

Special Publication - 06-16

ECONOMIC IMPACT OF TOURISM ON COLORADO RIVER COMMUNITIES INCLUDING:

**LAUGHLIN
BULLHEAD CITY
FORT MOHAVE
MOHAVE VALLEY
GOLDEN VALLEY**

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Acknowledgments

This report is the sixth in a series of studies currently being conducted on the Laughlin and Bullhead City region to define the social and economic interactions between communities in the region. The program team would like to express a special thanks to the Laughlin Town Manager's office, Laughlin Chamber of Commerce, City of Bullhead City and Bullhead City Economic Development Authority for providing financial support for this program. Finally, the program team would also like to thank the regional advisory committee and business community for their direction and ongoing participation in monthly workshops.

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INTRODUCTION

Gaming related tourism has grown in popularity over the last several years. Many state, small rural communities and Indian reservations have legalized gaming as a means to stabilize and increase jobs and local tax base. The goal has been to increase the number of visitors to a community with gaming as the attraction.

Communities in the Colorado River Region including Laughlin, Nevada, and Arizona communities of Bullhead City, Fort Mohave, Mohave Valley and Golden Valley are largely dependent on tourism; gaming and outdoor water recreation. Although these communities are spread across two states, separated by the Colorado River, they are largely dependent on one another. Laughlin's economic base is built around gaming tourism including nine full-service casinos. It is estimated that approximately 25% of casino employees live in Laughlin and the remaining 75% in Arizona communities. Arizona's economic base is built around retail and service sectors that support local tourism and local residents.

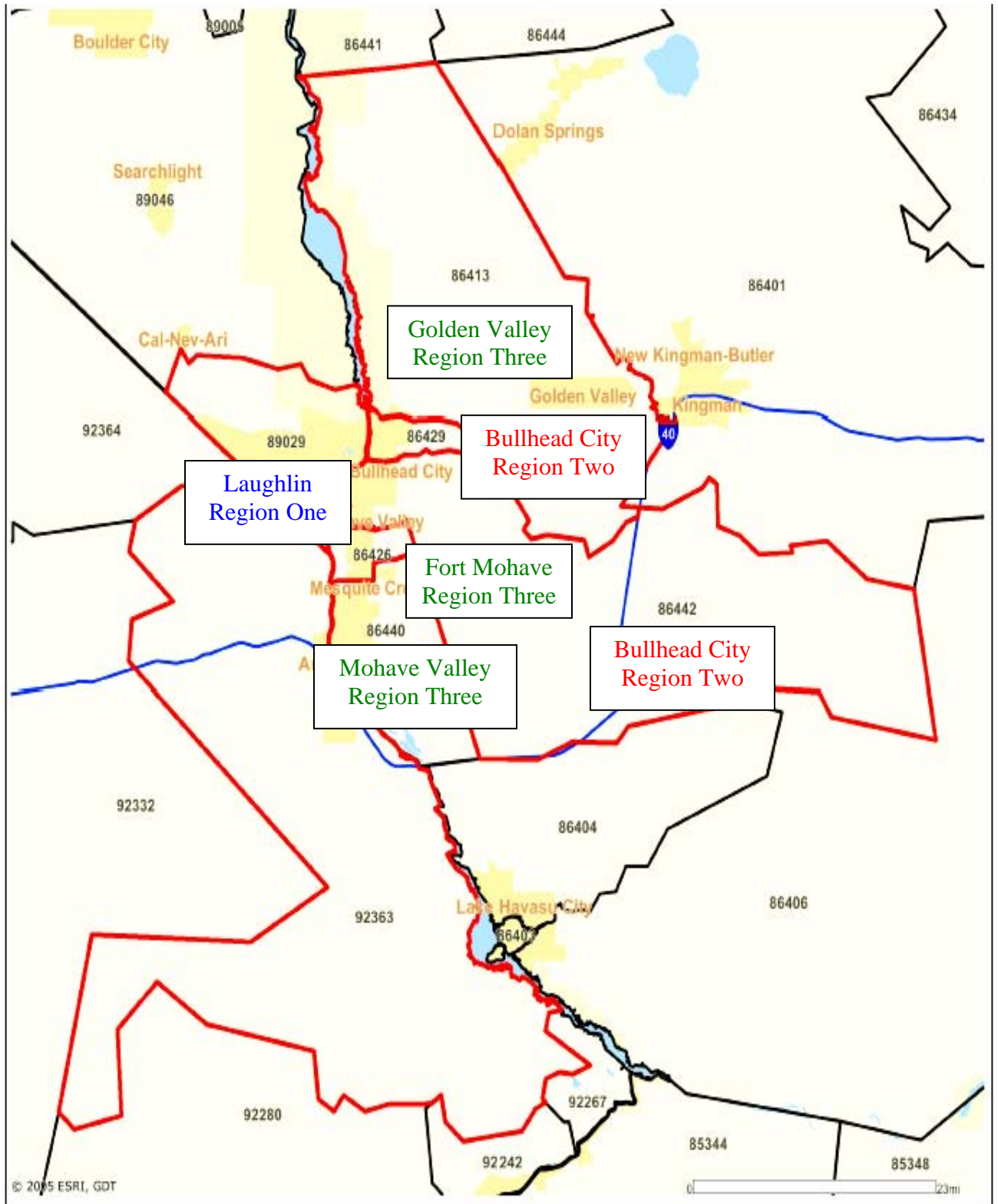
The purpose of this paper is to estimate the economic contributions that tourism has on the Colorado River Region using a multi-regional input-output model developed specifically for the region. Economic contributions are defined as total (direct and secondary) economic activity, personal income and employment supported in the region from tourism activity. This model is also designed to report the distribution of impacts across three regions: region one, Laughlin (blue), Nevada; region two (red), Bullhead City; and region three (green) Fort Mohave, Mohave Valley and Golden Valley (Figure 1). Region three is referred to in this paper as Other Mohave County Communities.

