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Economics in the know.

The Spending Patterns and Economic Impacts of Mexican Nationals in A Twenty-County Region of South and Central Texas

Study Conducted by:
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SABÉR Institute is a research collaborative of St. Mary's University and the San Antonio Hispanic Chamber of Commerce.

Special thanks to Visa for supplying the data that was the basis of this analysis.

April 12, 2013

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The Hispanic Chamber embodies the diversity of San Antonio, including hard-working and respected Hispanic professionals, entrepreneurs, small and medium-sized businesses, as well as many of San Antonio's major corporations, and helps businesses succeed by providing many opportunities for our members to build, connect and invest in their businesses.

In 2009, the Hispanic Chamber became the first chamber of commerce in San Antonio, and the first Hispanic Chamber in America to be accredited by the U.S. Chamber of Commerce. The Hispanic Chamber earned a Four-Star Accreditation and ranks in the top 1.7% of all chambers in the United States.

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I. Introduction

For many years, if not decades, many have observed the large influx of Mexican Nationals into the South and Central Texas areas. It has long been believed that their spending activity generates quite a bit of economic activity in the region. Some studies (discussed below) have measured this impact on the border region and in Central Texas, but as of yet, the impact in the San Antonio has mainly been measured from anecdotal evidence. As many of the locals visit the malls during the various major holiday seasons, it is clearly evident that they are spending quite a bit of money shopping. There is also evidence that they come to the area to receive medical, purchase homes, and start businesses. But, all of this evidence for the San Antonio region to date has been anecdotal. With data provided by Visa, this study will be able to document with data the economic impact that some of the spending by Mexican Nationals is having on the San Antonio economy. Additionally, the scope of the study expands to cover a twenty-county region into South and Central Texas. Hence, the purposes of this study are twofold: (1) provide estimates of the spending patterns by Mexican Nationals in this twenty-county region, and (2) measure the economic impact of this spending.

According to this data, Mexican nationals spent \$2,377,235,906 in 2011 and \$2,684,318,765 in 2012, a 12.9 increase, in the twenty-county region. The largest portion of this spending occurs in the border counties of Hidalgo, El Paso, and Webb counties, but Bexar, Hays, and Travis counties also see sizeable amount of spending in their local economies. The data also clear patterns of spending throughout the year with big increases in April, July, November, and December most likely related to the major holidays in these months. **For instance, in 2012, spending activity increases in the range of 35% to 93% during these months compared to the previous months.** We have also seen increases in their spending each year from 2010 to 2012. Many factors can drive this, but it is most likely driven by improving economic conditions in both the U.S. and Mexico. **All of this economic activity, supported employment of 25,456 full-time equivalent jobs earning incomes totaling \$925,884,587.** The spending also resulted in \$114,325,004 in tax revenues, not including sales tax revenues, to the State government and various local government agencies in the region of study.

Before getting into the data and methodology used in this study and the results, it will be of some benefit to briefly discuss why Mexican nationals come north to engage in these various activities. This will be discussed in the next section. The data and methodology will be discussed in Section III followed by the discussion of the results in Section IV. The last section will contain the conclusion and thoughts on future research.

II. Factors Affecting Mexican Nationals' Economic Activity in the U.S.

As discussed in the following section, this geography analyzed in this study covers three sub-areas: the San Antonio metropolitan area, some counties of Central Texas covering the outlet malls in that area, and counties along the U.S.-Mexico border. In each of these areas, one of the main reasons Mexican nationals are traveling to the region is to shop. In a survey of Mexican visitors to San Antonio conducted by the San Antonio Convention and Visitors Bureau and UTSA professor Dr. David C. Bojanic (2009), 67% of the respondents said their primary reason for visiting is to shop, followed by leisure/vacation (24%), visit family/friends (8%), and business (7%). It is also worth noting that this same survey showed that 73% of them stayed in hotels during their visits, 21% stayed with friends or relatives, 5% own a second home in the area, and 1% had other accommodations.

In their study of Mexican nationals cross-border shopping activity at the San Marcos Outlet Malls, Sullivan et al. (2012) also found that the main reason for visiting this area was also to shop. Maybe this is not too surprising since it was an intercept survey conducted at the outlet mall, but they did inquire as to the main reason for the visit. So, it is possible for the main reason for the visit to be something other than shopping.

Ghaddar and Brown (2005) also find shopping to be the biggest reasons for Mexican visitors to travel into the U.S. border region, but like the findings from other studies, the other reasons for traveling into the area are similar. The shopping activity by Mexican visitors from all regions of Mexico accounts for a sizeable portion of the retail activity in the border cities.

...Mexican trade represents a significant share of Texas border-city retail activity, ranging from 40 to 45 percent in Laredo, 35 to 40 percent in McAllen, 30 to 35 percent in Brownsville and 10 to 15 percent in El Paso. While El Paso relies mostly on shoppers from its sister border city, Ciudad Juarez, Rio Grande Valley communities draw a greater extent from interior cities such as Monterrey (Coronado and Phillips, 2012, 15).

Ghaddar and Brown (2005) also provide an interesting summary of the shopping traits of these visitors, which provide some insights into the reasons they come north to shop.

An assessment of the shopping traits of Mexican visitors to the South Texas border region revealed that Mexican shoppers exhibited a very high level of brand loyalty, were very price and quality conscious, and had especially favorable views of U.S. products in terms of their technological advancement, price competitiveness, high quality, and variety of choices (Vincent et al., 2003). Similar findings were reported for Mexican shoppers from Baja California who pointed to prices, variety and quality as main reasons for shopping in the U.S. (Sierra López and Serrano Contreras, 2002; San Diego Dialogue, 1994). Guo et al. (2005) further explore Mexican nationals' motives to shop in the U.S. beyond the external motives of product quality, variety and competitive pricing. Based on structural equation modeling, they find that psychological factors (desire to show off power, enjoyment of a more civilized shopping environment, aspiration to be an opinion leader, and yearning to be a successful person) are positively associated with cross border shopping frequency (Ghaddar and Brown, 2005, 12).

It is evident from this summary that there are many factors that drive them north from seeking value in the goods and services to purchase to psychological factors. It will also be evident from the discussion in the next section that they also come to the U.S. for medical care, and as previously mentioned, there is also ample anecdotal evidence that they come to buy homes and invest in businesses.

There are also some economic factors that influence the frequency of visits and the amount spent during those visits. One of these factors is the peso-dollar exchange rate. As Canas et al. note,

Exchange-rate fluctuations can quickly make goods and services across the border either cheaper or more expensive for international shoppers. As a result, retail sales to Mexican nationals are sensitive to swings in the peso's value...The sensitivity, however, isn't uniform across the border cities. Coronado found that retail trade in Laredo, McAllen, and

Brownsville is highly affected by changes in the value of the peso, while the El Paso retail sector is not (Canas et al., 2006, 12).

In a more recent analysis, Coronado and Phillips found that when the peso began falling in the third quarter of 2008, retail sales in the border cities slumped by 15% and as the peso strengthened in 2009-2011, retail sales in the border cities “quickly inched up” (Coronado and Phillips, 2012, 15). A similar relationship has held as the peso strengthened in 2012, according to Coronado and Phillips.

Overall economic conditions and violence in Mexico may also play a big role. If one buys into general macroeconomic theory, as wealth increases, we would expect that spending activity by Mexican nationals will also increase which could be reflected in more frequent visits and/or higher spending during those visits. It also seems reasonable that as violence in Mexico fluctuates that may also affect the frequency of visits to the region as Mexican citizens try to escape the violence.

Lastly, Sullivan et al. (2012) test the hypothesis that there is a negative relationship between distance traveled by Mexican nationals and the amount they spend. They also test the hypothesis that frequency of visits by Mexican cross-border shoppers positively affects the amount they spend. Both of these hypotheses were rejected as a result of their regression analysis.

