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## Calhoun County Casino Baseline Study Committee: Recommended Indicators and Baseline Data Report

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***Calhoun County Casino Baseline Study Committee  
Recommended Indicators and Baseline Data Report***

Submitted to:

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## **I. Introduction**

This study was funded by the Calhoun County Casino Baseline Study Committee to construct a profile of the county's social and economic conditions in anticipation of the opening of the Firekeepers Casino. The study identifies appropriate and relevant baseline indicators and data sources which will enable county stakeholders to have a better understanding of the short- and long-term effects of the Firekeepers Casino on the Calhoun County economic and social environment. In addition, the report offers an economic impact assessment of the construction and operation of the Casino on Calhoun County. It is the Committee's intention to maintain and, if necessary, revise these indicators so that they continue to track future social and economic development stemming from the casino.

The W.E. Upjohn Institute for Employment Research was awarded a contract to assist the Committee in identifying indicators and in designing an ongoing tracking system for the data. The Institute's approach included a review of previous impact studies conducted of casinos (Appendix A), an economic impact analysis of the casino on the county, a comparable area analysis, and an historical analysis. In addition, the W.E. Upjohn Institute worked closely with the Calhoun County Casino Baseline Study Committee in both identifying areas of concern as well in identifying and reviewing possible indicators. The following summary identifies the indicators selected, the basis for selecting these indicators, the timeline for collecting and presenting the data now and in the future, and an initial summary of what the indicators suggest.

## **II. Economic Impact**

The proposed Nottawaseppi Huron Band of Potawatomi Indians casino in Calhoun County will have an economic impact on the region through two major activities: the construction of the casino facility and the day-to-day operation of the casino. The impact of the construction activities will, of course, be temporary, and occur only during the years that monies are being expended on supplies and contractors necessary to prepare the site and build the structure that will house the casino. The impact on the county of the day-to-day operations of the facility will be perpetual for the life of the casino and include numerous direct employment positions, as well as purchases and interactions with other suppliers in the region.

This report presents the economic impact of two possible scenarios, a preferred (or high) level of casino development and a reduced level of development. All figures refer only to the estimated economic impact on Calhoun County.

The inputs used to perform this analysis are summarized in Table 1. All information for conducting this economic impact analysis was taken from the data included in the assessment report for the project.<sup>1</sup> The Upjohn Institute cannot provide assessment as to the reliability of cost and employment estimates used as inputs into our model. Estimates

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<sup>1</sup> PBS&J. *Final environmental impact statement for the proposed Nottawaseppi Huron band of Potawatomi Indians fee-to-trust transfer and casino Calhoun County, Michigan.* June 2006.

of employment impact, personal income, and gross domestic product were produced using a custom economic model from Regional Economic Models, Inc. (REMI).

**Casino Activity Assumptions**

Construction of the casino has already begun and is expected to continue until the spring of 2009. The casino is expected to open for business in June 2009 and the employment level is assumed to remain constant into the future once the facility is fully operational. Under the preferred development assumption, construction of the facility is estimated at \$57.6 million in 2004 dollars and the expected level of employment is 1,227 workers. Under the reduced development scenario, construction is estimated to cost \$27.6 million (in 2004 dollars) and the expected full employment level is 960 workers.

**Table 1**  
**Summary of Proposed Casino Activity**

Impact Type	Development Level	
	Preferred	Reduced
<b>Construction Phase Impact</b>		
Total building cost (in 2004 dollars)	\$54.0	\$24.0
Water & sewer line construction (\$2004)	\$3.6	\$3.6
<b>Total construction phase cost</b>	<b>\$57.6</b>	<b>\$27.6</b>
<b>Employment Level (perpetual)</b>		
Casino Gaming Activities	476	274
Food & Beverage	462	442
Mgmt, security, HR	134	125
Marketing	42	28
Maint, facilities	113	91
<b>Total</b>	<b>1,227</b>	<b>960</b>

**Economic Impact: Preferred Development Scenario**

Under the developers’ preferred development scenario, construction of the casino will generate approximately 325 jobs in Calhoun County during each year of building activity. This will generate personal income of \$10.7 and \$11.8 million, respectively, during the first and second year. Most of these jobs will be in the construction industry, however, the activity will also support a number of jobs in retail and other sectors due to spending at other businesses in the county. A summary of the economic impact of facility construction is shown in Table 2.

