaría de Turismo en la Ciudad de México, del 22 al 24 de septiembre de 2004. Retrieved March 26, 2008 at http://www.colef.mx.
- <sup>8</sup> Banco de Mexico is the only institution that provides data on two-way (north- and southbound) crossers by origin.
- <sup>9</sup> Bringas Rábago, N.L., N.L., "Un asercamiento al turismo fronterizo y los obstáculos para su consolidación," paper presented at VI Congreso nacional de Investigación Turística, organizado por el Centro de Estudios Superiores de Turismo, Secretaría de Turismo en la Ciudad de México, del 22 al 24 de septiembre de 2004. Retrieved March 26, 2008 at http://www.colef.mx.
- <sup>10</sup> Based on a 12 year average from 1995 to 2006 calculated by authors based on Banco de Mexico data.
- 11 Averages calculated by author based on Banco de Mexico data from 1995 to 2006. Include only land crossers.
- <sup>12</sup> San Diego Chamber of Commerce, Mexican impacts on retail sales. San Diego Economic Bulletin, vol. 27, No. 6, 1979 (cited in Phillips, K.R. and R.Coronado, Texas border benefits from retail sales to Mexican nationals. Federal Reserve Bank of Dallas The Face of Texas, 2005 (October): 24-26.)
- <sup>13</sup> There have been nine large-scale devaluations of the peso during the past 80 years: 1925, 1934, 1940, 1948, 1954, 1976, 1982, 1986 and 1994, according to Fullerton, T.M. Jr., Borderplex 9/11 economic impacts, Technical Report TX08-1, Border Region Modeling Project, The University of Texas at El Paso, 2008 (January).
- 14 San Diego Dialogue," Who crosses the border: a view of the San Diego/Tijuana metropolitan region." Technical report, University of California, San Diego: San Diego Dialogue, 1994 (cited in Ghaddar, S. and C.J. Brown, The economic impact of Mexican visitors along the U.S.-Mexico border: a research synthesis, University of Texas-Pan American Center for Border Economic Studies, 2005 (December). <sup>15</sup> Patrick, J.M. and W. Renforth, The effects of peso devaluation on cross-border retailing, Journal of Borderlands Studies, 1996, 1: 25-
- <sup>16</sup> Phillips, K.R. and R. Coronado, Texas border benefits from retail sales to Mexican nationals. Federal Reserve Bank of Dallas, *The Face* of Texas, 2005 (October): 24-26.
- <sup>17</sup> Ghaddar, S. and C.J. Brown, *The economic impact of Mexican visitors along the U.S.-Mexico border: a research synthesis*, University of Texas-Pan American Center for Border Economic Studies, 2005 (December).
- <sup>18</sup> To arrive at annual expenditures of Mexican shoppers, estimates per visit expenditures were projected on 2004 crossing statistics.

Total number of Mexican parties was estimated at 60,469 (entire border, out of which 11,522 parties crossing Arizona border). Source: Ghaddar, S. and C.J. Brown *The economic impact of Mexican visitors along the U.S.-Mexico border: a research synthesis*, University of Texas-Pan American Center for Border Economic Studies, 2005 (December).