III. Data and Methodology

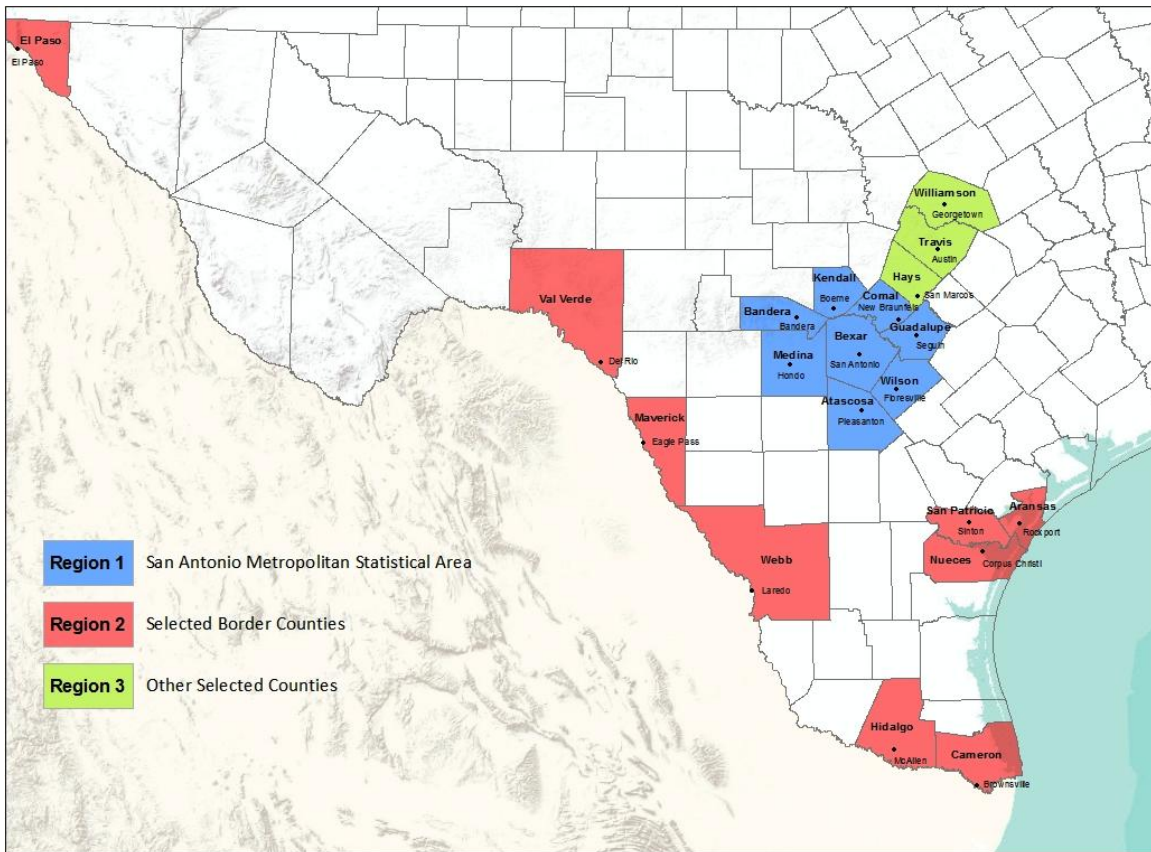
The core data for this study, provided by Visa, is spending by Mexican nationals using Visa cards for each month from February 2010 through December 2012 (data for January 2010 are not available). They are identified as Mexican nationals based on their Visa billing address being located in Mexico. Thus, the data do not identify if they also have a home in one of counties analyzed in this study indicating that the cardholder or their family might live at least part of the year in the U.S. There is also no indication in the data if the cardholder might be a citizen of another country but have a Mexican billing address. It might, therefore, be more appropriate to refer to these visitors as cross-border visitors from Mexico, but it does not seem to be very unrealistic to assume that the vast majority of these visitors are Mexican nationals. The data also do not capture their

purchases of homes or other real estate or their investment in businesses in the region. Much effort was made to find data to capture the spending activity on real estate and investment in businesses, but the data do not exist from secondary sources, to our knowledge. The data do capture their aggregate spending in each of the twenty counties given in the following table. The geographic area covered in this study is also shown in Map 1.¹ The counties selected for the study were those in the San Antonio Metropolitan Area (Region 1), border counties that are known to be impacted substantially by the economic activity of the Mexican nationals (Region 2), and select counties in the Central Texas area where sizeable outlet malls and other economic generators are located (Region 3). There are surely other counties that could have been included in the analysis, but consideration of including other counties had to be balanced with data management requirements.

¹ Thanks to The Nature Conservancy for providing the map.

Table 1: Major Cities in Each County	
County	Major Cities in County
Aransas	Rockport
Atascosa	Jourdanton, Pleasanton
Bandera	Bandera
Bexar	San Antonio
Cameron	Brownsville, Harlingen
Comal	New Braunfels
El Paso	El Paso
Guadalupe	Seguin
Hidalgo	McAllen, Edinburgh
Kendall	Boerne
Maverick	Eagle Pass
Medina	Hondo
Nueces	Corpus Christi
San Patricio	Sinton
Val Verde	Del Rio
Webb	Laredo
Wilson	Floresville
Hays	San Marcos
Travis	Austin
Williamson	Georgetown, Round Rock

Map 1: Geographic Area Covered in the Study

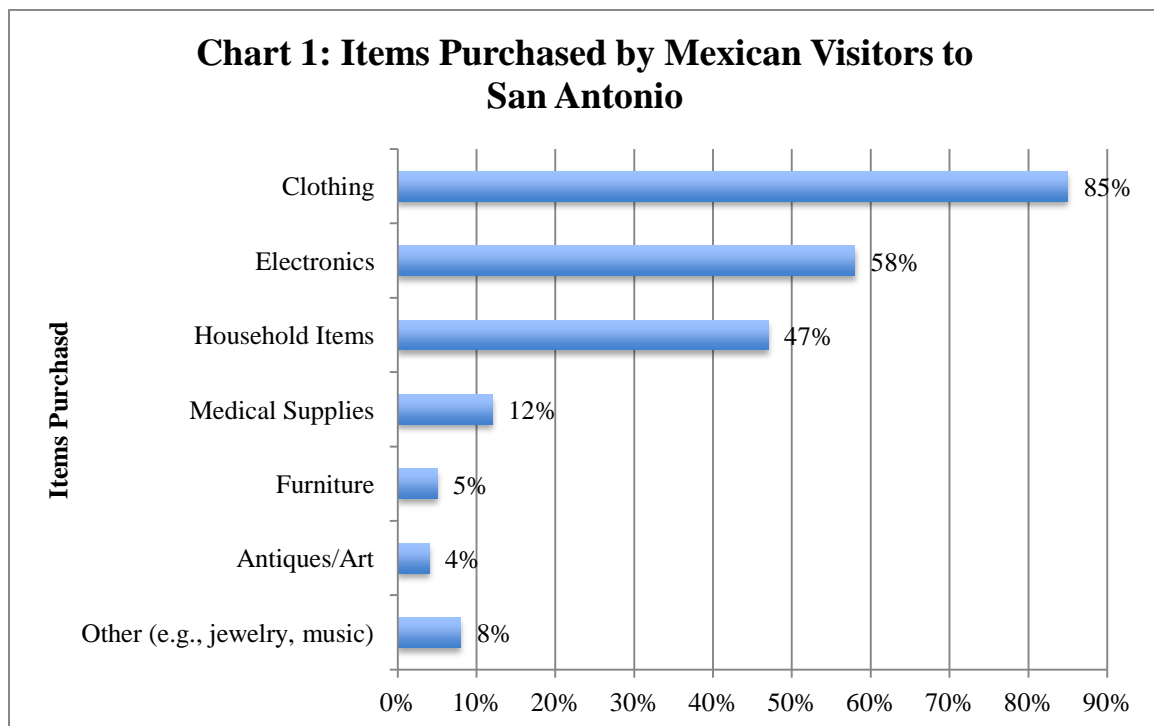


Obviously, Mexican nationals also use other credit cards, traveler’s cheques, and cash to facilitate their economic transactions. In fact, according to Euromonitor 2012, 49% of their spending was conducted in cash, 31% using credit cards, 16% using debit cards, and 3% using traveler’s cheques. Additionally, we know that spending by Mexican nationals in the U.S. using Visa cards represents 29% of their total spending in the country. Using these numbers and assuming the same percentages would hold in the twenty counties of this study, we were able to estimate the total amount of spending by Mexican nationals in these counties.

For quite some time, it has been the belief that Mexican nationals provide a sizeable economic impact to these areas, but while there have been some studies analyzing these impacts along the border region and Central Texas (see following discussion), the basis for the belief in these impacts in the San Antonio metropolitan area have largely been derived from anecdotal evidence, with the exception of an intercept study of Mexican visitors to San Antonio conducted by the San Antonio Convention and

Visitors Bureau and UTSA professor Dr. David C. Bojanic covering the period November 2008 to January 2009. This study adds to the knowledge provided by the anecdotal evidence and these other studies about the impacts of the Mexican nationals in this region, but just knowing the aggregate spending begs the question: On what are they actually spending their money?

