An Analysis of the Economic Impacts of Indian Gaming in the State of Arizona

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From the Summary of Results…

- Arizona Indian casinos spent an estimated $254 million on goods and services in 2000.

- The majority of these dollars were spent within the State of Arizona.

- Indian gaming is a significant source of jobs for Arizonans. In the spring of 2001, Indian gaming employed 8,876 people. Another 448 employees were engaged in casino regulatory activities. The total number of jobs directly related to gaming was 9,324.

- These jobs go to both Indians and non-Indians. In the spring of 2001, 57% of all casino and tribal gaming regulatory jobs were held by non-Indians. The Indian proportion of the gaming-related workforce employed on a given reservation ranges from 14% to 84% depending on local market conditions and the demographics of the tribe. In short, both Indian and non-Indian communities benefit from gaming employment.

- More than $28 million in federal and state payroll taxes were withheld by Indian nations in Arizona in 2000 on behalf of employees working in or overseeing Indian casinos. These funds were turned over to federal and state revenue agencies.

- Arizona Indian casinos indirectly generated an additional $40 million in state and local taxes that were collected on purchases, profits, and incomes that originated from casino vendor outlays and employment.

- The multiplier effects of Indian gaming through the Arizona economy are substantial. We estimate that, in 2000, at least 14,784 in-state jobs were attributable to Indian casino operations, and those operations directly and indirectly generated at least $468 million in economic activity within the state.

I. Introduction

The last few months have seen intensified public discussion of American Indian gaming operations in Arizona. At the heart of the debate lie questions regarding the impact of tribal gaming operations on the Arizona economy. Unfortunately, the discussion sometimes suffers from a shortage of facts and analysis. In this report, we set out to clarify some aspects of the nature of Indian gaming and to provide a gross analysis of its economic impacts. We employ newly available data on Indian casino operations around the state to provide an estimate—decidedly conservative—of the spending effects of Indian casinos on the Arizona economy.

II. Analysis

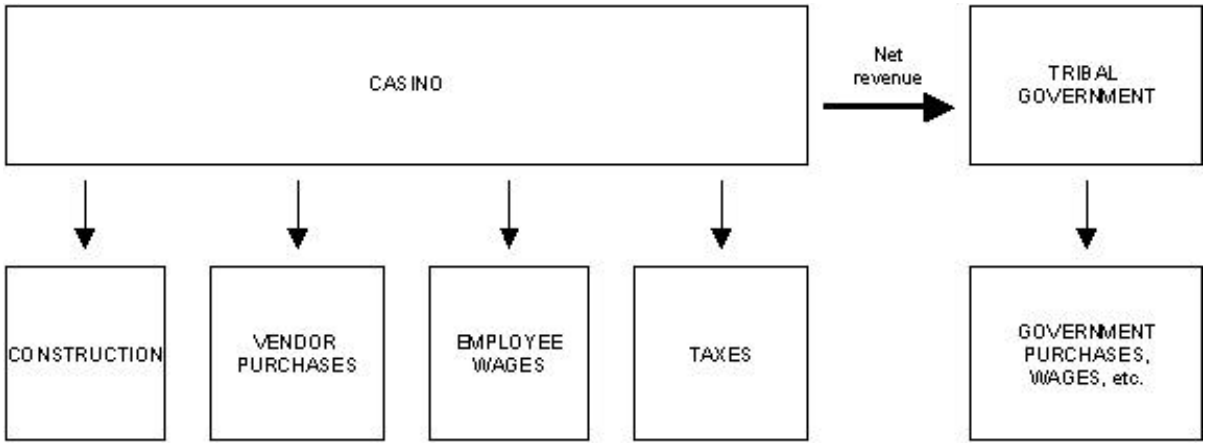
The fundamental question is this: What impact does spending by Arizona's Indian casinos have on the economy of the state?

