

# **THE ECONOMIC IMPACTS OF MEXICAN VISITORS TO ARIZONA: 2001 *REVISIONS (December, 2008)***

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## **Introduction**

In the process of preparing the 2007-2008 update to this 2001 study, two issues have resulted in the preparation of this *REVISIONS* document. First, the data used for the number of airport visitors in 2001 appears to be too large, compared to data that recently has become available for that 2001 period. The reason we are taking the time to release revisions **due to this new** data is that, without revisions, the comparison of 2001 – 2007-08 **results changes** figures in the 2007-08, particularly those related to total expenditures, by port or by destination city. The change in airport data is discussed in more detail below.

In addition, we have revised the economic impact tables for two reasons. First, to reflect changes created by revising the airport data described above and second, because it was determined during the 2007-08 study that the 2001 estimated impacts were too high.

The purpose of this revision is not to revise all of the 2001 tables to reflect the new data source. Some of the tables are completely unaffected by the data change. But even some that would have some small changes due to the data change will not be revised at this time. Only those that substantially affect the interpretation of the 2007-08 tables will be revised.

## **Border Crossing Data for Aliens at Phoenix and Tucson Airports**

The number of airport border “crossers” used in 2001 was from the **U.S.** 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.” In 2001, the INS data was the only data available to the authors for the number of Mexican visitors. Because the INS data essentially deals with travelers from Mexico arriving in the respective airports, the 2001 figures included both final destination passengers and pass-through travelers. The authors were unable to obtain data from any other sources regarding Mexican visitors arriving at airports and no data were available on the portion of pass-through vs. final destination passengers. Therefore, the procedure was to interview both pass-through and final destination visitors, as they were found and identified in the airports, as randomly as possible.

INS figures, comparable to those used in 2001, were not available for the more recent study, fiscal year 2007-08, so alternative data was sought out. 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 (TIA). Because this data measures final destination traffic, it is conceptually different than that used in 2001, which also included pass-through visitors. 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.

Substantial efforts were made to reconcile these two sources of data for 2006, a year for which both sources were available. The authors also tried reconciling both sources of data with the U.S. Department of Transportation, Research and Innovative Technology (RITA) database, available online. The authors could not reconcile these three sources of data. But there was strong belief that the most accurate numbers, the numbers that best reflected Mexican visitor activity, were those obtained from TIA.<sup>1</sup>

However, because they can't be reconciled and because the numbers used in the 2001 study and the 2007-08 study are very different, both conceptually and in magnitude, it created strange results when the *change* between 2001 and the current study are examined. We have recently obtained 2001 data that is consistent with newer 2007-08 study so we decided to revise some of the earlier tables in order to have a better understanding of the 2007-08 study. It should be noted that this data was not available to the authors in 2001; both airports were contacted at that time for data.

The following table has both sets of data. The number of parties traveling through the airport fell by a factor close to 10 for both airports when the new data is used instead of the INS data.

Table A (New to this revisions document)

2001 Airport Data		
	Tucson	Phoenix
Passengers		
Original data"	15,695	136,270
New data **	1,889	13,186
Parties***		
Original data"	8,134	81,495
New data **	979	7,896

\*Original data was obtained from the Immigration and Naturalization Service. Data were for "Aliens" who were "from Mexico," including pass-through visitors.

\*\*New data was obtained from the Tucson International Airport.

Data represents final destination passengers arriving in Arizona from Mexico, whose trips originated in Mexico rather than in the US.

\*\*\*Parties are computed using party size, by airport, from the 2001 survey.

<sup>1</sup> Many thanks go to Alex Kovach, Director of Air Service Development, Tucson International Airport, provided data for both of the major airports in Arizona.

## Expenditures per Party, Total Number of Parties, Total Expenditures by Port

The following table contains revised parties for the Tucson and Phoenix airports.<sup>2</sup> The table remains unchanged except the number of visitor parties to the airports is smaller.

