

APPENDIX I
SOCIOECONOMIC EVALUATION



**Socio-Economic Study of
Pauma Casino Expansion:
Housing, Schools, and
Problem Gambling**

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Rea & Parker Research

Rea & Parker Research is an economic and market research consulting firm based in San Diego, California, with facilities in Los Angeles and Orange County. It was founded by its present owners, Louis M. Rea, Ph.D., and Richard A. Parker, Ph.D., in 1984 and has grown into a well-respected, financially stable, and substantial research organization with clients throughout the State of California and the Southwest.

Richard A. Parker, Ph.D. and Louis M. Rea, Ph.D. are also professors in the School of Public Administration and Urban Studies at San Diego State University. Dr. Parker and Dr. Rea are co-authors of a highly successful book, *Designing and Conducting Survey Research: A Comprehensive Guide*, published by Jossey-Bass/Wiley Publishers (division of Simon & Schuster) in 1992, with a second edition published in 1997 and a third edition published in 2005.

Rea & Parker Research utilizes the university offices and state-of-the-art computer facilities, along with access to world-renowned scholars and reference material when necessary. There are four regularly employed members of the staff: Richard A. Parker, Ph.D., Louis M. Rea, Ph.D., Sharon Gomez, and Sherry Ryan, Ph.D., with part-time research assistant help from graduate and undergraduate student assistants.

Richard A. Parker, Ph.D. is President of Rea & Parker Research and a professor in the School of Public Affairs at San Diego State University where he teaches graduate and undergraduate courses in statistics, survey research, urban economic development, finance, and real estate. Dr. Parker possesses extensive analytical experience in fiscal impact analysis, statistical survey research, market analysis, land use, real estate development and valuation, and transportation issues.

Dr. Parker has been a consultant to both the public and private sectors for over 30 years. He has specialized in sample survey research for various governmental agencies and market research for retail, commercial, residential, and recreational development. Particular emphasis has been placed upon market research conducted in the field of transportation, with a myriad of rider/on-board surveys, intercept surveys, telephone surveys, and focus group projects having been performed for several transportation agencies. Dr. Parker has further established his reputation with regard to fiscal impact studies, urban redevelopment, and environmental impact/socioeconomic and demographic analyses.

Dr. Parker has also been involved on a consultative basis with a number of issues concerning economic and population growth impacts in Southern California and has published a variety of articles, monographs, and books on these subjects. He has further participated in various panel discussions, delivered expert testimony to legislatures and courts, and appeared on several radio and television programs on behalf of his clients. Dr. Parker is a graduate of Brown University, the University of California at Berkeley, and UCLA. He possesses degrees in Business Administration from those institutions (B.S., MBA, and Ph.D.) plus a further graduate degree in City Planning (MCP) from San Diego State University.

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urban/fiscal problems. He has published a variety of articles, participated in panel discussions, and delivered numerous papers at professional conferences throughout the United States. He has extensive experience as a researcher and consultant in California and particularly in San Diego and the Los Angeles area for the past 30 years.

Dr. Rea has conducted and supervised numerous projects in the areas of transportation research and transit planning, including on-board bus/train surveys, ride checks, intercept surveys, and focus groups. He has also conducted Internet and telephone surveys in numerous consulting and research assignments for municipal jurisdictions and private businesses throughout Southern California. Dr. Rea has prepared environmental impact reports and market analyses for various commercial/recreational developments and has analyzed the feasibility of assessment districts and direct benefit financing. Dr. Rea has also prepared demographic and economic profiles and projections for various projects.

Dr. Rea is a graduate of Colgate University in New York, where he earned a BA. He received a Master of Regional Planning (MRP) and Ph.D in Social Science. from Syracuse University in Regional Planning.

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Economic Impacts

Summary: There is no need for additional housing or school facilities or ancillary customer services in the Inland North San Diego County area to accommodate new Pauma casino customers or employees and their families.

This section begins with a discussion of the Multiplier Effect that can be expected from Indian casinos in general. The Multiplier Effect is a measure of the growth inducement associated with the ripple effect of the spending and re-spending of direct and indirect income within an economy that is resultant from an economic enterprise. The multiplier is larger the more self contained is the local economy and the less that casino gambling cannibalizes (substitutes for) other consumer expenditures. Substitution is particularly noteworthy between casinos and other gambling enterprises and between casinos and restaurants and bars. Further, urban areas have higher multipliers than do rural areas. As such the multiplier—or growth inducing impacts—of the proposed expansion of the Pauma Casino will be relatively low.

With a multiplier of 1.33:1, the projected 1,700 new employees can be considered to lead to a total of 2,260 total new employees in the inland North San Diego County area. At present, 51 percent of Pauma Casino employees live in the area bounded by the San Diego County-Riverside County boundary to the north, Borrego Springs to the east, and Vista to the southwest. Another 39 percent live in Riverside County, 8 percent are scattered throughout the balance of San Diego County from Imperial Beach to El Cajon to Oceanside, and 2 percent reside in San Bernardino County, Orange County, or Los Angeles County.

Casinos make every effort to be self-contained entertainment venues, with gaming, stage entertainment, inexpensive and fine dining options, and opportunities to enjoy recreational drinking. Visitors will find almost all of their needs met at the casino with regard to these amenities.

Clearly, however, those enterprises will develop to support the newly employed work force that the casino generates directly and indirectly, but they will develop in closer proximity to the employees' homes than to their work. There is little evidence anywhere in San Diego County that casinos cause the development of such ancillary enterprises in the vicinity of the casinos themselves.

In terms of impacts upon local ancillary development, housing and schools, it is the 51 percent of new employees in the inland North County area that is relevant. The 8 percent who reside elsewhere in San Diego County are sufficiently scattered that they are of no relevance for assessing such impacts. The other 41 percent live outside of San Diego County. Therefore, of the 2,260 new employees, only 1,153 (approximate) need to be accommodated in local planning. The mean number of dependent children per employee currently employed at Pauma Casino is 1.2 per employee, so it can be assumed that these 1,153 new employees residing locally (“local employees”) will have 1,383 dependent children.

Unemployment data from September, 2007 for the cities of Escondido, San Marcos, and Vista plus the CDPs of Valley Center and Fallbrook were gathered. The official unemployment rate for these communities in September, 2007 was 5.1 percent, with 8,600 persons officially unemployed. A certain portion of the unemployed are always considered to be permanent or “frictional” in that there will always be people moving and/or between jobs. Using 3 percent of the population as frictionally unemployed), 5,000 of the 8,600 can be considered to be unavailable for employment, leaving 3,600 unemployed to fill the 1,153 new jobs locally, without the need for any new housing or school facilities to accommodate the new Pauma employees who will reside locally. In addition, the two Pala developments (casino/spa expansion and wastewater treatment expansion) will add a maximum of 300 employees plus 100 indirect jobs (204 local) such that, once again, the 3,600 unemployed and available workers will more than suffice to accommodate the total of 1,357 new local employees.

Further, it is commonly accepted that the unemployment rate itself is a very low estimate of the population that is actually available for work. The unemployment rate treats those who are employed part-time but are desirous of more work as being fully employed. The unemployment rate does not consider those whose unemployment benefits have elapsed as being unemployed nor does it count those who have been missed by the census—those temporarily homeless or otherwise missed in the census count. These additional potential workers are among a group of people known as underemployed, and, depending upon who is included and who is not the underemployment rate is at least twice the official unemployment rate and up to six times as great. Therefore, there are at least an additional 8,600 workers available locally in addition to 3,600 not frictionally unemployed such that only 11 percent (1,357) out of 12,200 (8,600 underemployed and 3,600 unemployed—not frictionally) unemployed and underemployed

locally available workers will be needed, thereby causing no need for additional housing or school services either individually by the Pauma proposal or taken cumulatively with other planned job generating developments.

Similarly, in view of the short-term nature of construction activity and the current availability of construction workers already residing in the region, impacts associated with construction upon the immediate vicinity of the casino in terms of housing, schools, and ancillary development associated with the construction of the expanded casino will also be inconsequential.

The Multiplier: Casinos, as do any other form of economic development, generate indirect and induced effects upon an area's income and jobs. The direct beneficial effects of a casino include income, employment, and spending associated with providing goods and services to the casino patrons. The spending pattern does not stop there, however. Local businesses supply goods and services to casinos. These are indirect impacts, and the recipients of the payroll and payments for goods and services spend their money that is derived from the casino activities at local grocery stores, clothiers, appliance providers, automobile dealers, and so forth in what are known as induced effects.

The Multiplier Effect is a measure of the growth inducement associated with the ripple effect of the spending and re-spending of direct and indirect income within an economy that is resultant from an economic enterprise. The Multiplier is larger the more that the population spends out of each additional dollar that it receives (Marginal Propensity to Consume). It is also the case that the Multiplier is larger the more self contained is the local economy. That is, the less leakage of income that goes to other regions, the higher will be the Multiplier. As such, the more rural, the lower the Multiplier; the more urban, the higher will be the Multiplier.

The most common approach to estimating multiplier effects is using an input-output model. Such models evaluate economic effects by measuring the receipts and expenditures that result from and incremental change in an area's economy. Input-output models recognize that outputs of one industry are often inputs in another and that wages that employees of one industry earn are spent on a variety of goods produced in other industries. Thus, changes in the activity of one industry,

like a casino, affect both the casino employees and suppliers and the overall economy itself. RIMS, developed by the U.S. Department of Commerce and IMPLAN (Minnesota IMPLAN Group) are two of the most widely used input-output models. Once adjustments have been made for substitution effects, the regional Multiplier can be applied to the direct benefits. Various multiplier studies for Indian casinos have been performed over the years. The Endnotes to this section of the report contain references to several of these studies.

With the Pauma Reservation being in a community of minimal population and economic activity, the lower among the Multiplier Effect estimates contained in the Endnotes would be most applicable. Therefore, the indirect and induced growth impact of the proposed Pauma Resort and Casino can be expected to be in the 1.2:1 to 1.5:1 range, with 1.33:1 being an appropriate mid-range estimate. These same studies point to a somewhat higher multiplier during construction of 1.7:1. Much of the reason for the smaller multiplier at Pauma rests in the Substitution Effect associated with gaming, as mentioned above, and as discussed in greater detail below.

