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**The Socioeconomic Impacts
of a Native American Casino**

By

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The Socioeconomic Impacts of a Native American Casino

Abstract

In this in-depth case study, input-output analysis, secondary data analysis, focus groups, and personal interviews were employed to investigate the local-level impacts of a Native American casino. Both impacts in the small, rural Midwestern town which hosts the casino and Tribal-level impacts were examined. Analysis suggests that the economic impacts in the host town are similar to those that might be associated with the introduction of any large employer. Employment and income have increased locally; business opportunities have been created; and some local public services, such as law enforcement, have been strained. The casino has also altered the character of the community, creating an atmosphere of a busy, tourist center in a previously quiet, rural town. The sudden change in the financial position of the Tribal members has resulted in a variety of unresolved cultural, social, and economic difficulties. Specific conflicts have arisen between the Tribe and the local community over issues such as the tax exempt status of the trust land on which the casino is located and payments in lieu of tax. Although the casino presents the unique opportunity for the Native American and non-Native American communities to engage in economic and community development plans together, they have not fully explored these options because of a lack of communication and understanding between the communities.

Introduction

As recently as twenty years ago, legalized gaming outside of Nevada and New Jersey was largely isolated to bingo halls on Native American reservations or fund-raisers for local churches and non-profit organizations. By 1995, every state with the exception of Utah and Hawaii permitted some form of legalized gaming (Eadington, 1996; Larsen 1995). Thirty-eight states have adopted state and regional lotteries as an alternative to taxation for state revenue generation since New Hampshire began operating the first state lottery in 1964 (Thompson, Gazel, et al., 1995). Many states have also adopted restricted small-scale gaming in attempt to revitalize rural regions and communities with depressed economies.¹ Mississippi, for example, legalized gaming on "navigable bodies of water" in 1990 and now has 32 casino riverboats in towns along the Mississippi River and the coast of the Mississippi Sound (Meyer-Arendt, 1995). Iowa and Illinois have adopted similar regulations for water-based gaming. In Colorado, gaming has been legalized in three historical mining towns specifically to improve their economic viability.

Several Native American tribes have also adopted gaming as an economic development strategy for reservations. By March 1995, approximately 120 Native American tribes had negotiated 135 gaming compacts with states to run high stakes gaming enterprises under the Indian Gaming Regulatory Act of 1988 (National Indian Gaming Association [N.I.G.A.], 1995).²

How do Native American gaming enterprises affect Native American reservations and nearby non-Native American communities? From January to June, 1996, a case study of a relatively large Native American casino which opened in 1992 in a small, rural town in the Midwest, Casino Town, was conducted.³ Three main objectives shape this research. First, the

¹ It is useful to categorize gaming enterprises by their relative size and function. Non-commercial gaming used for fund-raising for non-profits, such as church bingo, can be considered *charitable gaming*. These games usually offer small prizes and generate relatively small amounts of revenue. *Small-scale gaming* enterprises include river boat casinos, historic town casinos, and Native American casinos. These gaming enterprises have been introduced largely for the purpose of economic revitalization in depressed economic regions and are often highly regulated and restricted to specific geographical locations within states. They may offer high-stakes games and prizes, but do not generally generate the level of revenue and tourist draw that large-scale casinos do. *Large-scale gaming* enterprises are high-profile, high profit, commercial operations such as found in Las Vegas, Atlantic City, and Monte Carlo. Some casinos cross the boundaries of these categories. For example, the Foxwoods Casino is a Native American casino owned by the Pequot Mashantucket Tribe of Connecticut. Yet, it is also the largest single casino in the world and generates a large amount of revenue like a large-scale casino.

² The Indian Gaming Regulatory Act (IGRA) of 1988 stipulates that federally recognized Native American tribes may operate high stakes gaming enterprises on federal trust land in states that allow gaming for any other purposes (such as state lotteries or charitable gaming). IGRA requires each tribe to negotiate a gaming compact with the state that outlines the tribe's and state's roles in regulation of the gaming enterprise.

³ The case study town will be referred to as "Casino Town" throughout this analysis to maintain the town citizens' and tribes' anonymity. The case study tribe will be referred to simply as the "Tribe."

study provides a comprehensive description of the local-level economic and social impacts of the casino on Casino Town and the Tribal population on reservation. Issues examined in Casino Town are local employment, income, traffic, housing, public services, local revenues, crime, non-casino local businesses, community planning, and the general quality of life. Tribal issues examined are reservation-wide development, employment, income, and youth issues. Second, the study will describe, in detail, the impacts that are unique to Native American gaming at the case study site. Third, this study will assess whether Casino Town and the reservation fall within the "economic boosterism" to "social disruption" theoretical continuum or whether an alternative theory better captures the impacts of the casino at the case study site.

Literature Review

The spread of legalized small-scale gaming in rural America marks the center of a heated debate that pits economic benefits of gaming against the costs of negative social consequences. The main argument in favor of legalized gaming is its purported role as an effective economic development strategy for regions with depressed economies. The main arguments against gaming are that gaming 1) is linked to organized crime 2) promotes compulsive gaming and 3) is immoral (Eadington, 1996). Another argument against legalized gaming is that it leads to increased local public service costs and resources use (Stubbles, 1990). This debate is often highly charged with moral language about the appropriateness of gaming as a recreational activity for the public.

The current literature on gaming leads to several contradictory conclusions about the effectiveness of gaming as an economic development policy. For instance, gaming is purported to increase regional employment and income and to generate local government revenues through property taxes, gaming taxes, and sales taxes. Previous studies of the net economic impacts of gaming operations at the state-level have shown that the industry brings jobs and income, reduces unemployment and welfare, and attracts additional business for non-gaming industries (Minnesota Gaming Commission and KPMG [M.I.G.A., 1992; Murray, 1993; University Associates, 1992). Yet, one study from Wisconsin showed that income and employment trends in counties with casinos for the retail and service sectors from 1980 - 1992 were not significantly different from trends in counties without casinos. This study did not find any link between shifts in income and employment and casino development (Deller and Chen, 1994). Similarly, Gabe, Kinsey, et al., (1996) found no significant relationship between per capita income in Minnesota counties and the presence of a casino in the county.

Legalized gaming does seem to generate local government revenues through property taxes and special gaming taxes. Gaming in Atlantic City resulted in the generation of \$195 million in property taxes and school taxes from 1978 to 1984 (Friedman, Hakim, et al., 1989). Several studies, however, show that local government revenue generation does not always match increased local public service and resource expansion costs. Immediate costs linked to casinos in two Colorado gaming towns (Stokowski, 1993), in Deadwood, South Dakota (Stubbles, 1990 and 1992) and in Atlantic City (Teske and Sur, 1991) exceeded the amount of local government revenue that legalized gaming was able to generate. Legalized gaming may contribute to local employment, income, and local government revenues, but not necessarily as dramatically as purported.

Negative impacts commonly associated with gaming are increased crime, public service and local resource costs, and compulsive gambling. Like the benefits associated with gaming, the magnitude of the costs associated with gaming in small communities is ambiguous. For instance, casinos are purported to cause increased crime because they attract employees and visitors with criminal inclinations (Buck, Deutsch, et al, 1991). Crime in Atlantic City grew from 100 per 1000 permanent residents in 1977 to 354 in 1984 after the introduction of legalized gaming. (Friedman, Hakim, et al., 1989). Several studies, however, show that the daily population in gaming communities also increases due to the influx of casino visitors and employees. The risk of crime victimization may decrease in gaming towns if populations increase at a faster rate than crime levels increase. When population influx is considered, the risk of crime victimization actually decreased in Atlantic City after the introduction of gaming (Albanese, 1985; Curran and Scarpitti, 1991) as well as in Colorado gaming towns (Stokowski, 1996).⁴

The effects of gaming on public service costs depend largely on the capacity of the service or resource under consideration at the time that gaming and subsequent growth are introduced into the community. Borden, Fletcher, et al. (1996) showed that casino tourists in Washoe County, Nevada put extreme pressure on local water resources. At the time of the study, the supply of water could absorb the pressure without additional local costs. Law enforcement services, on the other hand, seems to represent a service that is more frequently at capacity when gaming is introduced into a community. Law enforcement personnel in Atlantic City rose by 77 percent from 1978 to 1989, and its police budget increased by five fold during the same time period (Curran and Scarpitti, 1991). Police services in Central City, Colorado increased from 2 ½ officers to 19 officers after the introduction of gaming (Stokowski, 1996).

In areas where gaming facilities are readily accessible, people may increasingly exhibit compulsive gambling behavior. The presence of a compulsive gambler can have devastating effects on a individual household in terms of household funds lost to gambling and in terms of family cohesion (Thompson, Gazel, et al., 1995). Nationally, about 9.3 million adults and 1.3 million teenagers are estimated to have gambling problems; this represents about 2 to 3 percent of the United States population (Goodman, 1994). Few impact studies have been able to capture the true effects of legalized gaming on compulsive gambling behavior. Thompson, Gazel, et al. (1996), for example, showed that only 0.9 percent of 1,000 Wisconsin residents surveyed exhibited compulsive gambling behavior. This is lower than the national averages despite the fact that Wisconsin has 17 Native American casinos. The authors point out that they have probably underestimated the percentage of those with gambling problems because survey respondents are frequently reluctant to share such information in a random survey. This

⁴ Images of organized crime in Nevada during the infancy of the gaming industry in that state seems to have shaped the popularly held conviction that legalized gaming must be associated with organized crime. Today, there seems to be no evidence that organized crime is an issue for Native American or non-Native American gaming due in large part to the strict regulation of the industry (Albanese, 1985; Cozetto, 1995; Eadington, 1996).

study illustrates that the effects of legalized gaming on gambling addiction are exceedingly difficult to capture accurately.⁵

Evidence across studies about the costs of gaming lead to contradictory results. Legalized gaming may result in increased raw crime levels but also may result in decreased chances of victimization. Public service costs may depend largely on the capacity of the service at the time that gaming is introduced into the region. And compulsive gambling, though a serious social issue and difficult one to research accurately, has not been shown to worsen due to legalized gambling.

Two common approaches to defining the effects of non-Native American, small-scale gaming have been articulated by Stokowski (1996). The first theory, "economic boosterism" states that casinos will certainly cause some costs to communities. These costs will be compensated for by economic gains in terms of increased local government and state tax revenues and increased local employment and income. The "economic boosterism" theory is illustrated in Arland-Fye and Pelling's (1992) examination of the effects of riverboat gaming in Davenport, Iowa. Davenport hosts the gaming riverboat, *The President*, which started operations in 1991. In its first fifteen months, \$1 million of *The President's* \$1.7 million in revenues was awarded to various local social and human service programs. The riverboat has also boosted local tourism, provided funds for parks and recreation projects, and encouraged local entrepreneurs to invest in related business activities on the river front. Arland-Fye and Pelling (1992) assume that all negative effects are more than balanced by the positive economic effects.

The "social disruption" theory, on the other hand, suggests that gaming has extensive negative impacts in terms of "increases in crime, traffic, and related noises, a loss of certain community-oriented businesses, and a change in the community's social fabric" (Stokowski 1996, p. 63). The result is widespread community problems and loss of community control. This is illustrated by Stubbles's (1992) depiction of Deadwood, South Dakota after the introduction of gaming in 1989. The purpose of gaming was to provide the town with enough revenues to implement a renovation program in Deadwood's historic downtown district. Gaming has provided millions of dollars of revenue to the state of South Dakota and the town of Deadwood. Nevertheless, the town incurred a variety of costs related to the increase in the number of tourists and new residents. Additionally, a number of businesses oriented towards local needs were replaced by gaming operations so that a strip of gaming operations now dominates its main downtown area. Gaming served to restrict the economic diversity of the town rather than broaden it. In this case, the town has had to address the unexpected costs of gaming at the expense of the intended renovations.

Stokowski (1996) suggests that gaming towns may exhibit a hybrid of the outcomes predicted by the social disruption theory and the economic boosterism theory. The two theories may represent the extremes on a continuum of possible community-level gaming effects. Stokowski (1996) shows that even if towns do exhibit some of the negative impacts of

⁵ Gaming addiction represents a potentially serious negative impact of legalized gaming. This study does not include an analysis of the impact of the case study casino on the local occurrence of gaming addiction. This topic requires an intense understanding of addictive behavior that is beyond the scope of this paper.

gaming, they do not necessarily cease to exist as functional and safe communities. Yet, the benefits of gaming cannot always mitigate the costs as shown in gaming locales as diverse as Atlantic City and Deadwood, South Dakota.

The "economic boosterism" and the "social disruption" theories capture the essence of the debate over the appropriateness of gaming as an economic development strategy for small towns. These theories were developed in a non-Native American gaming context, so neither reflect the unique dimensions of Native American gaming. Below, several issues that relate specifically to Native American gaming are detailed to provide the additional framework necessary to assess the local-level effects of Native American gaming.