There is a resulting small change to the total number of parties for the 2001 study. Examining the numbers for Tucson and Phoenix suggests that there were likely data issues for the airport extending back to the even earlier studies. The data reported for 2001 for the airports includes only final destination passengers whose trips originated in Mexico.

Because in 2001, both pass-through and final destination visitors were surveyed at airports, pass-through visitors were also surveyed, as they were found. Since the new visitor parties in the revised Table 21 are only final destination passengers, new figures for per party spending for destination travelers was computed below. The per party expenditure figures are higher because surveyed pass-through observations were not averaged in with final destination visitors.

Table 21 (Revised December 2008)

Port of Entry	( Thousands of Parties)			Percent Change 1991-2001
	1977-78	1991	2001	
Douglas	713.6	1,251.1	1,995.2	59.5
Lukeville	131.8	152.7	143.5	(6.0)
Naco	228.9	238.0	356.6	49.8
Nogales	2,892.4	2,821.0	4,881.6	73.0
San Luis	2,333.9	2,405.6	2,988.0	24.2
Sasabe	25.4	6.7	40.2	500.0
Phoenix	2.9	0.7	7.9	1,027.9
Tucson	7.3	19.9	1.0	(95.1)
<b>Total</b>	<b>6,336.2</b>	<b>6,895.7</b>	<b>10,414.0</b>	<b>51.0</b>

<sup>2</sup> Table numbers are consistent with the 2001 study for easy comparison.

Table 22 (Revised December 2008)

Mexican Per Party Expenditures in Arizona 1977-78 vs. 1991 vs. 2001 by Port of Entry				
Port of Entry	(Dollars)			Percent
	1977-78	1991	2001	Change 1991-2001
Douglas	36.6	112.6	49.5	(56.0)
Lukeville	55.6	115.8	96.4	(16.8)
Naco	29.2	130.3	86.5	(33.7)
Nogales	58.4	121.9	102.9	(15.5)
San Luis	42.4	54.5	65.0	19.3
Sasabe	29.7	68.1	116.0	70.4
Phoenix	674.0	1,164.1	1,484.8	27.5
Tucson	639.7	1,135.2	898.5	(20.9)
Total	49.8	99.8	91.8	(8.1)

Tables 21 and 22 combine to determine total expenditures, by port of entry, in Table 20.

Table 20 (Revisions December 2008)

Total Direct Expenditures of Mexican Visitors in Arizona 1977-78 vs. 1991 vs. 2001 vs. 2007-08, by Port of Entry				
Port of Entry	(Millions of Dollars)			Percent
	1977-78	1991	2001	Change 1991-2001
Douglas	26.1	140.9	98.8	(29.9)
Lukeville	7.3	17.7	13.8	(22.0)
Naco	6.7	31.0	30.8	(0.6)
Nogales	168.8	343.8	502.5	46.2
San Luis	99.0	131.1	194.2	48.1
Sasabe	0.8	0.5	4.7	840.0
Phoenix	2.0	0.8	11.7	1,365.4
Tucson	4.7	22.6	0.9	(96.1)
Total	315.3	668.2	857.4	28.3

Total estimated expenditures for parties flying into the airports dropped substantially, mainly because of the change in visitor parties, due to the change in the data for Mexican visitors to Arizona traveling by air. Total estimated expenditures in Arizona in 2001 dropped from 962.9 million in the original estimate to 857.4 million.

### Expenditures per Category

Because the number of parties to Tucson and Phoenix ports changed, the two ports receive different weights and the spending categories, by mode, changed somewhat.

Table 24 (Revised December 2008)

Categories	Per Party Expenditures, by Category, by Mode (Dollars per Party)		
	Mode		
	Motor Vehicle	Pedestrian	Air
Lodging	1.19	-	40.41
Total Food	34.17	22.59	135.20
Restaurants	9.30	3.98	135.20
Groceries	24.88	18.61	-
Total Transportation	10.37	1.35	556.91
Gasoline or Auto	8.77	1.35	18.83
Air Travel	-	-	519.50
Car Rental	1.60	-	18.58
Stores	45.11	12.76	342.50
Total Medical	0.86	-	8.49
Doctors	0.24	-	8.49
Hospitals	0.49	-	-
Medicine	0.13	-	-
Total Business	5.00	2.07	218.46
All Other	1.55	0.55	118.12
Total	98.56	39.31	1,420.10

This results in small changes in overall expenditures per category.