Data are not available to provided a breakdown of the specific items purchased by the Mexican nationals on their Visa cards. However, many of the aforementioned studies provide some insights into the categories of items they purchase. The study by the San Antonio CVB and Dr. Bojanic shows that 14% of their spending was on lodging, 13% on restaurants, 64% on shopping, and 9% on transportation (SACVB and Bojanic, April 2009, 11). The results from this study also provide some insights into the items purchased by Mexican visitors as shown in Chart 1 (SACVB and Bojanic, April 2009, 11). According to their data, the most common items purchased are clothing, electronics, and household items.



Ghaddar and Brown (2005) provide a nice synopsis of several studies that have analyzed the impact of the economic activity of Mexican visitors along the U.S.-Mexico border region of Arizona, California, and Texas. For the impact on Arizona, they review Charney and Pavlakivich-Kochi’s 2002 study, “The Economic Impacts of Mexican Visitors to Arizona: 2001.” For California, they review: “Who Crosses the Border: A View of the San Diego/Tijuana Metropolitan Region” (San Diego Dialogue, 1994), “Survey of Border Crossers: Imperial/Mexicali Valleys” (Cox, 1998), and “Patrones y Habitos de Consumo en Baja California” (Lopez and Contreras, 2002). For Texas, they include: “The Economic Impact of Mexican Visitors to the Lower Rio Grande Valley 2003” (Ghaddar et al., 2003), “Rio Grande Valley Winter Visitors and Local Market Report 2004-2005” (Simpson and Thompson, 2005), and “Winter Visitor Study 2002-2003” (Vincent, Thompson, and Williamson, 2003). These studies use survey techniques to collect their data and find somewhat similar spending patterns by the Mexican visitors (see Table 2).²

Spending Category	Arizona	California	Texas
Business	6%		
Transportation	13%		
Groceries	25%		9%
Dining	10%		10%
Clothing	42%	46%	46%
Other	4%	6%	9%
Personal Hygiene		5%	
Appliances & Furniture		6%	12%
Food & Groceries		37%	
Medical			6%
Lodging			8%

² See Ghaddar and Brown (2005), pages 4-6, for further details on these studies.

Pavlovich-Kochi and Sharney completed an update to their 2002 study in December 2008. The research used a slightly more detailed categorization of spending as shown in Table 3 (Pavlovich-Kochi and Sharney, 2008, 50).

Table 3: Spending by Mexican Nationals in Arizona by Category: 2007-2008	
Spending Category	% of Total Expenditures
Lodging	6.8%
Food	20.4%
Transportation	7.4%
Retail	57.5%
Health & Medicine	0.5%
Business	1.4%
Entertainment	4.1%
Other	1.9%

Sullivan et al. (2012) study the spending patterns of Mexican nationals at the San Marcos Outlet Malls using data collected from 103 intercept surveys of Mexican cross-border shoppers. As shown in Table 4, their results show a somewhat similar spending to other studies with the largest amount of money being spent on clothing and other relatively large amounts being spend on food (dining and groceries) and lodging (Sullivan et al., 2012, 6).

Table 4: Spending by Mexican Nationals Visiting San Marcos Outlet Malls		
Spending Category	Average Expenditures	% of Total Spending
Transportation	\$283.98	5.5%
Other Shopping	\$830.43	16.1%
Groceries	\$197.36	3.8%
Apparel Shopping	\$2,499.85	48.3%
Entertainment	\$125.81	2.4%
Other Purchases	\$511.93	9.9%
Admission to Attractions	\$15.71	0.3%
Spectator Sports	\$16.69	0.3%
Lodging	\$323.24	6.3%
Restaurants	\$365.24	5.1%
Total	\$5,170.42	

Based on the results of these studies, we used the proportionate breakdown of spending activity as reported in Ghaddar and Brown (2005) for Texas to provide an estimate of how the Mexican national visitors to the twenty-county region in our study might be spending their money on more specific goods and services. As already noted, there is quite a bit of similarity in consumption patterns across these various studies covering different time periods and regions of the country, so this supposition combined with the fact that our study covers parts of South and Central Texas provides some credence to using the data from Texas to isolate possible spending patterns. Furthermore, the three studies analyzed in Ghaddar and Brown focus on the Rio Grande Valley which corresponds with some of the geography analyzed in this study.

Another purpose of this study is to measure the impact of the spending by Mexican nationals in this region from 2010 through 2012. Economic impact is based on the concept that a new dollar flowing into the area causes an expansion of the economy, and the spending by the Mexican nationals is certainly new dollars flowing into the regional economy. The businesses receiving this revenue use it to pay their workers' salaries and benefits, purchase inputs from local suppliers, and pay government taxes and fees. The direct economic impact is derived from the production activity of the businesses

and the salaries and benefits they are then able to pay their workers. This also generates additional economic activity often times referred to as the multiplier effects.

The multiplier effects can be separated into two effects: the indirect effect and the induced effect. The indirect effect results from the company purchasing inputs (physical goods or services) from its local suppliers. This then sets off additional spending by the supplier in its purchases of inputs and payment of salaries and benefits to its employees. The induced effect is derived from the spending of the employees of the company resulting from the incomes they receive. This is where the economic impact really begins to spread throughout the economy as workers spend their incomes to buy the various goods and services that they need and desire.

All of this economic activity also benefits the government at various levels as the spending by businesses, their employees, and others generate tax revenues and fees. For instance, these activities will generate excise, income, and property tax revenues, social security contributions, and various license fees.

Of course, not all of this economic activity is captured within the local economy. There are leakages as businesses and individual consumers purchase goods and services outside of the local economy causing some money to leak or flow out of the local economy. This is also the case as federal and state taxes and fees are paid resulting from these activities. These leakages are accounted for in the model and are not counted as part of the economic impact. In fact, they reduce the impact of these activities.

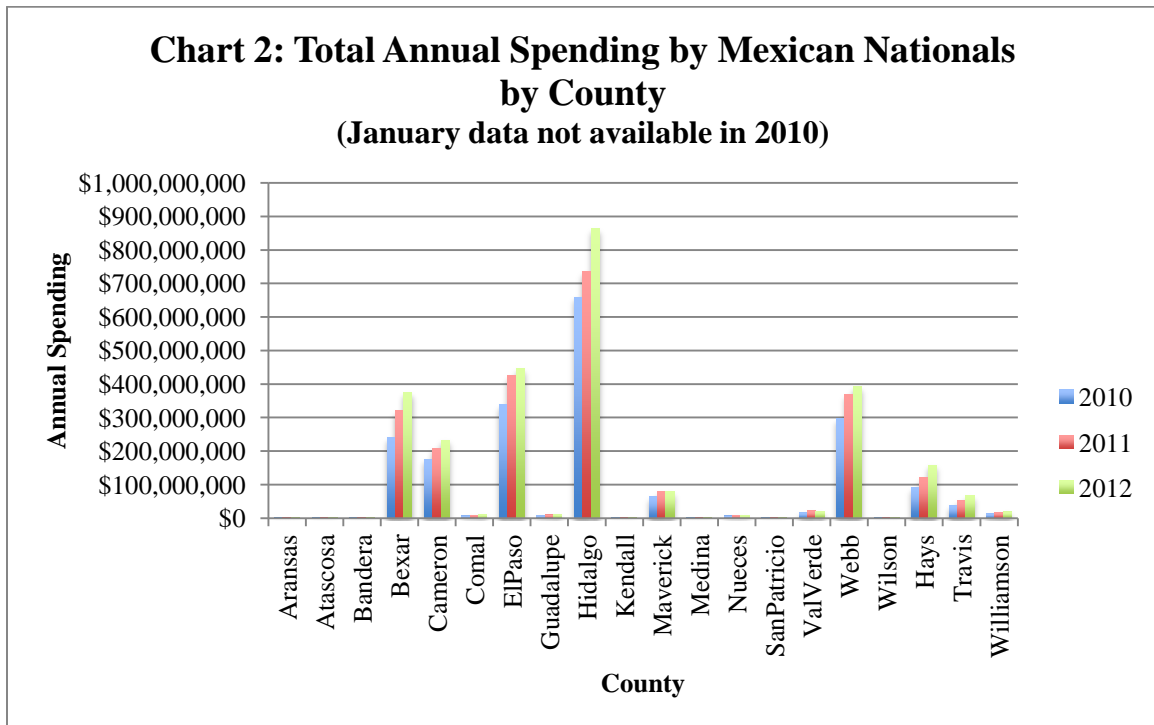
To measure these impacts, the IMPLAN input-output model was used for each county in the region. IMPLAN is a widely used model that will allow the analysis to be extended to include the impact, including multiplier effects, of this spending on employment and incomes.³

³ Spending was assumed to occur in the following industries according to the IMPLAN categorization system: Hotels and motels, including casino hotels (industry 411); food services and drinking places (industry 413); retail stores – food and beverage (industry 324); retail stores – clothing and clothing accessories (industry 327); offices of physicians, dentists, and other health practitioners (industry 394), retail stores – electronics and appliances (industry 322); retail stores – general merchandise (industry 329).