- <sup>19</sup> The estimate for Arizona included spending only in border counties; estimates are based on the study by Charney and Pavlakovich-Kochi (2005). Arizona estimates have been revised in 2008, which is reflected in this reporting. For explanation see Revisions to 2001, posted at <a href="http://ebr.eller.arizona.edu">http://ebr.eller.arizona.edu</a>
- <sup>20</sup> Cañas, J., R. Coronado and K. Phillips. 2006. Border benefits from Mexican shoppers. Federal Reserve Bank of Dallas *Southwest Economy* (May/June):11-13.
- Ghaddar, S. and C.J. Brown, *The economic impact of Mexican visitors along the U.S.-Mexico border: a research synthesis*, University of Texas-Pan American Center for Border Economic Studies, 2005 (December). Arizona estimates have been revised in 2008, which is reflected in this reporting. For explanation see Revisions to 2001, posted at <a href="http://ebr.eller.arizona.edu">http://ebr.eller.arizona.edu</a>
- <sup>22</sup> Ghaddar, S. and C.J. Brown, *The economic impact of Mexican visitors along the U.S.-Mexico border: a research synthesis*, University of Texas-Pan American Center for Border Economic Studies, 2005 (December).
- <sup>23</sup> Ghaddar, S. and C.J. Brown, *The economic impact of Mexican visitors along the U.S.-Mexico border: a research synthesis*, University of Texas-Pan American Center for Border Economic Studies, 2005 (December).
- <sup>24</sup> Fullerton, T.M. Jr., Borderplex 9/11 economic impacts, Technical Report TX08-1, *Border Region Modeling Project*, The University of Texas at El Paso, 2008 (January).
- <sup>25</sup> Phillips, K.R. and R. Coronado. 2005. Texas border benefits from retail sales to Mexican nationals. Federal Reserve Bank of Dallas *The Face of Texas* (October): 24-26.
- <sup>26</sup> Phillips, K.R. and R. Coronado, Texas border benefits from retail sales to Mexican nationals. Federal Reserve Bank of Dallas *The Face of Texas*, 2005 (October): 24-26; Cañas, J., R. Coronado and K. Phillips, Border benefits from Mexican shoppers, Federal Reserve Bank of Dallas, *Southwest Economy*, 2006 (May/June):11-13.
- <sup>27</sup> Phillips, K.R. and R. Coronado, Texas border benefits from retail sales to Mexican nationals, Federal Reserve Bank of Dallas *The Face of Texas*, 2005 (October): 24-26.
- <sup>28</sup> Patrick, J.M. and W. Renforth, The effects of peso devaluation on cross-border retailing, *Journal of Borderlands Studies*, 1996, 1: 25-41.
- <sup>29</sup> Phillips, K.R. and R. Coronado, Texas border benefits from retail sales to Mexican nationals, Federal Reserve Bank of Dallas, *The Face of Texas*, 2005 (October): 24-26.
- <sup>30</sup> Pavlakovich, K.V. and H.Kim, Outshopping by maquila employees: implications for Arizona's border communities, *Arizona Review*, 1990 (Spring): 9-16; Patrick, J.M. and R.S. Arriola, "The economic impact of maquiladoras on border development: A Rio Grande Valley case study some preliminary findings," paper presented at the Western Social Science Association meeting, El Paso, TX, 1987; Phillips, K.R. and R. Coronado, Texas border benefits from retail sales to Mexican nationals, Federal Reserve Bank of Dallas, *The Face of Texas*, 2005 (October): 24-26.
- <sup>31</sup> Holden, R.J., *Maquiladoras along the Texas-Mexico border: an econometric evaluation of employment and retail; sales effect on four border SMSAs*. Texas Department of Community Affairs, Regional Economic Development Division, 1984 (February) (cited in Phillips and Coronado, Texas border benefits from retail sales to Mexican nationals, Federal Reserve Bank of Dallas, *The Face of Texas*, 2005 (October): 24-26.)
- <sup>32</sup> Fullerton, T.M. Jr., Borderplex 9/11 economic impacts, Technical Report TX08-1, *Border Region Modeling Project*, The University of Texas at El Paso, 2008 (January).
- <sup>33</sup> Phillips, K.R. and R. Coronado, Texas border benefits from retail sales to Mexican nationals, Federal Reserve Bank of Dallas, *The Face of Texas*, 2005 (October): 24-26.
- <sup>34</sup> Adkisson, R.V. and L. Zimmerman, Retail trade on the U.S.-Mexico border during the NAFTA implementation era, *Growth and Change*, 2004, Vol. 35, No. 11: 77-89; retrieved March 20, 2008 at <a href="http://web.ebscohost.com/ehost/pdf?vid=3&hid=113&sid=cd/750e01-ff62-4cca-a957-27eb60f71e84%40sessionmgr103">http://web.ebscohost.com/ehost/pdf?vid=3&hid=113&sid=cd/750e01-ff62-4cca-a957-27eb60f71e84%40sessionmgr103</a>. See also: Cañas, J., R. Coronado and K. Phillips, Border benefits from Mexican shoppers, Federal Reserve Bank of Dallas, Southwest Economy, 2006 (May/June):11-13.
- <sup>35</sup> Kenn Morris, president of the Crossborder Group, cited in Berenstein, Leslie. "Waits, security issues hitting tourism hard," *The San Diego Union -Tribune*, March 11, 2008. Retrieved May 2, 2008 at <a href="http://signonsandiego.printthis.clickability.com/pt/cpt?action=cpt&title=Decline+in+border">http://signonsandiego.printthis.clickability.com/pt/cpt?action=cpt&title=Decline+in+border</a>...
- <sup>36</sup> Wasserman, D., The borderlands mall: form and function of an imported landscape, *Journal of Borderland Studies*, 1996, 11(2): 69-88
- <sup>37</sup> Cañas, J., R. Coronado and K. Phillips, Border benefits from Mexican shoppers, Federal Reserve Bank of Dallas, *Southwest Economy*, 2006 (May/June):11-13.
- <sup>38</sup> Hadjimarcou, J. and J.W. Barnes, Retailing for foreign nationals in the border zone: The impacts of currency devaluation and cross-border competition, *Journal of Global Marketing*, 1998, 11: 85-106 (cited in Fullerton, T.M. Jr., Borderplex 9/11 economic impacts,