The Substitution Effect: The “Substitution Effect” refers to the diversion of funds or jobs from other consumer goods and services to wagering and gaming. Critics of gaming often use this to argue that intra-industry “cannibalization” of related industries such as restaurants and other recreational establishments or a reduction of the amount of money spent on groceries due to gambling losses means that not all new jobs and spending created by the casino are actually new but instead are substitutes for or transfers from existing spending and jobs already present in the local economy. This is borne out by the literature on the subject, but the magnitude of the substitution effect is uncertain in any given local economy.

According to gaming opponents, for example, the number of restaurants in Atlantic City declined from 243 in 1977, when casino gambling was legalized, to 146 in 1987, largely attributed to inexpensive meals at the casinos (State of Hawaii Department of Business, Economic Development, and Tourism, *The Economic Impacts of Shipboard Gaming and Pari-Mutuel Horse Racing in Hawaii*, (1997)).

There are flaws with this kind of simple analysis. For instance, if meals are less expensive at casinos, then consumers, by switching to those meals, will be able to retain more disposable income and might spend that income in a number of ways unrelated to the local restaurants but in such a manner that spending and jobs are retained locally in other industries. For example, The

National Gambling Impact Study Commission's (1999) *Gambling Impact and Behavior Study: Report to the National Gambling Impact Study Commission*, "private earnings in construction, hotels and lodging, and recreation and amusement rose by 18%, 43%, and 22%, respectively, in casino communities;" however, "private earnings in restaurants and bars fell 19%."

The Endnotes to this section contain many examples of substitution effects of casinos that range between 29 percent and 73 percent. Substitution is particularly noteworthy between casinos and other gambling enterprises and between casinos and restaurants and bars. Making a precise determination of the substitution effect is difficult. Over time the amount of the substitution will depend upon many factors, including the availability of alternative spending opportunities, the extent of visitor patronage, and if the economy is at full employment.

The studies cited in the Endnotes support the assertion that there is a noteworthy level of substitution associated with the development of casinos. This economic phenomenon of substitution, along with "leakage" of revenues out of the local area due to the area's relatively remote location (in contrast to developed urban areas closer to the population base of the region) and low level of population and services, acts to reduce the magnitude of the multiplier. These economic circumstances justify the small multiplier projected for the area in the vicinity of the Pauma casino and hotel expansion.

Direct and Indirect Impact of Proposed Pauma Casino Operations on Local Service Sector, Housing and Schools: With an operations multiplier of 1.33, the projected 1,700 new employees can be considered to lead to a total of 2,260 total new employees in the area (**Table 1**). The questions then arise:

- Where will ancillary development of service industries occur?
- Where will these employees of the casino and consumers of any ancillary services live?
- Where will their children attend school?
- How will these new employees combine with new employees from other new developments to cumulatively impact housing and schools in the immediate region?

Prior to discussing the last of these questions—the cumulative impact of the various new developments planned for the area, the Pauma proposal will be examined in isolation regarding the first three questions.

The initial question about the location of support industries to the casino and its patrons is an important one. As discussed above, casinos generally have some substitution effect upon restaurants, bars, and other gaming enterprises. Casinos make every effort to be self-contained entertainment venues, with gaming, stage entertainment, inexpensive and fine dining options, and opportunities to enjoy recreational drinking. Visitors will find their needs met with regard to these expenditures at the casino. Thus, new local enterprise development to cater to casino patrons is unlikely to be significant.

According to the Federal Reserve Bank of Boston (*Memorandum: Economic Impact of Casino Development*, September 14, 2006):

The tourist, however, does not generally spend much in the communities surrounding a resort-style casino. Steve Wynn, a major casino operator, expressed this point to local businessmen in Bridgeport which also considered a casino, in the 1990s: ‘There is no reason on earth for any of you to expect for more than a second that just because there are people here, they’re going to run into your restaurants and stores just because we build this building [casino] here.’

Some enterprises will likely develop to support the newly employed work force that the casino generates directly and indirectly (by way of the multiplier effect), but they will develop in closer proximity to the employees’ homes than to their work. Rea & Parker Research has undertaken many direct contacts with hundreds of retailer real estate and location departments throughout the past 20 years, and it can be stated with great certainty that very few retail sector employers make location decisions based upon the location of nearby employees—office supplies would be such a retailer and some restaurants. Fast food operators base their decisions on a combination of residents nearby and traffic counts; however, it has been established above that the fast food and restaurant market will not benefit from traffic counts nearly so much when the destination of the traffic is a full-service casino. All other retail and consumer support services decide upon their location based predominantly upon residential counts and demographics—not local employment bases. Further to this point of the discussion, there is little observational evidence anywhere in San Diego County that casinos cause the development of such ancillary enterprises in the vicinity of the casinos themselves. Therefore, the second question arises—where will employees of the casino and employees of ancillary service enterprises live?

At present, 51 percent of Pauma Casino employees live in the area bounded by the San Diego County-Riverside County boundary to the north, Borrego Springs to the east, and Vista to the southwest. Another 39 percent live in Riverside County, 8 percent are scattered throughout the balance of San Diego County from Imperial Beach to El Cajon to Oceanside, and 2 percent reside in San Bernardino County, Orange County, or Los Angeles County.

Table 1			
Total Number of Inland North San Diego County Residents to be Employed and Children of Employees Due to Operations of Expanded Pauma Casino and Cumulative Impact (Direct and Indirect)			
	Direct Employees	Indirect Employees	Total Direct & Indirect
Projected New Casino Employees	1700		
Projected Cumulative Impact Development	300		
Apply 1.33 Multiplier		660	2660
Local Resident Factor (51 percent)	1020	337	1357
	Number of Local Children		
Number of Children per Local Casino Employee	(1.2*867) = 1040	(1.2*286) = 343	1383
Number of Children per Local Cumulative Impact Employee	(1.2*153) = 184	(1.2*51) = 61	245

In terms of impacts upon local housing and schools, it is the 51 percent in the inland North County area that are of relevant. The 8 percent who reside elsewhere in San Diego County are sufficiently scattered that they are of no relevance for assessing such impacts. The other 41 percent live outside of San Diego County. Therefore, of the 2,260 new employees, only 1,153 (approximate) need to be accommodated in local planning. The mean number of dependent children per employee currently employed at Pauma Casino is 1.2 per employee, so it can be assumed that these 1,153 new employee residents will have 1,383 (approximate) dependent children.

The issue then arises, how many of these new employees and their children can be expected to already reside in the area? In order to address that question, unemployment data from September, 2007 for the cities of Escondido, San Marcos, and Vista plus the CDPs of Valley Center and Fallbrook were gathered. The official unemployment rate for these communities in September, 2007 was 5.1 percent, with 8,600 persons officially unemployed (Table 2).

A certain portion of the unemployed are always considered to be permanent or “frictional” in that there will always be people moving and/or between jobs. This frictional employment varies from population to population but is usually between 2 percent and 4 percent. Using the midpoint (3 percent) of the local population as frictionally unemployed (3 percent is also the federally targeted full employment objective established in the 1978 Humphrey-Hawkins Full Employment legislation), 5,000 of the 8,600 can be considered to be unavailable for employment, leaving 3,600 unemployed to fill the 1,153 new jobs locally, without the need for any new housing or school facilities to accommodate the new Pauma employees who already reside locally.

Underemployment: It is a well established and accepted truism that the unemployment rate itself is a very low estimate of the population that is actually available for work. The unemployment rate treats those who are employed part-time but are desirous of more work as being fully employed. The unemployment rate does not consider those whose unemployment benefits have elapsed as being unemployed nor does it count those who have been missed by the census—those temporarily homeless or otherwise missed in the census count. These additional potential workers are among a group of people known as underemployed, and, depending upon who is included and who is not (e.g. workers who are working but for amounts below poverty wage levels), this underemployment rate is at least twice the official unemployment rate and up to six times as great. For example, a Field (California) Poll in 1998 found that, whereas the official number of unemployed in California was 1.1 million workers, there were 3.9 million California residents looking for work or more work—a number over three times the official count. Other sources confirming the reality of underemployment are set forth in the Endnotes.

Using the most conservative of assumptions, the 8,600 official unemployed are at least matched by 8,600 underemployed, and deducting the 5,000 frictional unemployed, it can be seen that at least 12,200 residents of inland North San Diego County are presently available for work in this area (8,600 unemployed plus 8,600 expired benefits and involuntary part-time less 5,000 frictionally unemployed). Thus, the local available workforce is more than ample to fill the new employment to be generated by the expanded casino.

In summary, given (a) the relatively small multiplier effect involved in this casino expansion project, (b) the fact that there is a significant population of unemployed and underemployed individuals, already residing in the local area who will fill the direct and indirect jobs it will create, and (c) such individuals will already have housing and children in schools, the casino

expansion will have no significant impact upon housing or schools. In addition, the increased employment is not likely to generate any significant ancillary services or business development (secondary growth) because of the tendency for such growth to locate near residential locations in contrast to employment locations. Finally, the influx of patrons visiting the expanded casino is unlikely to generate any significant ancillary business development because of the powerful capture rate of casinos for food, beverage and shopping dollars.

Table 2				
Effective Unemployment and Underemployment in North San Diego County				
September, 2007				
	#		% of Total Regional Population	
Official Unemployment	8600		5.1%	
Less Frictional Unemployment	<5000>		<3.0%>	
Total Effective (Available) Unemployment		3600		2.1%
Underemployed		8600		5.1%
Total Effective Unemployment & Underemployment		12200		7.2%

Direct and Indirect Impact of Proposed Pauma Casino Construction on Local Service Sector, Housing and Schools: With the construction industry having slowed significantly in San Diego County, there will be no problem finding local construction workers for this project, such that there will be likely be no in-migration of construction workers into the region that will be necessitated by the Pauma expansion. Indirect jobs from the Multiplier Effect will parallel the construction period and be short-term in nature, with no long-term impacts. Further, with that being the case, just as with the local resident permanent operational employees, any spinoff jobs will occur regionally and be spread according to the pattern of residential locations for the workers and according to the business locations for the contractors and material suppliers involved. That is to say, impacts upon the immediate vicinity of the casino in terms of housing, schools, and ancillary development associated with the construction of the expanded casino will be inconsequential.