Once fully operational, the casino is expected to generate 1,470 jobs and annual personal income of \$25 million in Calhoun County. Most of these jobs, 1,227, will be in the form of positions directly employed at the casino, such as gaming operators, managers, and maintenance. An additional 243 jobs will be supported elsewhere in the community

through local casino suppliers and the expenditures of casino employees in the local community. In total, the casino is expected to boost Calhoun County's gross regional product<sup>2</sup> by \$92.2 million each year, which represents a 2.0 percent increase over the 2009 total.

**Table 2**  
**Impact of Casino Facility Construction**

One-time Construction Activity Costs	Total (millions, in 2004 \$)	Inflation Adjusted Est.	
		2007 (millions \$)	2008 (millions \$)
Casino construction	\$54.0	\$28.90	\$29.60
Sewer and water line construction	\$3.6	\$1.93	\$1.97
<b>Total direct construction spending</b>	<b>\$57.6</b>	<b>\$30.8</b>	<b>\$31.6</b>
<b>Economic Impact</b>			
		<b>2007</b>	<b>2008</b>
Total personal income (nominal millions \$)		\$10.7	\$11.8
Total employment		325	322
Construction sector employment		238	233
Retail sector employment		31	33
Other sector employment		56	56

Note: Inflation adjustment uses same 1.023 factor used in the PBS&J report.

**Table 3**  
**Economic Impact of Casino Operation**

<b>Annual Employment in Calhoun County</b>	
Total	1,470
Direct (at casino)	1,227
Indirect and induced	243
Employment multiplier	1.2
<b>Financial Impact (mil.\$, 2009)</b>	
Personal income	\$25.0
Gross regional product	\$92.2

<sup>2</sup> Gross regional product is essentially a region's share of gross domestic product. It is a measure of total regional economic activity.

**Economic Impact: Reduced Development Scenario**

Under the developers’ reduced development scenario, construction of the casino will generate approximately 155 jobs in Calhoun County during each year of building activity. This will generate personal income of \$5.1 and \$5.6 million, respectively, during the first and second year. Most of these jobs will be in the construction industry, however, the activity will also support a number of jobs in retail and other sectors due to spending at other businesses in the county. A summary of the economic impact of facility construction is shown in Table 4.

**Table 4  
Impact of Casino Facility Construction**

One-time Construction Activity Costs	Total (millions, in 2004 \$)	Inflation Adjusted Est.	
		2007 (millions \$)	2008 (millions \$)
Casino construction	\$24.0	\$12.90	\$13.10
Sewer and water line construction	\$3.6	\$1.93	\$1.97
Total direct construction spending	\$27.6	\$14.8	\$15.1
<b>Economic Impact</b>			
		<b>2007</b>	<b>2008</b>
Total personal income (nominal millions \$)		\$5.1	\$5.6
Total employment		155	154
Construction sector employment		114	111
Retail sector employment		15	15
Other sector employment		26	28

Note: Inflation adjustment uses same 1.023 factor used in the PBS&J report.

Once fully operational, the casino is expected to generate 1,151 jobs and annual personal income of \$19.6 million in Calhoun County. Most of these jobs, 960, will be in the form of positions directly employed at the casino, such as gaming operators, managers, and maintenance. An additional 191 jobs will be supported elsewhere in the community through local casino suppliers and the expenditures of casino employees in the local community. In total, the casino is expected to boost Calhoun County’s gross regional product by \$72.2 million each year, which represents a 1.6 percent increase over the 2009 total.

**Table 5**  
**Economic Impact**  
**of Casino Operation**

<b>Annual Employment in Calhoun County</b>	
Total	1,151
Direct (at casino)	960
Indirect and induced	191
Employment multiplier	1.2
<b>Financial Impact (mil.\$, 2009)</b>	
Personal income	\$19.6
Gross regional product	\$72.2

### **Assumptions of the Analysis**

This economic impact analysis relies on several assumptions that are necessary as a result of incomplete or unknowable information regarding the Calhoun County casino development. If changes are made to these assumptions, or if the nature of the final development varies significantly from the proposal<sup>3</sup>, the true economic impact of the resulting activity could end up being significantly different from the estimates presented in this report. These key assumptions include the following:

- The casino opens at full employment strength, on schedule, in 2009. The estimates presented in Table 3 and Table 5 represents the ongoing, annual, economic impact expected to occur in each development scenario. In reality, many projects take longer than expected to reach their full employment levels, or ultimately reach a long-term employment level that is higher or lower than initially anticipated, due to changes in the business climate, technology, and worker availability.
- The occupational mix of the “amusement, gambling, and recreation” industry is similar to that found in the casino. The types of workers necessary to operate a casino represent a unique mix of occupations and supplier linkages that may not be well represented in our model. This analysis is forced to assume that the casino behaves similarly to the average for the industry in terms of supplier linkages and occupational mix.
- Jobs at the casino pay a wage that is inline with the average wage in the “amusement, gambling, and recreation” industry in Calhoun County. In 2008, the average wage used in the REMI model for this sector was just over \$17,000 per

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<sup>3</sup> See footnote 1.

- year. Although this may seem low, it reflects the fact that the industry as a whole tends to have many low-skill positions and part-time workers. If the actual average wage the new casino pays to workers ends up being significantly higher or lower than the average wage used in our model, it will have an effect on the indirect employment levels and overall personal income generated by the project.
- The sales of the casino are derived primarily from monies that either originate outside the county or from local residents who otherwise would have spent their entertainment dollars outside the county. In other words, our model makes the assumption that the casino is an export business—one that does not simply compete with other local businesses for the disposable income of local residents. If the casino is unable to draw a significant portion of its revenue from individuals who currently reside outside the county, there will end up being a “displacement effect” in the form of job and income losses from other local firms such as restaurants, theaters, or entertainment venues that formerly received money that ends up being spent at the casino. Although consumers may still benefit if they prefer the entertainment offered by the casino, the net economic impact will be reduced by business reductions elsewhere in the county.

### **III. Indicator Selection**

Over a period of two meetings, the Casino Baseline Study Committee identified 18 indicators for tracking the potential social and economic impacts of the Casino. The Committee adopted the following three premises early in their work.

- **Less is more.** The Committee did not want to flood the study with an abundance of indicators and lose the picture painted by the data. Their interest was to have focus with the indicators staying closely related to casino activity impacts.
- **Select indicators across metropolitan areas that are highly sensitive to changes in the community social conditions or environment.** Since the purpose of the study is to identify any changes or trends as a result of the casino, variables within indicator areas were selected that were the most sensitive to fluctuation (e.g. child abuse complaints versus complaints assigned to a caseworker for action). In addition, the use of comparison metro areas (Jackson and Muskegon Counties) makes it possible to identify changes in the indicators that are above their general movement that are felt across all metro areas due to changes in the business cycle.
- **The indicators and associated data were selected to reveal any possible trends rather than any causal relationship between the casino and the indicators.** The Committee emphasized that positive or negative trends within any of these indicators are the result of multiple factors, and they recognized that the casino alone would not cause movement in the rates or outcomes within the data.



#### **IV. Selected Social and Economic Indicators**

The chosen indicators and their areas of classification include the following:

##### **Family Impact**

Divorce Rates  
Child Abuse and Neglect Complaints  
Domestic Violence Reports to Law Enforcement  
Adult Protective Services Referrals  
Free and Reduced Lunch Rates of Participation  
School Attendance Rates

##### **Financial Impact**

2-1-1 Financial Assistance Information Request Calls  
Personal Bankruptcy Filings  
Calhoun County Senior Millage Financial Services Assistance Requests

##### **Crime Offenses**

Larceny  
Fraud  
Embezzlement  
DUI (Alcohol and Narcotics)  
Disorderly Conduct  
Emmett Charter Township Motor Vehicle Thefts

##### **Economic Opportunity**

Unemployment Rate  
Employment Growth Rate  
Real Property County Equalized Values and Emmett Township Property Values

Again, these indicators were identified for their usefulness in monitoring the impact of the Firekeepers Casino on Calhoun County's residents. They have been selected based on a review of previously completed impact studies of other rural casino locations across the U.S. (see Appendix A) and on conversations with local governmental, non-profit, and business stakeholders.

In identifying these indicators, focus rested on four areas of concern where the potential impacts of the casino are believed to be most significant.