METHODOLOGY

A 36-sector hybrid multi-regional input-output economic model was developed for the Colorado River Region. The Colorado River multi-regional input-output model was designed with an aggregation scheme to use the minimum number of endogenous sectors (local) needed to estimate the economic impacts from tourism related business activity. Sectors common to all three geographic areas were identified as: Agriculture, Construction, Manufacturing, Transportation/Communication/Public Utilities (T/C/PU), Trade, Eating/Drinking/Lodging (EDL), Services, Health, Public Schools, Local Government, and households. Employment in the casino industry was thought to make the greatest contribution to inter-area economic activity within the study area. A casino sector was added to the Laughlin region of the model to estimate the economic contributions casino operations have on Laughlin, Bullhead City and Other Mohave County Communities. Information from local leaders indicated potential changes in operations of the local electric generating plant could have significant impacts on the local economy. Although it was not originally included in the model design, a power plant sector was included and demonstrated in the model to estimate specific economic impacts that may be useful in the future.

Both primary and secondary data was used to localize expenditures and interactions that best reflect the regional economy. Twenty-eight primary surveys were conducted with local businesses to identify sources of revenues, labor migration patterns and incomes, and general business-to-business expenditures in the region. Over

Figure 1. Regional Map by Zip Code Area



800 primary surveys were conducted with local households in each region to determine where households live, work, and purchase goods and services. Secondary data included estimated output totals for sales, personal income and employment published by Economic Census, Bureau of Labor Statistics and Nevada Gaming Commission.

Visitor Days in the Colorado River Region

Total visitors to the Colorado River Region were used to estimate total visitor days. For this study, total visitor days were preferred since visitor expenditure data is collected and reported on a trip basis that could then be estimated on a daily basis. Three sources of information were used to estimate total visitor days in the Laughlin and Bullhead City area. First, the 2004 Nevada Gaming Abstract provided information specific to visitors staying in casinos. Second, the Las Vegas Convention Visitor Authority (LVCVA) 2004 Visitor Profile Study provided information specific to the average visitor’s economic interactions with the regional economy. Third, direct surveys were completed with casino properties to help verify secondary and primary household expenditure survey data. Each of these sources helped estimate the total visitor days of 11,988,600 in the Colorado River Region for 2004. Table 1 summarizes the total estimated visitor days to the Colorado River Region for 2004.

Table 1. Estimated Total Visitor Days in the Colorado River Region, 2004

Types of Visitors	Estimated Total Visitors	Average Length Of Stay	Total Visitor Days
Visitors Staying in Casino	3,559,800	2.8	9,967,440
Visitors Day Bus Tour	400,000	1.0	400,000
Other Lodging outside Casino	504,000	2.8	1,411,200
Pass Through Travelers	400,000	0.5	200,000
Total	4,883,800		11,988,600

Type of Visitors:

Visitors Staying in Casino. Estimated by total occupied rooms reported by casino operators in the 1997 Nevada Gaming Abstract. Average length of stay reported by LVCVA and verified by direct casino property surveys.

Visitor Day Bus Tours. Estimated from direct casino survey. Casinos reported total number of visitors arriving in area on day bus tours. Average length of stay is one day.

Other Lodging Outside Casino. Includes other hotels/motels, RV Parks, camping, vacation/weekend properties and staying with friends and relatives. This includes lodging in both Laughlin and Bullhead City. Average length of stay was assumed the same as visitors staying in casinos.

Pass Through Travelers. This includes travelers that stop while traveling through the area. Normal reasons for stopping may include but not be limited to purchasing gas, refreshments, food and gaming. This is only an estimate by using department of transportation traffic counts. Additional data collection is warranted.