First, Native American gaming promotes tribal-level development. Native American gaming is viewed by most researchers as a highly effective economic development program for Native American tribes (Center for Applied Research, 1995; Clapp, Heffley et al., 1993; Coopers and Lybrand, 1995; Cozetto, 1995; Deloitte and Touche, 1993; McCollough, 1994; Minnesota Planning, 1993; Murray, 1993 and n.d; McGladrey and Pullen, 1993; N.I.G.A., 1995; M.I.G.A., 1992; O'Hara, 1995; Thompson, Gazel, et al., 1995; University Associates, 1994). Gaming brings independently generated financial resources to tribes so that they may pursue social and economic development programs, provides employment to tribal members, and brings a new sense of hope and pride to tribes. In general, the literature does not reflect any negative effects caused by gaming for Native American tribes.

Second, Native American gaming does not create casino strips nor does it introduce outside industry interests to the extent that has been observed in towns with non-Native American gaming such as Deadwood, South Dakota. This is due to legislation that limits Native American gaming to reservations or trust land. Third, local revenue generation is based on payments in lieu of tax and donations rather than property taxes. Communities' ability to control and benefit from local businesses often lies in their ability to design business regulations, zoning laws, and to collect property taxes. According to the Indian Gaming Regulatory Act, Native American gaming enterprises must be located on reservation land or land held in trust for tribes by the federal government. Therefore, they are not subject to local municipal administrative laws or tax collection.⁶ For communities with Native American casinos, then, local governments lack the control that they are accustomed to wielding when dealing with local businesses. They are also unable to benefit from the industry by taxation which can limit non-Native American host towns' ability to expand public services. Finally, Native American gaming can create negative feelings towards tribes in local non-Native American residents as observed in Connecticut by Carmichael, Peppard, et al. (1996) and in Wisconsin by Sumathi, Preissing, et al. (1994).

⁶ Native American tribes are considered dependent but separate sovereign nations within the United States. The jurisdiction of administrative laws and taxation for tribal nations is roughly equivalent to that of states. Therefore, states and local municipalities cannot tax reservation land which is technically owned by legally separate and "equal" entities. This is similar to the idea that one state cannot tax residents of another state. Nor can states or local municipalities tax the federal government for land it owns and holds in trust for tribes. Military bases and commissaries are other examples of federal property that cannot be taxed by states and municipal governments.

Methodology

Site Selection

In determining the study site, it was important to choose a case study tribe that would be representative of gaming tribes in the United States and a non-Native American host community that was reasonably "typical." Several characteristics of the case study Tribe and reservation were similar to other gaming tribes. The Tribe has a small population which is not unusual for gaming tribes. The *1990 Census of Population and Housing* reported that the Tribe had an on-reservation population of approximately 500. A state report showed that there were approximately 1,300 total Tribal members, on and off-reservation. Two-thirds of all reservations in the United States have populations below 4,000, and several of the tribes who have chosen to pursue gaming have even smaller populations. The case study reservation is located in a rural area as are the majority of reservations in the United States. The Tribe is relatively poor compared the host state and has high unemployment levels, which is typical of gaming Tribes (Table 1). The reservation economy depended heavily on government employment and transfer payments which is also characteristic of Native American tribes. The Tribe opened the case study casino in 1992, which is within the time frame that most gaming tribes began casino operations.

Table 1: Basic Reservation, United States Native Americans, Eskimos, and Aleuts, and Host State Demographics^a

1989 Data	Reservation	All Native Americans, Eskimos and Aleuts in the United States	Host State
Unemployment	40% ^b	40%	5%
Per capita income	\$4,300	\$8,300	\$13,300
Households below poverty level	50%	30%	11%

^a Most of the national data presented here are from the *1990 Census of Population and Housing* and include urban and rural, reservation and non-reservation Native Americans, Eskimos, and Aleuts. These data are expected to vary to some degree from the subset of rural reservation population data. Other sources for data were Snipp (1989) and Cornell and Kalt (1990).

^b A study from the host state reported that the unemployment level for the Tribe in 1989 was 51 percent.

The case study Tribe, however, does have some unique characteristics. The reservation consists of discontinuous land across several counties in a Midwestern state. Additionally, the case study casino is not located on the reservation. Rather, it is located in Casino Town, which is approximately twenty miles from the nearest reservation site. Finally, the Tribe owns and operates two casinos; the second is approximately 65 miles from the case study site. Although it is not particularly unusual for gaming tribes to run two casinos, it does complicate the Tribal-level impact analysis. Despite some unique features of the case study

Tribe and casino, it seemed reasonably "typical" and may be regarded as representative of other gaming tribes in the United States.

The host community, Casino Town, also seems reasonably reflective of other non-Native American communities that host Native American casinos. These communities tend to be small, rural towns near reservations that are easily accessible by major roads. Unlike host communities for non-Native American casinos, they are not necessarily economically depressed or dying towns. They tend to have functional, if small, local economies. This is the case for Casino Town. Casino Town has a permanent population of approximately 800 people. It lies near the border of two rural counties in a Midwestern state. Although it is not adjacent to the reservation, it is reasonably close to most of the reservation sites. The major industries in the area are agriculture and manufacturing. The region also supports recreational tourism and a large number of second homeowners. Casino Town is located near a major highway that runs across the state, so it is easily accessible to travelers.

Because the Tribe and host community are relatively typical sites for Native American gaming, the results of the case study can be generalized to other locations. The results of this study can be viewed as predictive for other Native American gaming sites.

Data Collection and Analysis

Because of the wide range of variables under consideration, it was necessary to utilize a variety of data sources, data collection approaches, and data analysis techniques. To organize and frame these various methodologies, the overarching research approach of *triangulation* was adopted. This approach has been used in a variety of social sciences, including psychology and anthropology. Triangulation simply refers to "the application of multiple, heterogeneous measures, all of which relate in some specified way to the theoretical construct of central interest" (Crano 1981, p. 320). This method assumes that no single measure can completely describe the theoretical construct accurately. Further, it assumes that heterogeneous measures rarely share the same inaccuracies; the error in each method is independent and non-systematic. By analyzing various measures for overlap, one can obtain a more precise interpretation of the subject of inquiry.

To attain triangulation, three basic research tools were utilized in this study: input-output analysis, secondary data analysis (with an emphasis on the control group method) and qualitative analysis of structured focus group and personal interviews.

Input-output is both a descriptive and an analytical tool. As a descriptive tool, input-output summarizes regional economies as a series of accounting transactions among producing sectors (e.g., manufacturing firms), consuming sectors (e.g., households) and the rest of the world (e.g., regional imports and exports). Input-output also expresses the relationship between demand and supply for regional economies. As an analytical tool, input-output can be used to assess the impact of a change in final demand for regional output (Deller, 1990). In this case study, input-output was used specifically to estimate the impact of the local expenditures of the casino employees (wage effects), the impact of the operational expenditures of the casino (non-wage effects), and the impact of the expenditures of the casino patrons (patron effects) on local employment and income.

For the input-output analysis, three sets of data were requested and provided by the casino operation itself. Data on the casino's regional non-wage expenditures were requested

and used to construct the casino's local expenditure pattern. The casino provided detailed information on local expenditures such as advertising, utilities, and contracted maintenance. Data on the casino's regional wage expenditures (total wages paid to employees who reside within a two county region) were also requested and supplied.⁷ These data were broken down into total number of employees and total amount of wages paid for each of three income categories as defined by MicroIMPLAN. Using the approach outlined in Wagner, Deller, and Alward (1992), total wages were decomposed into detailed expenditure patterns for each of the three income categories.

Information about the casino patrons was solicited through a survey that was implemented from January 1996 - May 1996. The intent of the survey was to determine basic demographic characteristics of the casino patrons and to collect data to construct patrons' expenditure patterns while in the two county region. Casino patrons were randomly selected for the survey as they exited the casino in four sessions spaced evenly over the five month period. Spacing the survey implementation over the five month period was intended to provide a more random sampling of patrons and to capture seasonal differences in patron spending habits.⁸ Several calculations were performed using the data from the Casino Patron Survey to ensure that on the effects of the non-local patrons were included in the input-output analysis (See Appendix 1 for Casino Patron Survey).

Micro-IMPLAN (Impact PLANning) was used to create the input-output model for the local economy. Micro-IMPLAN is a 528 sector modeling system and database developed by the United States Forest Service of the United States Department of Agriculture. All figures reported are for 1993 and reflect the most current year available (Deller, Sumathi, et al., 1993).

The research team also administered a series of structured interviews in Casino Town, the county, and on the reservation with business people, local government members, public service providers, social service providers, and residents. Interviews were generally informal, not tape recorded, and followed a flexible structure. The interview series was intended to provide qualitative data on the effects of the casino locally. These interviews also allowed an alternative venue through which to gather records from the interviewees that were not necessarily easily accessible through standard secondary data collection procedures.

Following the research methods outlined by Krueger (1994), the research team conducted four focus group discussions as a second method of collecting qualitative data. Three focus groups were implemented in Casino Town: a business focus group, local government/public official focus group, and a citizen focus group. One Tribal focus group was administered. This focus group included Tribal members from each of the three categories listed above (business representatives, Tribal council members, and Tribal members at large).

⁷ The relevant labor market was defined to be composed of two counties. While the majority of casino employees reside within the defined labor market, a small percent commuted from greater distances.

⁸ The patron survey data would have been more complete had summer patrons been included in the sample. However, time constraints restricted our research team from carrying the project into the summer months.

The secondary data collected for the control group analysis were limited to data on regional employment, crime statistics, public service expenditures, and local revenues. The control group method, as described by Rephann, Dalton, et al., (1996), is a method of comparing one defined region that has experienced some shock or treatment with another similar region that has not experienced the treatment or shock. Differences between the regions are assumed to be due to the treatment or shock. Secondary data were gathered from a variety of sources including records maintained and reported by various public agencies of the host state. Other secondary data were collected from interviewees; this included information such as number of police calls, emergency calls, and local property tax rates.

Results

The results of the analysis are presented in three parts. First, the impacts of the casino on regional employment and income are presented and summarized. Next, the impacts of the casino on Casino Town are reported by type of impacts (e.g., housing, government revenues and expenditures, etc.). Then, the Tribal-level impacts are presented. Each section is supplemented with information gained from the personal interviews and focus group discussions.

Regional Impact: Employment and Income

The casino has had a positive impact on regional employment and income. The casino itself employs approximately 870 regional employees (those living within the two county region defined as the labor market) and pays out approximately \$14 million in wages to regional employees. Casino employees spend their wages in other local businesses which supports additional income and employment. Using input-output analysis, casino employees' expenditures were estimated to support an additional 561 local jobs and \$7.26 million in employee compensation income. This is the wage effect. The casino itself spends money in the local economy which also supports additional jobs and income. The casino non-wage expenditures (goods and services that the casino purchases in the region for operational purposes) were estimated to support 137 jobs and \$1.88 million in employee compensation income. This is the non-wage effect. Casino patrons who come from outside of the local area also spend money in the local non-casino businesses when they visit the region. Expenditures from non-local casino patrons were estimated to support 94 jobs and \$1.00 million in employee compensation income. This is the patron effect.⁹ The casino, then, was estimated to support 790 jobs in addition to the 870 on-site jobs at the casino and \$10.13 million in employee compensation income in addition to the \$14 million paid to on-site casino employees. The estimates show that casino employees have the greatest impact on the local economy, while the casino patrons have the least impact (See Appendix 2 for full input-output results).

A decomposition of jobs supported through wage, non-wage, and patron effects by industry shows that the majority of jobs and income supported occurs in the trade and services

⁹ Approximately 51 percent of the 480 casino patrons surveyed came from 50 miles or farther from the casino. These patrons were considered non-local patrons. Only the effect of non-local patrons was considered in the analysis.

sectors. An estimated 280 jobs in trade and 321 jobs in the service sector were estimated to be supported by the casino. This pattern is not unexpected because of the labor intensive and recreational nature of the casino gaming activity. The bulk of the impacts stem from employees' spending (e.g., trade and services) and patron expenditures (e.g., trade and services). Additionally, the majority of the casino's expenditures fall into the trade and services sectors (See Appendix 2).¹⁰

Historical Employment Trends

Yearly data provided by the host state on actual employment in the trade and services sectors in Casino Town and four nearby communities were examined and compared to the input-output analysis results. Actual growth in employment in the region in the trade and service sectors from 1991 to 1994 was approximately 700 jobs with 70 jobs in Casino Town. While this level of growth matches the level predicted by the input-output analysis, the regional economy was growing prior to the introduction of the casino. While the casino doubtless contributes to the growth in communities other than Casino Town, it probably is not the driving force. The other communities are dynamic and growing retail hubs independent of the casino and show steady employment growth since 1990 --well before the casino opened. The changes in Casino Town employment, on the other hand, are probably closely linked with the casino. (See Appendix 3).

This pattern suggests two possibilities. First, much of the growth predicted by the input-output analysis has been absorbed by existing businesses. In the case, the input-output estimates are too high. Second, the potential level of spill-over impact from the casino predicted by the input-output analysis has not been fully realized.