#### **Family and Children**

Six indicators were selected to track the casino's impact on the family dynamic. These indicators include divorce rates, domestic violence reports to law enforcement, and reported calls for child and adult protective services interventions. Excessive gambling could impact marital conditions and cause household stress as reflected in rates of divorce, domestic violence, and in interactions with children and other

dependent family members. Reports of child abuse and neglect and referrals for adult protective services to the Department of Human Services were chosen as indicators of instability in the household. Note that these report rates were chosen over assignment rates (cases determined to warrant further review by a caseworker) because the rate of reports was determined to be a more reflective indicator of when something is amiss in the family interactions and dynamics. It is recognized that selecting this higher tier of activity (initial complaints over complaints assigned to a caseworker) might include some duplicate counts and/or erroneous complaints, but the possibility of over counting should be similarly present across all counties. Additionally, this approach fits the Committee's second premise of selecting indicators that are most sensitive to environmental conditions.

The remaining two indicators reflect children's performance in the county schools and include school attendance rates and percent of children taking free and reduced lunch. These indicators were chosen to monitor the potential harm on children if unhealthy gambling behavior and/or addictive behaviors impact parenting. The rationale is that unhealthy gambling behavior impairs parenting which could result in school problems for their children, (e.g., ability of parents to get children to school consistently and financial problems leading to eligibility for free and reduced school lunch programs).

**Financial Impact**

The potential harm excessive gambling can inflict on the financial stability of families and individuals may be revealed in the number of calls for financial assistance information requests at the county 2-1-1 call centers, fluctuations in personal bankruptcy filings, and variations in requests for Calhoun County Senior Millage financial services.

**Crime Offenses**

The potential financial instability from excessive gambling may impact certain crime activity related to larceny<sup>4</sup>, fraud, embezzlement, alcohol and narcotic DUI offenses, and disorderly conduct. Theft of motor vehicles will also be tracked in Emmett Charter Township due to the physical proximity to the casino.

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<sup>4</sup> Includes pocket-picking, purse snatching, theft from buildings, theft from coin operated machinery, theft from motor vehicles, and other larceny activities.

**Economic Opportunity** The casino could provide additional employment opportunities for county residents. Therefore, we will also monitor trends in unemployment rates, employment growth rates, and real property equalized values in the county and in Emmett Township. In addition, we will track changes in property values in Emmett Township as it is likely that the casino could generate increased spin off commercial development.

In studies such as this one, it is too easy to concentrate on a casino's potential negative impacts on the surrounding general community. It is important to note that the casino will generate employment opportunities for area residents, while its revenues can provide assistance to members of the Nottawaseppi Huron Band of Potawatomi Indians. We recommend that sufficient space be held open to house indicators that monitor the impact of the casino-supported programs once they are enacted.

## **V. Comparison County Approach**

The indicators noted above will be tracked on an annual basis, not only for Calhoun County, but also for two comparison counties that do not have a casino in their geographic region. Muskegon and Jackson counties were selected as comparison counties given their similarities to Calhoun. Both counties are similar in population size, as well as in social and economic characteristics. It is important to note that, as of this writing, discussions are underway in Muskegon County regarding the development of a casino. It is unknown if this effort will come to fruition, but the discussion will be monitored as it relates to this study.

As shown in the table below, the Battle Creek MSA (Calhoun County) is smaller than the other single-county MSAs in terms of population; however, it shares many common characteristics with the two other counties. First, the age profile of the three metro areas is very similar as is their racial profile. The education achievement levels are also comparable. Additionally, all three have strong manufacturing sectors and similar sized education and health sectors.

Still, the counties do maintain their differences, According to the U.S. Census Bureau, Battle Creek's and Jackson's unemployment rates in 2006 are well below that of Muskegon's.<sup>5</sup> In addition, Muskegon residents, on average, have lower incomes.

Finally, all three share two important commonalities. First, none of them currently house a casino. Second, they are all in Michigan and thus share the same statewide fiscal and economic environment.

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<sup>5</sup> The Census's estimate of the counties' unemployment rates differ from the unemployment rates estimates calculated by the Bureau of Labor Statistics. This is strikingly true for Muskegon where the Census estimates the county's 2006 unemployment rate to have hit 15.3 percent compared to the BLS estimate of 6.9 percent. The BLS estimates are used in this report's indicators.