Indian Gaming Expenditures

Figure 1 shows a schematic of the uses of Indian casino gross revenues. Consistent with its operation as a business, each casino (CASINO) must pay for capital facilities (CONSTRUCTION); goods and services required for operations and maintenance (VENDOR PURCHASES); and labor (EMPLOYEE WAGES). In addition, many tribes across the country make payments to states to reimburse them for regulatory oversight or infrastructural costs, and they incur their own costs of regulation (TAXES).[1] Consistent with its operation as a tribally owned enterprise, the casino transfers its income after these expenses (Net revenue) to the tribe that owns it (TRIBAL GOVERNMENT). This income is then spent or invested by the tribe according to the priorities that result from the operation of its political institutions. These expenditures (GOVERNMENT PURCHASES, WAGES, etc.) typically take place across an array of government services and programs: civil protection, public works, health maintenance, natural resource and land management, education, economic development, housing, and so on.

[1] In an accounting sense, the tribe's self-regulation expenditures may actually derive from a transfer of net income to the tribe rather than from a dedicated tax. From the perspective of this modeling exercise, the two are equivalent. The same is true whether the tribe or the casino pays the state for its regulatory efforts.

Figure 1
Disposition of Casino Gross Revenues



Data

The Arizona Indian Gaming Association (AIGA) gathered data from thirteen of its member tribes for three categories of casino spending: vendor outlays, employment, and taxation. For the additional two non-participating gaming tribes, AIGA estimated numbers in these categories based on other sources of knowledge and on its members' staffs' expertise in the gaming market. Table 1 presents the results of this survey and estimation exercise.

Several salient features of Indian gaming are made immediately apparent by the data in Table 1. First, Indian gaming is a large industry. Its 9,324 employees make it broadly comparable, in employment terms, to the Arizona mining sector, which in December of 2000 employed 9,700 persons.[1] Second, casinos represent a substantial direct source of aggregate demand as they spent an estimated $254 million on goods and services in the most recent calendar year. Across eight of the thirteen reporting tribes, 53% of the dollars were spent in the State of Arizona.[2] Eleven of the thirteen report having 6,722 relationships with vendors located in Arizona.[3]

Third, the employment benefits to households are shared almost equally between Indians and non-Indians: 5,336 non-Natives constitute 57% of the estimated total number of casino and regulatory employees (9,324). In other words, across all gaming tribes, a little more than half of the employment benefits go to non-Indians. However, individually across these tribes, the Indian proportion of total, gaming-related

[1] Bureau of Labor Statistics, "State and Area Employment, Hours, and Earnings," Series ID: sas0400001000011, Seasonally adjusted Arizona statewide mining, accessed at http://146.142.4.24/cgi-bin/SeriesHist?sas0400001000011, on May 17, 2001.

[2] The eight tribes reporting expenditure data by region are: Ak-Chin, Ft. Mojave, Pascua Yaqui, Quechan, Salt River, San Carlos, Tohono O'odham, and Yavapai Apache.

[3] These 6,722 "vendor relationships" are between Indian casinos and fewer than 6,722 unique vendors since some vendors have relationships with more than one casino.

employment varies from 14% to 84%, depending on local market conditions and the size and composition of the tribal labor force.

Table 1
Selected Attributes of Casino Spending by Arizona Tribes
$ in millions, 2000

	Participating Members[1]	AIGA Estimated Gaming Tribe Total[2]		
EXPENDITURES				
Casino Vendor Expenditures	$225	$254		
Regulatory Expenditures				
Self-regulation expenditures[3]			$18	$21
Arizona Department of Gaming payments			$4	$5
TOTAL	***$247***	***$279***		
EMPLOYMENT				
Casino employees				
American Indian/Alaska Native			3,613	3,785
Other	4,295	5,091		
Regulatory Employees				
American Indian/Alaska Native			173	203
Other	173	245		
TOTAL	***8,254***	***9,324***		

[1] Includes: Ak-Chin, Cocopah, Ft. McDowell, Ft. Mojave, Gila River, Pascua Yaqui, Quechan, Salt River, San Carlos, Tohono O'odham, Tonto Apache, White Mountain Apache, and Yavapai Apache.

[2] Estimates for the Colorado River Indian Tribes and Yavapai-Prescott (not members of AIGA) provided by AIGA.

[3] Includes AIGA estimates rather than actual expenditures for Gila River and Pascua Yaqui.

Data may not sum due to rounding.
Source: Arizona Indian Gaming Association.