Casino Town Business Conditions

In general, local residents' comments in focus group discussions confirmed that the results of the historical data analysis appear to be reasonable and reflective of reality. Although the input-output results may be slightly inflated, discussants verified that the predicted proportional effects of wage, non-wage, and patron expenditures were reflective of reality. Local businesses reported that they have benefited mostly from casino employee expenditures rather than the casino itself or the casino patrons: "The casino employees have helped some local businesses [but] not too many of the casino patrons visit other businesses." Residents anticipated that the casino would bring much more local growth than has actually occurred: "Everybody thought when the casino opened that their businesses would grow by leaps and bounds and it never happened." Many expressed the opinion that local economic conditions may have hindered this outcome. The most commonly cited cause was an unbalanced retail sector in Casino Town: "Probably [have] 2,000 people employed in Casino Town, but they can't shop in Casino Town because the retail sector is not diversified enough." Local residents and business owners identified a number of lost opportunities and suggested that the community must work with the casino and Tribe to build a stronger local economy for

¹⁰ It is important to note that in this analysis, "job" does not distinguish between full-time and part-time employment. Hence, care must be taken when interpreting the impact of the casino on employment.

the future. Still some worried about becoming overly dependent on the casino given past and current communication problems and political uncertainties in the future: "Casino Town should not rely on the casino...Casino Town needs to promote Casino Town because it was here before the casino and will be here long after the casino...the casino should add to the community not dominate it."

Casino Town Impacts

Many of the impacts of the casino in Casino Town can be linked to the inflated population of the municipality on any given day and the subsequent increase in activity 24 hours per day. The casino seems to be the cause of a three-pronged population increase in Casino Town. First, some casino employees have moved to Casino Town which has increased the permanent population. Second, other casino employees who do not live in Casino Town, commute to the casino each day to cover the three work shifts of the 24 hour operation. And third, approximately 2,400 casino patrons visit Casino Town each day.¹¹ The town's population, which is permanently approximately 800, expands by at least 387 percent on a daily basis. The town's infrastructure and public services are designed to serve the needs of approximately 800 people; the increased activity has subsequently strained some of the local resources.¹² As one resident observed, "Casino Town is like Avalon, California, an island where the population was 810 but swelled to 5,500 each day from tourism. The actual population doesn't reflect the amount of activity or problems in Casino Town where there are probably 5,000 people a day on average."¹³

Housing

One of the results of the increased number of casino employees moving to Casino Town has been an increase in the demand for rental units. This has been met in part by the construction of new apartment complexes with approximately 65 rental units and the conversion of owner-occupied homes to rental units.

The local renters are perceived as a transient population by the long-time residents of Casino Town. Some are concerned that the high degree of turnover among renters is threatening the stability of neighborhoods: "The renters here are casino employees and transients, not long time renters like in the past when a family rented the same place for years and years." While the demand for rental units in Casino Town has increased, sales in permanent homes has not changed much.

¹¹ The daily average casino visitor count from October, 1994 to September, 1995 was approximately 4,800. This varies depending on the season and the day of the week from about 2,600 to 8,000 people. Patrons are counted each time they enter the casino, and some may be double-counted if they enter more than once a day. A conservative estimate of casino visitors is provided above.

¹² This change is most notable during the summer months when casino patron activity increases and a substantial number of seasonal summer residents return to their recreational homes in this area.

¹³ Casino Town residents commonly cite 5,000 as the number of visitors and employees that come to the casino each day. This is probably based on the casino's daily visitors counts. The estimates used for the purposes of this case study are more conservative, as explained previously.

Community members view the housing issue as a fundamental link to healthy community growth and stability. Attracting permanent residents and developing more permanent low-cost housing are viewed as a priorities for the Town: "The apartments are great, but we gotta find a way to get people to move into the community." Residents feel that there is currently a mismatch between casino employee wages and permanent housing costs in Casino Town which limits the Town's ability to promote community investment: "Casino jobs haven't translated into community investment or ownership."

Crime

Crime in Casino Town has increased since the casino opened. Residents and county and local police officials attribute this to the large number of people in the town and the 24 hour activity rather than the casino itself. A County Sheriff's Department representative remarked:

"Since the casino, calls for police from Casino Town have risen about 30 percent and have remained steady at that rate. The casino operation itself is very tight and good on controlling crime or other negative effects. But, the nature of having a large number of people and transients drawn to community causes there to be more police calls."

There has been a substantial increase in the number of police responses to calls in Casino Town by both local and county law enforcement officers. From 1991 to 1995, the number of municipal police responses increased by 104 percent (1,128 responses in 1991 and 2,306 responses in 1995). (Casino Town Police Records 1991 to 1995 and County Sheriff's Department).

When the population-at-risk is considered using the framework of Albanese (1985), it is evident that the risk of victimization has decreased in Casino Town. While the daily population of Casino Town has gone from 800 without the casino to approximately 3,700 with the casino (an increase of 387 percent), crime has increased only by 104 percent since the casino opened. Since the population-at-risk has increased faster than crime, risk of victimization has decreased.¹⁴

Although raw crime levels have increased in Casino Town, risk of victimization has decreased since the casino opened. Neither residents nor law enforcement officials attribute the crime directly to the casino, but rather to the increased population. Nonetheless, residents perceive their lives as more dangerous now than before the casino opened. One resident noted that whatever the source of the crime, "the overall effect is unrest and loss of security" for community members.

¹⁴ A formal analysis of crime versus population change was not possible because accurate Casino Town population data were not available for the time period under investigation. Only estimates of population from the state were available, but these did not capture the influx of casino workers into Casino Town or actual daily visitor populations. The population approximations above were estimated using Casino Town's population from 1990 (*1990 Census of Population and Housing*), casino visitor counts, and approximate number of casino employees working during one shift.

Traffic

Community members have cited problems with increased levels of fast traffic on the highway that runs through the town since the casino opened in 1992.¹⁵ Traffic counts from the Department of Transportation verify that traffic on the highway near Casino Town increased significantly from 1988 to 1992. A significant portion of the traffic through Casino Town seems to be destined for the casino (Data provided by the County Highway Commissioners Office).

A volunteer emergency medical service team in the area confirms that the increased volume of traffic has translated into more frequent car and truck accidents. They have responded to an increased number of traffic-related emergencies in the past few years. Some residents feel that a stop light would improve the safety of the road. But a stop light would also cost the town over \$100,000.

Local residents expressed concern that the highway safety hazards are exacerbated by the location of the casino near the highway:

“Traffic has increased over the last 20 year but has gotten even worse in the last 4-5 years. It has at least doubled in this time. It’s very hard to cross [the highway] and it needs a stop light. Visitors have to cross [the highway] because of the casino’s location ...[near the] highway.”

For Casino Town residents, heavy and fast local traffic represents one of the largest safety hazards introduced by the casino. It seems to be a symbolic and daily reminder of the new crowded, fast-paced, and seemingly dangerous environment that the casino has created.

Public Services

Community members feel that almost all types of public services have been pushed to capacity due to the additional people drawn into Casino Town by the casino and heightened activity levels: “Growth demands services like roads, water and sewer extensions.” They feel that they need to plan for long-term services expansion to accommodate long-term community changes caused by the casino:

“From our own budget, we have had the money to expand roads, but now we have to expand sewage which was going to hold us into the next century because it is overburdened. We have to dump all of our money into that ... just to keep up but we can’t expand to keep up with growth.”

Law enforcement, fire, and emergency services appear to be the areas that have experienced the greatest amount of immediate pressure due to the casino. To address the increased number of police-related incidents and the new need for 24 hour police patrols, the Casino Town Police Department has expanded. Police officer hours increased by about 60 percent (1 person), and the number of patrol cars increased by 100 percent (1 car) since 1992

¹⁵ The highway was expanded from two to four lanes independently but at the same time that the casino opened. This has also contributed to high traffic levels.

(Casino Town Police Department records). The increased demands on and expansions in the police department are reflected in their increased expenditure levels from 1992 to 1994 (See Appendix 4)

Fire Department expenditures experienced an increase of 85 percent from 1993 to 1994 as compared to the 6 percent increase at the state level. The Fire Department's increase in expenditures seems to be a response to the increased responsibility in the area due to new local developments including the casino, casino hotel, and apartment buildings rather than a reaction to a higher number of calls. The nature of fire service expenditures is a function of personnel and equipment necessary to fight fires given the local composition of buildings, infrastructure, and population, in addition to the actual number of calls. The sheer size of the casino hotel dictated the need for some additions in personnel and equipment(See Appendix 4).

Medical emergency calls to Casino Town have also experienced a recent increase. Many of the calls are related to traffic accidents, but an increasing number are calls directly to the casino. A nearby hospital's emergency services responded to an average of 68 calls per year to the casino since it opened in 1992. Non-casino calls to Casino Town also hovered around 70 per year. The presence of the casino, then, may have doubled the number of medical emergency calls that the local hospital responds to in Casino Town (Hospital Emergency Services records).¹⁶

The local volunteer emergency response team has also responded to multiple calls at the casino: "In the casino's first year, [volunteer emergency response team] made 110 runs to the casino in 10 months, that was 35 percent of all of their runs." The increased number of calls that volunteer team answers has increased the organization's costs. The casino has donated some money to team but not enough to make up for the additional work that they have encountered due to the casino.

Law enforcement, fire services, and emergency medical services seem to represent the service areas that were operating at capacity when the casino opened. The town has responded to the congestion caused by the increased demand for services by expanding them.

Local Revenues

The casino and casino hotel have contributed to the local revenue generating capacity for Casino Town through payments in lieu of tax (PILT), donations, property taxes, and hotel room taxes. Only secondary data pertaining to these three areas is provided below.

The traditional form of municipality-level capacity building is through increases in the property tax base. But, because the casino itself is on land held in trust by the Federal government, that property is removed from the property tax rolls. Still, the Tribe has a history of paying Casino Town PILTs for the costs incurred by the town as a result of the presence of Tribal gaming enterprises. This payment is envisioned to make up for property taxes that could be collected on the trust property if it were privately held instead. There was an increase of 1,250 percent in PILTs collected in Casino Town from 1986 to 1994. This dramatic increase can be linked directly to the casino and payments made from the Tribe to Casino

¹⁶ Records of ambulance calls prior to 1992 are not broken out by municipality, so comparisons of the number of calls before and after the casino opened were not possible.

Town. In 1993 and part of 1994, the Tribe made regular and agreed upon PILTs to the Casino Town government (See Appendix 4).

Additionally, hotel room tax increased with the installation of the new casino hotel in 1993. The new hotel, with approximately 150 units, replaced a hotel with fewer than 20 units. The municipality's share of the 4 percent hotel room tax is included in the town's Miscellaneous Revenues and is reflected in the hike from 1993 to 1994. The increase in 1992 was not related to the casino (See Appendix 4).

The casino also pays property taxes on its non-trust property in Casino Town, primarily parking lots, storage areas, and administrative office space. The casino's property tax payments to Casino Town (not including the percentage that goes to the school system) equaled 30 percent of the town's total property tax revenue for 1995 (Casino Town Property Tax records). The marked increase in property taxes from 1986 to 1994 (See Appendix 4) cannot be completely attributed to the payments made on local Tribal properties. Participants in all three Casino Town focus groups attribute the rise in property taxes to the construction of a new school and to the state-wide trend, not solely the casino.¹⁷

Payments in lieu of tax and hotel room taxes clearly represent non-traditional forms of income to Casino Town. Recently, the Tribe stopped making the regular PILTs to the municipal government and elected to replace them with direct donations to specific local organizations and service providers. The change in payment mechanisms seems to be the result of miscommunication over two issues: the municipal government's use of the PILTs and the status of the land on which the casino hotel is located. In short, the municipal government had elected to 'bank' the lump sum PILTs to offset the costs of major new infrastructure investments that will be required in the future, due in part to the casino (e.g., traffic lights, wastewater treatment plant, etc.). The Tribe may have expected to see these funds flowing to the individual departments that were most affected by the casino.

At the same time, the Tribe was planning to purchase a site for their new hotel. As a condition of the purchase, Casino Town requested that the Tribe leave the property on the tax rolls rather than apply for federal trust status as they had planned. The Casino Town government was seeking stability in revenues by requesting that the land be kept on tax rolls. The Tribe may have taken the request as a lack of trust in their willingness to continue with the PILTs. In addition, the Tribe considered the request a breach of their good faith negotiations with the municipality, upon which the PILTs were based, because the request limited the Tribe's ability to act within its rights as a sovereign nation. After this incident, payments from the casino in the form of one lump sum were stopped in favor of smaller donations directly to specific governmental departments and service providers including the local schools, libraries, the fire department, the emergency medical team, and the municipal government.¹⁸

¹⁷ Income taxes are also paid by both Tribal members and non-Tribal employees of the casino. Non-Tribal employees must pay both federal and state income taxes. Tribal members must pay federal income taxes on their casino wages and on the disbursement of casino net income.

¹⁸ The total amount and distribution of donations made from the casino and Tribe to the Casino Town and surrounding communities were not made available to the research team by the casino.