Table 6

**Social and Economic Characteristics**

<b>DEMOGRAPHICS</b>	<b>Calhoun</b>	<b>Jackson</b>	<b>Muskegon</b>
<b>Total population</b>	<b>137,991</b>	<b>163,851</b>	<b>175,231</b>
Median age (years)	37.8	37.3	36.8
Under 18 years	24.7%	24.2%	25.3%
Between 18 and 65 yrs	61.6%	63.5%	62.3%
65 years and over	13.8%	12.3%	12.4%
Hispanic or Latino (of any race)	3.6%	2.6%	4.1%
White alone	81.9%	86.7%	79.1%
Black or African American alone	10.3%	8.0%	14.1%
American Indian and Alaska Native alone	0.5%	0.5%	0.5%
Asian alone	1.6%	0.6%	0.5%
<b>EMPLOYMENT STATUS</b>			
<b>Population 16 years and over</b>	<b>107,928</b>	<b>129,482</b>	<b>136,961</b>
Unemployment rate	8.5%	9.0%	15.3%
<b>OCCUPATION</b>			
Management, professional, and related occupations	28.4%	27.7%	27.8%
Production, transportation, and material moving occupations	24.1%	17.6%	23.6%
<b>INDUSTRY</b>			
Manufacturing	25.6%	18.5%	27.0%
Retail trade	12.0%	10.6%	12.5%
Finance, Insurance, Real Estate	4.9%	6.3%	4.4%
Professional, scientific, and management	5.9%	7.4%	4.7%
Educational services, and health care	20.9%	21.7%	23.0%
Arts, entertainment, and recreation	7.0%	7.4%	7.1%
<b>INCOME AND BENEFITS (IN 2006 INFLATION-ADJUSTED DOLLARS)</b>			
<b>Total households</b>	<b>53,762</b>	<b>60,543</b>	<b>65,635</b>
Less than 15,000	18.0%	15.7%	16.8%
\$15,000 to \$34,999	24.0%	24.5%	25.0%
\$35,000 to \$99,000	46.1%	48.1%	50.0%
\$100,000 or more	12.0%	11.8%	8.2%
Per capita income (dollars)	21,644	21,010	18,720
<b>EDUCATIONAL ATTAINMENT</b>			
<b>Population 25 years and over</b>	<b>91,717</b>	<b>109,373</b>	<b>113,777</b>
Less than 9th grade	4.0%	2.8%	3.5%
9th to 12th grade, no diploma	11.4%	10.3%	9.2%
Percent high school graduate or higher	84.7%	86.8%	87.3%
Percent bachelor's degree or higher	19.1%	16.4%	16.5%

Source: 2006 American Community Survey.

Saginaw and Bay City MSAs were also considered as a possible comparison counties. Both areas have some social and demographic similarities, and neither has a casino. However, Saginaw was ruled out due to the county's larger population size and mitigating factors, such as its location on the east side of Michigan and proximity to the declining auto manufacturing industry. The Bay City MSA is very similar to Calhoun County in population, as well as in economic and social conditions. Unfortunately, the Bureau of Labor Statistics (BLS) has discontinued its publication of employment statistics for Bay County, which limits indicator availability.

Although the indicators selected are primarily a yearly county-wide snapshot, two indicators were added which focus specifically on Emmett Charter Township, since it is the jurisdiction where the casino will be located. Motor vehicle theft and real property

values will be highlighted for the township given the proximity of the casino and the documented change which could occur within its borders.

In addition, the indicator related to seniors is only provided for Calhoun County and not the comparison counties since the specialized senior millage funding is not generated in the other two counties.

A final factor involved with indicator selection was the availability and accuracy of data for the indicator. For instance, the Committee was interested in tracking utility payment delinquency rates as a measure of family distress and household financial instability. A review of utilities in the three counties showed that there are three electrical service providers, four gas providers, one propane provider, and numerous water providers. Inquiries with the electrical and gas utilities providing a majority of the services revealed both an unwillingness and inability to meet our request for delinquency payment rates. As a result, this indicator was not included in the study. Another area of interest for tracking was referrals for gambling-related counseling services. Given the vast and fragmented array of counseling services and the corresponding array of payment for services, the data for this variable became essentially unattainable. Home foreclosure was also considered for use as an indicator, but again, a central source for data does not exist and the ongoing turmoil in the mortgage industry ruled this indicator out for inclusion. A further discussion of indicators not selected for use in the study can be found in Appendix B.

