

# Tourism's Impact on Future Transportation Needs

FINAL REPORT 507(3)

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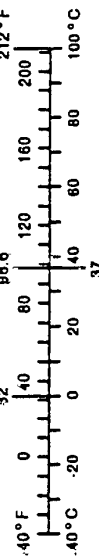
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# METRIC (SI\*) CONVERSION FACTORS

APPROXIMATE CONVERSIONS TO SI UNITS				APPROXIMATE CONVERSIONS TO SI UNITS			
Symbol	When You Know	Multiply By	To Find	Symbol	When You Know	Multiply By	To Find
<b>LENGTH</b>							
in	inches	2.54	centimeters	cm	millimeters	0.039	inches
ft	feet	0.3048	meters	m	meters	3.28	feet
yd	yards	0.914	meters	m	yards	1.09	yards
mi	miles	1.61	kilometers	km	kilometers	0.621	miles
<b>AREA</b>							
in <sup>2</sup>	square inches	6.452	centimeters squared	cm <sup>2</sup>	millimeters squared	0.0016	square inches
ft <sup>2</sup>	square feet	0.0929	meters squared	m <sup>2</sup>	meters squared	10.764	square feet
yd <sup>2</sup>	square yards	0.836	meters squared	m <sup>2</sup>	kilometers squared	0.39	square miles
mi <sup>2</sup>	square miles	2.59	kilometers squared	km <sup>2</sup>	hectares (10,000 m <sup>2</sup> )	2.53	acres
ac	acres	0.395	hectares	ha			
<b>MASS (weight)</b>							
oz	ounces	28.35	grams	g	grams	0.0353	ounces
lb	pounds	0.454	kilograms	kg	kilograms	2.205	pounds
T	short tons (2000 lb)	0.907	megagrams	Mg	megagrams (1000 kg)	1.103	short tons
<b>VOLUME</b>							
fl oz	fluid ounces	29.57	milliliters	mL	milliliters	0.034	fluid ounces
gal	gallons	3.785	liters	L	liters	0.264	gallons
ft <sup>3</sup>	cubic feet	0.0328	meters cubed	m <sup>3</sup>	meters cubed	35.315	cubic feet
yd <sup>3</sup>	cubic yards	0.765	meters cubed	m <sup>3</sup>	meters cubed	1.308	cubic yards
Note: Volumes greater than 1000 L shall be shown in m <sup>3</sup> .							
<b>TEMPERATURE (exact)</b>							
°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C	Celsius temperature	9/5 (then add 32)	Fahrenheit temperature



These factors conform to the requirement of FHWA Order 5190.1A  
 \*SI is the symbol for the International System of Measurements

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## EXECUTIVE SUMMARY

The technological revolution experienced during the last decade has wrought many changes in many different industries. The first phase of this set of reports for the Arizona Department of Transportation presented an overview of all of these changes. The second phase looked at how these changes will affect planning and economic development. This third phase of the report focuses on tourism and the changes that can be expected due to the many facets of these transformations surfacing simultaneously.

First, the report focuses on the changing of the demographic guard--from Baby Boomers to Generation Xers, and finally, to the ensuing Net Generation. The first part of the report concentrates on the noted generational differences that have been researched by many authors. The second part connects these differences to the effects implied for Arizona's tourist activities. Here the report is substantially hampered by a lack of information and the small entourage of tourist officials that are embracing these issues. But, VisionEcon uses logical supposition and deductions from the developments that have been researched by other experts.

Finally, the report attempts to tie these developments into traffic count numbers recorded at major highways surrounding Arizona's tourist attractions. According to this analysis, the maturity of an attraction plays a monumental role in the amount of traffic expected around it. With youthful, fast-growing attractions, while the number of visitors is growing exponentially, the number of vehicles per visitor will tend to drop as more vehicles are actually entering the site as opposed to traveling to other destinations in the area. In contrast, with more mature attractions, the number of vehicles per visitor should increase as more vehicles are being diverted to ancillary activities near the site.

Overall, VisionEcon concludes that the attraction factor of a tourist site will ultimately be affected by technological indicators such as the effectiveness of virtual tours, the number of links a tourism site has to other travel research websites, the ease of online booking and the success of niche marketing the site within the context of an outdoor or theme-adventure experience.

Once again, Arizona is encountering changes that need to be made within the state due to this newly emerging technological economy. Ironically, even the industry that has represented our base industry of the past—tourism--will not be able to escape these beckoning changes.

## INTRODUCTION

In the past, visitors to Arizona were attracted to the climate, the area's natural beauty and the wide array of activities the state offers. Yet, the question emerges as to whether these attractions will be enough to draw the worldwide attention of the generations to come in what is regarded as a "New Economy". As mentioned in the first two reports of this series, "New Economy" was a term used to describe the technological revolution the world has been undergoing since the start of the last decade. Two aspects of this technological revolution will impact Arizona tourism in a major way. First, due to globalization and the increase in living standards that has resulted from this "New Economy", the possible array of tourist destinations has increased dramatically for the average tourist. Second, the Internet and the information technology revolution have transformed the methods of exposing tourists to new destinations, allowing tourists to research these possibilities in new ways. In addition, the methods of purchasing tourism services have changed.

The conglomeration of all of these factors suggests that the only gauges that will be able to project the demand for future tourism services in Arizona will not be quantitative factors. Thus, however unsettling this situation may be for transportation planners—VisionEcon contends that the future transportation needs of Arizona tourists will not lend themselves to quantitative analysis. The gauges have become more qualitative measures: the effectiveness of virtual tours on the Internet, the number of links a tourism site has to other travel research websites, the ease of online booking, the success of niche marketing the site within the context of an outdoor or theme-adventure experience or simply just the luck of close proximity to another tourism site that has been successful in these areas.