Cumulative Impacts: The immediate future seems to offer only two substantial new developments in the area—the expansion of the Pala Casino and Spa and the Pala Wastewater

Facility. The exact number of jobs to be created is not available to Rea & Parker Research; however, using data from Barona, Viejas, and Rincon, it can be projected that the 250 new slot machines at Pala will require 250-300 new employees. The wastewater facility will be a small one with minimal employment. For example, large facilities that process and treat 25 million gallons per day might employ 50 workers. The Pala plant is scheduled to be 1-2 percent that size (323,000 gallons per day). Even allowing for economies of scale, it is hard to imagine more than 15 employees for this facility.

As such, the only additional job creation facilities that are planned to be opened in the near future will add at most another 300 jobs to the area, which, when added to Pauma Casino's 1,700 new employees will total 2,000 direct employees and an additional Multiplier Effect of 660 jobs = 2,660 new jobs due to Pauma and Pala. Utilizing the 51 percent local resident factor established above, this implies new jobs for 1,357 people within the northern San Diego County region—well within the 3,600 unemployed and available for work, let alone the additional 8,600 underemployed.

From a cumulative impact perspective, the jobs to be created by the proposed Pauma Casino expansion, when combined with the existing employment in the area and other known local job-generating developments, will be of no consequence in terms of housing needs or schools. No new housing units are needed in the vicinity of the Pauma Casino in order to accommodate the new employees of Pauma or Pala or any of the employees who have been working there for years. Existing employees have homes and are commuting to work presently from those homes, and new employees can be absorbed from those local residents currently unemployed.

Endnotes

Economic Impacts

Multiplier Effect:

- In June 2007, the Center for Economic Development and Business Research in the W. Frank Barton School of Business, Wichita State University issued *Fiscal and Economic Impact of Casino Gaming: South Central Kansas*. RIMS was used in the Wichita State University study, and multipliers that ranged between 1.19:1 and 1.57:1 were derived for operations, with 1.37:1 to 1.92:1 applicable to construction.
- Gaming Market Advisors in December, 2005—*Economic Impact of the Proposed Riverwalk Casino, Philadelphia, PA*--used a 1.45:1 construction multiplier, a 1.47:1 wage multiplier, and a 1.33:1 operations multiplier for Philadelphia.
- In June, 2005, the Center for Government Research (Kent Gardner, Ph.D. project director and Rebecca Sumner, Ph.D.) performed studies for a Seneca Niagara Casino (Niagara Falls, New York)—*Seneca Niagara Casino: Fiscal and Economic Impact on Niagara Falls, New York*—and for Rochester in July, 2004—*Seneca Rochester Casino: Fiscal and Economic Impact on Rochester, New York*. Their Multiplier for Niagara Falls (2005) was 1.67:1 and 1.58:1 for Rochester (2004).
- In Oklahoma Indian casino Multipliers were determined to be 1.57:1 (Kenneth W. Grant II, Katherine A. Spilde, and Jonathan B. Taylor of the Harvard Project on American Indian Economic Development ((*Social and Economic Consequences of Indian Gaming in Oklahoma*, 2003-2004--John F. Kennedy School of Government, Harvard University)
- Mark Seitz and David Darling of Kansas State University (*The Role of Harrah's Prairie Band Casino Property in the Area Economy*—2003) report an input-output model determination of the Multiplier in Kansas of 1.3, but they further indicate that they find this to be low compared to “other calculations done by the authors.”
- The IMPLAN model was applied in Arizona to show that 9,324 casino employees would generate a total of 14,784 (Multiplier = 1.6) and that the \$279 million in spending would multiply to \$468 million (Multiplier = 1.7) — Stephen Cornell and Jonathan Taylor of the Udall Center for Studies in Public Policy, University of Arizona--*An Analysis of the Economic Impacts of Indian Gaming in the State of Arizona*-2001).
- Donald Phares (University of Missouri) in *Casino Gaming in Missouri* (2001) determined that the Multiplier for casino operations is 1.8 for both operations and construction.
- Fred Carston, Director of the Connecticut Center for Economic Analysis at the University of Connecticut, along with other University of Connecticut staff—William Lott, Director of Research, and Stan McMillen, Bobur Alimov, Na Li Dawson, and Tapas Ray (*The Economic Impact of the Mashantucket Pequot Tribal Nation Operations in Connecticut* (2000)) indicate that the Multiplier in the cities closest to Foxwoods Resort Casino is 2.1.
- Adam Rose of Pennsylvania State University in his often cited 1998 study for the National Gambling Impact Study Commission, *The Regional Economic Impacts of Casino Gambling* indicates that small cities, are likely to have multipliers that can range as high as 1.5—meaning that a dollar of direct impact will produce another 50 cents of economic benefits to the community as the direct benefits multiply or ripple through the city. Medium-size cities can experience multipliers of 2.0 and large cities up to 2.5.
- Amy Lake and Steven Deller of the University of Wisconsin (*The Socioeconomic Impacts of a Native American Casino* (1996)) provided a somewhat higher Multiplier in that 870 casino jobs were generating an additional 790 jobs (Multiplier = 1.9) and that \$14 million in compensation to casino workers multiplied into another \$10.13 million as

a result of the ripple effect (Multiplier = 1.7). The majority of the spin-off jobs were in trade (280 jobs) and services (321 jobs), with the bulk due to employee and patron spending outside of the casino.

- William Thompson (University of Nevada-Las Vegas) and Ricardo Gazel (Inter-American Development Bank)--*The Monetary Impacts of Riverboat Casino Gambling in Illinois*, 1996--utilize multipliers that are 1.1:1 for benefits and 1.3:1 for costs.

Substitution Effect:

- The Center for Economic Development and Business Research in the W. Frank Barton School of Business, Wichita State University issued *Fiscal and Economic Impact of Casino Gaming: South Central Kansas* (2007) and “expected that 50 percent of new jobs generated by the casino will come through substitution of existing jobs within the community.”
- In June, 2005, the Center for Government Research (Kent Gardner, Ph.D. project director and Rebecca Sumner, Ph.D.) performed studies for a Seneca Niagara Casino (Niagara Falls, New York)—*Seneca Niagara Casino: Fiscal and Economic Impact on Niagara Falls, New York*—and for Rochester in July, 2004—*Seneca Rochester Casino: Fiscal and Economic Impact on Rochester, New York*. The Seneca Niagara Casino study utilized a substitution factor of 29 percent—40 percent within 50 miles and 0 percent outside of 50 miles—in reducing the number of employees from 2,100 “total” to 1,500 “new.”
- Stowe Shoemaker (University of Houston) and Dina Marie V. Zemke (Cornell University) indicated that, in a 1993 Nebraska survey, 48 percent of the participants who gambled reported that they would gamble more if more legalized options were available and 26 percent of the non-gambling participants reported that increased availability and access to legal gambling would prompt them to gamble. They further reported about a 1999 study in Niagara Falls, Ontario that showed that there was a significant increase in casino gambling by local residents between before and after the construction of a new casino. Both of these findings imply a clear substitution effect among gambling alternatives. (*The “Locals” Market: an Emerging Gaming Segment*, 2005).
- The 2004 Center for Government Research study for Rochester identified \$129 million of \$351 million (37 percent) as substitution (\$12 million from a local racetrack and \$117 from the local economy)—“There is a consistent pattern of loss for specific industries, particularly food and beverage establishments, as a consequence of a casino. Casino food, drink, and retail facilities are designed to attract patronage to the casino.”
- Donald Phares (University of Missouri) in *Casino Gaming in Missouri* (2001) found that “72.6 percent of gaming revenues come from other spending within the community, including retail, entertainment, and saving,” some of which displaces local sales tax revenue (*Casino Gaming in Missouri: The Spending Displacement Effects and Gaming’s Net Economic Impact*, 2001).
- Donald Siegel (Nottingham University Business School) and Gary Anders (Arizona State University West) published *The Impact of Indian Casinos on State Lotteries: A Case Study of Arizona* in March, 2001. They cited earlier studies of theirs that suggested that Indian casinos have created leakages from restaurants and bars (1998) and that displacement occurred in Missouri in industries that are considered substitutes for gaming, such as entertainment and recreation services (1999). In this article, they established that substitution also occurred among other gambling opportunities, with “horse and dog tracks first to feel the effects of casino growth” and lotteries following. Siegel and Anders found significant substitution/elasticity factors of .375 between lottery games and slot machines, especially Lotto (.418). This indicates that for each dollar spent on Indian casino slot machines, 37.5 cents is cannibalized for state lotteries.

- Adam Rose of Pennsylvania State University in the 1998 study for the National Gambling Impact Study Commission, *The Regional Economic Impacts of Casino Gambling*, wrote: “While there are claims that this [cannibalization] can be 100 percent or more, there are no empirical studies to support such a conclusion.”
- Thompson, et al. found a 30 percent substitution rate with respect to a small local area. Thalheimer (1992) estimated casino substitution effect for horse racing in Maryland at 25 percent.
- John W. Kindt (University of Illinois), *Business-Economic Impacts of Licensed Casino Gambling in West Virginia* (1998) quotes Thompson, Gazel, and Rickman (1995) that “More than 10 percent of the locals would spend more on groceries if it were not for the casino, while nearly one-fourth would spend more on clothes.”