If there is one single source of significant conflict between local residents and the Tribe as a result of the casino, it centers directly on the PILTs. It is common knowledge among Casino Town residents that the casino stopped making the lump sum PILT payment to the Town. Because it is common knowledge, residents tend to focus on this issue. They may direct resentment towards the casino for not paying its fair share to support Casino Town projects based on this fact. Fewer residents seem to be aware of the amount of money that the casino does pay in property and hotel room taxes. Common feelings are: "It's not fair when somebody's got a little teeny lot and house that isn't much good and they have to pay their fair share... whether you've had an argument with the Town or not, you have to pay your taxes," and "there is a great increase in costs caused by the casino, even with the positive effects. They don't foot the bill."

There is also a perception that nobody at the state or federal level cares about the casino-related issues in Casino Town because they both collect revenues in the form of income taxes from the casino employees: "The local issues also need to be resolved. The Town is left out of tax collection - the federal government gets the tax but the Town gets nothing."

Community Planning

Casino Town was taken by surprise by the magnitude of the impacts that the casino caused locally. The town did not integrate the casino into its long-term planning in advance. Now, they are realizing the need for long-term integration and careful community planning. They are currently experiencing immediate problems such as local public service congestion. Although Casino Town has received increased revenues in terms of property taxes and hotel room taxes due to the casino, the revenues do not meet the costs associated with the immediate problems or the costs of long-term community planning.

Local frustration about the lack of appropriate community planning has been compounded by the breakdown of the PILTs. The subsequent financial instability and uncertainty has made it very difficult for Casino Town to develop a capital budget and improvement plan. Neither the Casino Town government nor the local service providers are able to include the casino's donations into their long-term budgets because the donations come at unpredictable intervals and in unknown quantities beforehand. One resident expressed the opinion that the "Tribe does contribute financially but the contributions are at their own choosing without consulting the county. They do not contribute on an equal basis with the rest of Casino Town." The casino, on the other hand, is attempting to assess the local needs so that they can make donations to appropriate service providers and departments that are lacking sufficient funds and that are particularly stressed due to the presence of the casino.

Communication Between Casino Town and the Tribe

Casino Town residents feel that the lack of open dialogue between the Tribal Council and the Town presents a significant barrier to solving the problems associated with the casino.

"Communication between the Town Board and the Tribal Council is bad. There was better communication with the [management company], but they were not good for the Tribe. At least, the [management company] were available for the Town board to

talk to. Now, we can go for months trying to get a meeting...the casino management is always available but the [Tribal] Council is not."

Currently, residents feel that the casino and the town are existing as separate entities.

"You want to know what the impact of the casino is in Casino Town? As of April 1996, right now, we're existing separately. The community is existing as a community and has very little to do with the casino. The casino is existing on its own. But you want to know what the future could do? It depends on what the communication is going to be. We could sit down and work on a common goal and communicate with each other, if they come to us and say 'As a community what do you see us doing?' And as a community, we go over to the casino and say 'What can we do to help your business?'"

Most of the community members who participated in focus groups and interviews expressed the opinion that the problems associated with the casino could be resolved positively if a working relationship could be established between the Town and the Tribal Council. In fact, when asked how they would vote, if they had the chance, on renewing the gaming compacts in the state, the majority in each Casino Town focus group said they would vote in favor of renewal.¹⁹ Most cited the employment provided locally by the casino and opportunities for local growth as the reasons: "We need to be friendly and walk the extra half mile to meet the Tribe in addressing issues. The casino and problems are not going to go away so we need good communication. We need to do it in a friendly manner, not in an antagonistic manner." Others feel that the Tribe should reinstate the PILTs as a first step towards a better relationship:

"If the Tribe reinstated the payments, it would help the Town to regain trust. It would help the town's feeling of equity and 'we're in it together' - we've had to do something we don't like but so have you and we're all in it together. Those are the rules we're both playing with."

Casino Town residents realize that cultural barriers may be blocking communication lines between the town and the Tribe: "Dealing with a new culture is a real change. Kids handle it well but the adults don't necessarily." "It may be cultural. The Tribe may not be familiar with the workings of big business. The [Tribal] Council may be uncomfortable in the position of dealing with another [Town] Council." For the most part, residents referred to cultural differences between themselves and the Tribe in vague, general terms. While they

¹⁹ Majority support of state-Tribal compact renewal did not necessarily signify absolute support of local gaming. Many participants expressed the opinion that they would rather try to find beneficial solutions to the current problems than see the casino close which would leave many people unemployed and would leave a large empty building and parking lots in the middle of town. Participants seemed to be equally divided between those who viewed gambling as an appropriate recreational activity and those that did not.

recognize that cultural misunderstanding may be part of the communication problem, they may not understand the Tribe's culture or the inherent rights of the Tribe as a Sovereign Nation well enough to identify specific points of difference. The Tribal members seem more familiar with 'living in two worlds' (the Native American world and the non-Native American world), but it may also be difficult for them to adjust to working as partners with the Town.

Tribe and Reservation Effects

For the Tribal members living on or near the reservation, the casino provides a relatively large influx of money to an historically impoverished area. The casino represents a departure from the trends of poverty and dependence on outsiders for economic security for the Tribal members living on-reservation. The casino is Tribally owned, like all Native American gaming enterprises, and Tribally operated. The profits from the casino are reinvested in the Tribe and Tribal members either through reservation-wide projects or through individual per capita payments.²⁰ The casino has provided an income generating industry to the Tribe and returned some of the decision-making power, formerly in the hands of external agents, e.g., the Federal government, to the Tribe.

Tribal members, like Casino Town residents, cite that the most obvious impacts of the casino have in terms of employment and income. Unlike Casino Town residents, Tribal members benefit from casino profits through the reservation-wide projects and per capita payments. While the influx of money into the reservation economy has presented many positive opportunities to the Tribe, it has also magnified and fueled some structural and social obstacles facing the reservation. As one Tribal member put it: "...the casino has shaken our community...there have been many good, some bad effects...we are still working our way through the shock."²¹

The remainder of this section is devoted to a discussion of the impacts of the casino on the Tribal members living on the Tribe and reservation. Reservation-wide development, employment, income, youth issues, and communication with the Casino Town will be covered. All information presented was gathered through interviews and focus groups, therefore no quantitative analysis is provided.²²

Reservation-wide Development

The casino has provided the Tribe with a source of income with which to pursue reservation-wide improvement projects.²³ Social, elder, and youth services seem to have been

²⁰ Per capita payments to each registered Tribal member are made on a regular basis. Per capita payments for children are kept in bank accounts until children reach 18 at which point they may access the funds and receive the regular per capita payments.

²¹ All comments attributed to Tribal members in quotations marks are paraphrases rather than direct quotes. Neither interviews nor the Tribal Member Focus group discussion was tape-recorded.

²² Quantitative analysis was not possible because the data requested were either not available or not provided by the casino or Tribe.

²³ The Tribe owns two casinos in different municipalities which are approximately 60 miles apart. References to casino profits pertain to profits from both casinos. Without further research of the second casino, it is difficult to distinguish differences between the effects of the two on the reservation and Tribe.

the priorities for casino profit use. For example, the social service agency located on the reservation has expanded its personnel by 50 percent and expanded its office space by 75 percent. Elder services and facilities have been improved; housing units for elders were constructed soon after the casino opened: "Different tribes use casino money in different ways, our Tribe was noted by other tribes because of how well the Tribe takes care of the elders. Recently, we have switched our focus from elders to the youth." Youth services such as lectures, outdoor activities, trips, counseling, heritage training, and educational scholarship funds have been developed. Casino profits have also been used for reservation infrastructure. For example, many of the roads on the reservation have been paved or resurfaced and are now regularly plowed of snow in the winter.

The Tribe has not branched far into business diversification or other economic development projects, although this seems to be a priority for the future. The Tribe is planning to open a new store on the reservation and a fish hatchery, but these projects are both in the initial phases. The lack of pre-existing institutions and on-reservation professionals to direct economic development seems to have hindered this type of activity, despite the fact that the casinos introduced financial capital that could be used towards these purposes. As one Tribal member put it: "The Tribe never had an economic development plan before the casino because we were working on grants and federal government funds...the economy was based on grants, the whims of the federal government, and bingo." Since the introduction of the casinos, the Tribe has organized a board for economic development, created an Economic Development Officer position, and is building economic development plans. They are in the beginning stages of building the organizational and professional infrastructure necessary for long range economic development. Many members realize that this type of institution building is a long process and that it will take many years to come to fruition.

Tribal Employment

The casino has provided Tribal members with the opportunity to access jobs in a Tribally-owned business which is sensitive to Tribal member needs. Some Tribal members have taken advantage of the opportunity and now have jobs at all levels at the casino. Still, unemployment on the reservation has not decreased as much as would be expected.

Generally, high unemployment in a community signals either a lack of available jobs or a mismatch between workers' skills or preferences and jobs in the local industry. There does not seem to be a lack of available jobs in the area. In fact, county employers, including the casino, report having difficulty finding workers to fill open jobs (casino personnel). It is possible that there is a skills/preferences mismatch between unemployed Tribal members and vacant jobs. Even though the casino does offer a variety of jobs at different skill levels, unemployed Tribal members may not have the skills or desire to work in the gaming industry. If this is the case, then directing casino proceeds towards reservation business diversification, and providing alternative employment opportunities, may be a more effective approach to lowering unemployment. A third possibility is that the casino is too far from the reservation to make it a convenient work location for Tribal members.

Tribal members offered an alternative explanation for high unemployment on the reservation. According to interviewees and focus group participants, many Tribal members had withdrawn from the workforce well before the casinos opened due to prejudice and

harassment experienced in off-reservation jobs: "People can't get jobs or [they] quit them because of harassment." One Tribal member recalled having worked at the same place off-reservation for over twenty years where he experienced daily on-the-job harassment and never received a promotion. This seems to have forced many Tribal members out of the work world years, even generations, ago. Having been removed from the work world, many members lost or never developed basic job skills such as maintaining regular work hours, adhering to workplace rules, and workplace hierarchies. When previously unemployed Tribal members did take jobs at the newly opened casino, many subsequently quit or were fired from the jobs because they were ill-prepared to manage the workplace structure. The casino has reacted to this problem by implementing an employee retention program at the casino specifically aimed at Tribal members. Other members attribute the high unemployment levels on-reservation to members' lack of drive or their satisfaction with the income they receive through per capita payments.

Income

Each Tribal member receives monthly per capita payments from the dispersion of net income derived from casino operations. For most Tribal members, the per capita payments present an opportunity to obtain many of the material goods that they had previously lacked. The sudden increase in personal income has resulted in a round of spending on consumer goods such as cars and furniture that have brought a radical material change to Tribal households: "Members have new cars now instead of beaters." For others, the additional income has provided a means of stabilizing household income and obtaining basic needs: "The Tribe is now able to feed and clothe families."

The payments have also brought some unforeseen negative results. Many Tribal members were not used to the amount of disposable income they were able to access through per capita payments and advances: "Tribal members were exposed to something completely foreign in the per capita payments. People got carried away with spending and overextended themselves." Many members were unfamiliar with preparing household budgets, having federal income taxes removed from their income, holding banking/checking accounts, or managing debt. They subsequently overextended themselves financially and are currently faced with large debts. Without the experience in budgeting household finances, they were not able to foresee this outcome or to manage it when it occurred: "We need to help people learn how to budget. A lot of people don't know how to budget per capita and have already lost all their money. And now they can't get welfare because of per capita." The Tribe is currently addressing this issue by hiring a financial planner to advise Tribal members on household budgeting and investment. Per capita not only makes members ineligible for Assistance to Families with Dependent Children, it makes them ineligible for other services such as Social Security and Headstart. Many members still need these services, especially the latter for day care.

There is also a general misunderstanding by non-Tribal members of the level of per capita payments generated by the casino: "The Tribe does not disclose the amount of the per capita to the public, so the public's conception of the amount might be exaggerated." Because the popular media draws attention to some of the smaller tribes with highly profitable casinos,

there is a perception that all casino payments are large, which further complicates cultural conflicts.

Youth

Youth issues were commonly cited by the focus group participants and Tribal leaders as one of the most pressing issues for the Tribe as a whole and for individual families. On the positive side, many Tribal youth have gained a new sense of pride and self-esteem since the casinos opened. They are no longer viewed as the "poor kids" by their non-Tribal peers: "Kid can wear new clothes to school instead of hand-me-downs." Now, there are numerous Tribal programs aimed at keeping kids involved in positive extracurricular activities to help them develop appreciation for their culture and history, education, and career possibilities.

The majority of teen-agers, however, do not reflect the positive attitudes that some of their elders are trying to instill in them. They are often unmotivated in school and unmotivated to pursue higher education or develop career goals. Like unemployment, this seems to have been an issue for the Tribe well before the casinos opened as so cannot be attributed to the casinos.

Tribal members cite a variety of non-casino sources for this lack of motivation: "Education has always been a problem on the reservation, its not necessarily related to the casinos." Many youths have experienced prejudice throughout their lives in the public school systems or have performed poorly in the school systems: "Kids have faced racism and harassment in school and so they are unwilling to put themselves in position of more treatment like that in college." Additionally, they have been conditioned to understand the difficulties that they will face in the non-Tribal work world: "Kids don't care about education because they can't get hired outside of the reservation because of racism."