Another transformation is occurring that does not receive as much exposure as the other changes mentioned above. And, this force is an important one to be reckoned with. This force embraces the proposition that the immensity of the Baby Boom generation has shaped the tourism market of the past. Yet, past strategies may no longer succeed in this technologically advancing future. Not only is technology changing the market, but the generations that follow the huge force of the Baby Boom Generation are drastically different from the Baby Boom Generation itself.

**With all of these technological and social waves cresting, the question emerges: is Arizona prepared for the changing demands that this flux in tourism could create on our transportation industry?** To get to the answer of whether the state is ready for such changes, we need to understand the wants and needs of those who will support Arizona's tourism market in the future. **Only then will we be able to access the future scope of the state's travel and tourism industry and its demands on the transportation system.**



**This report will do just that by first looking at this break in the generations and then looking at how technology will change the travel market.**

## **A STUDY OF THE GENERATIONS**

Since the health of Arizona's travel and tourism industry in the future will depend upon the accuracy of today's planning, this report examines the characteristics and activities of the groups that will determine the demand for the services of Arizona's tourism industry in the future. Throughout this report, these groups will be referred to as the "Baby Boomers", born between 1946 and 1964; "Generation Xers", born between 1965 and 1976; and the "Net Generation" as all those individuals born after 1977. Together, the Baby Boomers and Generation Xers comprise 80% of the population. They also are the two generations still in the process of climbing in income attainment, making them the most important and influential groups on which to focus our time and resources. Since each generation has its distinctly different preferences and interests, it is important to understand and plan for both.

### **Baby Boomers' Characteristics**

Baby Boomers are a group of 77 million people born approximately between 1946 and 1964. According to Steve Dwyer in his article "The Right Prescription for Maturing Boomers", "They are the biggest spenders of all the generations, having more disposable income. They prefer products and services that make life less complicated so they can continue with their busy lives.<sup>1</sup>" Most Baby Boomers chose to establish their careers before a family, and this may explain why they tend to be loyal to their employers and strive to remain with one company for many years.

One of the most significant influences on the young Baby Boom generation was the invention of television in the 1950's. According to the book, Boomers, Xers and Other Strangers, "television watching became an important part of our American culture and shaped our beliefs, attitudes and actions. Advertisers could create instant fads through national advertisement campaigns."<sup>2</sup>

Baby Boomers have a spirit of adventure and desire to have fun in work and play. Baby Boomers are also health oriented-- buying vitamins, eating healthier, and exercising. Many of them enjoy quiet, outside activities, such as gardening and golfing. Due to the increasing longevity of Baby Boom Americans, Gail Sheehy, author of New Passages: Mapping Your Life Across Time, claims that midlife now starts around 50, with a much more active lifestyle on into the 60's and 70's<sup>3</sup>.

### **Generation Xers' Characteristics**

Nonetheless, the terms "active lifestyle" are truly relative. Generation Xers also enjoy unique types of sports and recreation as seen in the advent of "Extreme Sports". According to the book, Boomers, Xers and Other Strangers,

extreme sports appeal to Generation Xers' "love of diversity and fast-paced action and their desire to do things differently from previous generations."<sup>4</sup> These activities include aggressive in-line skating, skateboarding, bicycle stunt riding, BMX racing, snowboarding, parasailing and sky surfing.

In the professional world, Generation Xers are highly PC literate and remarkably comfortable in today's rush of technology. They have a strong work ethic and take an entrepreneurial approach to their careers. They feel that career is important, but not all consuming and they want to find a balance between personal life and career. Thus, while Baby Boomers are more prone to spend their salaries, Generation Xers are more reluctant—seeing the ramifications that spending makes on the work versus play pendulum. Thus, Generation Xers are more apt to save and invest. Educational advancement is also important to Generation Xers. The rate at which Generation Xers are "flocking" to college is rapidly increasing.

Growing up in an ethnically diverse society, they more easily acknowledge the rights of all minority groups. They tend to be more tolerant and accepting of individuals of various backgrounds and lifestyles. They are the "Friends" generation in which they feel strong loyalty within their relationships<sup>5</sup>. They are peer-oriented and rely on each other. Many Generation Xers are marrying later, possibly a result of being the kids of dual-income parents, in which divorce is not just an exception anymore, but "normal".

Baby Boomers matured in a period when information was highly valued but a difficult commodity to obtain, while Generation Xers have grown up during the information explosion. During the 1980's, prices for computers dropped making them more affordable for the average household. In 1982, there were 1.5 million computers in homes, five times the number in 1980. Between 1984 and 1988, 39.4 million computers were purchased across the country<sup>6</sup>.

The introduction and rapid growth of the Internet during the 1990's has virtually created a different world for both the Baby Boomers and Generation Xers. It has changed the way that individuals communicate with each other, perform research, and entertain themselves (i.e. chat rooms and computer games)<sup>7</sup>. The Internet was embraced as the new medium that would change the way we live<sup>8</sup>. Tremendous growth has occurred and new and improved applications are continuously being developed for use in the workplace, in education and homes.

The following table gives a brief description of these two generations and how their differences will affect the activities they desire in the future.