These employees, of course, pay payroll taxes on the incomes earned at the casino. According to AIGA's survey, Indian casinos withhold an estimated $24 million in federal income taxes for all employees. They also withhold an estimated $4 million in State of Arizona payroll taxes for their non-Indian employees and for those American Indians and Alaska Natives who do not reside on the reservation where they work.

Table 2
Payroll Tax Withholdings
$ in thousands, 2000

Members Gaming Tribe Total	Participating AIGA Estimated		
Federal Income Taxes			
	Casino	$20,332	$22,927
	Regulatory	$1,039	$1,228
TOTAL	***$21,371***	***$24,155***	
State Payroll Taxes			
	Casino	$3,289	$3,792
	Regulatory	$176	$215
TOTAL	***$3,465***	***$4,006***	

Data may not sum due to rounding.
Source: Arizona Indian Gaming Association.

Economic Impacts

The three categories of casino expenditure displayed in Table 1—vendor purchases, employment, and regulatory expenditures—form the basis for a gross impact modeling exercise. We ask the model: If these expenditures of Indian gaming revenue were suddenly (and instantaneously) removed from the Arizona economy, what else would disappear with them? The IMPLAN model applied here essentially re-equilibrates the economy after a decrement (or increment) of, for example, 8,876 jobs in the amusement and entertainment sector.[1] IMPLAN reports back the multiplier effect: i.e., what the indirect consequences are across all the sectors of the economy as those employees spend their incomes and those dollars are, in turn, spent and re-spent through the economy. Table 3 displays IMPLAN's estimate of the in-state economic activity made possible by gaming establishments. It shows that $468 million dollars of economic activity rests on Indian gaming, and 14,784 jobs are attributable to it.

Table 3
Estimated Gross Impacts of Casino-related Expenditures
$ in millions, 2000

Expenditures		**Effect**			
Casino jobs:	8,876 ➔		**Direct**	**Indirect**	**Total**
In-state vendor outlays:	$135	Value Added[1]	$324	$144	**$468**
Regulatory expenditures:	$25	Employment	11,599	3,185	**14,784**

[1] *Value added* here refers to the impact on gross state product.
Sources: Arizona Indian Gaming Association; Minnesota IMPLAN Group, Inc., *IMPLAN Professional: Social Accounting & Impact Analysis Software, Version 2.0* (Stillwater, MN: Minnesota IMPLAN Group, Inc., 2001).

[1] This is the total number of jobs in the casinos alone; gaming regulatory jobs are presumed to be modeled by the regulatory expenditures of $25 million.

It should be noted, also, that the expenditure of Indian gaming revenues on vendors, labor, and regulation (the left-hand side of Table 3) has fiscal consequences for the state. Indeed, the model estimates that of the total impact on Arizona, state and local governments reap $40 million in tax collections—nearly nine times what the state receives in direct transfer payments from the tribal governments for regulatory oversight ($4.5 million). These contributions to the state and local treasuries arise not out of direct tribal payments, of course, but out of the payments made by the tribe's suppliers and workers and their suppliers and workers throughout the economy. In other words, even though tribes appropriately do not pay taxes to the state (see below), their gaming operations are associated with a substantial, additional positive fiscal impact on the state.

There are a number of other ways that Indian gaming likely contributes to the state's economy that we have not been able to include in this analysis. For example, we know that many Indian gaming operations, both within Arizona and elsewhere, employ significant numbers of former welfare recipients. In particular, some tribal gaming operations are closely associated with reductions in the number of persons on welfare rolls in counties where those operations are located.[1] This reduces state and federal taxpayer burdens. In addition, Indian nations with significant gaming net revenue obviously spend much of that revenue in numerous ways in state and local economies as they (for example) send young people to college, build houses, construct infrastructure, invest in enterprises, and work to improve the quality of reservation life.

Thus, contrary to the misperceptions of some, Indian gaming is not a drag on the Arizona economy. On the contrary, it is a substantial contributor to the Arizona economy, stimulating job creation, income, and even tax revenue.