The only explanation offered by members that is directly related to the casino is the issue of per capita payments. Youths are aware that they will receive regular per capita payments as adults. They may see no reason to work because they think that the per capita payment will be a sufficient source of income. This is particularly troublesome for Tribal teenagers who foresee a relatively large one-time payment from their trust fund upon turning 18 years of age: "Kids have difficulty seeing the value of an education because they know that they will get the per capita." To adults, the trust payment might be the foundation for a college education, or "nest egg" to start a family. But, to many teenagers, the trust fund payment appears to be large enough to fund an entire life, which probably is not the case.

Another youth concern raised by focus group members was that young people seem uninterested in their culture. The casino may be indirectly linked to the issue of loss of culture—through the per capita payments. Some members think that Tribal members are currently more concerned with the money they receive from the casinos than with culture. "Kids only care about cars, not culture," noted one member. It is probably more closely linked to the history of the Tribe than to the casino. "Often, parents are blamed for kids' problems, but they grew up in boarding school and were never taught...Indian ways. Even adults don't know Indian culture because they were never taught it." "Youth problems are linked with the identity problems of the Tribe, from the times when we were squatters to now with the casino."

Communication Between the Tribe and the Casino Town

The issue of communication problems with the Casino Town Board and residents was not raised in most of the interviews with Tribal members or in the focus group discussion. This is surprising since communication with the Tribe was a prevailing topic in each of the three Casino Town focus groups. This may be because Tribal member interviewees and focus group participants are not in positions to address the issue of communication with Casino Town or because members were simply unwilling to discuss this issue. It should also be noted that the research team asked Tribal members questions about the effects of the casinos on the Tribe and reservation. The line of questioning may not have led members naturally to the issue of communication with Casino Town.

Alternatively, it is possible that since the majority of Tribal members do not live in Casino Town, they are not particularly linked with the community's problems. Casino Town may simply be the location of one of the casinos for many Tribal members. Also, focus group participants and interviewees seemed inwardly focused, on the problems that the Tribe, itself, is dealing with on the reservation. They may feel that the resolution of internal issues is a priority while issues with the Casino Town community is outside their world.

Comments on the Tribal and Reservation Impacts

Many of the negative reservation impacts (economic underdevelopment, youth motivation problems, lack of professional and physical infrastructure, lack of integration into the education system and workforce, lack of job skills, and training) are issues related to chronic poverty and were present on the reservation before the casino opened: "The Tribe has a long history of welfare, poverty, alcohol abuse, and family dysfunction. The casino cannot solve poverty issues over night. We need at least a generation, twenty years or more, to deal with that." The infusion of money into the community has acted as a catalyst to magnify and focus attention on these problems: "There were always problems, but now they're magnified..." Members also point out that the Tribe needs time to adjust to having new income and to learn how to use it to their advantage. "You can't expect members to change their way of life, deal with new money, and maintain the culture in a few years. Maybe in ten years, members will be able to adjust and integrate culture and money." "We need time in Indian Country to work with the casinos and income."

Conclusion

This case study has presented the local-level economic and social impacts of a Native American casino in the non-Native American host community and Native American reservation. In general, the impacts on Casino Town are those normally associated with the introduction of any large business that causes rapid growth in a small, rural community. Employment and income opportunities have increased locally but have been constrained by local conditions. These conditions are an underdeveloped local retail sector and lack of businesses that are complimentary to the tourist industry and accessible from the casino. Casino patrons' lack of interest in non-casino local businesses has served to further restrict the employment and income effects in Casino Town. Some local resources, such as public services and housing stock, have been pushed to capacity. And, local revenue generation capacity has increased through property taxes and hotel taxes.

Yet, several impacts described in the case study are unique to Native American gaming with respect to the rest of the gaming industry. The most obvious difference is the effect of the casino on Tribal-level development. The Tribe is attempting to initiate long needed social programming, infrastructure improvement, economic development plans on the reservation with the new income. First, the Tribe needs to build the necessary institutions to make these efforts successful. Some individuals are struggling with issues of long-term household budgeting, lack of appropriate jobs skills, youth motivation issues, and loss of culture. Many of the on-reservation issues seem to be linked to the long history of poverty rather than the casino itself.

The effects of payments in lieu of tax and donations from the Tribe on Casino Town also represent a unique aspect of Native American gaming. While these voluntary payments have been substantial, they have also been unpredictable. Therefore, Casino Town is unable to integrate these payments into community-wide planning or rely upon the casino as a stable source of funding to pay for costs caused by the introduction of the casino.

Unlike many other non-Native American communities with legalized small-scale gaming, gaming has not overwhelmed the local economy. Although the casino has had a wide variety of effects, it remains a single, isolated business in Casino Town. Casino Town has not developed a strip of casinos with outside ownership. This is a result of the Indian Gaming Regulatory Act which states that Native American casinos can only be located on reservation or federally held trust land. Casino Town cannot wield administrative control over the trust land on which the casino is located. This a result of Tribe's identity as a sovereign nation with administrative control over its lands. Because Casino Town does not have administrative privileges over the land on which the casino is located, residents perceive a loss of community control, even if it is limited to one business. But, Casino Town residents have maintained more control over local growth and development than gaming towns in South Dakota and Colorado where strips of gaming enterprises with outside interests have developed.

The final unique feature of Native American gaming is its ability to act as a bridge over the gap between the reservation and non-Native American community both economically and socially. Currently, the bridge in Casino Town might be characterized as an open draw bridge. There is currently no mechanism through which Casino Town and the Tribe can engage in dialogue or problem-solving together. Casino Town is not used to dealing with a Native American Tribal entity either in government-to-government dialogue or in a business setting. The Tribe may not be used to dealing with non-Native American governments at the municipality-level or with the non-Native American business world. Since neither community is fully aware of the other party's cultural or political perspective, each seems to make assumptions about the intentionality of the other party or misunderstand the other. The lack of communication and understanding between the town and Tribe is manifested in issues like the current controversy over the payment in lieu of taxes and in the concept of what is "fair." The communities have different opinions of the role that the casino should play in Casino Town and the responsibilities that it bears.

The issue of miscommunication between the Tribe and Casino Town illustrates that overcoming communication and cultural barriers is a vital aspect of achieving economic integration between the reservation and the rest of the local economy. Both communities are currently struggling independently to take advantage of the opportunities offered by the casino

and to minimize its negative effects. The lack of communication lines between the two communities is currently blocking their ability to pool resources, build and utilize problem-solving skills, and share experiences in order to address common problems. While the casino is currently a source of conflict between the Tribe and Casino Town, it has the potential to become the vehicle through which the two communities learn to work together and the reservation economy becomes integrated with the rest of the regional economy.

This research has also shown that neither the "social disruption" nor the "economic boosterism" theory characterizes the effects of Native American gaming at the case study site. The "social disruption" theory has been illustrated in Deadwood, South Dakota where gaming has overwhelmed the local community socially and economically. This is not the case for Casino Town which has not ceased to exist as a safe and functional community. Nor does this theory capture the realities of the reservation effects. While there are numerous social issues on the reservation, these are linked to historical factors rather than the casino itself.

On the other hand, economic benefits have not yet mitigated the costs of gaming in Casino Town. And, although the casino has acted as an economic boost for the reservation economy, it has not been served to amend all of the reservation problems. So, the "economic boosterism" theory does not seem to apply either.

Rather, the introduction of the casino seems to have caused an "economic and cultural shock" in both the Native American and non-Native American communities examined in this study. Neither community was completely prepared for the nature or magnitude of the impacts that they experienced. Casino Town changed from a small, unknown, rural town to a busy, 24 hour a day town with a large daily population influx, due primarily to the casino. The Tribe has also experienced a community-wide shock in the form of money infused into the reservation economy. Now, both communities are in the process of sorting out the positive and negative effects and emerging from their initial shock. Both communities recognize that the casino has had significant positive impacts in terms of income, employment, and business opportunities created. Yet, the introduction of the casino has also magnified some social and structural problems within each community and between the communities. Each community feels that it will not be able to reverse the negative effects in a short period of time. The Tribe is in a position of attempting to reverse some of the effects of a long history of poverty while maintaining cultural integrity. Casino Town is in the position of trying to encourage economic development locally with constrained resources. In addition, the casino has introduced the non-Native American community to Native American culture and society and vice versa. Both communities are faced with the task overcoming the cultural and communication barriers that exist between them.

BIBLIOGRAPHY

- Albanese, J. S. (1985). "The Effect of Gambling on Crime." *Federal Probation* 49(2): 39-44.
- Arland-Fye, B. and R. Pellin (1992). "Riverboat Gambling: Recreational Revenue?" *Parks and Recreation* 27(11): 64-66, 75.
- Borden, G. W., R. R. Fletcher, et al. (1996). "Economic, Resource, and Fiscal Impacts of Visitors in Washoe County, Nevada." *Journal of Travel Research* 34(3): 75-80.
- Buck, A. J., J. Deutsch, et al. (1991). "A Von Thünen Model of Crime, Casinos and Property Values in New Jersey." *Urban Studies* 28(5): 673-686.
- Carmichael, B. A., J. Donald M. Peppard, et al. (1996). "Megaresort on My Doorstep: Local Resident Attitude Toward Foxwoods Casino and Casino Gambling on Nearby Indian Reservation Land." *Journal of Travel Research* 34(3): 9-16.
- Center for Applied Research (1995). *Indian Reservation Gaming in New Mexico: An Analysis of Its Impact on the State Economy and Revenue System*. Denver, CO, The New Mexico Indian Gaming Association.
- Clapp, J. M., D. R. Heffley, et al. (1993). *The Economic Impacts of the Foxwoods High Stakes Bingo and Casino on New London County and Surrounding Areas*, Arthur W. Wright and Associates.
- Coopers and Lybrand (1995). *Analysis of the Economic Impact of the Oneida Nation's Presence in Oneida and Madison Counties*. Coopers and Lybrand.
- Cornell, S. and J. P. Kalt (1990). "Pathways from Poverty: Economic Development and Institution-Building on American Indian Reservations." *American Indian Culture and Research Journal* 14(1): 89-125.
- Cozzetto, D. A. (1995). "The Economic and Social Implications of Indian Gaming: The Case of Minnesota." *American Indian Culture and Research Journal* 19(1): 119-131.
- Crano, W. D. (1981). "Triangulation and Cross-Cultural Research." *Scientific Inquiry and the Social Sciences*. M. B. Brewer and B. E. Collins. San Francisco, CA and London, England, Jossey-Bass, Inc.
- Curran, D. and F. Scarpitti (1991). "Crime in Atlantic City: Do Casinos Make A Difference?" *Deviant Behavior: An Interdisciplinary Journal* 12: 431-449.

- Deller, S. C. (1990). *A Collection of Regional Economic Models for the State of Maine: An Application of the IMPLAN Modeling System*. Orono, ME, University of Maine.
- _____, N. R. Sumathi, et al. (1993). *Regional Economic Models for the State of Wisconsin: An Application of the Micro-IMPLAN Modeling System*. Madison, WI, University of Wisconsin-Madison /Extension.
- _____, and S. Chen (1994). *The Impacts of Native American Gaming on Rural Areas: The Case of Wisconsin*. Madison, WI, University of Wisconsin-Madison/Extension.
- Deloitte and Touche Realty Consulting Group (1993). *Economic Benefits of the Potawatomi Bingo*. Milwaukee, WI, Deloitte and Touche Realty Consulting Group.
- Eadington, W. R. (1996). "The Legalization of Casinos: Policy Objectives, Regulatory Alternatives, and Cost/Benefit Considerations." *Journal of Travel Research* 34(3): 3-8.
- Friedman, J., S. Hakim, et al. (1989). "Casino Gambling as a "Growth Pole" Strategy and its Effect on Crime." *Journal of Regional Science* 29(4): 615-623.
- Gabe, T., J. Kinsey, et al. (1996). "Local Economic Impact of Tribal Casinos: The Minnesota Case." *Journal of Travel Research* 34(3): 81-88.
- Goodman, R. (1994). *Legalized Gambling as a Strategy for Economic Development*. Northampton, MA, United States Gambling Study.
- Goodman, L. R. (1995). "Market Analysis of Reservation-Based Gaming: A North Dakota Case Study." *Economic Development Review* 13(4): 16-18.
- Krueger, Richard A. (1994). *Focus Groups: A Practical Guide for Applied Research*. 2nd edition. Thousand Oaks, CA. Sage Publications.
- Larsen, M. D. (1995). "Gaming Industry Development: A Comparison of States." *Economic Development Review* 13(4): 4-8.
- McCullough, A. M. (1994). "The Politics of Indian Gaming: Tribe/State Relations and American Federalism." *The Journal of Federalism* 24(Summer): 99-112.
- McGladrey and Pullen CPAs and Consultants (1993). *The Economic Impact of the Sycuan Gaming Center on East San Diego County*. San Diego, CA, McGladrey and Pullen CPAs and Consultants.
- Meyer-Arendt, K. J. (1995). "Casino Gaming in Mississippi; Location, Location, Location." *Economic Development Review* 13(4): 27-33.