IV. Results

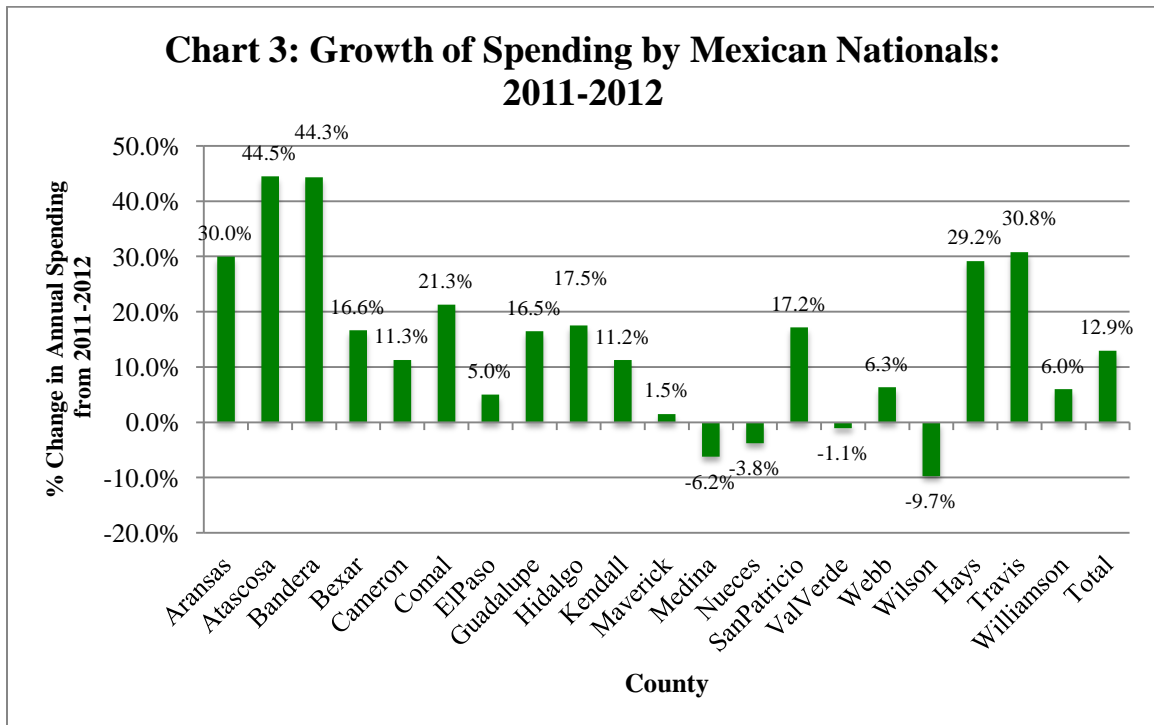
This section will begin with a description of the spending patterns by Mexican nationals in the regions from 2010 through 2012. The economic impact results will be described in the second half of this section.

In the twenty-county region, Mexican nationals spent \$2,377,235,906 in 2011 and \$2,684,318,765 in 2012, a 12.9 increase.⁴ Chart 2 shows the distribution of this spending across counties by year. Clearly, Hidalgo County saw the biggest impact from this spending activity, followed by El Paso, Webb, and Bexar. Not surprisingly, the border counties capture a large portion of the spending, but some of the off-border counties like Bexar, Hays, and Travis also see substantial impacts most likely due to their large shopping complexes, medical facilities, and tourist attractions. It is also evident that spending in most of these counties has increased from year to year. The following charts provide more detail on these growth patterns.



⁴ Data for January 2010 are not available, so since a full year of data is not available, spending from 2010 is not included. Numbers from 2010 will be reported where appropriate.

Atascosa and Bandera County experienced the largest growth rate from 2011 to 2012 (see Chart 3), but part of this might be due to the relatively small amount of spending in these two counties. Of the counties with the largest amount of spending activity, Travis and Hays showed the largest increases, 30.8% and 29.2%, respectively. This most likely indicates a boost in spending at the outlet malls in this area. Bexar County also saw a nice boost in spending of 16.6% over this time period. Amongst the border counties, it is worth noting that the county that saw the largest impact, Hidalgo County, also experienced the largest increase in spending from 2011 to 2012. Medina and Nueces Counties were the only ones who saw a decline in spending activity.



Looking at the changes in spending from month-to-month also yields some interesting insights into the spending patterns of the Mexican nationals in this region. In Chart 4 showing the month-to-month fluctuations in total spending by Mexican nationals over the twenty-county region, we can clearly see, as just discussed, that there has been an increase in spending over this time period. What we can also begin to see in this chart is that there appears to be a boost in spending in the months of April, July, November, and December. This is clearly illustrated in the following four charts (Charts 5 – 8). This

data verify the anecdotal evidence and results from other studies that there is a boost in spending by Mexican nationals around the Easter and Christmas holidays, as well as during the Summer break evidenced by the increase in July. The data do not show spending by week, so we cannot directly say that the boost in spending in April, for example, is due to the Easter holiday, but based on anecdotes and survey evidence from other studies, it seems that this would be a plausible supposition to make.

To get a clearer picture of the increases in these months, Chart 9 shows the month-to-month changes in spending over each of the three years for only April, July, November, and December. Not only does the spending increase in these months quite sizably, but the magnitude of the increases has grown in each of the years with the exception of the growth in December 2012 compared to December 2011. This exception follows the typical pattern seen in overall consumer spending in the U.S. this past December whereby many consumers did a large portion of their Christmas shopping in November and slowed their spending in December. While it was not within the scope of this study to run statistical analyses to pinpoint the reasons for the overall trend of increases in each of these growth rates, some possible explanations can be put forth. The most likely explanation is improving economic conditions in Mexico, and given the strong economic linkages between the two countries, the improving U.S. economy also probably helped boost spending over this time period.

As discussed earlier, the exchange rate between the peso and the dollar also impacts spending by Mexican nationals, so Chart 10 provides a look at the relationship between monthly spending by Mexican nationals and the exchange rate over the time period of this study. It does appear that the relationship does hold to some extent, although we still saw a big increase in spending in November and December 2011 even though the peso weakened quite sharply, indicating that other factors not controlled for here (such as improving economic conditions) are driving that spending. Chart 11 plots the change in spending from the same period in the previous year relative to the exchange rate. This look at this relationship might be indicating that as the peso has weakened over the time period of this study, these year-over-year changes have slowed a bit, so there is possibly a correlation between the exchange rate and the rate of growth in spending over time.