**Table 1**  
**Generational Characteristics and the Implications for Tourism**

	<b>Generational Characteristics</b>	<b>Implications for Tourist Activity</b>
<b>Baby Boomers</b>	<ol style="list-style-type: none"> <li>1. Career-oriented, high disposable income</li> <li>2. Desire simplicity</li> <li>3. Active</li> <li>4. Influenced by television</li> </ol>	<ol style="list-style-type: none"> <li>1. <b>Expense as a secondary consideration</b></li> <li>2. <b>Quiet, tranquility sought</b></li> <li>3. <b>Prefer itemized itinerary with outdoor activities</b></li> <li>4. <b>Marketed through TV</b></li> </ol>
<b>Generation Xers</b>	<ol style="list-style-type: none"> <li>1. Seek balance between work and play</li> <li>2. Diverse and independent</li> <li>3. Peer-oriented</li> <li>4. Influenced by Internet</li> </ol>	<ol style="list-style-type: none"> <li>1. <b>Shorter, more frequent, less expensive trips</b></li> <li>2. <b>Customization of trips desirable</b></li> <li>3. <b>Traveling party size increasing</b></li> <li>4. <b>Marketed through Internet</b></li> </ol>

## TYPES OF VACATIONS

Baby Boomers now enjoy Adventure Vacations as an option to the typical vacation. According to USA Today Magazine, over the last few years, the tremendous upswing in adventure travel has caught the public, and the travel industry, by surprise. They want to hike, go white-water rafting, fish, view wildlife, scuba dive, bicycle, sail, mountain climb and ride horses<sup>9</sup>. Also, they are attending adventure-type camps, spas and other “theme-based” or cultural trips around the globe.

In addition, globalization has opened up the doors for most people to experience the wonder and beauty of many other cultures and locations. Because of globalization, people are becoming more familiar with other regions, continents, cultures and activities. The isolation of countries is no longer an issue as friends are made on the Internet within other parts of the world and experiences are shared with those of other cultures.

The global economy has enjoyed excellent growth. Baby Boomers have possessed good-paying jobs, bought houses and cars, and were presented appliances that allowed them extra time and mobility. At first, these developments culminated into an increased ability to discover National Parks and National Forests in a citizen’s own country. Now, the competition for the tourism aspirations of the Baby Boomer and the generations that follow comes from attractions across the globe. At the same time, Generation Xers are entering the tourist market desiring different aspects of a tourist experience.

Yet, both Baby Boomers and Generation Xers are continually looking to find a balance between the intensity of work and the release of recreation. Many trends in society today indicate that the public's love affair with the great outdoors will continue to grow well into the next century. As we spend more time in offices, the need to be more physically active can be expected to increase, leading us to more outdoor recreation. As a result, people will continue to be involved in wildlife and wilderness issues.

To test these generalizations, VisionEcon scanned information available from the Travel Industry Association in Washington, D. C. **The following table is a small sample of the data available from the Association. However, any more in-depth information is only available for a fee that could not be covered by the budget for this project.**

**Table 2**  
**Type of Travel Activity**  
(Data from Years 1999-2000)

	<b>Number of U.S. Adults Partaking in Activity</b>	<b>Percent of U.S. Adults</b>
<b>Total Adult Population</b>	<b>281,421,906</b>	<b>100%</b>
Adventure Travel Trip in last 5 years	98,000,000	35%
Biking in last 5 years	27,000,000	10%
Camping in last 5 years	NA	33%*
Educational travel in past 3 years	30,200,000	11%
Gambling	NA	7%**
Garden Tours in last 5 years	40,000,000	14%
Golf	17,300,000	6%
Tennis	6,000,000	2%
National Parks in last year	30,000,000	11%
Romantic vacations	61,800,000	22%
Organized sport event in past 5 years	75,300,000	27%
Choosing destination via travel media	101,900,000	36%
Via Newspaper	NA	28%*
Via Travel Agent	64,200,000	23%
Via Internet	59,000,000	21%
Via Television	5,100,000	2%
Weekend Trips versus vacations		
At least one weekend trip per year	103,000,000	37%
All of vacation time spent traveling (Employed Adults Only)	NA	28%

Source: Travel Industry Association website [www.tia.org](http://www.tia.org), "Travel Market Segments", Bureau of the Census.

\*Exact number of travelers not explicitly quoted by TIA. Percentage of U.S. Adults quoted.

\*\*Year of survey does not appear to be the year 2000, exact survey year unclear.

## **What Arizona Has Offered in the Past**

Based on information provided by DK Shifflet and Associates, the primary activity pursued by most visitors to Arizona in 1999 was dining<sup>10</sup>. For both residents and nonresidents, nearly 30 percent of people in Arizona enjoyed the restaurant scene. Shopping and entertainment followed closely, with almost one-quarter interested in these activities. Outdoor activities were the next activities of choice which included visits to parks (national and state) and historical sites. The outdoor activities included camping, golfing, boating/sailing, hunting/fishing, hiking, and biking.

The size of the groups traveling in 1999 ranged from individuals to families (4 or more). Other categories included couples, two males/two females and three or more adults. Leisure travel in Arizona mainly consisted of individuals (22%) and families (27%).

The age of travelers were broken out by age groups consisting of 18-34 years of age, 35-54, and 55 or older. Between the ages of 18 to 34, residents of Arizona visited our tourist areas more often than nonresidents. This implies that Arizona may not be succeeding at attracting the Generation X age group. For the ages 35-54 it was an even split between residents and nonresidents. However for those 55 and older, nonresidents traveled at a higher percentage (29.7). In terms of leisure travel, residents between the ages of 35 to 54 were involved in slightly more travel at 40.2 percent compared to 38.8 percent for those 18-34 years of age.

## **Arizona as a Destination**

Historically, Arizona has banked on the Grand Canyon as remaining one of the most frequently visited national parks in the country. Yet in the year 2000, the number of individuals that visited the Grand Canyon fell by over 2 percent from the previous year. In fact, almost all the national parks in Arizona lost visitors in the year 2000. As the following section will discuss, the only national parks that resisted that negative trend were those that benefited from “theme-based” or cultural activities.