- Minnesota Gaming Association and KPMG Peat Marwick (1992). *Economic Benefits of Tribal Gaming in Minnesota 1992*. Minneapolis, MN, Minnesota Gaming Association and KPMG Peat Marwick.
- Minnesota Planning (1993). *Minnesota Gambling 1993*. Minneapolis, MN, Minnesota Planning.
- Murray, J. M. (1993). *The Economic Benefits of American Indian Gaming Facilities in Wisconsin*, Wisconsin Gaming Association and University of Wisconsin-Cooperative Extension.
- _____. (n.d.). *The Economic Impact of American Indian Gaming on the Government and the State of Wisconsin*, Green Bay, WI, University of Wisconsin-Cooperative Extension.
- National Indian Gaming Association (1995). *Speaking the Truth About Indian Gaming*. Washington DC, National Indian Gaming Association.
- O'Hara, C. (1995). "The Impact of Gaming on a Tribal Economy and Economic Development Strategy: The White Mountain Apache Experience." *Economic Development Review* 13(4): 12-15.
- Rephann, Terence, Margaret Dalton, et al. (1996). "Casino Gambling as an Economic Development Strategy." Morgantown, WV, West Virginia University Regional Research Institute.
- Roehl, Wesley S. (1996). "Competition, Casino Spending, and Use of Casino Amenities." *Journal of Travel Research* 34(3): 57-62.
- Snipp, C. M. (1989). *American Indians: The First of This Land*. New York, NY, Russell Sage Foundation.
- Stokowski, P. A. (1993). "Undesirable Lag Effects in Tourist Destination Development: A Colorado Case Study." *Journal of Travel Research* 32(2): 35-41.
- _____. (1996). "Crime Patterns in Gaming Development in Rural Colorado." *Journal of Travel Research* 34(3): 63-69.
- Stubbles, R. (1990). "The Deadwood Tradition: Putting Gambling Before Planning in South Dakota." *Small Town*(Nov.-Dec.): 20-27.
- _____. (1992). "A Question of Gambling." *Parks and Recreation* 27(4): 61-64, 83.

- Sumathi, N.R., John Preissing, et al. (1994). *Casino Gaming in Northern Wisconsin*. Superior, WI. University of Wisconsin-Cooperative Extension..
- Teske, P. and B. Sur (1991). "Winners and Losers: Politics, Casino Gambling, and Development." *Policy Studies Review* 10(2/3): 130-137.
- Thompson, W., R. Gazel, et al. (1995). *The Impact of Native American Gaming in Wisconsin*. Milwaukee, The Wisconsin Policy Research Institute, Inc.
- _____. (1996). *The Social Costs of Gambling in Wisconsin*. Thiensville, WI, Wisconsin Policy Research Institute.
- United States Congress (1988). *Indian Gaming Regulatory Act*, 100th Congress, 17 October 1988, 25 USC 2701.
- United States Department of Commerce Bureau of the Census (1990). *1990 Census of Population and Housing*. Washington, D.C. Tape File 3A.
- University Associates - Capital and University Associates - Upper Peninsula (1994). *Economic Impact of Michigan's Indian Gaming Enterprises*. Lansing, MI and Wilson, MI, Michigan Indian Gaming Enterprises.
- Wagner, J. E., S. C. Deller, et al. (1992). "Estimating Economic Impacts Using Industry and Household Expenditures." *Journal of the Community Development Society* 23(2): 79-102.

APPENDIX 1:
CASINO PATRON SURVEY

1996 CASINO VISITOR SURVEY

Time: _____ Date: _____

1. What was the primary purpose of this trip to Casino Town?
Circle one number.

- | | |
|----------------------------|-------------------------|
| 1. Visit casino | 4. Passing through area |
| 2. Visit friends/relatives | 5. Local resident |
| 3. Vacation | 6. Other: _____ |

If you are a local resident, please go to question 3.

2a. On this trip, how many days do you expect to spend in the two County region? See map on back of survey. Enter the number.

_____ (number of days)

2b. If this is a multipurpose trip, how many days will you spend primarily at the Casino in Casino Town? [If this is not a multipurpose trip, go to question 3.] Enter the number.

_____ (number of days)

3. Including yourself, how many people are in your travel party? Enter the number.

_____ (number in travel party)

4. Are you on a tour bus? Circle one number.

1. Yes 2. No

5. How much did you personally (not including other members of your travel party) spend on gaming at the casino on this trip? Do not include winnings reinvested. Enter the amount.

\$ _____ (dollar amount)

6. Throughout this entire trip, how much does your travel party expect to spend total in the two counties including Casino Town)? How much will your travel party spend in Casino Town? Please see map on back of survey. Enter the amounts.

Two County Region

	(Not including Casino Town)	Casino Town
Lodging/camping	\$ _____	\$ _____
Restaurant/bar	\$ _____	\$ _____
Parking/car rental	\$ _____	\$ _____
Grocery/convenience store	\$ _____	\$ _____
Misc. retail (souvenirs, etc.)	\$ _____	\$ _____
Entertainment/admissions	\$ _____	\$ _____
Gas/auto repairs/oil/etc.	\$ _____	\$ _____
Tour bus fees	\$ _____	\$ _____
Other: _____	\$ _____	\$ _____

7. In the past 12 months, including this trip, how many times have you visited the Casino in Casino Town? Enter the number.

_____ (number of visits)

8. In the past 12 months, how many times did you visit casinos other than the Casino? Enter the number.

_____ (number of times)

9. What is the ZIP Code of your primary residence? Enter the number.

_____ (ZIP Code)

10. What is the distance, in miles, from your primary residence to the Casino in Casino Town? Enter the number.

_____ (number of miles)

11. What is your highest level of formal education? Circle one number.

- | | |
|--------------------------|----------------------|
| 1. Grade school | 5. Completed college |
| 2. Some high school | 6. Graduate work |
| 3. Completed high school | 7. Other: _____ |
| 4. Some college | |

13. What is your employment status? Circle one number.

- | | |
|-----------------------|-----------------|
| 1. Employed full-time | 5. Unemployed |
| 2. Employed part-time | 6. Retired |
| 3. Self-employed | 7. Student |
| 4. Homemaker | 8. Other: _____ |

14. What is your gender? Circle one number.

1. Male 2. Female

15. What is your age? Enter the number.

_____ (age)

16. How many people are in your household? Enter the number.

_____ (number)

17. What was your approximate annual household income from all sources, before taxes, in 1995? Circle one number.

- | | |
|------------------------|------------------------|
| 1. Less than \$20,000 | 4. \$40,000 - \$49,999 |
| 2. \$20,000 - \$29,999 | 5. \$50,000 - \$75,000 |
| 3. 30,000 - \$39,999 | 6. Over \$75,000 |

APPENDIX 2:
INPUT-OUTPUT RESULTS

Table A: Economic Impact Of Casino Wage, Non-Wage and Patron Expenditures

	<i>Final Demand (MMS)^a</i>	<i>TIO^b (MMS)</i>	<i>Emp Comp Income^c (MMS)</i>	<i>Property Income^d (MMS)</i>	<i>Total PoW Income^e (MMS)</i>	<i>Total Value Added^f (MMS)</i>	<i>Jobs</i>
Economic Impact Due to The casino's Regional Non-Wage Expenditures							
Direct	2.8024	2.8024	1.0779	0.6122	1.6902	2.0181	79
Indirect	0.0000	0.4216	0.1030	0.0772	0.1802	0.1986	6
Induced	1.8368	2.1568	0.6951	0.4605	1.1557	1.3147	51
Total	4.6391	5.3807	1.8761	1.1500	3.0261	3.5313	137
Economic Impact Due to Casino's Regional Wage Expenditures							
Direct	13.0562	13.0562	3.7859	2.6677	6.4536	7.4353	310
Indirect	0.0000	2.6427	0.6202	0.5091	1.1294	1.2348	40
Induced	7.5314	8.8436	2.8503	1.8883	4.7388	5.3905	211
Total	20.5876	24.5424	7.2564	5.0652	12.3216	14.0607	561
Economic Impact Due to Casino Patrons' Regional Expenditures							
Direct	1.1463	1.1463	0.4839	0.215	0.6989	0.8189	56
Indirect	0.0000	0.1787	0.0391	0.0307	0.0698	0.0765	2
Induced	1.2574	1.4765	0.4759	0.3153	0.7911	0.9000	35
Total	2.4036	2.8014	0.9989	0.5609	1.5598	1.7953	94
Total Economic Impact Due to Casino's Regional Wage, Non-Wage, and Patrons' Expenditures							
Direct	17.0049	17.0049	5.3477	3.4949	8.8427	10.2723	445
Indirect	0.0000	3.2430	0.7623	0.6170	1.3794	1.5099	49
Induced	10.6256	12.4769	4.0213	2.6641	6.6856	7.6052	298
Total	27.6303	32.7245	10.1314	6.7761	16.9075	19.3873	791

The individual non-wage, wage, and casino patron expenditure total impacts may not sum to the combined totals due to rounding errors.

^a Millions of dollars

^b Total Industry Output

^c Employee Compensation Income: the sum of wages paid to employees and profits made by local businesses

^d Business profit

^e Total Place of Work Income: The sum of Employee Compensation and Property Income

^f The two-county level equivalent of state-wide Gross Domestic Product

Table B: Industry Specific Breakdown Of Economic Impact Due To The Casino

<i>Industry</i>	<i>Final Demand (MMS)^a</i>	<i>Total Industry Output^b (MMS)</i>	<i>Employee Comp Income^c (MMS)</i>	<i>Property Income^d (MMS)</i>	<i>Total PoW Income^e (MMS)</i>	<i>Total Value Added^f (MMS)</i>	<i>Jobs</i>
Total Impact from Casino Wage, Non-Wage, and Patron Expenditures							
Ag, Forestry, and Fisheries	0.2555	0.6806	0.0860	0.1749	0.2608	0.2672	16
Mining	0.1957	0.2134	0.0143	0.1090	0.1232	0.1371	16
Construction	0.0000	1.3395	0.2851	0.2290	0.5139	0.5205	13
Manufacturing	3.1784	4.0869	0.7543	0.4260	1.1822	1.2199	38
Transportation & Utilities	2.0297	2.6878	0.6559	0.6348	1.2903	1.5025	29
Trade	6.6101	6.8540	3.1873	1.0473	4.2346	5.1116	280
F.I.R.E.	6.1573	6.9633	0.5938	2.4003	2.9939	4.1648	52
Services	8.3311	8.9330	3.8444	1.6543	5.4999	5.6551	321
Govt	0.8715	0.9646	0.7087	0.0981	0.8069	0.8071	27
Total	27.6293	32.7231	10.1298	6.7737	16.9057	19.3858	791

^a Millions of dollars

^b Total Industry Output

^c Employee Compensation Income: the sum of wages paid to employees and profits made by local businesses

^d Business profit

^e Total Place of Work Income: The sum of Employee Compensation and Property Income

^f The two-county level equivalent of state-wide Gross Domestic Product

APPENDIX 3:
HISTORICAL EMPLOYMENT TRENDS

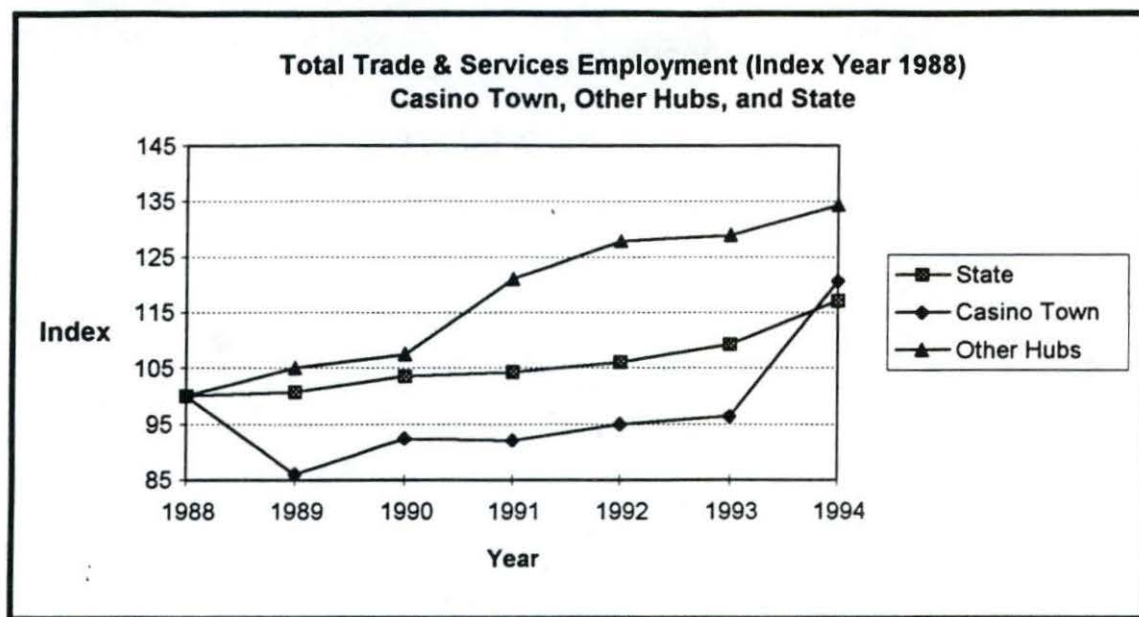


Figure 1

Table A. Trade & Service Employment for Casino Town, Other Hubs, and the State

	1988	1989	1990	1991	1992	1993	1994
Casino Town	245	211	227	226	233	236	296
Other Hubs	5,344	5,620	5,749	6,464	6,830	6,895	7,171
State	2,091,300	2,104,340	2,166,004	2,178,973	2,215,954	2,283,600	2,448,287