Visitor Expenditures

Table 2 summarizes the average daily direct visitor expenditures per visitor day and total expenditures for 11,988,600 visitor days in the Colorado River Region for 2004. Average visitor expenditures were estimated for both purchases made within the casino and purchases outside the casino. Two sources were used to make these estimates. First, visitor expenditure data is collected by the LVCVA and published in the 2004 Laughlin Visitor Profile. This publication was used to estimate total average daily visitor expenditures. The LVCVA collect visitor expenditure data in seven general expenditure categories: gaming, food and drink, entertainment, shopping, sightseeing, lodging and transportation. Tips were also included and estimated using 5 percent of total casino revenue. Once total average expenditures for each category were estimated, the 2004 Nevada Gaming Abstract (Nevada State Gaming Control Board 2004) was used to estimate the amount of expenditures made within the casino. Adjustments were made to account for purchases by local residents at a rate of approximately 5 percent of total casino revenue. Average daily visitor expenditures outside the casino were then estimated by subtracting average daily visitor expenditures in the casino from the total average daily visitor expenditures.

Table 2. Average Direct Expenditures per Visitor Day and Total Visitors in the Colorado River Region, 2004.

Expenditure Category	Average Visitor Day Purchases in Casino	Average Visitor Day Purchases Outside Casino	Average Visitor Day Purchases	Total Purchases for 11,988,600 Visitor Days
Gaming	\$46.11	\$0.00	\$46.11	\$552,794,346
Food & Drink	\$12.17	\$3.74	\$15.91	\$190,738,629
Entertainment	\$1.27	\$0.05	\$1.32	\$15,824,952
Shopping	\$3.97	\$7.37	\$11.34	\$135,950,724
Sightseeing	\$0.00	\$0.54	\$0.54	\$6,473,844
Lodging	\$8.32	\$3.62	\$11.94	\$143,143,884
Transportation	\$0.00	\$4.15	\$4.15	\$49,752,690
Estimate Tips	\$3.59	\$0.00	\$3.59	\$43,039,074
Total	\$75.43	\$19.47	\$94.90	\$1,137,718,143

ECONOMIC IMPACTS

Economic impacts were estimated for Laughlin, Bullhead City and Other Mohave Communities in terms of total economic activity, total personal income and total employment generated from visitors to the Colorado River Region. When estimating each of these economic components, three categories are presented.

Direct Impacts. Direct impacts are the initial point of sale. That is, a visitor purchases lodging, food and beverage, gaming, etc. This is a direct injection into the local economy. Tourism purchases are considered export sales because they generate new dollars into the economy. Dollars spent by local residents do not have a direct impact on the regional economy but are measured through secondary impacts.

Secondary Impacts. Secondary impacts are defined as indirect and induced impacts. Indirect impacts are the purchases between businesses that essentially support direct impacts. For example, if a visitor purchases a meal in Laughlin, the operator of that business has a depletion of inventory and will have to replenish this inventory which is usually done through another business. Induced impacts represent purchases between households and local businesses as a result of incomes earned from direct impact purchases. For example visitors make direct purchases in the region and a portion of these purchases support a level of household income that is paid to employees. Employees then take that income and make purchases from businesses located in and outside the region. Purchases made outside the region are considered leakage. Secondary impacts are often referred to as the multiplier effect.

Total Impacts. Total impacts are the summation of direct impacts plus secondary impacts.

Per Visitor Day Impacts

Each visitor day to the Colorado River region generates \$144.59 in total economic activity between Laughlin, Bullhead City and Other Mohave County Communities. The greatest impacts are felt in Laughlin, which is due to high direct expenditures in the casinos. However, the total direct visitor expenditures in the area of \$94.90, generates an additional \$49.69 of which 78 percent benefits Bullhead City and Other Mohave County Communities. Table 3 summarizes the per-visitor-day total economic activity impact on the Colorado Region for 2004.

Table 3. Per Visitor Day Total Economic Activity Impact on the Colorado River Region, 2004.

	In Laughlin	In Bullhead City	In Other Mohave County Communities*	Total Economic Impact
Total Economic Activity				
Direct	\$75.43	\$16.67	\$2.80	\$94.90
Indirect/Induced (Secondary)	\$10.76	\$28.24	\$10.69	\$49.69
Total Economic Activity	\$86.19	\$44.91	\$13.49	\$144.59

* Includes Fort Mohave, Mohave County, and Golden Valley

At the level of economic activity presented in Table 3, Table 4 shows the visitor day impacts on total personal income in Laughlin, Bullhead City and Other Mohave County Communities. Each visitor day to the Colorado River Region impacts personal income directly \$25.06. Since the majority of the visitor activity is within the casino sector, the majority of the direct income is paid to Laughlin employees. Additional household income of \$8.04 is generated throughout Laughlin, Bullhead City and Other Mohave County Communities by indirect and induced effects. The total income impact from each visitor day to the Laughlin is is \$31.11.