## THE LINKS BETWEEN THE ARIZONA TOURIST AND TRANSPORTATION

As mentioned above, many transformations are occurring in the tourism market. As a result, the activities of choice are changing. As mentioned, outdoor/theme tourism adventures are becoming more popular within Baby Boom circles. Also, because the levels of sensory stimulation for future generations have been much higher than previous generations, many future tourists will be expected to veer away from traditional tourist activities and toward more risk-taking and high-adrenaline tourist activities. VisionEcon contends that these developments suggest that many older tourism-marketing techniques may not fare well in the future. The marketing of theme-based adventure travel will become much more important with the ensuing generations.

This section will review the statistical data available on both fronts: 1) changes in the types of activities and 2) changes in research and booking of travel.

### Travel Activities

With all these transformations in mind, we need to find ways to measure Arizona's appeal within the outdoor/theme- or high-adrenaline adventure travel markets. Unfortunately, Arizona does not possess a central data source for this or many other types of decision making activities. The Arizona Hospitality Research and Resource Center at Northern Arizona University is currently working to aggregate tourism data available from the federal government and other private sources. Yet, the process of assembling a database is in its infancy. For this reason, it is very difficult to gauge any true shift in the industry's long-term fundamentals.

To better understand the travel market, a travel research analyst would need to answer five questions: 1) Who is coming to Arizona? To answer this question, Arizona needs to build a **multi-dimensional** informational database of its visitors. For instance, the state should be able to view not just the ages of our visitors, but party size by age, primary attractions by age, and travel planning vehicles employed by age groups. The state should be able to answer not just the income of our visitors, but party size by income, primary attractions by income, and travel planning vehicles employed by income groups. All of these dimensions will become more important in the future. 2) Why are visitors attracted to Arizona? What was the **primary** reason for their visit? Were they sent here for business training or a business convention and, "after-the-fact", decided to take a desert tour? Or, did they come primarily for a desert tour? Did they come to visit relatives, and then drive to the Grand Canyon? Or, did they come to raft the Colorado River? Arizona needs to know what brought them to



Arizona **in the first place**—not just “after-the-fact” activities they chose to do while they were already here. (VisionEcon would contend that shopping and dining are usually after-the-fact activities.) 3) Who is not coming to Arizona? Has the state unknowingly been pushing travel activities that are declining in market share? Is the state missing new personalities of traveler? And, 4) What market transformations are being overlooked in the Arizona travel market? Are the state’s marketing vehicles are too detached from new vehicles of travel planning? Or, has the state not capitalized on the assets **it already has** to meeting new yearnings for adventure or sporting events? This information helps to monitor changes in the travel market and reveal to the state whether it is transforming along with that marketplace. 5) Lastly, we need to compare this data to the worldwide traveler. Are there varying transformations occurring in other countries? A great example of this would be the rising wave of Japanese and German interests in the Old West.

Since rigorous research by the authors was frustrated by that lack of such a statewide database, the authors were forced to amass sometimes vague, fragmented data from varied sources. Due to this gap in information, any of the following conclusions need to be regarded as tenuous.

The most reliable source of travel statistics still remains the National Park Service. The agency releases visitation numbers for national parks on a timely, consistent manner. While not every traveler visits a national park or monument, some simple deductions can still be made. According to a survey conducted for the Florida Research Office in 1998, almost half of all travelers participated in some nature-based activity (including national park visitation) during their trips<sup>11</sup>. Thus, the national park numbers could be expected to capture about half of all travelers.

Airport statistics are also available on a timely, consistent basis. These numbers will capture many groups that would not be considered a part of the tourist target market. First, it includes residents leaving the state for business or pleasure, out-of-state business travelers with no intentions to participate tourist-type activities, travelers solely visiting family and/or friends and possibly some snowbirds (elderly visitors who reside in Arizona during the winter).

A compilation of these two statistical sources in unison with some anecdotal information from older studies presented by the American Travel Survey of the Bureau of Transportation Statistics in 1995, the following table can be composed.

**Table 3**  
**Out-of-state Travelers in Arizona**

Year	Total Airport Passenger Volume <sup>1</sup>	Percentage Change	Total Travelers From Out-of-state <sup>2</sup>	Percentage Change	Total Visitors to National Parks in Arizona <sup>3</sup>	Percentage Change	Maximum Percentage of Out-of-state Travelers Visiting National Parks in AZ
1999	38,382,302		37,684,442		17,736,998		47.1%
2000	40,893,740	6.5%	40,150,217	6.5%	17,119,292	-3.5%	42.6%

<sup>1</sup> Data summarized from Enplanement/Deplanement totals for the airports of Sky Harbor, Tucson, Yuma and Grand Canyon NP.

<sup>2</sup> Calculated using estimates from The 1995 American Travel Survey suggesting that 54% of all air travelers in and out of AZ originate from outside the state, and 42% of all travelers to AZ drive to the state.