Underemployment

According to the Economic Policy Institute:

For various reasons, many analysts have wondered if the unemployment rate is always the best measure of labor market weakness. Unemployment rates only reflect those actively seeking work, and thus overlook some other important dimensions of joblessness that are particularly germane... A more comprehensive measure of labor utilization is underemployment. This Bureau of Labor Statistics (BLS) concept includes the unemployed, discouraged workers (people who looked for work at some point over the past year, but have given up due to lack of prospects), involuntary part-timers (part-time workers who would prefer full-time work), and a smaller group of people who want to work but face a barrier such as lack of transportation or child care.

Lester Thurow, the world-renowned MIT economist has written that he sees the U.S. economy as containing vast numbers of un- or underemployed labor. He estimates that together with newcomers into the labor force, this aggregate is equal to about one third of the American work force. This reserve army of the un- and underemployed and newcomers depress both wages and the inflation rate.

According to a publication of the Congressional Research Service, Library of Congress entitled *The New Economic Paradigm: Is It New and Is It a Paradigm?* by Marc Labonte, Economist, Government and Finance Division and Gail E. Makinen, Specialist in Economic Policy, Government and Finance Division, 2001

- [Referring to Thurow’s estimates] Since this is such a large fraction of the work force, it is of interest to see what he has in mind. His computations were made in the fall of 1995 when the official unemployment rate was hovering around 5.7%. To come to his conclusion, Thurow combines the following: the 7.5 to 8 million officially unemployed, the 5 to 6 million people who are not working but who do not meet any of the tests for

being active in the workforce and are therefore not considered unemployed, the approximately 4.5 million part-time workers who would like to work full time but cannot find such jobs, the approximately 8.1 million American workers in temporary jobs, the 2 million workers who work "on call," and the 8.3 million self-employed "independent contractors." Next, he believes that there are about 5.8 million missing males aged 25 to 60 years. They are missing in the sense that they exist in the U.S. census statistics but not in U.S. labor statistics. Finally, to these data he adds another 11 million immigrants (both legal and illegal) who entered the United States from 1980 to 1993 in search for more work and higher wages. The sum is, in his words, "...a sea of unemployed workers, underemployed workers, and newcomers looking for work."

Problem and Pathological Gambling and Public Assistance

Summary:

This section establishes that gambling is not so much increased by casinos as it is transferred among alternative gambling opportunities. Studies tend to support this finding in that the percentage of the population that is subject to problem gambling issues has not changed (1 percent to 7 percent of the population, depending upon the severity of the problem) as casinos have increased in number by 1600 percent. In California, the most recent survey (2006) of gambling prevalence shows that problem and pathological gamblers represent between 2.8 and 4.6 percent of the State's adult (18 and over) population. It is reasonable to assume that the San Diego County prevalence rate is within the same range.

Much of the cause for problem gambling is in the addictive nature of those who suffer from the disease and their tendencies to be subject to other addictions simultaneously. It is not possible to scientifically directly associate the growth of Indian casinos to an increase in problem gambling—the problem gambler will find his or her outlet for gambling among a plethora of gambling opportunities including the State lottery, horse racing, sports books (legal and illegal), casinos, and online gambling, which is growing very rapidly and is considerably more convenient than casinos. The implication of this conclusion is that the addition of a new casino or the expansion of an existing casino in a region where casinos and other gambling opportunities prevail will not result in a significant increase in the number of problem gamblers.

What is abundantly clear is that the population of problem gamblers is a relatively small subset of the total population. Further, with this potential problem being small, there are sufficient economic benefits to be obtained from casinos in many of these communities that there will be additional public funds available from the additional tax benefits and reduced public assistance to help in this regard along with the programs offered by the casinos themselves.

There is a substantial substitution factor among lotteries, horse racing, casinos, and other gambling opportunities that indicates gambling is not so much increased by casinos as it is transferred among alternative gaming opportunities. The studies below tend to support this

finding in that the percentage of the population that is subject to problem gambling issues has not changed and that much of the cause for problem gambling is in the addictive nature of those who suffer from the disease and their tendencies to be subject to other addictions simultaneously.

A fundamental issue with problem gambling and Indian casinos is: To the extent that there is any apparent causal relationship between these casinos and problem gambling (an association severely challenged herein), is that relationship due in any way to the presence of a casino nearby? More directly, given that several casinos and other gambling opportunities already exist in a region, will the addition of a new casino or the expansion of an existing casino substantially add to the number of problem and pathological gamblers.

The lack of a meaningful association between access to gambling and problem and pathological gambling tends to render the fears of increased problems due to casinos to be substantially unfounded.

Magnitude of Problem Gambling: The estimated magnitude of the problem has been addressed in many studies:

- Following up on the issue of costs, the Wichita State University (2007--using data provided by Earl Grinols—University of Illinois) study allocated \$2,145 of local apprehension, adjudication and incarceration costs to the criminal activity of each pathological gambler and \$247 for problem gamblers. Statewide adjudication and incarceration costs were \$1,893 for each pathological gambler and \$229 for a problem gambler for a total of \$4,038 for each pathological gambler and \$476 for each problem gambler. This study, therefore, also found the criminal justice costs to be approximately one-third of pathological gambling costs in that it estimated the societal costs applicable to welfare, lost productivity, bankruptcy, suicide, and illness of \$7,579 for the pathological gambler (total criminal and social = \$11,617, with criminal justice = 35 percent) and \$2,834 for the problem gambler (criminal justice portion of total \$3,310 = 14 percent).
- William N. Thompson and R. Keith Schwer (both University of Nevada-Las Vegas) estimated, based upon data from only 99 members of Gamblers Anonymous, that each compulsive gambler imposed costs of approximately \$8,000 annually upon other residents of southern Nevada (*Beyond the Limits of Recreation: Social Costs of Gambling in Southern Nevada*, 2005). Of these costs, \$1,428 were government costs and \$6,616 were economic losses for southern Nevada. Thompson and Schwer also added bad debts and unpaid medical bills to their analysis; however, these are not economic losses—they are transfers from one party (creditor) to another (debtor) in strict economic terms.
- John W. Kindt (University of Illinois), in *The Costs of Addicted Gamblers: Should the States Initiate Mega-Lawsuits Similar to Tobacco Cases?* 2001, provided an estimate from the Harvard Medical School that the cost of pathological gambling in the United States was in excess of \$13,200 per pathological gambler per year

- Approximately 1.1 million adolescents between the ages of 12 and 18 were identified as pathological gamblers by R.F. Drinan in 1999 for the National Catholic Reporter—*Government's Unseemly Promotion of Gambling*.

These expenditures are substantial, especially among adolescents and Gamblers Anonymous members, who are not necessarily representative of all problem gamblers. However, just how big is this population?

- The 2006 California Problem Gambling Prevalence Survey (2006) prepared by a National Organization for Research and Computing (NORC) at the University of Chicago found that problem and pathological gamblers in the State of California range from 2.8 percent to 4.6 percent of the adult (18 and over) population.
- Earl Grinols (University of Illinois) and David Mustard (University of Georgia) in *Measuring Industry Externalities: The Curious Case of Casinos and Crime* (2004) state that pathological gamblers are 1 to 2 percent of the population and problem gamblers another 2 to 3 percent.
- The National Gambling Impact Study Commission's *Final Report* (1999) identified 1-7 percent of the population as those who gamble because of a compulsion to do so, in contrast to entertainment and identified a higher level of problem gambling within 50 miles of a casino (Rea & Parker Research NOTE: In the case of the Pauma proposal, many casinos already exist within that distance of the proposed casino—some within a handful of miles. To the extent that this might be true of isolated casinos, it is not likely to be the case as incremental casinos are added in such an agglomeration).
- In Washington State, a state with tribal casinos, a report commissioned by the state's Council on Problem Gambling found that between 3 and 5 percent of the state's residents have had "severe" gambling problems during their lives (Rachael A. Volberg, *Gambling and Problem Gambling in Washington State: A Replication Study, 1992 to 1998*, Report to Washington State Lottery, May, 1999).

The magnitude of the gambling problem is further supported in the endnotes that follow this section.

In summary, it is estimated that the problem and pathological gamblers represent between 1 percent and 7 percent of the overall United States population. Based on a study conducted at the University of Chicago for the California Department of Alcohol and Drug Programs (Office of Problem and Pathological Gambling), the problem/pathological gamblers are estimated to be in the range of 2.8 percent to 4.6 percent of the California adult population. It is reasonable to assume that the San Diego County prevalence rate is in the same range.

Role of Casinos in Problem Gambling: Casino gambling does not seem to be a major contributor to the number of problem gamblers. There is some conflicting evidence, but the more prominent studies and researchers point to findings that are characterized by those below.

- Christian Jacques and Robert Ladouceur of the University of Laval (Quebec, Canada) produced a study (*A Prospective Study of the Impact of Opening a Casino on Gambling Behaviours: 2- and 4-year Follow-Ups*, 2006) that concluded “one year after opening of the casino, results indicated a significant increase in casino gambling activities and in the amount of money lost to gambling of the Hull [casino], compared with Quebec [no casino], respondents. However, contrary to our hypothesis, this trend is not maintained 2 and 4 years later...We expected that the longer the exposure to gambling activities, the higher the rates would be...The present results, measured in 3 different ways, failed to confirm such an increase in pathology in the Hull cohort, compared with the Quebec cohort.”
- Jonathan Taylor, Research Fellow at the Harvard Project on American Indian Development and Senior Policy Scholar at the Udall Center at the University of Arizona, testified before the Rhode Island Special House Commission to Study Gaming (August, 2002) that “Studies indicate that pathological gaming has remained steady at about 1 percent over nearly a quarter century despite a 1600 percent increase in the availability of gaming.”
- William Eadington of the University of Nevada, Reno stated when asked if casino expansion in the state would foster more problem gambling: “My suspicion is probably not. Not from the empirical studies I’ve seen in other jurisdictions. Not from my experience that has occurred in other jurisdictions that have indeed added to their gaming offerings, casino style gaming offerings.”