Chart 4: Total Spending by Mexican Nationals Across 20-County Area

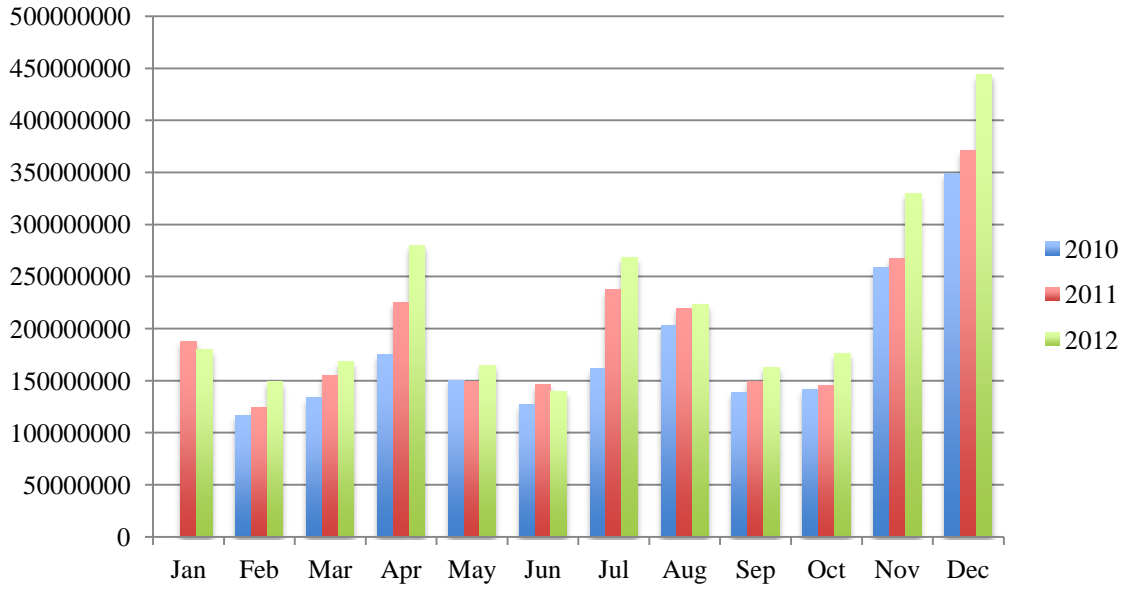


Chart 5: Mexican Nationals Spending by County and Month: 2010
Data for January are not available