Table 4. Per Visitor Day Total Personal Income Impact on the Colorado River Region, 2004.

	In Laughlin	In Bullhead City	In Other Mohave County Communities*	Total Income Impact
Total Personal Income				
Direct	\$21.79	\$2.68	\$0.59	\$25.06
Indirect/Induced (Secondary)	\$1.28	\$3.15	\$1.62	\$6.05
Total Personal Income	\$23.07	\$5.83	\$2.21	\$31.11

* Includes Fort Mohave, Mohave County, and Golden Valley

Building on the previous two tables, Table 5 shows the employment impact from one visitor day to the Colorado River Region. The level of economic activity and personal income previously reported per visitor day supports .0001290 total jobs or approximately 775 visitor days per job in Laughlin, Bullhead City and Other Mohave County. This impact will have more meaning when applied to the total visitor days.

Table 5. Per Visitor Total Employment Impact on the Colorado River Region, 2004.

	In Laughlin	In Bullhead City	In Other Mohave County Communities*	Total Employment Impact
Total Employment				
Direct	0.000848	0.000164	0.000035	0.001047
Indirect/Induced (Secondary)	0.000042	0.000134	0.000067	0.000243
Total Employment	0.000890	0.000298	0.000102	0.001290

* Includes Fort Mohave, Mohave County, and Golden Valley

Total Visitor Impacts

Table 6 presents the total economic impact on Laughlin, Bullhead City and Other Mohave County Communities from 11,988,600 visitor days to the Colorado River Region. Using the previously presented per visitor day impacts, the total impacts is estimated by multiplying the total visitor days by per visitor day impacts. Visitors to the Colorado River Region made direct purchased of over \$1 billion, generating secondary economic activity of \$595 million throughout the region for total economic activity of over \$1.6 billion. This level of economic activity included over \$373 million of total personal income and supported 15,462 jobs. This represents approximately 27.8 percent of the total regional income, and 52.8 percent of the total regional employment.

Table 6. Economic Impact of Total Visitor Days on the Colorado River Region, 2004.

<i>Note: All Dollars in Thousands</i>			In Other Mohave County Communities*	
11,988,600 Visitor Days	In Laughlin	In Bullhead City		Total Impact
TOTAL ECONOMIC ACTIVITY				
Direct	\$788,850	\$131,875	\$87,998	\$1,008,723
Indirect/Induced (Secondary)	\$129,023	\$338,584	\$128,121	\$595,728
Total Economic Activity	\$917,873	\$470,459	\$216,119	\$1,604,451
TOTAL INCOME				
Direct	\$261,286	\$32,142	\$7,116	\$300,544
Indirect/Induced (Secondary)	\$15,326	\$37,745	\$19,475	\$72,546
Total Personal Income	\$276,612	\$69,887	\$26,591	\$373,090
TOTAL EMPLOYMENT				
Direct	10,162	1,960	416	12,538
Indirect/Induced (Secondary)	504	1,609	811	2,924
Total Employment	10,666	3,569	1,227	15,462

* Includes Fort Mohave, Mohave County, and Golden Valley

Table 7 shows the average incomes per job for direct, secondary and total impacts by region. These results further give the Colorado River Region a feel for the average incomes that support each category of impacts. This is calculated by dividing personal income by employment.

Table 7. Average Income per Job for Direct, Secondary and Total Impacts in the Colorado River Region, 2004.

			In Other Mohave County Communities*	
Total Impact Average Income	In Laughlin	In Bullhead City		Total Impact
Direct	\$25,712	\$16,398	\$17,105	\$23,970
Indirect/Induced	\$30,409	\$23,458	\$24,014	\$24,810
Total Economic Activity	\$25,934	\$19,582	\$21,671	\$24,129

* Includes Fort Mohave, Mohave County, and Golden Valley

Summary and Conclusions

In 2004, tourism activity in the Colorado River region was the largest basic industry generating over \$1.6 billion in economic activity that included over \$373 million in personal income and 15,462 jobs. Comparing these results to a similar study conducted in 1997, tourism visitor days have increased 35 percent and overall impacts have increased by 25 percent in total economic activity, 50 percent in total personal income, and 15 percent in jobs. A very interesting observation is that the total estimated visitors to the region have remained relatively unchanged but the average length of stay has increased nearly one full day. This shows that the region is doing a very good job keeping tourism in the region longer and realizing a greater economic impact.

There are other indicators that show evidence that the region's economic base is expanding by the significant increases in secondary impacts and personal incomes. This can be interpreted in two ways: 1) employees working in tourism related industries are spending more of their earned income in the region, creating more local expenditures that support additional rounds of secondary impacts and/or 2) industries are expanding and paying higher wages or new residents have higher than average wages. More than likely both situations are contributing to the increased impacts.