It is clear from the citations above as well as those in the Endnotes that problem gambling has existed for a long time and that the proportion of the population afflicted has remained relatively constant. Therefore, it is not possible to scientifically directly associate the growth of Indian casinos to an increase in problem gambling—the problem gambler will find his or her outlet for gambling among a plethora of gambling opportunities including the State lottery, horse racing, sports books (legal and illegal), casinos, and online gambling, which as demonstrated below, is growing very rapidly. It could then be expected that Indian casinos would count among their patrons their fair share of problem gamblers who have selected that site to gamble but are not gambling because of the casino—they would somewhere and somehow without the casino. Amy Lake and Steven Deller of the University of Wisconsin (1996) recognized the difficulty of establishing a true association between casinos and problem gambling when they wrote, “compulsive gambling, though a serious social issue and difficult one to research accurately, has not been shown to worsen due to legalized gambling.” The evidence points to the conclusion that the proposed Pauma casino/hotel expansion will not substantially increase the number of problem/pathological gamblers. More specifically, the Pauma expansion is not likely to change the prevalence rate of problem gamblers in the region as it will likely remain in the range estimated for the State -- 2.8 percent to 4.6 percent.

The 2005 La Posta arbitration hearing summarized this issue as well as it can be; “...the reality proven at the hearing is that this County is already replete with convenient access to opportunities

to gamble—including not only nine ‘Las Vegas style’ Indian gaming casinos that have existed for years..., but also pari-mutuel betting, the State lottery, legal card rooms, internet gambling, and illegal sports betting.” The La Posta arbitration hearing went on to state that “there has been a complete lack of persuasive evidentiary nexus in this arbitration between the proposed addition of a small, remote casino to a gambling market already replete with convenient gambling opportunities – including numerous, larger and more convenient Indian casinos – and any increase in the scope of problem and pathological gambling in San Diego County.”

On-Line Gambling: One of those alternative gambling opportunities that call into question the existence of any causality between Indian casinos and problem gambling is on-line/Internet gambling, which has grown significantly in recent years.

Since the widespread availability of the Internet in 1995, Internet gambling opportunities have expanded rapidly. The United States government has passed legislation designed to restrict on-line gambling but it has fallen short of actually prohibiting it. The literature on the subject points out that the laws are vague and the issues are complex. Efforts to prohibit on-line gambling, or even restrict it, have not been very successful. The general conclusion is that on-line gambling is here to stay and it is likely to expand. Further, the literature points to the conclusion that Internet or on-line gambling is more likely to contribute to pathological gambling behavior than is casino gambling.

- Concerning the expansion of on-line gambling, Robert T. Wood, Robert J. Williams, and Paul K. Lawton reported the following findings in their article titled “Why Do Internet Gamblers Prefer Online versus Land-based Venues? Some Preliminary Findings and Implications.” *Journal of Gambling Issues* (2007).
 - Internet gambling opportunities have expanded at an astonishingly rapid rate, and more and more people are apt to gamble online. In 1995, there were only 24 Internet gambling sites accessible online. Just over a decade later, in 2006, that number had increased to over 100 times that, to more than 2,500 Internet gambling/web sites, consisting of 1,083 on-line casinos, 592 sports and race-books, 532 poker rooms, 224 on line bingos, 49 skill game sites, 30 betting exchanges, 25 lottery sites, and 17 backgammon sites.
 - Current industry estimates suggest that the worldwide number of Internet gamblers is at least 14 million and possibly as high as 23 million.
 - More recent studies seem to indicate that the rate of Internet gambling is increasing in many societies. The most recent surveys of the general U.S. adult population in 2006, for example, have

found rates of 3%. The most recent Canada-wide study has found rates of 2.3% to 3.6%. In the early 2000's, rates were below 2%.

- Internet gambling was estimated to total \$1.5 billion in 2000, \$5.7 billion in 2003, \$8.2 billion in 2004, \$10.7 billion in 2005, and \$12-\$15 billion in 2006 (CRB report, 2006)
- On-line gambling is here to stay.” Roger Clarke and Gillian Dempsey stated in an article titled, “*The Feasibility of Regulating Gambling on the Internet.*” in *Managerial and Decision Economics* (2001). They further concluded that, even if laws could be rewritten to address virtual gambling activities, the intractability of the technical difficulties confronting forms of regulation, together with the international jurisdictional problems are likely to remain insurmountable obstacles to strategies of prohibition.

With regard to the relationship between pathological gambling and on-line gambling, the following references are particularly relevant.

- The psychological impact on individuals can be very different with respect to Internet and traditional gaming establishments. One of the key differences is the solitary nature of Internet gambling. Internet gambling is almost exclusively, by definition, a solitary form of gambling; thus, this characteristic tends to make it a more hazardous gambling environment. Also, it is very difficult for others (i.e., friends, family support groups) to identify whether someone has a problem when they gamble on the Internet. It is much easier to monitor an individual who takes numerous trips to a casino than it is to determine how often someone logs on to a particular web site. (Kiran S. Raj. *Drawing a Line in the Sand: How the Federal Government Can Work with the States to Regulate Internet Gambling*, Emory Law Journal. 2006).

In the same article by Kiran S.Raj, it is indicated that an underage gambler will have an easier time accessing an Internet gambling site than gambling at a casino because it is more difficult for a gambling site to detect if someone is underage than for traditional casinos.

- With the explosive growth of the Internet, people who use the Internet to gamble may have more serious gambling problems than those who go to casinos or play lotteries. The findings of a study by the American Psychological Association (APA) indicated that those who have the most Internet gambling experience also have the most significant levels of problem gambling behaviors, known as level 2 (problematic), and level 3 (pathological). This APA study was cited in an article by Christopher Woodruff and Susan Gregory. *Profile of Internet Gamblers: Betting on the Future*, UNLV Gaming Research and Review Journal, 2005.

The Endnotes at the end of this section show other evidence regarding the growth and popularity of on-line gambling and its association with problem gambling.

Senior Citizens: Senior citizens are seen as an important constituency by many casinos. Individuals at this time in their lives have the disposable income and time to spend. The impact of gambling as a major activity for seniors is highly contentious. Proponents state that gambling is

an enjoyable recreational diversion, that those who participate are adults, and that the casinos generally provide special treatment to their senior clientele. Opponents point to the problems that can arise for those individuals who have an addiction to gambling. Problem gamblers will have difficulties contributing to their families monetarily and emotionally, thereby creating social problems for the whole community. Senior gamblers who are living on fixed incomes might have a more difficult time recovering from an addiction to gaming than younger gamblers because it is more difficult (if not impossible) for seniors to increase their incomes over time. Further, they might deny themselves needed medications and nutrition at that time of life when they are most in need.

There is a remarkable paucity of rigorous studies concerning senior gambling problems. Many anecdotal accounts are available, but little scientifically derived data. The following studies do, however, provide rigorous analysis.

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- Thor Carlson, editor of the Good Age Newspaper of the Amherst H. Wilde Foundation, in *Studies Reveal Misperceptions About Seniors' Gambling Habits* quoted Kelly Reynolds of the Minnesota Gambling Resources Center as saying “Among the adult population, about 1 to 3 percent is prone to compulsive gambling. Through our informal research, the rate among seniors probably falls within that range.” Roger Svendson, director of the Center reported: “We get fewer calls on the helpline from seniors and young people than any other age group and I think we are seeing fewer of them in treatment centers.”
 - Focal Research Consultants from Halifax, Nova Scotia in a 2002 study for the New Brunswick Department of Health and Wellness surveyed 1,000 seniors (defined as age 55 and older) living in 685 randomly selected households and identified that
 - 83 percent of seniors have participated in gambling activities—74 percent within the past 12 months and 49 percent monthly
 - Lottery draws are the most popular form of gambling (43 percent participation), lottery tickets (13 percent), and bingo (8 percent)
 - Three times as many seniors indicated that they play slot machines at casinos compared to New Brunswick adults in general
 - Among all seniors, the mean number of gambling activities per year is 1.5. It is 2.0 for those who have gambled in the past year.
 - Seniors spend an average of \$284.49 (Canadian) annually on gambling—regular gamblers \$558.80.
 - 3 percent of all seniors are at any risk for problem gambling (1 percent high risk)—4 percent for those who have gambled in the past year—5 percent for regular gamblers. “These rates are lower than that noted for adults in general in New Brunswick.”
 - Younger seniors gamble more than older seniors and are, therefore, more at risk
 - Higher education is related to less gambling
 - The odds of regular gambling by seniors is significantly higher for males

- The Alberta Alcohol and Drug Abuse Commission in 2000 found that 32 percent of Alberta seniors do not gamble at all, 66 percent are non-problem gamblers, and 2 percent are problem gamblers. Less than 1 percent (0.4) are probable pathological gamblers.

Most studies that have some statistical rigor, in contrast to anecdotes, indicate that the majority of senior gamblers do not have more of a problem with compulsive gambling than does the general population at large that has demonstrated a 1 to 7 percent rate of problem gambling depending upon the study and severity of the measure used to identify the disorder.

Seniors clearly find gambling to be a highly enjoyable activity. Most seniors indicate that entertainment is their main reason for gambling and not the desire to win money.

- Ron Karpin, head of the New Jersey Council on Compulsive Gambling is quoted in the April 19, 2001 Christian Science Monitor (*Growth of Retiree Gambling Raises Stakes*) as saying “There’s no question senior gambling is on the rise. They’re the fastest growing segment of the population, they’re more affluent than ever and...they’re bored.”

Although not out of proportion to their population size, that percentage of seniors, whatever the actual proportion, who might have gambling problems, should not be ignored. Seniors are less resilient than the general population in that they are more often living on limited and fixed incomes and have health needs that can impose significant costs upon that income. They, therefore, may be less able to afford the gambling losses than is the general population.

What exists, therefore, is a clear finding. Seniors appear to be not significantly different and no more susceptible than the general public to compulsive gambling, which has already been discussed in this report as a problem that is not of an abnormally large magnitude. Other references in the Endnotes also support this conclusion.