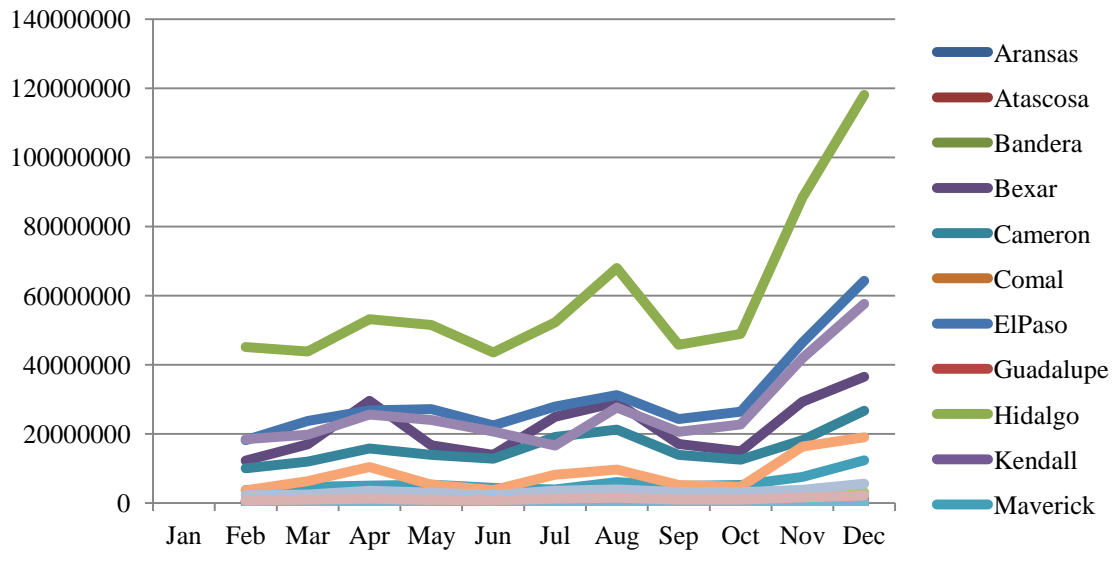


Chart 6: Mexican Nationals Spending by County and Month: 2011

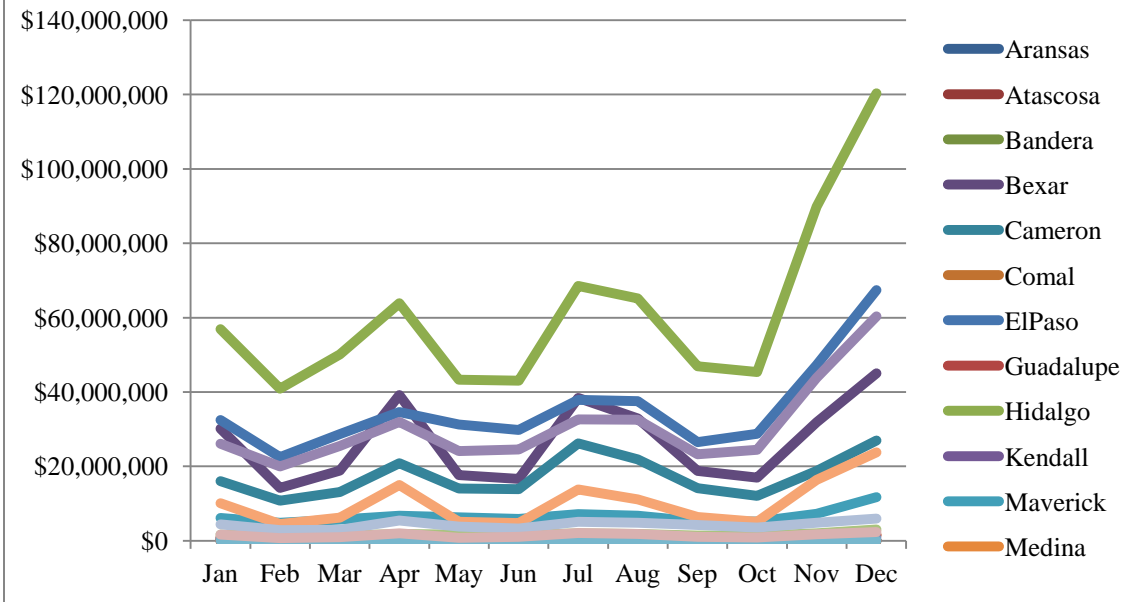


Chart 7: Mexican Nationals Spending by County and Month: 2012

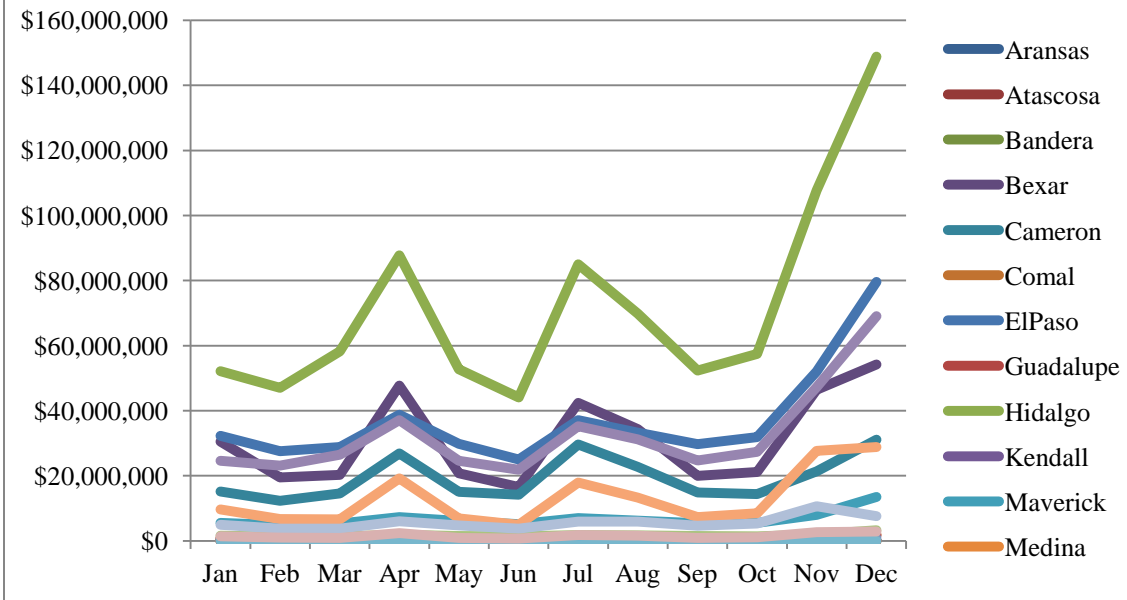


Chart 8: Month-to-Month Percentage Change in Mexican Nationals Spending

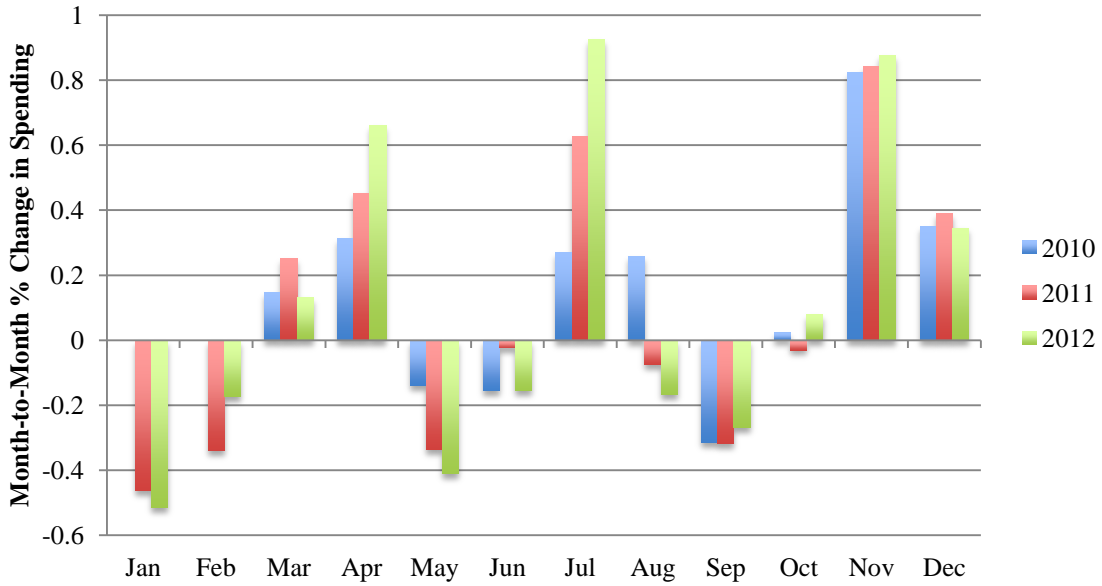
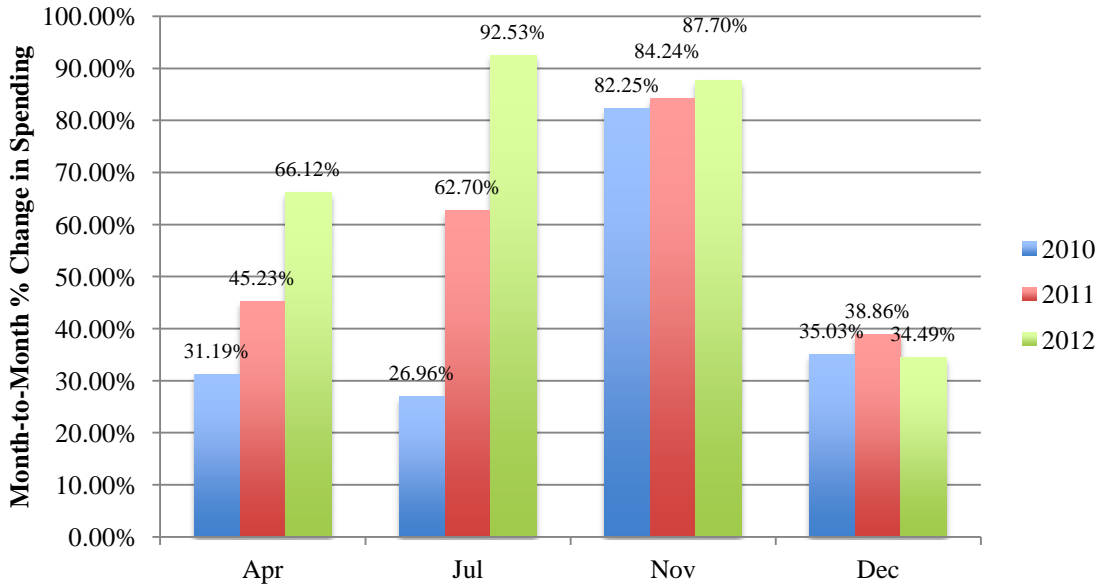
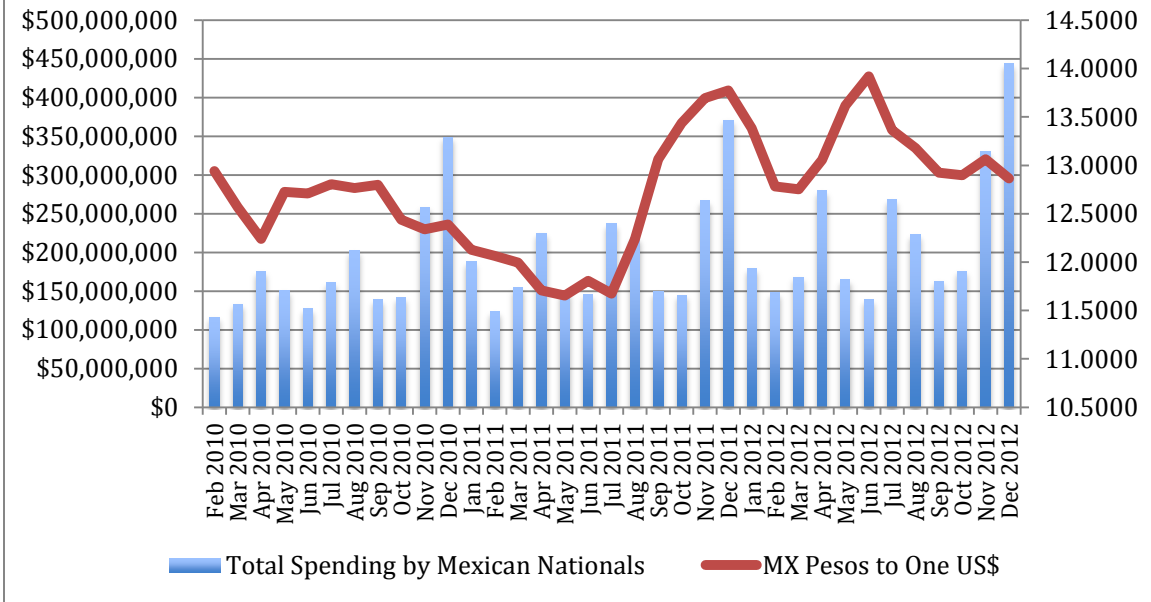


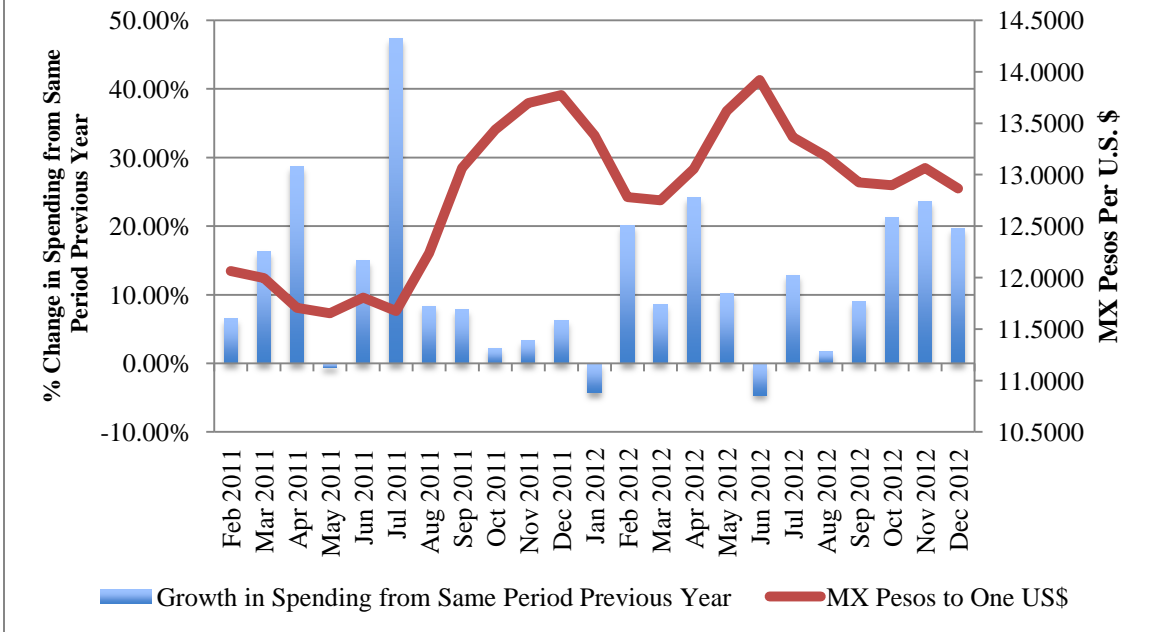
Chart 9: Month-to-Month Percentage Change in Mexican Nationals Spending for Select Months



**Chart 10: Monthly Spending by Mexican Nationals
Relative to Peso/\$ Exchange Rate**



**Chart 11: Change in Mexican National Spending
Relative to Peso/\$ Exchange Rate**



Using the categorical breakdown of spending by Mexican nationals in Texas derived from other studies, the amount of spending on various goods and services is estimated. As is clearly shown, spending on clothing accounts for the largest amount of

spending at \$1,234,786,632 in the twenty-county region in 2012. Spending on appliances and furniture, dining, groceries, and other items follows this. Charts 13, 14, and 15 show the spending by category in the San Antonio metropolitan area, the border area, and the Central Texas area. While the proportion spent in each category is the same across all geographies, these charts provide some perspective of the volume of spending in each category in the respective area.