Table 23 (Revised December 2008)

Categories	Expenditures per Category, 1991 vs. 2001 (Thousands of Dollars)		% of Percent Column Change	
	1991	2001	Total	1991-2001
Lodging	12,934	9,094	1.1	(29.69)
Total Food	173,971	321,742	37.5	84.94
Restaurants	28,788	81,750	9.5	183.97
Groceries	145,183	240,065	28.0	65.35
Total Transportation	24,627	85,235	9.9	246.11
Gasoline or Auto	20,987	68,706	8.0	227.38
Air Travel	2,969	4,620	0.5	55.60
Car Rental	671	11,909	1.4	1,674.84
Stores	222,312	373,541	43.6	68.03
Total Medical	24,105	6,388	0.7	(73.50)
Doctors	15,745	1,837	0.2	(88.33)
Hospitals	5,205	3,597	0.4	(30.90)
Medicine	3,155	954	0.1	(69.76)
Total Business	148,238	45,032	5.3	(69.62)
All Other	82,069	14,125	1.6	(82.79)
Total	688,256	857,402	100.0	24.58

### Expenditures by County and City, 1991 and 2001

Table 30 (Revised December 2008)  
Expenditures by County and City, 1991 and 2001

County	1991 Expenditures (\$ 000s)	2001 Expenditures (\$ 000s)	Percent Change	2001 Percent of Total Expenditure	2001 City Visitor Parties	2001 Exp. Per Visitor Party (\$)
Cochise	164,263	96,753	(41.10)	11.28	2,167,994	44.63
Maricopa	16,419	36,535	122.52	4.26	68,320	534.77
Pima	108,506	289,460	166.77	33.76	1,480,758	195.48
Santa Cruz	268,470	242,542	(9.66)	28.29	3,509,644	69.11
Yuma	130,598	191,158	46.37	22.30	2,849,109	67.09
Other Counties	-	954	N.A.	0.11	7,055	135.25
Outside Arizona					401,313	
Total	688,256	857,402	24.58	100.00	10,484,192	81.78
City*						
Douglas	141,631	79,423	(43.92)	9.26	1,845,212	43.04
Nogales	268,470	242,542	(9.66)	28.29	3,509,644	69.11
Phoenix	16,419	30,502	85.77	3.56	65,976	462.33
San Luis	61,960	67,104	8.30	7.83	1,645,647	40.78
Tucson	98,760	280,257	183.78	32.69	1,347,497	207.98
Yuma	68,637	123,772	80.33	14.44	1,201,118	103.05
Other Cities	32,379	27,802	(14.14)	3.24	805,944	34.50
					63,155	
Total	688,256	851,402	23.70	99.30	10,484,192	81.21

## Economic Impacts

Table 36 (Revised, December 2008)  
Direct Economic Impacts, by County, and for Arizona

County	Direct Spending \$000s	Direct Jobs	Direct Income \$000s
Cochise	96,753	1,009	16,580
Maricopa	36,535	535	10,808
Pima	289,460	3,126	54,721
Santa Cruz	242,542	2,538	45,531
Yuma	191,158	2,212	35,899
Other Counties	954	10	173
SUM	857,402	9,431	163,712
Arizona	857,402	9,431	163,712

Table 37 (Revised December 2008)  
 Total Economic Impacts, by County, and for Arizona

County	Total Output \$000s	Total Jobs	Total Income \$000s
Cochise	114,601	1,258	22,630
Maricopa	52,385	711	16,955
Pima	359,488	4,056	80,800
Santa Cruz	276,688	3,026	57,057
Yuma	228,097	2,742	49,345
Other Counties	1,129	13	237
SUM	1,032,388	11,805	227,024
Arizona	1,100,504	11,805	262,527