Addressing Pathological Gambling: Among critics of Indian gaming, a frequently cited study that seeks to tie Indian gaming to pathological gambling is the 2006 study by Charlene Wear Simmons, Ph.D., assistant director of the California Research Bureau (CRB), entitled *Gambling in the Golden State 1998 Forward*. Regarding pathological/problem gambling, the report agrees that approximately 4 percent of adults in the United States are affected by problem or pathological gambling.

The report cites the National Gambling Impact Study Commission’s report about increased problem gambling within 50 miles of a casino and then moves to more anecdotal data about calls

to gambling help lines, stating that 77.5 percent of calls to the California Council on problem Gambling, Inc. are “*generated* by gamblers whose primary preference is gambling in an Indian casino.” There is no evidence that these anecdotal callers to a hotline are representative of all problem gamblers, and the inference that 77.5% of calls are due to Indian casino gambling may actually strengthen the position of the Pauma proposal. That is, it is just as easy to make the case that the educational and self-evaluative programs offered by the Pauma Tribe and other Indian casinos are having the desired effect of alerting problem gamblers to their situation and causing them to act upon that realization.

The gaming tribes in San Diego County, including the Pauma Band of Mission Indians, are seriously involved in efforts to prevent problem gambling. For example, the California Tribal Business Alliance, which includes the Pauma Band of Mission Indians, actively advocates and promotes responsible gambling. The Indian casinos train their employees about the importance of responsible gambling and inform their guests where they can obtain help for gambling problems. Informational brochures, available throughout the casinos, discuss how a person knows that he or she has a gambling problem and the ramifications of such a problem in terms of family, friends, and social obligations. The brochures provide a hotline 800-426-GAMBLER that is available to call 24 hours each day. The hotline is confidential and trained staff members provide referral information for those seeking help.

Guests may request a halt to casino promotional mailings, check cashing privileges, and player club privileges. A player may even request to be excluded from the casino. The existing Pauma casino participates in these efforts to prevent and address problem gambling and the proposed expanded Casino would continue to train casino staff and provide public awareness of the dangers of irresponsible gambling. As required, the proposed expanded casino would also contribute to the funding base of the California State Office of Problem Gambling.

In summary, the economic success of Indian casinos coupled with their efforts to establish programs to prevent problem gambling serves to stabilize the prevalence of problem gamblers in San Diego County.

The endnotes for this section describe some of the most important programs and organizations at the federal, state, and local levels geared to the prevention of problem gambling and the treatment of problem gamblers.

Public Assistance: Despite the lack of connection between the expansion of Indian gaming and increased problem gambling, if San Diego County and/or the State of California wish to expand problem gambling programs, there will be significant additional public funds available that are available because Indian casinos do, in fact, reduce the demand for public assistance.

Welfare and other income transfer payments are, of course, directly related to employment. Besides the lack of impact upon local housing and schools, there is a substantial fiscal benefit associated with the creation of these new jobs for unemployed and underemployed local workers. That is, casinos reduce public assistance costs:

- The Center for California Native Nations at University of California, Riverside in 2006 published *An Impact Analysis of Tribal Government Gaming in California* under a grant from the Pechanga Tribal Government. In this study, the University researchers, led by Joel Martin, Ph.D., Professor of American Indian Affairs, it was found that census tracts in close proximity (10 miles) to gaming reservations grew in median family income between 1990 and 2000 more than non-gaming proximate tracts (55 percent versus 33 percent), and that, if extrapolated throughout California, this would imply the \$3.4 billion “is obtained as the additional income associated with the establishment of gaming in California.”

The study of Indian casinos in California shows that in census tracts having a median family income of \$5,000 in 1990 (in 2000 dollars), the establishment of gaming was associated with a 17 percent decline in the number of families receiving public assistance. At a level of \$15,000 in median family income, the number of families receiving assistance declined by 7 percent, and it “all but vanishes” at a median family income of \$30,000. Tribal governments with gaming experienced a reduction in the percentage of families in poverty from 36 percent in 1990 to 26 percent in 2000.

The same study also showed that the number of employed persons 16 years of age and older increased “significantly more between 1990 and 2000 in gaming than in non-gaming tracts (15.1 percent versus 4.0 percent). This increase in employment retained the younger workers on the gaming reservations rather than moving away in order to find employment, with the population (16 years of age and older) of gaming tract increasing 18.8 percent versus 10.9 percent for non-gaming tracts.

The population of individuals who completed high school increased significantly faster in gaming than in non-gaming tracts (increase of 11 percent versus 1 percent. Likewise, post-secondary education also increased faster (24 percent increase in gaming tracts versus 16 percent non-gaming).

- Jonathan Taylor, along with Joseph Kalt and Kenneth Grant of Harvard University in 2002 (*Public Policy Analysis of Indian Gaming in Massachusetts*) estimated that statewide employment in Massachusetts due to a proposed Indian casino would remove

approximately 1374 persons from the state's Temporary Assistance to Needy Families (TANF) program and save the state approximately \$8.7 million annually. The hypothetical Massachusetts casino is to be equal in size to Foxwoods in Connecticut, and, therefore, it is estimated that the employment of approximately 13,000 workers will generate a reduction in TANF equal to approximately 10.5 percent of the number of workers.

- *Social and Economic Impacts of Native American Casinos* by William Evans and Julie Topoleski (University of Maryland—2002) details their study that found that four or more years after an Indian casino opens, tribal population increased by 12 percent and employment increased by 26 percent. Over the same period overall regional unemployment had fallen by 9 percent while the fraction of working poor dropped by 15 percent. Further, mortality rates fell in casino counties more than in non-casino counties.
- Jonathan Taylor, with Matthew Kreps, and Patrick Wang of Harvard University report in *The National Evidence on the Socioeconomic Impacts of American Indian Gaming on Non-Indian Communities* (2000) that Indian casinos reduce welfare and income support programs substantially--unemployment insurance payments are reduced by 32 percent after the opening of an Indian casino, transfer payments are reduced by 8 percent, and income maintenance program payments are decreased by 38 percent. "Not only do Indian casinos help the poorer of the tribes move ahead vis-à-vis their counterparts with respect to employment, but also ...Indian casinos have accomplished the same for proximate non-Indian communities with respect to income maintenance programs."
- The 1999 study by the University of Chicago's National Opinion Research Center (NORC) found that communities with casinos have 43% higher earnings in their hotel and lodging sectors than those communities farther from casinos. This study was conducted for the National Gambling Impact Study Commission and was reported in *U.S. Commercial Casino Industry: Facts at Your Fingertips*. The study indicated that "fewer people in casino-affected communities receive public assistance from local governments for unemployment or social welfare because residents had higher earnings in construction, hotel and lodging and recreation industries...communities closest to casinos experienced a 12% to 17% drop in welfare payments, unemployment rates and unemployment insurance after the introduction of casino gaming."

The vast preponderance of evidence indicates that public assistance costs will decrease as the less fortunate residents of the community experience the benefits of better jobs and economic growth and these funds will be available to local and State governments for additional public benefit programs, as these governments see fit. Other references to support these conclusions are found in the Endnotes.

Endnotes

Problem and Pathological Gambling and Public Assistance

Magnitude of Problem Gambling:

The following references support the case that a significant amount of money is devoted to the prevention and treatment of pathological gamblers. However, it is also shown that the prevalence of pathological and problem gamblers within the population at large and/or the adult population is relatively small.

- Leanna M. Sumitra, MD and Shannon C. Miller, MD at a symposium on addiction in Minneapolis in 2005, presented *Pathologic Gambling Disorder*, in which they found that rates of past-year job losses are more than twice as high in patients with pathological gambling disorder (13.8 percent) as in non-gamblers (5.5 percent) and rates of filing for bankruptcy are almost five times as high (19.2 percent versus 4.2 percent). Rates of divorce (53.5 percent), and incarceration (21.4 percent) are higher in persons with pathological gambling disorder than in non-gamblers (18.2 percent and 0.4 percent respectively), and that one-third of the annual cost of pathological gambling disorder represents criminal justice expenses.
- The Responsible Gambling Council's (Canada) 2005 Gambling Prevalence Study showed that:
 - Over 60 per cent of Ontarians gamble in one form or another
 - When asked which gambling activities they participated in during the past year, Ontarians said:
 - Ticket lotteries (52.4 %)
 - Scratch/Instant Win tickets (24.9%)
 - Casino games and slot machines (23%)
 - Young adults, ages 18-24, have the highest rate of problem gambling: 6.9%
 - The rate of problem gambling among the general adult population in Ontario is 3.4%
 - One in 10 people report being negatively affected by someone else's gambling
- Blaszczynski and Silove (1996) noted that criminal behavior among adolescent gamblers may be more prevalent than among adults because of their limited means of raising funds. In the United Kingdom, Fisher (1991) reported that 46 percent of adolescents surveyed stole money from their family, 12 percent stole from others, 31 percent sold possessions, and 39 percent gambled with school lunch or travel money.
- In an Australian study, Blaszczynski and McConahy (1994) reported that most adult problem gamblers use their wages to finance gambling, supplemented by credit cards (39 percent), borrowing from friends and relatives (33 percent), and loans from banks and other financial institutions (30 percent). In Canada, Ladouceur (1994) found that the pathological gambler spends between \$1000 and \$5000 per month on gambling and uses both family savings (90 percent) and borrowed money (83 percent).
- Kindt (2001) identified 1.6 percent of the United States population to be pathological gamblers.
- Volberg performed a similar study in Louisiana and identified 2.5 percent – 4.1 percent of the population as problem gamblers and 1.8 percent – 3.2 percent as pathological

(*Gambling and Problem Gambling in Louisiana: A Replication Study, 1995 to 1998*), March, 1999.

- The State of Hawaii study (1997) identified that various studies estimated pathological gambling to be approximately 1 to 6 percent of the adult population in the United States. The magnitude of the number of problem gamblers, therefore, can range between 3 million and 11 million adults and adolescents.
- Robert Goodman (*Legalized Gambling as a Strategy for Economic Development* (1994)) estimated that 9.3 million adults and 1.3 million teenagers had gambling problems (2 to 3 percent of total U.S. population).