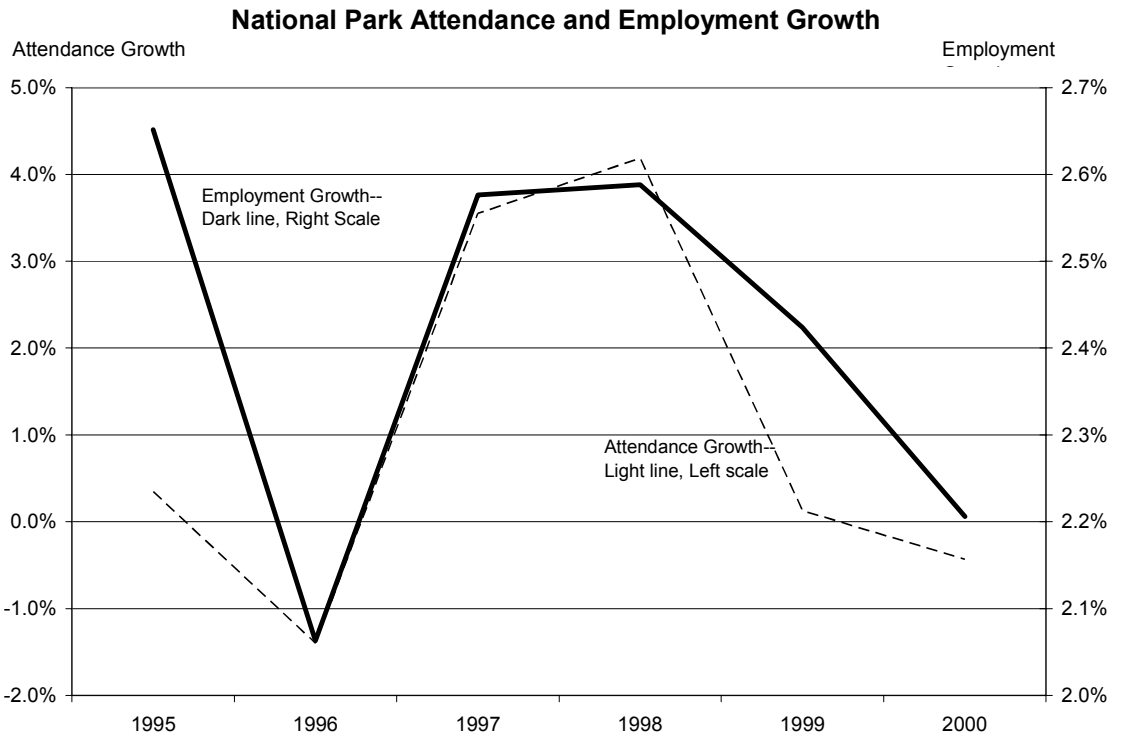
<sup>3</sup> Includes national monuments and recreational areas.

Sources: Arizona Hospitality and Research Center, National Park Service and Bureau of Transportation Statistics

This information suggests that the percentage of out-of-state visitors attending national park sites in Arizona may have dropped to less than 43% in 2000. Arizona was not alone in this strange anomaly. On a nationwide basis, airline travel was also up 6.2 percent but the attendance at all national park sites fell by 0.4 percent.

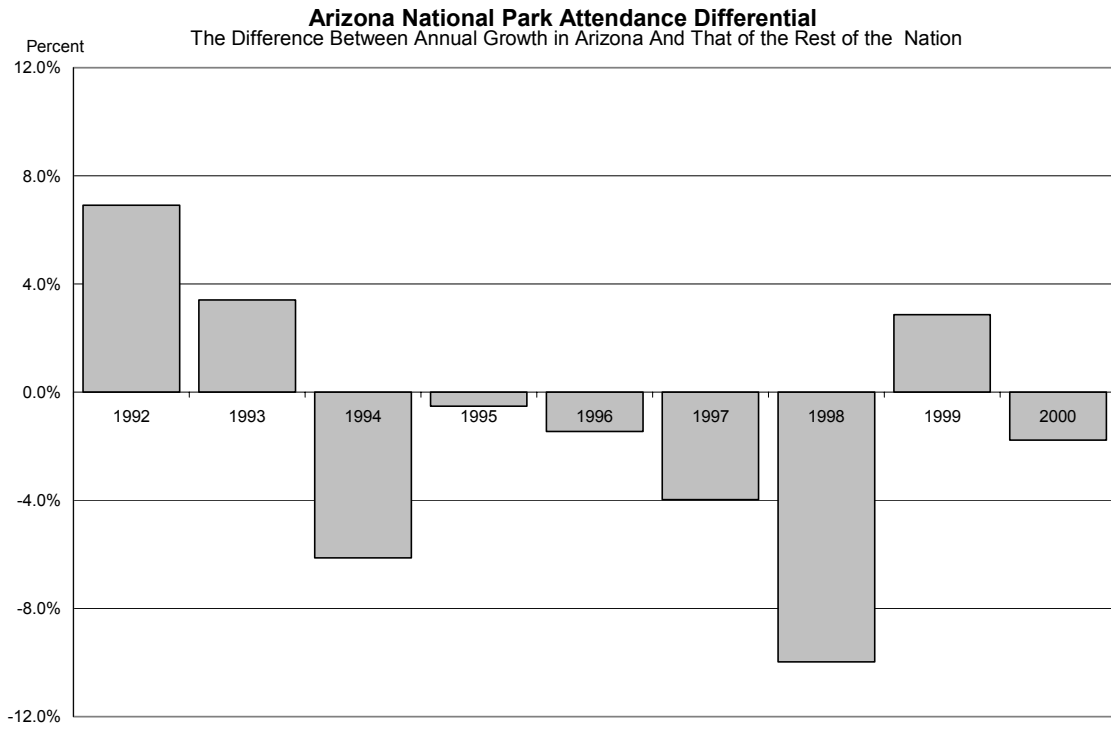
Part of this incongruity is explained by the economy. When examining an industry's market, one needs to separate the cyclical moves in the industry from the fundamental long-term trends. One way to do this is to examine the growth in the industry on a national level and then compare local market growth to that. As the following chart illustrates, a nationwide slowdown in national park site attendance has occurred over the last two years. Much of the slowdown in park attendance is explained by a drop in employment growth across the country. Consequently, Arizona would be expected to experience the negative impact of slower job growth over the last two years.

Figure 1



Nonetheless, national park site attendance in Arizona has dropped by substantially more than the national number. A closer look at the numbers may explain why.

# Figure 2



## Niche Marketing

According to data amassed from the Business Journal's Book of Lists, the National Park Service Data and the individual attraction sources, VisionEcon asserts that the attractions that have remained appealing since 1996 have tended to embrace one of four themes.