## **VI. Timeline**

The time period for data collection is contingent upon construction progress and the final opening date of the Firekeepers Casino. Construction has begun with the casino opening planned for June 2009. Given this timetable, baseline data will be collected for 2005-2008. For this initial report, data is largely available for 2005-2007, although some of the 2007 data will not be available until after August. Appendix C includes a timeline for data availability for each indicator. As noted in the chart, some data is available shortly after the close of the calendar year, and other data is not available for nine months into the new year.

In order to accommodate the anomalies in data for the construction/opening year, impact data review shall not occur until the 2010 calendar year data are available. Given that the literature suggests that the impact from a casino's opening will occur during the first one-to-three years after opening before leveling off, it is recommended that the period of review shall continue for five years following the opening of the casino.

## **VII. Baseline Data Summary**

The following is a brief description of the historical trends in the social and economic indicators for Calhoun County and the comparison counties of Jackson and Muskegon.

## Family Impact

- Calhoun and Muskegon County divorce rates increased slightly in 2006 while Jackson County rates decreased considerably over the three-year period.

Table 7

<b>Divorce Rates by County and Calendar Year per 1,000 population</b>						
<b>County</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Calhoun	8.9	9.2	8.8			
Jackson	9.2	8.3	8.3			
Muskegon	8.4	9.1	8.5			

Rates are the number of persons married which ended in divorce or annulment per 1,000 population

Source: Michigan Department of Community Health Vital Statistics

- The number of Adult Protective Services referrals is much higher in Calhoun County when compared to the other two counties. The level of referrals has remained fairly constant in Calhoun and Jackson Counties while Muskegon County has experienced a decreased level of referrals over the three-year period.

Table 8

<b>Number of Adult Protective Services Referrals Received by County per 10,000 population</b>						
	<b>FY 2005</b>	<b>FY2006</b>	<b>FY2007</b>	<b>FY2008</b>	<b>FY2009</b>	<b>FY2010</b>
<b>Calhoun</b>	20	23	22			
<b>Jackson</b>	12	11	11			
<b>Muskegon</b>	6	3	3			

Source: APS data are taken from the WebI, ASCAP Universe.

- With only two years of reporting available thus far for Child Protective Services, any trends or comparisons are not relevant.

Table 9

<b>Number of Child Protective Services Complaints Received by County</b> per 10,000 population						
	<b>FY 2005</b>	<b>FY2006</b>	<b>FY2007*</b>	<b>FY2008</b>	<b>FY2009</b>	<b>FY2010</b>
<b>Calhoun</b>	222	210				
<b>Jackson</b>	231	232				
<b>Muskegon</b>	194	183				

Numbers reflect complaints rather than the number of complaints that are assigned to a caseworker for investigation and services.

Source: PS004 Reports. FY 07 data are only partial due to the revised information technology reporting and therefore omitted.

- Calls to law enforcement agencies for domestic violence offenses increased considerably in all three counties from 2004-2006 with Calhoun and Jackson Counties having a significant larger number of calls overall than Muskegon County.

Table 10

<b>Domestic Violence Reports to Law Enforcement</b> <b>by Calendar Year</b> per 10,000 population							
	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>Calhoun</b>	94	149	147				
<b>Jackson</b>	86	148	148				
<b>Muskegon</b>	68	109	99				

Source: Michigan State Police Central Records Division, Michigan Uniform Crime Report [http://www.michigan.gov/documents/msp/DomesticViolence\\_176016\\_7.pdf](http://www.michigan.gov/documents/msp/DomesticViolence_176016_7.pdf)

Free and Reduced Priced Lunch participation rates have increased slightly over the last three years in Calhoun County while remaining more stable in the other two counties.