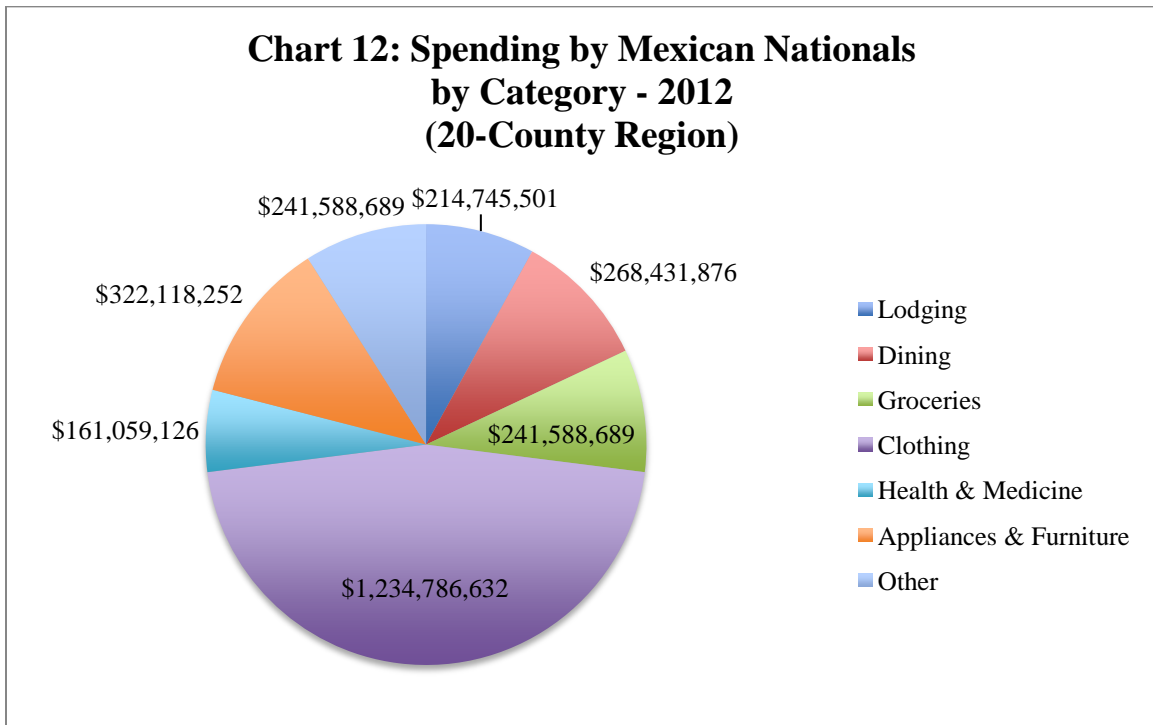


Chart 13: Spending by Mexican Nationals by Category in San Antonio MSA - 2012

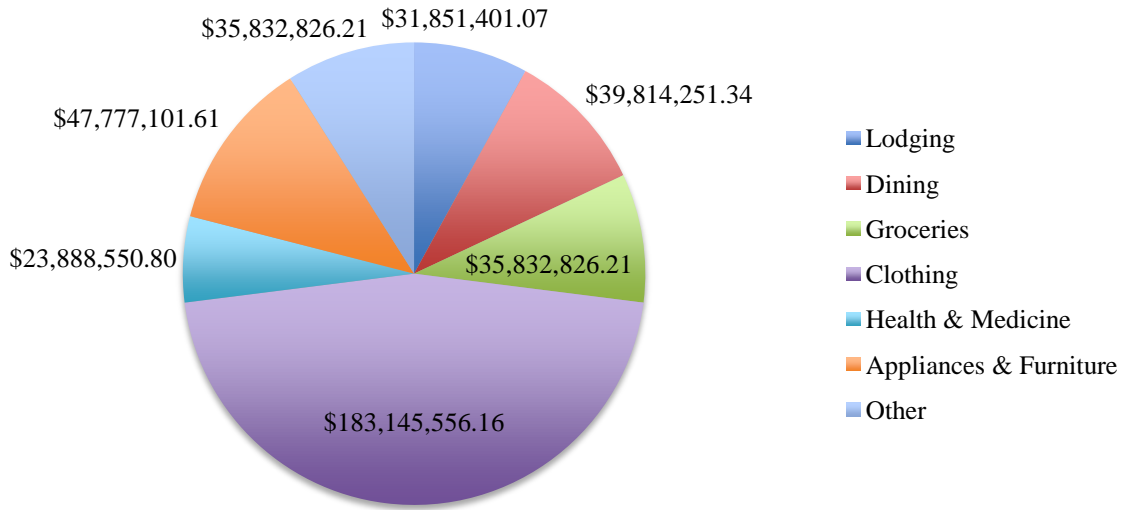


Chart 14: Spending by Mexican Nationals by Category in Border Area - 2012

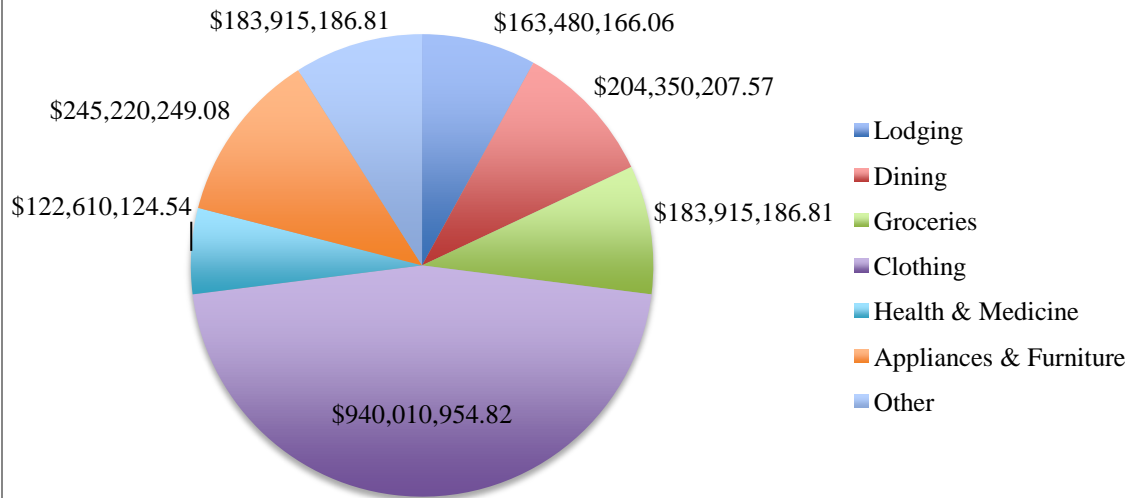
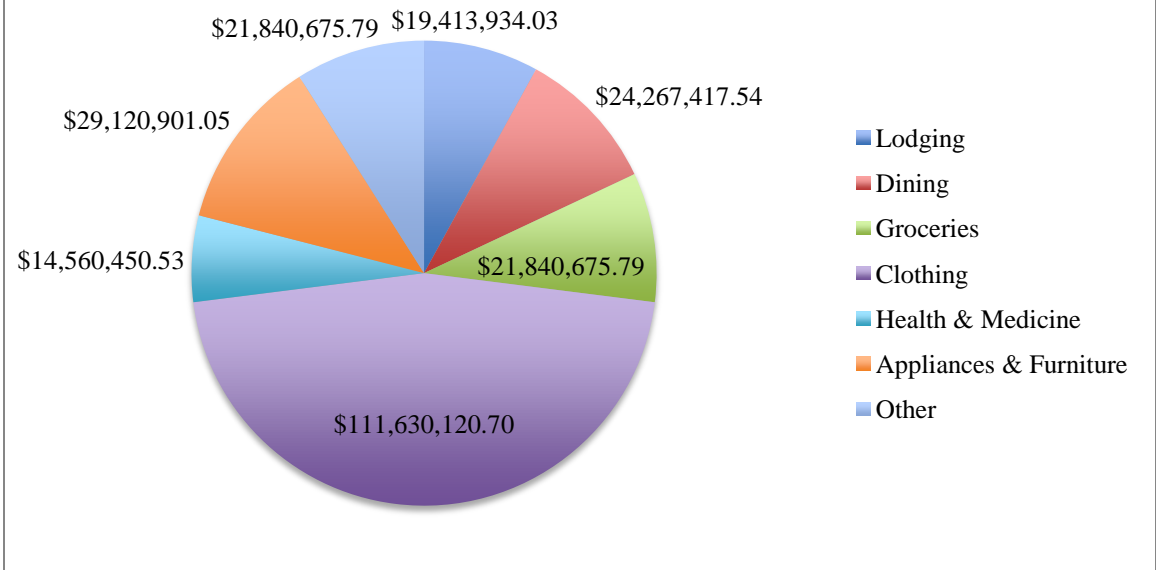