- 1) The "Old West" or Indian Culture/Lands
- 2) Desert Lands
- 3) High-activity Recreational Areas
- 4) Participatory or Sports-related Activities

**Table 4**

### **Fastest-growing Tourist Attractions for 2000**

	Percentage Gain
<b>1</b> Tombstone	128.0%
<b>2</b> Organ Pipe Cactus National Monument	58.8%
<b>3</b> Pima Air & Space Museum	48.3%
<b>4</b> Wildlife World Zoo	35.5%
<b>5</b> Rawhide Western Town	33.3%
<b>6</b> Navajo National Monument	29.6%
<b>7</b> Hubbel Trading Post National Historic Site	20.7%
<b>8</b> Desert Botanical Gardens	11.8%
<b>9</b> Slide Rock State Park	10.9%
<b>10</b> Old Tucson Studios	5.8%

Source: Main source as Business Journal Book of Lists, unavailable/outlier data from National Park Service, Arizona Hospitality Research Center.

Thus, according to what sketchy data is available, the attraction factors of tourism are changing. The data that are available for tourism suggest that trips are following more of an outdoor/theme adventure experience. In addition, the most popular of these attractions have themes that center on attributes that Arizona holds principle claims to—the Old West and Indian territories. VisionEcon would surmise that we can no longer simply bank on the attraction of our natural wonders. This finding also gels with the findings that the generations to follow are more fiercely independent and diverse. Thus, in the future, only by capitalizing on the uniqueness of a destination and applying highly flexible marketing approaches will a tourist destination gain mercy from the exponential swings in trends that future generational changes and the Internet will produce.

## **Attraction Factors and Traffic**

Traffic count data for the major highways leading into the studied tourist attractions did not uphold the suggestion that Arizona roads saw fewer vehicles at national park sites in the year 2000. According to the Arizona Department of Transportation State Highway System Log, all the mass-appeal attractions such as the Grand Canyon, Saguaro National Park and Glen Canyon saw double-digit increases in the number of vehicles traveling the nearby major highways on a given day.

**Table 5: Traffic and Arizona's Noted Tourist Attractions**

<b>Traffic and Arizona's Noted Tourist Attractions</b>				
		1998	1999	2000
	<b>Fast-growth attractions</b>			
1	Organ Pipe Cactus National Monument			
	Attendance	257,737	162,684	258,306
	%ch	6.7%	-36.9%	58.8%
	Traffic Counts on Closest Major Highway	1,810	1,950	2,033
	%ch		7.7%	4.3%
	Daily number of vehicles per visitor	2.56	4.38	2.87
2	Tombstone			
	Attendance	216,381	212,682	485,000
	%ch	-56.7%	-1.7%	128.0%
	Traffic Counts on Closest Major Highway	1,581	1,591	1,693
	%ch		0.6%	6.4%
	Daily number of vehicles per visitor	2.67	2.73	1.27
	<b>Mass-appeal attractions</b>			
1	Grand Canyon National Park			
	Attendance	4,578,089	4,930,151	4,816,559
	%ch	-5.6%	7.7%	-2.3%
	Traffic Counts on Closest Major Highway	4,363	4,789	5,694
	%ch		9.8%	18.9%
	Daily number of vehicles per visitor	0.35	0.35	0.43
2	Saguaro National Park			
	Attendance	3,310,036	3,424,051	3,398,592
	%ch	20.5%	3.4%	-0.7%
	Traffic Counts on Closest Major Highway	28,968	31,000	35,650
	%ch		7.0%	15.0%
	Daily number of vehicles per visitor	3.19	3.30	3.83
3	Bank One Ballpark			
	Attendance	3,600,412	3,019,654	2,740,664
	%ch	NA	-16.1%	-9.2%
	Traffic Counts on Closest Major Highway	206,753	244,718	257,721
	%ch		18.4%	5.3%
	Daily number of vehicles per visitor	20.96	29.58	34.32
4	Glen Canyon			
	Attendance	2,667,249	2,467,199	2,500,000
	%ch	8.6%	-7.5%	1.3%
	Traffic Counts	3,877	4,480	5,658
	%ch		15.6%	26.3%
	Number of vehicles per visitor	0.53	0.66	0.83
5	Lake Mead			
	Attendance	1,860,428	1,671,747	1,701,803
	%ch	-0.1%	-10.1%	1.8%
	Traffic Counts	8,020	9,722	9,319
	%ch		21.2%	-4.1%
	Daily number of vehicles per visitor	1.57	2.12	2.00
Source: National Park Service, Arizona Hospitality Research Center, Business Journal Book of Lists, Arizona Department of Transportation.				