I. Taxation of Tribal Gaming Revenues

Current debate about Indian gaming often includes the idea that Indian gaming has disrupted the Arizona economy and reduced revenue collections. While it is not within the scope of this analysis to directly rebut those claims,[2] we want to note that the idea, often heard, that Indian gaming is not taxed is simply wrong. Indian gaming, as the diagram in Figure 1 suggests, in effect *is* taxed—at a rate of 100% of net revenues—by tribal governments themselves.

[1] See, for example, Cornell, Stephen, Joseph Kalt, Matthew Krepps, and Jonathan Taylor, "American Indian Gaming Policy and Its Socio-Economic Effects: A Report to the National Gambling Impact Study Commission," July 31, 1998, Table 23, at 73; and, more generally, Gerstein, D., R. Volberg, H. Harwood, & E. Christansen, *Gambling impact and behavior study: Report to the National Gambling Impact Study Commission* (Chicago: National Opinion Research Center, University of Chicago, April 1999), at 71.

[2] But see, for example, Taylor *et al*., for a rebuttal of the claims of Professor Gary Anders and his colleagues that Indian gaming depresses Arizona transaction privilege tax collections in Maricopa County. Taylor, Jonathan, Kenneth W. Grant II, Miriam R. Jorgensen, and Matthew B. Krepps, "Indian Gaming in Arizona: Social and Economic Impacts on the State of Arizona" (Cambridge, MA: The Economics Resource Group, Inc., June 4, 1999), at 35-37.

Because the Indian Gaming Regulatory Act (IGRA) requires tribal ownership of casino operations and constrains the uses of casino net income, describing Indian gaming as "untaxed" is comparable to saying the Arizona Lottery is "untaxed." By definition, government-owned enterprises turn over all profits to their owner governments. This is as true for Indian gaming as it is for the Arizona Lottery. Just as Lottery profits go directly into state coffers to provide services to Arizona citizens, so casino profits go directly into tribal government coffers to provide services to tribal citizens.

Furthermore, the implication in some of the current discussion that tribes should pay taxes to the State of Arizona is analogous to asking a state government to pay taxes to the United States or to another state. By way of comparison: Arizona drivers have no appropriate claim on the income that the State of Alaska derives from crude oil extraction—income gained through severance taxes that increase both Arizona's gasoline prices and Alaskans' personal incomes via per capita distributions. Similarly, the taxpayers of Arizona have no appropriate claim on the revenues tribal governments derive from casinos.[1]

I. Summary of Results

Within the limitations noted below, this analysis demonstrates that Indian casinos have pronounced, positive impacts on the Arizona economy. The key findings:

- Arizona Indian casinos spent an estimated $254 million on goods and services in 2000.

- The majority of these dollars were spent within the State of Arizona.

- Indian gaming is a significant source of jobs for Arizonans. In the spring of 2001, Indian gaming employed 8,876 people. Another 448 employees were engaged in casino regulatory activities. The total number of jobs directly related to gaming was 9,324.

- These jobs go to both Indians and non-Indians. In the spring of 2001, 57% of all casino and tribal gaming regulatory jobs were held by non-Indians. The Indian proportion of the gaming-related workforce employed on a given reservation ranges from 14% to 84% depending on local market conditions and the demographics of the tribe. In short, both Indian and non-Indian communities benefit from gaming employment.

- More than $28 million in federal and state payroll taxes were withheld by Indian nations in Arizona in 2000 on behalf of employees working in or overseeing Indian casinos. These funds were turned over to federal and state revenue agencies.

[1] Even if a policy justification could be found for state taxation of Indian gaming, IGRA constrains states from demanding revenues from tribes in compact negotiations beyond the reimbursement of regulatory costs the state bears to regulate Indian gaming. See, e.g., 25 USC § 2710 (d)(7)(B)(iii)(II).

- Arizona Indian casinos indirectly generated an additional $40 million in state and local taxes that were collected on purchases, profits, and incomes that originated from casino vendor outlays and employment.

- The multiplier effects of Indian gaming through the Arizona economy are substantial. We estimate that, in 2000, at least 14,784 in-state jobs were attributable to Indian casino operations, and those operations directly and indirectly generated at least $468 million in economic activity within the state.