Table B. Trade & Service Employment for Casino Town, Other Hubs, and the State by Index Year 1988^a

	1988	1989	1990	1991	1992	1993	1994
Casino Town	100	86	93	92	95	96	121
Other Hubs	100	105	108	121	128	129	134
State	100	101	104	104	106	109	117

^a Because the employment levels for the state and individual communities are of such different magnitudes, it is difficult to compare the raw figures. A growth index was created so that the relative changes in state and community-level employment could be compared. The index entries indicate the change in employment for the state and communities relative to the base year of 1988. The following formula was used to build the index:

$$n = (a/a_{88}) \times 100 \quad \text{where } n \text{ is the index entry}$$

a is the actual employment (number of workers)

i is the year of the entry

a_{88} is the actual employment (number of workers) for 1988

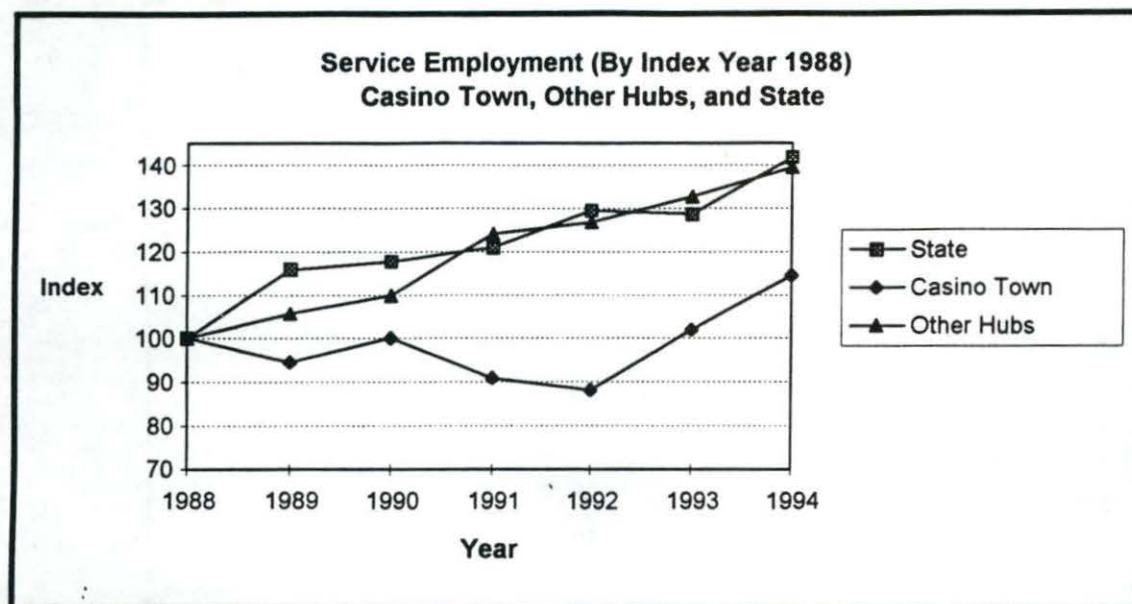


Figure 2

Table C. Service Employment for Casino Town, Other Hubs, and the State

	1988	1989	1990	1991	1992	1993	1994
Casino Town	148	140	148	135	131	151	169
Other Hubs	3,038	3,215	3,342	3,764	3,847	4,034	4,243
State	561,538	649,159	660,279	678,901	726,675	722,751	796,397

Table D. Service Employment for Casino Town, Other Hubs, and the State by Index Year 1988^a

	1988	1989	1990	1991	1992	1993	1994
Casino Town	100	95	100	91	89	102	114
Other Hubs	100	106	110	124	127	133	140
State	100	116	118	121	129	129	142

^a Because the employment levels for the state and individual communities are of such different magnitudes, it is difficult to compare the raw figures. A growth index was created so that the relative changes in state and community-level employment could be compared. The index entries indicate the change in employment for the state and communities relative to the base year of 1988. The following formula was used to build the index:

$$n = (a_i / a_{88}) \times 100 \quad \text{where } n \text{ is the index entry}$$

a is the actual employment (number of workers)
i is the year of the entry
a₈₈ is the actual employment (number of workers) for 1988

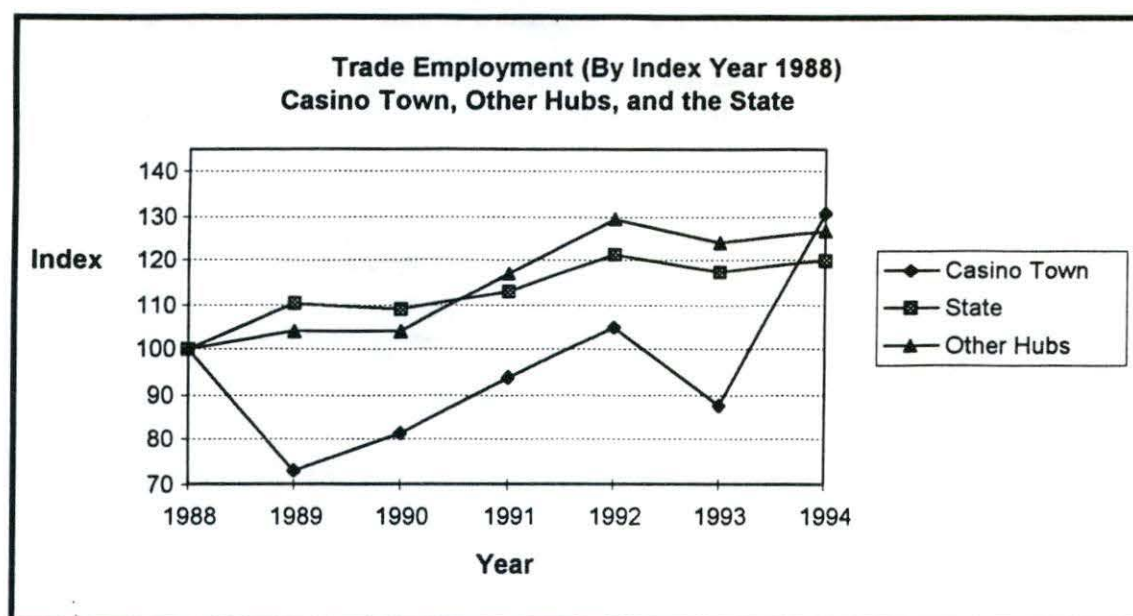


Figure 3

Table E. Trade Employment for Casino Town, Other Hubs, and the State

	1988	1989	1990	1991	1992	1993	1994
Casino Town	97	71	79	91	102	85	127
Other Hubs	2,306	2,405	2,407	2,700	2,983	2,861	2,928
State	354,583	392,155	386,592	401,129	430,632	416,752	426,775

Table F. Trade Employment for Casino Town, Other Hub^a, and the State by Index Year 1988^a

	1988	1989	1990	1991	1992	1993	1994
Casino Town	100	73	81	94	105	88	131
Other Hubs	100	104	104	117	129	124	127
State	100	111	109	113	121	118	120

^a Because the employment levels for the state and individual communities of are such different magnitudes, it is difficult to compare the raw figures. A growth index was created so that the relative changes in state and community-level employment could be compared. The index entries indicate the change in employment for the state and communities relative to the base year of 1988. The following formula was used to build the index:

$$n = (a/a_{88}) \times 100 \quad \text{where } n \text{ is the index entry}$$

a is the actual employment (number of workers)
 i is the year of the entry
 a_{88} is the actual employment (number of workers) for 1988

APPENDIX 4:

CASINO TOWN PUBLIC SERVICE COSTS AND LOCAL GOVERNMENT REVENUES

Public Service Costs

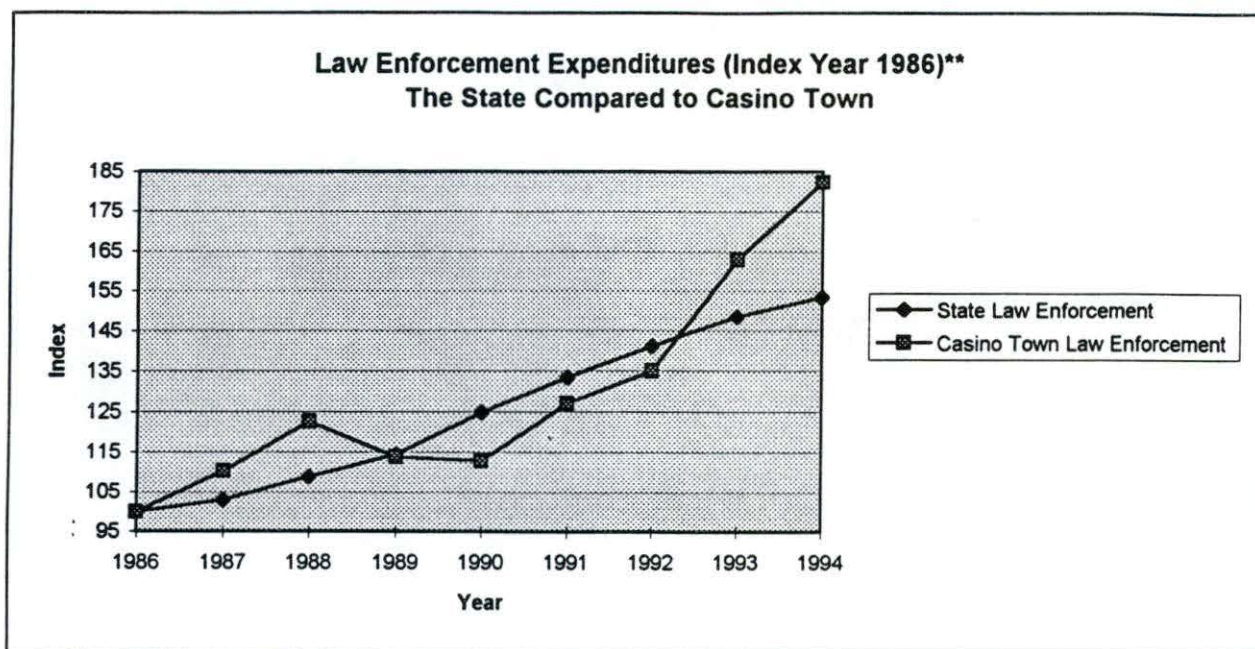


Figure 1

Table A: Law Enforcement Expenditures from 1986 to 1994 for the State and for Casino Town
(In thousands of dollars)

	1986	1987	1988	1989	1990	1991	1992	1993	1994
State	480218	494435	522854	549588	598957	640559	677660	712997	736949
Casino Town	42	46	51	48	47	53	56	68	76

Table B: Law Enforcement Expenditures from 1986 to 1994 for the State and for Casino Town
By Index Year 1986**

	1986	1987	1988	1989	1990	1991	1992	1993	1994
State	100	103.0	108.9	114.4	124.7	133.4	141.1	148.5	153.5
Casino Town	100	110.3	122.5	113.9	112.9	127.0	134.9	162.9	182.3

** Because the expenditure levels for the state and Casino Town are of such different magnitudes, it is difficult to compare the raw figures. A growth index was created so that the relative changes in state and Casino Town expenditures could be compared. The index entries indicate the change in expenditures for the state and Casino Town relative to the base year of 1986. The following formula was used to build the index:

$$n = (a_i / a_{86}) \times 100 \quad \text{where } n \text{ is the index entry}$$

a is the actual expenditure in thousands of dollars
i is the year of the entry
a₈₆ is the actual expenditure in thousands of dollars for 1986