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- <sup>39</sup> Cañas, J., R. Coronado and K. Phillips, Border benefits from Mexican shoppers, Federal Reserve Bank of Dallas, *Southwest Economy*, 2006 (May/June):11-13.
- <sup>40</sup> Fullerton, T.M. Jr., Borderplex 9/11 economic impacts, Technical Report TX08-1, *Border Region Modeling Project*, The University of Texas at El Paso, 2008 (January).
- <sup>41</sup> Cañas, J., R. Coronado and K. Phillips, Border benefits from Mexican shoppers, Federal Reserve Bank of Dallas, *Southwest Economy*, 2006 (May/June):11-13.
- <sup>42</sup> Fullerton, T.M. Jr., Borderplex 9/11 economic impacts, Technical Report TX08-1, *Border Region Modeling Project*, The University of Texas at El Paso, 2008 (January).
- <sup>43</sup> Carreira, R., Douglas economy reviewed, *The Indicator*, Cochise College Center for Economic Research, 7-8, 2007 (Fall).
- <sup>44</sup> Patrick, J.M, 2006 (cited in Cañas, J., R. Coronado and K. Phillips, Border benefits from Mexican shoppers, Federal Reserve Bank of Dallas, *Southwest Economy*, 2006 (May/June):11-13).
- <sup>45</sup> While Pima County geographically is a border county, Tucson as the largest city is 60 miles from the border and at the time of 1977-78 study was considered an interior city.
- <sup>46</sup> Hopkins' data indicate an unusual increase in the share of Cochise County.
- <sup>47</sup> Using average inflation 0.03 for 10 years (which comes to 0.30); i.e., \$857.4 million in 2001 is worth \$677.4 million in 1991 dollars. This result reflects revisions of 2001 economic impacts made in 2008. For explanation Revisions to 2001, posted at <a href="http://ebr.eller.arizona.edu">http://ebr.eller.arizona.edu</a>
- <sup>48</sup> Based on revised 2001estimates; for explanation see Revisions to 2001, posted at http://ebr.eller.arizona.edu
- <sup>49</sup> Interesting comparison with findings in Cheryl Cothran's "The Tourism Industry in Arizona March 2002:" "Visitor surveys have established that VFR (visit friends and relatives) ranks as the single most important 'trip purpose' for Arizona visitors, motivating a third of all visits and 40 percent in Maricopa County."
- <sup>50</sup> Percent of population of Hispanic origin in Pima County increased from 29 percent in 2000 to 33 percent in 2007; in the same period, in Maricopa County from 25 percent to 30 percent, according to Pew Hispanic Center, <a href="http://pewhispanic.org/states/?countyid=4019">http://pewhispanic.org/states/?countyid=4019</a>, November 21, 2008.
- <sup>51</sup> Vera Pavlakovich-Kochi, Arizona-Sonora Regional Indicators, public presentation, Tucson, AZ, October 2006.
- <sup>52</sup> Vera Pavlakovich-Kochi, Arizona-Sonora Regional Indicators, public presentation, Tucson, AZ, October 2006.
- <sup>53</sup> Wendy Vittori's presentation at Arizona-Mexico Commission's plenary session, in Ciudad Obregon, November 2007.
- <sup>54</sup> Acosta, Suleika, New Nogales, Sonora mall makes impact on both sides of the border, KOLD News 13. Jan 21, 2007. Retrieved June 2, 2008 at <a href="http://www.kold.com/global/story.asp?s=5901885&ClientType=Printable">http://www.kold.com/global/story.asp?s=5901885&ClientType=Printable</a>
- <sup>55</sup> Source: Walmart de México retrieved June 10, 2008 at http://www.walmartmexico.com.mx/1distrigeo.html .
- <sup>56</sup> Source: "Center for Economic Research releases holiday shopping survey results," *The Daily Dispatch*, <a href="http://www.douglasdispatch.com/articles/2006/news/news4.txt">http://www.douglasdispatch.com/articles/2006/news/news4.txt</a> accessed on 12/13/2006.
- <sup>57</sup> Source: INEGI. Encuesta Nacional de Ingresos y Gastos de los Hogares 2005. Cuadro 2.1,
- Hogares y su ingreso corriente total trimestral por deciles de hogares segun tamano de localidad.
- htpp://inegi.gob.mx, accessed on January 16, 2007.
- <sup>58</sup> Dr. Pablo Wong Gonzalez and Dr. Patricia Salido, researchers at the El Centro de Investigación en Alimentación y Desarrollo (CIAD)
- Monthly exchange rates were retrieved from Federal Reserve website (http://www.federalreserve.gov/releases/g5/) 9/18/08
- <sup>60</sup> Using the 12 month (July 07-June 08) average exchange rate, the income categories shown in Tables 11 and 12 correspond to income categories in U.S. dollars as: (1) under 929.33; (2) 929.33 to 1,393.90; (3) 1,394.00 to 1,858.57; (4) 1,858.66 to 2,787.90; (5) 2,787.99 to 3,717.23; (6) 3,717.33 to 4,646.56; (7) 4,646.66 to 7,434.56, and (8) 7,434.65 and more. Based on Federal Reserve website <a href="http://www.federalreserve.gov/releases/g5">http://www.federalreserve.gov/releases/g5</a> on 9/18/08.
- <sup>61</sup> Approximately 3 percent annually.
- <sup>62</sup> For further explanation, see the report "2008 Revisions of 2001 Results" at http://ebr.eller.arizona.edu.
- The number of airport border "crossers" used in 2001 was from the Immigration and Naturalization Service (INS). The INS figures estimated the number of international travelers from Mexico and disaggregated those figures into "Aliens" and "U.S. Citizens." As such, the 2001 figures included both final destination passengers and pass-through travelers. During the 2001 study, no data were available on the portion of pass-through vs. final destination passengers, so surveyors interviewed both pass-through and final destination visitors, as they were found and identified in the airports, as randomly as possible. In the current study, data were obtained for both airports of the *final destination* traffic from Mexico to Phoenix Sky Harbor Airport and to the Tucson International Airport. This data could also identify the portion of trips (round-trip) that originates in Mexico vs. the portion that originates in the U.S. These portions are used as proxies for the portion of U.S. vs. Mexican travelers. It is assumed that if the trip started in Mexico and ended in Mexico, then those are Mexican visitors to the U.S. If the trips began and ended in the U.S., it is assumed those travelers are Americans traveling to Mexico. Because this data is for final destination travelers, only travelers who indicated they visited Phoenix/Tucson were interviewed in this study. As a