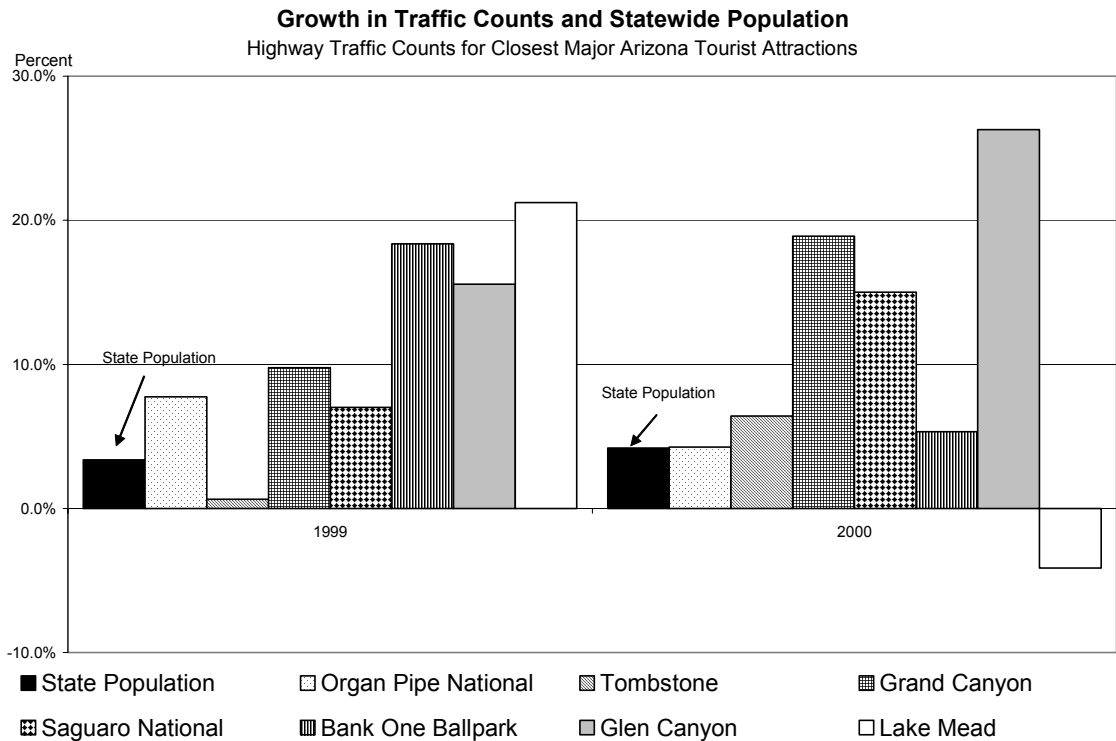
While some question the precision of traffic count data, VisionEcon believes that many other explanations can help to resolve the discrepancies between attendance and traffic volume. First, some park attendance numbers include those entering the attraction due to employment as well as those entering for a tourism experience—other park numbers do not. While the difference between the two is important to monitor marketing strategies—it is not important for this report which concerns itself with the overall burden on the transportation system. Second, the highways chosen from the ADOT traffic count system tend to feed into more than one destination. Hence, the presented traffic counts should be expected to overestimate the underlying traffic induced by the attraction alone.

In addition, the maturity of the tourist attraction plays a role in the traffic volume. As a tourist attraction site matures, other offshoot activities of that site will develop. For instance, the Grand Canyon is no longer just a natural wonder to admire. It has become a river to raft, a valley to hike down, a park to camp in, caves to explore, a creation to fly over, an IMAX movie to experience, a center to shop, and the list goes on. Hence, when one visitor enters the park—five or six more may be enjoying ancillary activities around the park site on that date.

Interestingly, many of the traffic count points do not necessarily reflect areas of robust population growth. For instance, Glen Canyon traffic counts clocked double-digit increases in 1999 and 2000. Yet, the population growth of the nearest town, Page, only gained at a 3.2 percent rate over the census periods from 1990 to 2000. While this rate of growth is decent, the town ranked 71<sup>st</sup> in comparison to the other 87 Arizona towns and places recorded by the Department of Economic Research, Population Statistics Unit. The Grand Canyon traffic counts over those two years also averaged a hefty double-digit gain, yet Flagstaff, Williams and Winslow ranked 55<sup>th</sup>, 61<sup>st</sup> and 72<sup>nd</sup> in terms of population growth over the census periods. On the other side of the coin, Saguaro National Park has shown consistent increases in growth and is near one of the most robust centers of population growth. Marana and Oro Valley near Tucson ranked first and second within these periods. Thus, there is no consistent correlation between an area's population growth and the traffic counts surrounding its major attraction. As the following graph illustrates, statewide population growth also has a very small influence on an attraction's traffic patterns.



**Figure 3**



Source: Business Journal Book of Lists, Arizona Department of Economic Security, Population Statistics.

Hence, with fast-growing attractions not only are the percentage gains higher than with older attractions, but also the number of cars will not gain as fast as the overall attendance numbers suggest. In contrast, older attractions will experience the opposite- the numbers of cars growing faster than attendance since there are other ancillary activities to partake in. For instance, the table suggests that about one out of every third car carried one visitor to Tombstone in 1998. Since then, Tombstone has benefited from two different phenomena. First, an explosion of interest from other countries fascinated with the “Old West” and Indian cultures has brought many international visitors and, second, attendance was enhanced by the close proximity of the newly opened Kartchner Caverns State Park. This park is located approximately 28 miles from Tombstone. It includes trail access to the Whetstone Mountains in the Coronado National Forest. In addition, interactive exhibits are part of its 23,000 square foot Discovery Center. The Center provides information on many features of the cave including its discovery and formation. Interestingly, while the Coronado visitation numbers were excluded from the rankings due to new accounting methods, the new methods still suggested that attendance due to the proximity of Kartchner Caverns increased astronomically.

Now, almost every car traveling near Tombstone carries a bona fide visitor. The Grand Canyon, Saguaro National Park as well as Bank One Ballpark on the other hand, have seen the number of vehicles per visitor increase. You do not have to enter B.O.B. to see the Diamondbacks play. You can eat at Friday's Front Row Restaurant or watch on a big screen at Hi-Tops. Hence, VisionEcon asserts that while many factors are in play, the traffic counts have more to do with the maturity of the attraction than the attendance numbers themselves.

## **Online Tourism**

Given the tragic occurrence on September 11, 2001, one would expect online spending to decline at least for a brief period. However, according to the eCommercePulse study done by Nielsen/NetRatings and Harris Interactive, the U.S. continued to spend online. E-Commerce spending increased 54 percent to \$4.7 billion in September over one year earlier. The study revealed that online spending hit a record high in September 2001, with 38.6 million people purchasing online. The study also found that the travel sector held on to its top spot as the largest spending category in September at \$1.1 billion. The travel category grew by 44 percent over September 2000<sup>12</sup>.