Chart 15: Spending by Mexican Nationals by Category in Central Texas - 2012



IV.2. Economic Impacts

As discussed previously, the economic impacts derived from the spending of the Mexican nationals is measured using the IMPLAN input-output model. These impacts include the effects from the direct spending, as well as both the induced and indirect multiplier effects. Table 5 summarizes the total impacts on employment, income, value added (contribution to regional gross domestic product), and output. Income, value added, and output are in 2013 dollars.

Table 5: Economic Impacts of Mexican Nationals Spending: 2012

	<u>Employment</u>	<u>Income</u>	<u>Value Added</u>	<u>Output</u>
Aransas County	0.8	\$17,682	\$32,103	\$57,834
Atascosa County	5.9	\$141,675	\$238,997	\$432,493
Bandera County	1.3	\$32,492	\$58,136	\$101,312
Bexar County	3,974.5	\$135,237,591	\$215,906,290	\$359,303,612
Cameron County	2,589.5	\$61,466,869	\$108,172,803	\$195,496,223
Comal County	111.2	\$3,106,257	\$5,205,258	\$8,992,890
El Paso County	4,768.2	\$128,920,928	\$227,437,858	\$399,760,138
Guadalupe County	102.1	\$2,509,985	\$4,251,608	\$7,558,192
Hays County	1,701.4	\$40,709,542	\$72,963,169	\$129,669,538
Hidalgo County	9,646.8	\$246,951,591	\$435,905,917	\$766,810,988
Kendall County	12.9	\$357,269	\$589,780	\$1,013,661
Maverick County	790.9	\$17,525,308	\$30,770,451	\$56,800,475
Medina County	3.5	\$73,317	\$136,300	\$250,844
Nueces County	82.9	\$2,560,235	\$4,121,493	\$7,013,088
San Patricio County	5.6	\$142,820	\$235,993	\$416,999
Travis County	654.9	\$23,382,394	\$36,417,526	\$59,295,057
Val Verde County	202.4	\$4,906,344	\$8,367,433	\$14,968,880
Webb County	4,221.0	\$107,913,731	\$185,560,813	\$327,282,111
Williamson County	179.9	\$4,935,715	\$8,087,786	\$13,954,033
Wilson County	1.2	\$27,800	\$46,327	\$84,762
San Antonio MSA	4,342.7	\$144,762,606	\$234,927,246	\$394,540,989
Border Area	22,190.3	\$592,954,096	\$1,030,250,164	\$1,821,790,562
Central Texas	2,549.8	\$85,717,997	\$138,407,563	\$229,434,724
Entire Study Area (20 Counties)	29,456.3	\$925,884,587	\$1,542,826,827	\$2,632,930,021

The total impact to output in the entire study region (20-county area) in 2012 was \$2,632,930,021. This activity contributed \$1,542,826,827 to the gross domestic product of the region and supported over 29,456 full-time equivalent jobs earning incomes of \$925,884,587. Since the largest portion of the spending activity occurs in the border counties, it is not surprising that those counties - especially Hidalgo, Webb, El Paso, and Cameron counties - see the largest economic impacts. **Bexar County also sees a substantial impact to its economy with the spending generating output of \$359,303,612 which supports over 3,974 jobs and incomes of \$135,237,591.** It is also evident in this data that Hays and Travis counties experience sizeable impacts, as well, most likely due to spending at the outlet malls in those counties.

IV.2. Economic Impacts

This spending by the Mexican visitors also generates tax revenues to local and state governments. The estimated amount of tax revenues paid by businesses and households as a result of this activity in 2012 is given in Table 6.⁵ Of course, some of this spending results in sales tax revenues paid, but some of these revenues are rebated back to the Mexican nationals if they choose to submit for the rebates. Sales tax revenues are not included in the numbers in Table 6, but even with the rebates, the sales tax revenues to the local and State governments are not zero. Even if all of the sales taxes paid by the Mexican nationals were rebated to them, there would still be sales taxes generated from this economic activity as a result of the induced and indirect spending effects.

Table 6: Tax Revenues from Mexican Nationals Spending: 2012

	<u>Indirect Business Taxes</u>	<u>Household Taxes</u>
Aransas County	\$2,924	\$121
Atascosa County	\$21,034	\$936
Bandera County	\$5,112	\$211
Bexar County	\$14,289,904	\$812,411
Cameron County	\$9,274,854	\$356,867
Comal County	\$405,368	\$22,549
El Paso County	\$17,956,893	\$763,138
Guadalupe County	\$397,088	\$17,786
Hidalgo County	\$35,360,133	\$1,487,070
Kendall County	\$49,445	\$2,773
Maverick County	\$2,977,977	\$89,080
Medina County	\$13,603	\$496
Nueces County	\$295,321	\$17,320
San Patricio County	\$21,320	\$1,056
Val Verde County	\$754,942	\$27,094
Webb County	\$15,281,308	\$728,746
Wilson County	\$4,458	\$196
Hays County	\$6,380,593	\$259,108
Travis County	\$2,352,586	\$131,682
Williamson County	\$662,113	\$34,509
Border Area	\$81,910,822	\$3,686,438
Central Texas	\$9,388,815	\$561,632
San Antonio MSA	\$15,858,227	\$969,455
Entire Region	\$108,315,954	\$6,009,050

⁵ These include property taxes, motor vehicle license fees, severance taxes, various license fees (e.g., fishing and hunting license fees), and other taxes paid by businesses and households.

As shown in Table 6, even with the sales tax revenues excluded from the numbers, this economic activity still generated over \$108 million in business tax revenues and over \$6 million in tax revenues paid by households in 2012 to the state and local governments. As is expected, those counties with the most spending activity see the highest level of revenue generation. The input-output model does not separate revenues to the State of Texas and to local government agencies, but it is clear that this economic activity is a sizeable source of revenues to the State and many municipal and county governments.

V. Conclusions

Mexican Nationals journey to South and Central Texas for a variety of reasons, and as the numbers reported in this study indicate, they register a substantial impact through much of this region. These impacts have been documented and measured in the border and Central Texas areas, but to date, only anecdotal evidence has been available in support of the impact they register in the San Antonio area. This study provides data that support the anecdotal evidence of their sizeable impacts in San Antonio and Bexar County. Specifically, it is very evident that their spending activity occurs throughout the year, but there is clearly large boosts in spending in April, July, November, and December related to the major holidays occurring in those months. The large amount of spending by the Mexican Nationals in this region is yet more evidence of the importance of the links between the two economies. This activity is an economic trump card to the region that provides a boost to our local economies unlike that experienced in many other metropolitan economies throughout the country resulting in a further diversification of spending that also lends an element of stability to these economies.

While the data do show sizeable impacts, we know that the impacts extend beyond what we were able to capture in this analysis based on anecdotal evidence. The engagement of Mexican nationals in the real estate markets and their investment in businesses in this region surely makes an important impact. This study builds upon the foundation of research done focused on other regions of Texas and the state and adds hard data to the impacts in San Antonio, and it is the hope that future research will build upon these studies and extend into capturing these other impacts.

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