Role of Casinos in Problem Gambling:

The following references support the case that casino gambling is not a major contributor to the number of problem gamblers.

- Research shows that the presence of a casino has no recognizable effect on the number of personal bankruptcies within a community. An article published in the Journal of Socio-Economics in 2002 (Lydia de la Vina and David Bernstein, *The Impact of Gambling on Personal Bankruptcy Rates*) explored the relationship between increased access to casino gambling and rising personal bankruptcy rates. One of the central conclusions was that, "The evidence reported here does not support the hypothesis that the introduction of gambling has impacted county bankruptcy rates."
- Jonathan Taylor, along with Joseph Kalt and Kenneth Grant of Harvard University in 2002 (*Public Policy Analysis of Indian Gaming in Massachusetts*) once again concluded that "A further examination of these 100 non-Indian communities determined that those proximate to Indian casinos...witnessed...no increases in social ills."
- Jonathan Taylor, with Matthew Kreps, and Patrick Wang of Harvard University report in *The National Evidence on the Socioeconomic Impacts of American Indian Gaming on Non-Indian Communities* (2000) that there is "no evidence of harmful economic or social impacts due to Indian casino introduction is discernible in our 30 indicators of economic and social health."

On-Line Gambling:

Other information concerning the popularity and intractability of on-line gambling are found in the following references.

- A 2002 Government Accountability Office (GAO) study (*Internet Gambling: An Overview of the Issues*) estimated that 50-70 percent of Internet gamblers worldwide are United States players
- "An ICM Research survey (for the United Kingdom Gambling Commission, June 2007) concerning remote gambling participation of 8,000 adults, surveyed from September

2006 to June 2007, found that 8.6% had participated in at least one form of remote gambling (e.g. computer, mobile phone or interactive/digital TV) in the previous month. This compares with the revised 2006 calendar year figure of 7.4%. The remaining 91.4% of respondents said they did not participate in any form of remote gambling. Remote gamblers tend to be men between the ages of 18 and 34. Computer-related remote gambling was 6.7% of respondents.

- For many gamblers, the Internet affords them an overall experience that they prefer and that land-based venues cannot provide. A recent American Gaming Association (2006) study found that the main reasons people gave for gambling online were convenience (48%); fun/excitement/entertainment (24%); greater comfort, not having to drive (24%). Wood, Williams, and Lawton, *Journal of Gambling Issues*, 2007.
- A report published by the Responsible Gambling Council (Canada) in 2007 (White, Monica A. Ph.D; Mun, Phil, Ph.D; Kauffman, Nadine; Whelan, Christina; and Regan, Matthew, *Teen Gambling in Ontario: Behaviours and Perceptions among 15 to 17 Year Olds*) indicates that in Ontario, youths 15-17 years of age reported that they spent the most on Internet gambling relative to other types of gambling (\$21.65 per month). And they spent most of their gambling time Internet gambling (2 hours 2 min per month).
- The Responsible Gambling Council's 2005 Gambling Prevalence Study showed that:
 - Online gambling among 18-24-year-olds has risen from 1.4% in 2001 to 5.5% in 2005
 - Young adults, ages 18-24, have the highest rate of problem gambling: 6.9%
 - Internet gamblers are spending more time online: 25% gamble at least weekly; 12.7% gamble daily

Senior Citizens:

The following references support the conclusion that senior citizens do not suffer from problem/pathological gambling in any significant number.

- Interviews with 1,018 problem gamblers who had called a gambling helpline, of whom 168 were older adults, found that “older, as compared to younger adult problem gamblers, were more likely to report having lower incomes, longer durations of gambling, fewer types of problematic gambling, and problems with casino slot machine gambling.” Older adults were also less likely to report gambling-related anxiety, family problems, illegal behaviors, drug problems, indebtedness to bookies or acquaintances, and problems with casino table gambling.” (Marc N. Potenza—Yale University Medical School; Marvin A. Steinberg— Connecticut Council on Problem Gambling; Ran Wu, Bruce J. Rounsaville, and Stephanie S. O’Malley—Yale University Law School, *Characteristics of Older Adult Problem Gamblers Calling a Gambling Helpline*, 2006).
- Linda Havir of St. Cloud State College (Minnesota) and Janet Hope of the College of St. Benedict (Minnesota) did a survey of 143 clients at the St. Cloud, Minnesota community senior center and concluded that “the most surprising thing we found was that few people seemed to be at risk of negative gambling habits.”
- Zaranek and Chapleski (2005) supported the premise that older adults go to casinos mainly for social activity. Older adults who supported the location of a casino in Detroit were not problem gamblers—they “enjoyed a variety of other social activities...” The authors did, however, add a note of caution in that “those with lower incomes and poor mental health were more likely to be frequent visitors [to the casino].”

- In Philadelphia, researchers from the University of Pennsylvania and the Pennsylvania State College of Medicine recently published a study in the American Journal of Geriatric Psychiatry. This study (*Gambling Among Older, Primary-Care Patients: An Important Public Health Concern* by Suzi Levens, Anne-Marie Dyer, Cynthia Zubritsky, Kathryn Knott, and David W. Oslin) published in January of 2005, conducted a random sample of 843 senior citizens, 65 or older, at primary care facilities in Philadelphia. One-half of those randomly asked to participate agreed to be part of the study. From those who responded to the questionnaire, 70 percent reported that they had gambled at least once in the past year. Almost 11 percent indicated that they had bet \$100 or more on a single bet and/or had placed a bet for more than they could afford to lose. Those individuals were identified as at-risk gamblers. At-risk senior gamblers, just as with the general population, also were found to suffer from other addictions such as binge drinking, had posttraumatic stress disorder, were of a minority race or ethnicity, or were a Veterans Administration patient.
- Joni Vander Bilt (Western Psychiatric Institute and Clinic), Hiroko H. Dodge (University of Pittsburgh), Rajesh Pandav (Western Psychiatric Institute and Clinic), Howard J. Shaffer (Harvard Medical School) and Mary Ganguli (University of Pittsburgh) studied western Pennsylvania low-income, rural residents who had at least a 6th grade education and were 65 years of age or older for fifteen years (1987-2002)—*Gambling Participation and Social Support Among Older Adults: A Longitudinal Community Study*. Starting with 1,422 randomly selected participants and 259 volunteers, the study reached the ten year mark with 1,016 participants and finished with 664 full-term participants. The authors used the 1,016 participants at the ten-year mark for their study. This group averaged 78.8 years of age over the course of the study. It was the purpose of the study to identify the connection, if any, between gambling and health over time.

Among the study participants, 47.7 percent reported leaving their homes in order to gamble. This was the least frequently reported outside activity, following medical appointments (98.7 percent), family occasions (95.1 percent), shopping (92.5 percent), non-family social occasions (91.9 percent), banking (87.7 percent), haircut/beauty shop (86.6 percent), and church/other place of worship (77.2 percent). The study found no association between gambling and cigarette use but did find a connection between gambling and alcohol use among seniors. No association was found between gambling and depression, but gambling was positively associated with social support—gamblers were more social than non-gamblers, which could imply that gambling has social and health benefits.

- Windsor Regional Problem Gambling Services (Windsor, Ontario) in 2001 reported that slot machines were the primary cause of problem gambling (59 percent). The mean age of problem gamblers is 39.2 years of age, but 14 percent of problem gamblers were retired or disabled. It is noteworthy that 13 percent of the 2003 population of the province of Ontario is age 65 and over and 12 percent of Windsor's 2001 population was 65 and over. These percentages match the proportionate rate of problem gamblers for this age group and indicate no problems in the senior population that are distinct from the total population.
- A study of senior gambling in Detroit found that those most at risk “were from lower income, lacked ‘senior optimism,’ had mental health problems and had little social support” (Becky Yerek, *Casinos Draw One-in-Three Seniors*, The Detroit News, 2003). Regarding social support, The American Gaming Association in 2000—*State of the States: The AGA Survey of Casino Entertainment*—evidenced considerable social support for seniors in citing that “Similar to the average casino customers, only 3% of the elderly respondents said that they visit a casino alone. The most important reason to visit

a casino was to ‘go out/socialize.’ For the majority of the elderly, visiting a casino is a fun night out because casinos offer them excitement, entertainment, as well as social benefits.”

- David Strow in the July 31, 2000 Las Vegas Sun (*LV Seniors Vulnerable to Gambling Addiction*) reported that UNLV professor Fred Preston found that approximately 2 percent of all seniors surveyed by phone showed signs of current problem gambling, while another 2 percent had indications of pathological gambling. “Just under 3 percent of seniors had problems with gambling at some point in their lives while another 2.4 percent had signs of pathological gambling in the past.”

Another survey by UNLV’s Howard Cannon Center for Survey Research interviewed 449 local residents age 55 and older and found that “The numbers may similar to other segments of the population...”

- Omar Moufakkir, Ph.D. (CHN University—The Netherlands), in *An Analysis of Elderly Gamers’ Trip Characteristics and Gambling Behavior: Comparing the Elderly with Their Younger Counterparts*, cited a work out of the Yale School of Medicine in the American Journal of Psychiatry (2000) that said “there appears to be an association between recreational gambling and good health among elderly persons,’ suggesting that, hypothetically, the increased activity, socialization, and cognitive stimulation of gambling might be the causes of this benefit.
- Moufakkir also cited a study by GLS Research—*Las Vegas Visitor Statistics Annual Report* (2000)—of 1,374 respondents that shows, among the elderly:
 - 58% of the elderly are day-trippers
 - over one-fourth came to Las Vegas by charter bus and over one-fourth engaged in recreational activities other than gambling
 - 14% traveled alone—the least likely age group to do so.
 - No statistically significant differences existed among the age groups in spending patterns, with
 - 41.5% of the elderly spending some money inside the casino on food and beverages (mean = \$18) and 32.3% spending money on food and beverages outside the casino (mean = \$33).
 - 18.6% of those between the ages of 21 and 34 “never set a budget” before visiting a casino; 15.1% of those 55-64, and 13.0% 65 and older. The mean amount budgeted for seniors was \$202.30, which was the smallest of all groups (ages 35-44 had the largest budgets--\$471.80).
 - Similarly, the mean amount lost by the elderly (\$118.30) was the smallest of all age groups.