Furthermore, as mentioned above and discussed in more detail below, this analysis does not include the expenditures tribal governments make with casino net incomes. This means that our numbers significantly underestimate the positive impacts of Indian gaming on the Arizona economy. In brief, the effects of Indian gaming are large and positive for the state's treasury and economy. Public policy discussions of Indian gaming need to take this fact into account.

I. Limitations of this Analysis

The foregoing analysis estimates tribal casinos' effects on Arizona's economy, state spending, and state employment. The analysis has some limitations that should be noted.

First, this analysis assesses the gross impacts of Indian gaming rather than the net impacts. That is, this is not a cost-benefit analysis. Starting with data reported by tribes and gathered by AIGA, we estimate the gross impacts of spending by Indian casinos on wages, capital, and operating inputs. A more comprehensive analysis would assess what spending habits might have been *in the absence of* Indian casinos to determine the net economic benefit of casinos. To the extent that Indian casinos in Arizona retain Arizonans' discretionary spending in-state (as compared with a situation in which Arizonans can only go to Nevada or some other, out-of-state venue to gamble), those net economic benefits will be higher.[1] On the other hand, to the extent that Indian casinos displace other forms of consumer spending, the net economic benefit will be lower.[2] However, such an analysis is beyond the scope of this immediate project.

[1] Evidence on Arizonans' behavior indicates that this particular effect may be substantial. Nearly half of those who visit Indian casinos and who had frequented Nevada casinos in the past, visit Nevada less since the advent of Indian gaming in Arizona. Only 11% visit Nevada casinos more than they used to. Behavior Research Center, *Statewide Indian Gaming Study* (Phoenix, AZ: Behavior Research Center, 1999), at 13.

[2] Contrary to what some might imagine, casino entertainment is not a "category killer" in leisure spending—that is, it does not destroy other sectors in the leisure industry. In urban contexts, for example, casinos have been shown to have lower revenues the greater the availability of other leisure spending (Evart, Candace, and Matthew B. Krepps, "Competition for the Gaming Dollar and the Urban Casino Puzzle," presented at the 10th International Conference on Gambling and Risk-Taking, Montreal, 1998.) In rural contexts, Indian casinos in particular have been shown to have a greater destination effect on the local economy than a competition effect. That is, the effect of their attracting more visitors to their region dominates any competitive effect they have that may cause customers to substitute away from existing leisure activities (Taylor, Jonathan, Matthew B. Krepps, and Patrick Wang, "The National Evidence on the Socioeconomic Impacts of American Indian Gaming on Non-Indian Communities," *American Behavioral Scientist*, forthcoming).

Second, the data used in this analysis are incomplete, and our results thus tend to understate substantially the gross impact of Indian gaming on the Arizona economy. Specifically, lack of access to proprietary data means our modeling does not encompass the tribal government spending made possible by casino net income. Because most tribal economies are relatively undeveloped and undiversified, and because it would not make sense economically for a tribe to produce everything that it needs, tribes depend substantially on the surrounding state's economy and other sources for the provision of capital, goods, services, and other operating inputs. Casino profits increase a tribe's ability to purchase such inputs. The bulk of such spending by a tribe typically takes place within the state where the tribe is located. Compared to multi-state casino operators whose shareholders are not concentrated in a given state, tribal casinos generally have a higher-than-average ratio of in-state economic benefits to revenues.[1] However, we are not able to include these expenditures in the present analysis. We also should note that the model we use in this analysis does not examine expenditures related to casino construction; these, also, often have been substantial.

Third, while we have no reason to question the quality of the data provided by tribes and gathered by AIGA, we have been unable thus far to formally audit it. Where possible, AIGA verified its estimates against the judgments of professionals in the field. In addition, we evaluated the data for internal consistency, made inquiries to some of the contributing tribes about the data they reported, and adjusted the numbers accordingly.[2]

[1] Gazel, Ricardo, "The Economic Impacts of Casino Gambling at the State and Local Levels," *The Annals of the American Academy of Political Science,* March 1998, at 78.

[2] Note: the data presented in Table 1 display a substantially larger impact than data reported earlier (e.g., Taylor, *et al*.). The difference arises because: i) casinos have expanded; and ii) more data in this paper was reported directly rather than estimated by pro-rationing—particularly for large casinos.