Public Service Costs

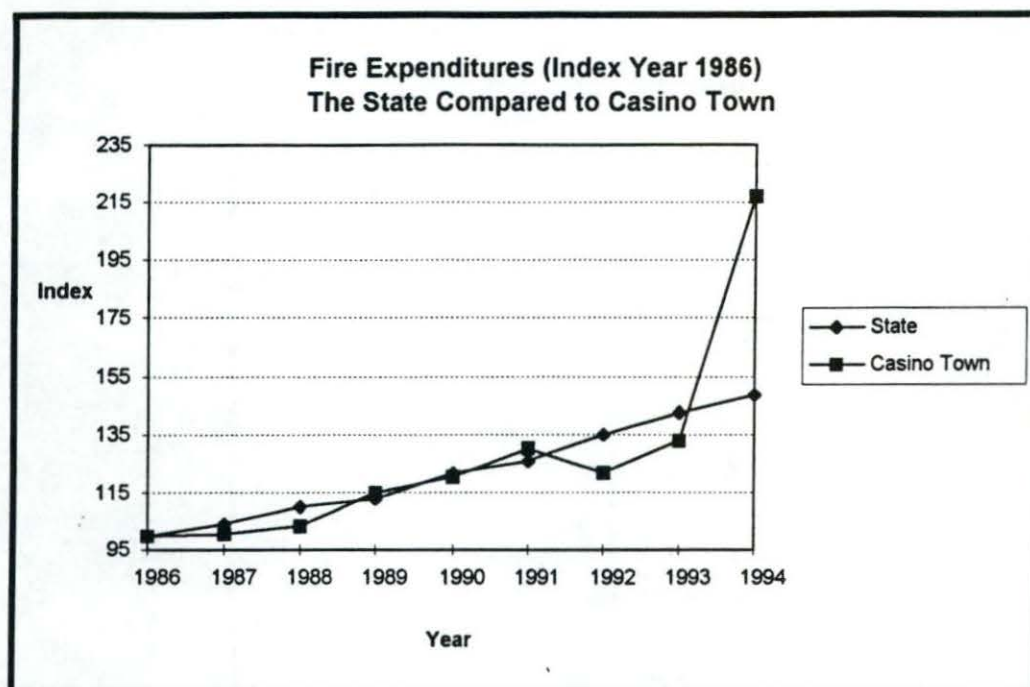


Figure 2

Table C: Fire Expenditures for the State and Casino Town (In thousands of dollars)

	1986	1987	1988	1989	1990	1991	1992	1993	1994
State	241532	250225	265621	273058	293625	304675	326292	343549	358309
Casino Town	31	31	32	36	37	40	38	41	67

Table D: Fire Expenditures for the State and Casino Town By Index Year 1986**

	1986	1987	1988	1989	1990	1991	1992	1993	1994
State	100	103.6	110.0	113.1	121.6	126.1	135.1	142.2	148.3
Casino Town	100	100.3	102.9	114.9	120.4	129.8	122.0	132.7	217.5

** Because the expenditure levels for the state and Casino Town are such different magnitudes, it is difficult to compare the raw figures. A growth index was created so that the relative changes in state and Casino Town expenditures could be compared. The index entries indicate the change in expenditures for the state and Casino Town relative to the base year of 1986. The following formula was used to build the index:

$$n = (a_i / a_{86}) \times 100 \quad \text{where } n \text{ is the index entry}$$

a is the actual expenditure in thousands of dollars

i is the year of the entry

a_{86} is the actual expenditure in thousands of dollars for 1986

Local Government Revenues

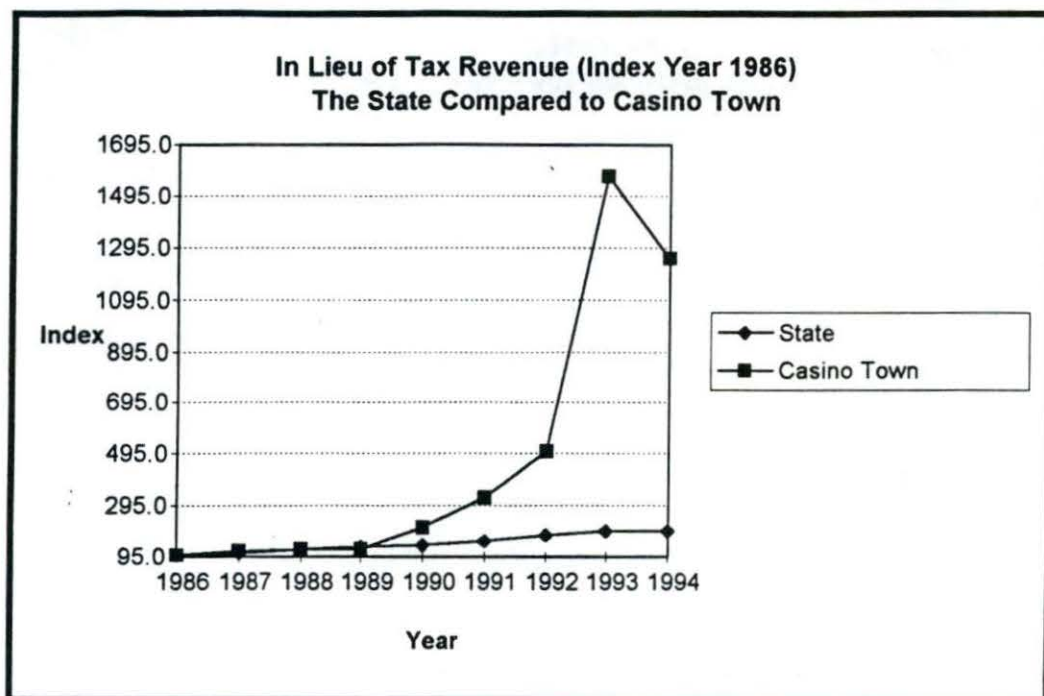


Figure 3

Table E: In Lieu of Tax Revenue for the State and Casino Town (In thousands of dollars)

	1986	1987	1988	1989	1990	1991	1992	1993	1994
State	31641	35245	38961	42123	45917	50507	56441	61087	62680
Casino Town	12	14	15	15	25	38	59	184	147

Table F: In Lieu of Tax Revenue for the State and Casino Town By Index Year 1986**

	1986	1987	1988	1989	1990	1991	1992	1993	1994
State	100.0	111.4	123.1	133.1	145.1	159.6	178.4	193.1	198.1
Casino Town	100.0	119.7	123.9	128.2	211.1	323.9	506.8	1573.5	1253.9

** Because the revenue levels for the state and Casino Town are such different magnitudes, it is difficult to compare the raw figures. A growth index was created so that the relative changes in state and Casino Town revenues could be compared. The index entries indicate the change in revenues for the state and Casino Town relative to the base year of 1986. The following formula was used to build the index:

$$n = (a_i / a_{86}) \times 100 \quad \text{where } n \text{ is the index entry}$$

a is the actual revenue in thousands of dollars
 i is the year of the entry
 a_{86} is the actual revenue in thousands of dollars for 1986

Local Government Revenues

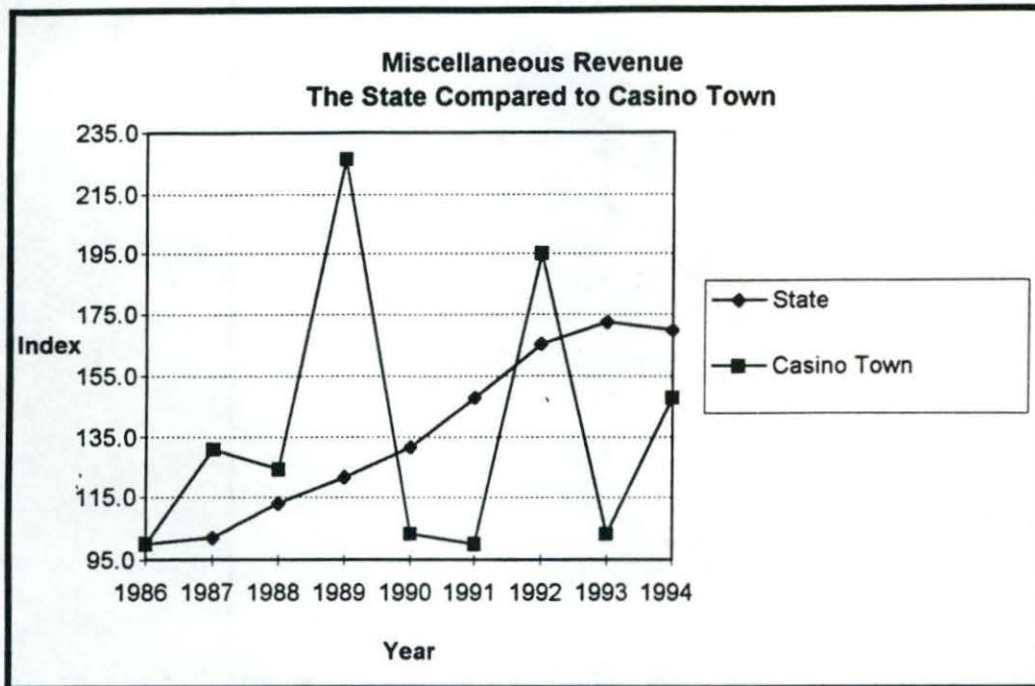


Figure 4

**Table G: Miscellaneous Revenues from 1986 to 1994 for the State and for Casino Town
(In thousands of dollars)**

	1986	1987	1988	1989	1990	1991	1992	1993	1994
State	2732254	2787407	3095089	3321747	3588053	4039616	4520537	4704154	4646642
Casino Town	406	530	506	920	420	407	793	420	601

Table H: Miscellaneous Revenues from 1986 to 1994 for the State and for Casino Town By Index Year 1986**

	1986	1987	1988	1989	1990	1991	1992	1993	1994
State	100.0	102.0	113.3	121.6	131.3	147.8	165.5	172.2	170.1
Casino Town	100	130.6	124.6	226.6	103.6	100.3	195.3	103.4	147.9

** Because the revenue levels for the state and Casino Town are of such different magnitudes, it is difficult to compare the raw figures. A growth index was created so that the relative changes in state and Casino Town revenues could be compared. The index entries indicate the change in revenues for the state and Casino Town relative to the base year of 1986. The following formula was used to build the index:

$$n = (a_i / a_{86}) \times 100 \quad \text{where } n \text{ is the index entry}$$

a_i is the actual revenue in thousands of dollars
 i is the year of the entry
 a_{86} is the actual revenue in thousands of dollars for 1986

Local Government Revenues

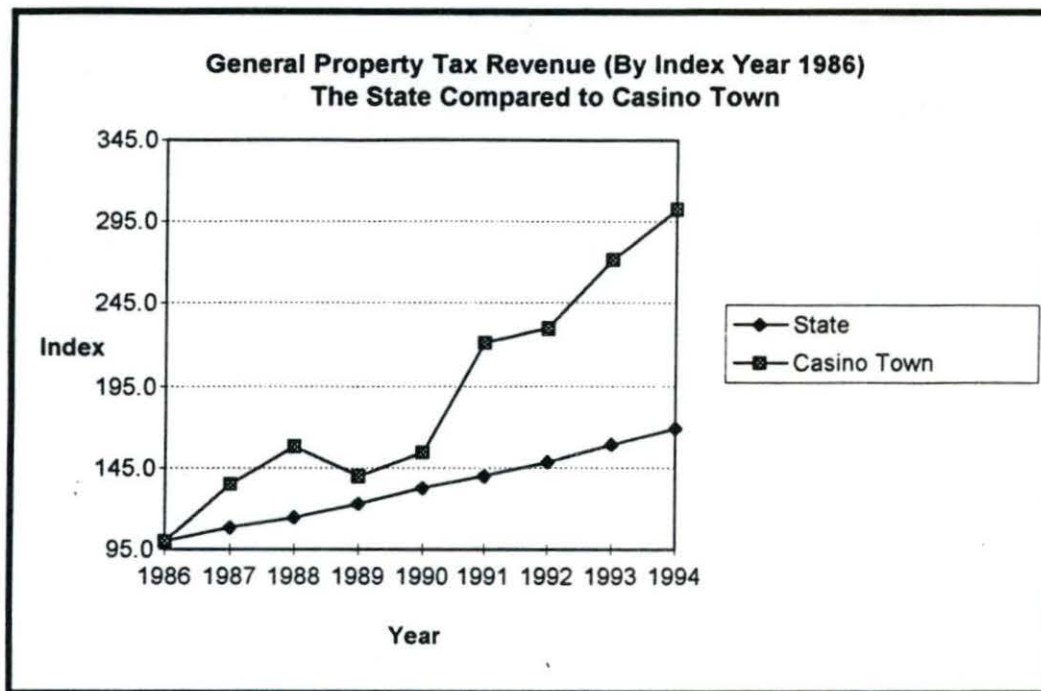


Figure 5

Table I: Property Tax Revenue for the State and Casino Town (In thousands of dollars)

	1986	1987	1988	1989	1990	1991	1992	1993	1994
State	1142010	1242076	1312752	1397302	1520867	1600054	1700473	1825512	1924456
Casino Town	69	93	109	97	107	152	159	188	208

Table J: Property Tax Revenue for the State and Casino Town By Index Year 1986**

	1986	1987	1988	1989	1990	1991	1992	1993	1994
State	100.0	108.8	115.0	122.4	133.2	140.1	148.9	159.9	168.5
Casino Town	100.0	135.6	157.8	140.2	154.9	220.9	230.2	272.7	302.3

** Because the revenue levels for the state and Casino Town are such different magnitudes, it is difficult to compare the raw figures. A growth index was created so that the relative changes in state and Casino Town revenues could be compared. The index entries indicate the change in revenues for the state and Casino Town relative to the base year of 1986. The following formula was used to build the index:

$$n = (a_i / a_{86}) \times 100 \quad \text{where } n \text{ is the index entry}$$

a is the actual revenue in thousands of dollars
 i is the year of the entry
 a_{86} is the actual revenue in thousands of dollars for 1986