Addressing Pathological Gambling:

Aside from the educational programs offered by Indian casinos, resources for Problem Gamblers are available at the national, state, and local levels. A summary of the most significant sources of help for problem gamblers is presented below.

The National Council on Problem Gambling was established to increase public awareness of pathological gambling, to ensure the widespread availability of treatment for problem gamblers and their families, and to encourage research and programs for prevention and education. The National Council on Problem gambling has compiled a list of resources on problem gambling issues, including links to other problem gambling related websites. The National Council has 36 state affiliates.

Gam-Anon is an international self-help organization that sponsors weekly meetings in various cities throughout the United States and Canada. The purpose of Gam-Anon is to provide counseling and support to spouses, family, and close friends of compulsive gamblers. Meetings are available at various San Diego locations.

The State of California has established the Office of Problem Gambling which addresses problem gambling through prevention. The Office of Problem Gambling spends over \$3 million each year to address such issues and the funds are contributed by gaming tribes in the State.

Other state and local sources of help for problem gamblers are as follows:

1. California Council on Problem Gambling: This Council is dedicated to assisting problem gamblers and their families, and to promote awareness, education, research, prevention and treatment for problem gambling. The Council supports a problem gambling helpline (800-522-4700), provides literature concerning the prevention of problem gambling, operates a speaker's bureau, and provides employee awareness training. During fiscal year 2005-2006, the Council handled 3,515 calls to their helpline. In 2006, the San Diego County Health and Human Services Agency provided the California Council on Problem Gambling a \$50,000 grant to train 80 alcohol, drug and mental health counselors to become certified in the identification and treatment of problem gamblers. This California organization is an affiliate of the National Council on Problem Gambling.
2. San Diego Gamblers Anonymous: This is an organization with chapters throughout the world. Its purpose is to provide a venue for men and women to share their experiences

with one another about problem gambling issues in a therapeutic and compassionate atmosphere. The organization operates a hotline as follows: 866-239-2911.

3. San Diego Center for Pathological Gambling: This is a private organization that offers outpatient assessment and treatment associated with problem gambling. The Center provides gamblers with information, tools and support to begin and maintain recovery from gambling. The recovery program addresses financial issues, self-care, and relationship issues in addition to problem gambling. The Center is located in Vista, California.

The San Diego County Department of Health and Human Services sponsors a program for the treatment of problem gamblers. This program currently treats 75 persons and is funded, at least in part, by gaming tribes in San Diego County.

Public Assistance:

These references provide further evidence that Indian Casinos reduce the need for public assistance.

- C. Ford Runge, Ph.D., Professor of Applied Economics and Law, University of Minnesota co-authored (with Barry Ryan of the University of Minnesota) *The Workforce Economic Benefits of Minnesota Indian Gaming Association Member Tribes' Casino-Resorts* in January 2007 for the Minnesota Indian Gaming Association. In this report, Runge and Ryan indicated that
 - 9,100 (7,900 full-time and 1,200 part-time) of the 12,900 casino jobs in Minnesota (71 percent) go to rural residents—typically the most economically disadvantaged geographic component of the population.
 - In Minnesota, every tribal casino full-time employee is offered medical and dental insurance coverage, as individuals or families. Only 80 percent of Minnesota private sector employers offer medical benefits, and in the hospitality industry, only one-half of full-time workers are offered medical insurance.
 - Full-time and part-time tribal employees can participate in a 401k retirement savings plan (only 14 percent of hospitality employers offer such a plan), and tribal employees added \$10.6 million to the plan in 2005.
 - Tribal workers also participate in life and disability insurance plans at 60 percent and 74 percent participation rates, respectively, compared to 35 percent and 21 percent, respectively, industry-wide. Tribal gaming operations in Arizona currently employ approximately 10,000 people – a figure comparable in size to the number employed in Arizona's mining sector. Approximately 4,300 Indians are employed in tribal gaming operations, and several hundred more are employed in tribal gaming regulations. On remote reservations, Indian casinos are often the largest employers in the region, significantly reducing the

economic burden for Indian and non-Indian residents by providing much needed jobs. There, where few other options for employment exist, the number of tribal employees working in Indian gaming can run as high as 84%. (Statement of the Honorable Vivian Juan-Saunders, Chairwoman of the Tohono O'Odham Nation, Oversight Hearing on the Regulation of Indian Gaming. Committee on Indian Affairs United States Senate June 28, 2005.)

- P. Michael McLain and Sharad K. Maheshwari of Hampton University (*Impact of Gaming Industry on Local Employment and Personal Income*, 2006), in their study of Chicago, Des Moines, Memphis, Detroit, Gulfport, Baton Rouge, New Orleans, and Gary, found that the “employment ratio in every region has shown a statistically significant improvement after gaming is authorized in the region with the exception of Gary, Indiana, where it has improved somewhat but not enough to show a statistically significant improvement.”

They also indicated that “all MSAs and CSAs included in this study show that ... per capita personal income has improved after casino gambling is started.” Statistically significant increases in per capita income are found at 99% confidence in Chicago, Des Moines, and Memphis. Additionally, there was improvement at 95% confidence in Detroit and Gulfport; whereas, the increases in Baton Rouge, New Orleans, and Gary did not achieve statistical significance. CGR (2004) indicates that “National comparisons of communities with and without casinos reported a reduction in the unemployment rate and reduced dependency on cash assistance in those communities with casinos.

- In three of four cases, rural counties that adopted casino gaming experienced increases in household and payroll employment. This seems to hold even though casino employment is dispersed over several counties rather than just the home county. (Local Employment Trends, *Federal Reserve Bank of St. Louis Review*, 2004).
- Additional studies point to Indian communities having started as very low income areas, such that the benefits from casino development are heavily skewed toward lower income groups. This distribution of benefits toward the formerly most disadvantaged groups is of great assistance in terms of public assistance programs.
 - Grant, Spilde, and Taylor (2003/2004): “In sum, the regional effects of Indian gaming are disproportionately concentrated. Those areas that are economically marginal in the state [Oklahoma] benefit the most”—up to 75%-80% of the net economic benefits of Indian gaming.
 - The Center for California Native Nations (University of California-Riverside) study of Indian casinos in California indicated that the poorest communities in 1990 captured the largest increases in median family income over the ensuing decade “due to the establishment of tribal government gaming. Indeed, the fact that the positive effects of gaming on income are observed only for [census] tracts having median family income of less than \$27,500 (in 2000 dollars) implies that only the poorest one-third of tracts in the state benefited from the establishment of gaming.” Further, the number of poor persons declined in these poorer tracts, indicating a more equitable distribution of income. Indian lands are still disadvantaged generally, with 17 percent unemployment and 26-30 percent of families in poverty.

- Douglas Clement, writing for the Federal Reserve Bank of Minneapolis in 2003 (*Milking the New Buffalo*) indicates that during the 1990-2000 decade, all reservations in Minnesota increased in population and income as well as decreased in unemployment and poverty. Per capita income changes were 16-19 percent for casino counties and only 4 percent for those without casinos.
- Cheryl King and Casey Kanzler of Evergreen State College in Washington State have reported that there was a 15 percent reduction in the number of families in poverty on Indian reservations with casinos from 1990 to 2000 (*Background to a Dream*, 2002), with some reservations achieving as much as 81-100 percent reductions. In 1997, tribes employed 14,000 Washington residents—both tribal and non-tribal, so some of these benefits also accrued to non-tribal members. Furthermore, casino tribes spend 30-35 percent of gaming revenues investing in social services such as medical care, education, childcare, and addiction/dependency programs (30-40 percent in Oregon according to testimony of Joseph Kalt (Harvard University) before National Gambling Impact Study Commission --1998).
- Stephen Cornell and Jonathan Taylor of the Udall Center for Studies in Public Policy, University of Arizona in *An Analysis of the Economic Impacts of Indian Gaming in the State of Arizona* (2001) wrote that "...we know that many Indian gaming operations...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." In its analysis of 100 gambling and non-gambling communities close to newly opened casinos, the National Opinion Research Center—University of Chicago found that unemployment rates, welfare outlays and unemployment insurance declined by about one-seventh.
- Adam Rose of Pennsylvania State University in his often cited 1998 study for the National Gambling Impact Study Commission, *The Regional Economic Impacts of Casino Gambling* identified that "In counties where an Indian-owned casino opens, we find that jobs per adult increase by about five percent," and that "...they do yield many economic benefits, including helping people get off welfare rolls, improving their access to health benefits, establishing a good employment record, and accumulating savings to purchase a home and to educate their children....Also, the situation is much more positive in the case of Native American casinos, where in many instances all the members of the tribe are part of ownership."
- Coopers and Lybrands 1997 survey for Louisiana (*How Louisiana Wins*) indicates that 11.2 percent of Louisiana gaming employees were able to remove themselves from public assistance once employed by the riverboats, 20.2 percent are no longer receiving unemployment compensation, and 13.2 percent no longer receive food stamps. Almost two-thirds (63.7 percent) indicated that they have better health care because of their job in the casino industry, and another 50.0 percent have better access to day care.
- Terance J. Rephann of Allegany College of Maryland, Andrew Isserman of West Virginia University, and Margaret Dalton and Anthony Stair of Frostburg State University in *Casino Gambling as an Economic Development Strategy* (1997), writing under a grant from the National Science Foundation, state that "Per capita income grew nearly five percentage points faster in casino counties than in their non-casino county counterparts," and that "based on results here, one could infer that casinos lessen reliance on public assistance...particularly for income maintenance payments..."
- Amy Lake and Steven Deller of the University of Wisconsin (*The Socioeconomic Impacts of a Native American Casino—1996*) reported that previous studies of the net economic impacts of gaming operation at the state-level have shown that the industry brings jobs and income and reduces unemployment and welfare (Minnesota Gaming Commission, 1992, Murray, 1993).