With the Internet growing in stature, especially with the Generation Xers and Net Generation, VisionEcon maintains that it will be necessary to provide visual aids that will give virtual tours of vacation sights. However, the virtual tours will have to provide enticing stimulation to the minds and curiosities of the younger generations in order to compete with the flash and thrill of other attractions. Thus marketing genius will become even more important in encouraging visits to landmarks and historical sites such as the Grand Canyon. Generation Xers-- and the Net Generation that follows-- already have had a big impact on marketing approaches because of their increased role in family decision-making and purchasing power.

According to Melva Goffney, Director of Research and Planning at Nickelodeon Online, 75 percent of online purchasers between the ages of 8 to 12 influence the groceries a family buys. In addition, over two-thirds said they have a major influence on family vacation destinations<sup>13</sup>. As they become young adults, they will be used to getting what they want and will drive commerce for decades.

Going online to research potential vacation spots, consumers will find millions of locations anywhere in the world, obtain detailed maps and accurate driving directions, locate places of interest, and customize road trip plans. They can also access helpful travel information such as the nearby hotels, restaurants, ATMs, gas stations and much more. Furthermore, this information can be accessed from a variety of different devices including Internet-ready cell phones,

wireless modems, personal digital assistants (PDAs) and other handheld devices.

Hence, VisionEcon claims that the pressures experienced by other industries during this technological revolution will also come to tourism-- competition will be fierce. VisionEcon believes glitz and adventure will be the key. As stated by Lise Hansen, a presenter at the Travel and Tourism Research Association Conference, "An online interaction becomes an experiential Web site when it conforms precisely to the consumer's decision-making process. An experiential Web site must match consumers' expectations – as if they had created the experience themselves. And it should not only be easy to use: It should also engage and surprise its visitors. Therefore, designing an online experience requires a deep understanding of the consumers' expectations."<sup>14</sup>

### **Arizona's Role in the Globalization of Tourism**

Lastly, Arizona will naturally fit into the globalization effects of tourism due to the Canamex Corridor. To enhance the roadways stretching from Mexico to the Canadian province of Alberta, the 1995 National Highway Systems Designation Act produced a "High Priority Corridor" known as the Canamex Trade Corridor. The Canamex Corridor's main objectives are to facilitate transportation distribution, commerce and tourism. The Corridor includes the states of Arizona, Nevada, Utah, Idaho and Montana. It also includes states in Mexico and the Canadian province of Alberta.

There are five initiatives associated with the Canamex Corridor. The five initiatives are part of the "Smart Corridor". The five initiatives include 1) Smart Freight Corridor, 2) Smart Tourist Corridor, 3) Telecommunication Access for Rural Areas, 4) Corridor Highway Improvements and 5) Smart Process Partnerships. Each of these initiatives provides an opportunity for the Canamex states to work together more efficiently in meeting its overall objectives through shared Information Technology Systems (ITS). This technology enhances the safety and efficiency of the Corridor for both freight and tourists by providing general information to the public, enforcement agencies and emergency service organizations. For travelers, the ITS could also "allow full cellular coverage by eliminating dead spots" and "state of the art rest stops could provide tourists access to traveler information services". If these developments are successful, they will help to encourage attendance at attractions that fall along I-10, Routes 60 and 93 in Arizona.

## CONCLUSION

Arizona's tourism industry is being forced onto a path of continuous evolution. According to numbers released by the Arizona Office of Tourism, \$13.8 billion dollars in total spending and \$385 million dollars of state tax revenue is at stake in Arizona<sup>15</sup>. For transportation planners, VisionEcon contends that the key indicators of whether a tourist site will demand better transportation resources in the future will be qualitative measures. First, the planner will need to gauge whether the marketing of the tourist attraction has woven its way into an outdoor/theme adventure experience and second, how well the marketing of the attraction makes use of virtual tours and the ease of booking these trips on the Internet. By examining these indicators, planners will be able to differentiate the sites that will flourish in the future from those that expire with the size of the Baby Boom Generation. Just as in the case study between Internet providers Prodigy and America Online, marketing will become king for tourism in the "New Economy".

## END NOTES

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- 1 Dwyer, Steve. "The Right Prescription for Maturing Boomers". Prepared Foods. February 1997. p. 12.
- 2 Hicks, Dr. Rick and Kathy. Boomers, Xers and Other Strangers. Illinois: Tyndale House Publishing. 1999. p 244.
- 3 Sheehy, Gail. New Passages: Mapping Your Life Across Time.
- 4 *Ibid*, p. 259.
- 5 Furash, Edward E. "A Mystery Generation No Longer". The Journal of Lending & Credit Risk Management. February 1998. p 86.
- 6 Furash. *Ibid*, p. 181.
- 7 Furash. *Ibid*, p. 198.
- 8 Furash. *Ibid*, p. 205.
- 9 "Baby Boomers Bypass Ho-Hum Vacations". USA Today Magazine. September 1997. p. 9.
- 10 DK Shifflet and Associates. "Arizona 1999 Travel Profile". August 2000.
- 11 The Ecotourism Society. "USA Ecotourism Statistical Factsheet." 1999. <http://www.ecotourism.org>.
- 12 Pastore, Michael. "Retailing: E-Commerce Survives an Enigmatic September". October 16, 2000. <http://cyberatlas.internet.com/markets/retailing/article>.
- 13 Pastore, Michael. "Demographics: Young Americans Take Their Spending Online". September 19, 2000. [http://cyberatlas.internet.com/big\\_picture/demographics/article](http://cyberatlas.internet.com/big_picture/demographics/article).
- 14 Hansen, Lise. "The Seven Deadly Sins of Complex E-Commerce Travel Research". Presentation from the Travel and Tourism Research Association Annual Conference. [http://www.ttra.com/Supplimental%20Proceedings/Research\\_Papers.htm](http://www.ttra.com/Supplimental%20Proceedings/Research_Papers.htm).
- 15 Arizona Office of Tourism. "2000 Statistical Report". p. 4.