result, both the number of "alien crossers" report for the airports and the expenditures for party computed for the airports are conceptually different for 2001 and 2007-08. For more explanation, see Revisions of 2001 results (December 2008) at <a href="https://ebr.eller.arizona.edu">https://ebr.eller.arizona.edu</a>.

<sup>&</sup>lt;sup>64</sup> Based on 2008 Revisions of 2001 results (December 2008) at <a href="http://ebr.eller.arizona.edu">http://ebr.eller.arizona.edu</a>.

<sup>&</sup>lt;sup>65</sup> Minnesota IMPLAN Group, Inc. IMPLAN Professional, Version 2.0. Social Accounting & Impact Analysis Software.

<sup>&</sup>lt;sup>66</sup> Note: "income" refers to labor income, i.e., wages and salaries, and is a part of total "sales" (or output); therefore, "income" shall not be added to "sales."

<sup>&</sup>lt;sup>67</sup> 2001 impacts have been revised in 2008; for explanation se Revisions 2001 (December 2008) at <a href="http://ebr.eller.arizona.edu">http://ebr.eller.arizona.edu</a>.

<sup>&</sup>lt;sup>68</sup> Tax revenues are a part of the total "sales" (i.e., output) impact, and they are commonly estimated by IMPLAN models. However, Arizona revenue Model, maintained in Eller College's Economic and Business Research Center is based on more detailed information. Although estimated separately, the tax revenue impact reported in Table 49 should not be added to the total sales impact reported in Table 47, because, by definition, it is already a part of the total impact.

<sup>&</sup>lt;sup>69</sup> De Gennaro, N. and R.J. Ritchey, *The economic impact of Mexican visitors to Arizona*, The University of Arizona College of Business and Public Administration, Division of Economic and Business Research, prepared for Arizona Office of Tourism, 1978; Hopkins, R.G., *The economic impact of Mexican visitors to Arizona*, University of Arizona, College of Business and Public Administration, Economic and Business Research Program, funded by the Arizona Office of Tourism through Northern Arizona University, 1992; Charney, A.H. and V. Pavlakovich-Kochi, *The economic impacts of Mexican visitors to Arizona*: 2001, The University of Arizona: Economic and Business Research Program, prepared for the City of Tucson's Tucson-Mexico Trade Office, 2002. A copy of the "Revisions to 2001 Study" (December 2008) is available at <a href="http://ebr.eller.arizona.edu">http://ebr.eller.arizona.edu</a>.

<sup>&</sup>lt;sup>70</sup> Source: http://www.x-rates.com/d/USD/MXN/graph120.html; accessed on November 30, 2008.

<sup>&</sup>lt;sup>71</sup> The Arizona-Mexico Commission in cooperation with the Arizona Office of Tourism was successful in obtaining an extension of compliance with the Western Hemispheric Travel Initiative (WHTI) from January 2008 to June 2009.