Table 11

County-Wide Free and Reduced Lunch Participation Rates by Academic Year						
Percent of all students						
	04/05	05/06	06/07	07/08	08/09	09/10
<b>Calhoun</b>	39.7	41.0	44.3			
<b>Jackson</b>	39.0	39.7	40.1			
<b>Muskegon</b>	49.0	51.1	49.2			

\*2007/08 data available through MDOE in August

Source: [http://www.michigan.gov/cepi/0,1607,7-113-21423\\_30451\\_36965---,00.html](http://www.michigan.gov/cepi/0,1607,7-113-21423_30451_36965---,00.html)

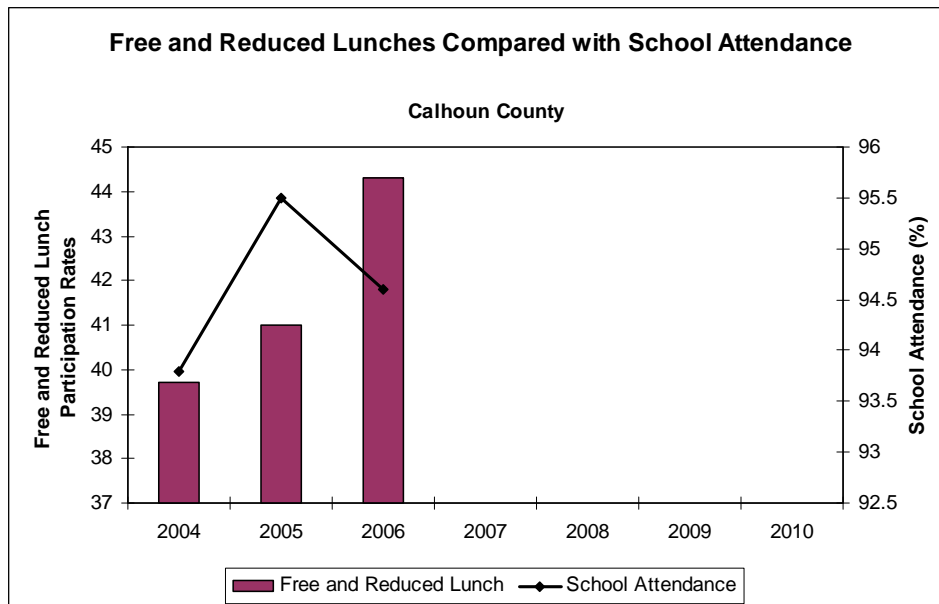
- School attendance rates remain constant in all three counties.

Table 12

County-Wide School Attendance Rates by Academic Year						
	04/05	05/06	06/07	07/08	08/09	09/10
<b>Calhoun</b>	93.8	95.5	94.6			
<b>Jackson</b>	95.2	95.0	95.1			
<b>Muskegon</b>	95.3	95.7	95.8			

\*2007/08 data available through MDOE in August

Source: Michigan Department of Education, Office of Educational Assessment and Accountability





### Financial Impact

- The total call volume for 2-1-1 financial service assistance information is greater in Calhoun County than the other two counties. All three counties show increases in total calls for this purpose over the three-year period.

Table 13

<b>2-1-1 Financial Service Information Requests by County</b>						
	<b>FY 2005</b>	<b>FY2006</b>	<b>FY2007</b>	<b>FY2008</b>	<b>FY2009</b>	<b>FY2010</b>
<b>Calhoun</b>	10,138	9,485	11,044			
<b>Jackson</b>	3,935	3,944	4,457			
<b>Muskegon</b>	*	7,350	8,122			

\* Muskegon County opened their call center in August 2005. During this initial five month period, 2,455 calls for financial services information were received

Source: 2-1-1 Call Center County specific call reports

- Personal bankruptcy filings include only two years of data and, therefore, trends are not relevant. Still, the total numbers of filings are higher in Jackson County.

Table 14

<b>Non-Business Bankruptcy Filings by Calendar Year</b>					
	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>Calhoun</b>	442	497			
<b>Jackson</b>	609	842			
<b>Muskegon</b>	417	624			

CY 2005 data are not included due to bankruptcy law revisions in October, 2005

Source: Table F-5A U.S. Bankruptcy Court PACER Service Center [https://pacer.uspci.uscourts.gov/cgi-bin/statistics.pl?puid=01215526237&rpt\\_type=f5a](https://pacer.uspci.uscourts.gov/cgi-bin/statistics.pl?puid=01215526237&rpt_type=f5a)

- Calhoun County Senior Services Senior Millage data shows some increase in requests over the three-year period.

Table 15

<b>Calhoun County Senior Millage Funded Financial Services Assistance Requests by Calendar Year</b>						
	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Money Management	42	53	46			
Home Heating Assistance	NA	226	384			

Calhoun County Senior Services Millage Annual Report

## Crime Offenses

- Larceny, fraud and disorderly conduct all decreased slightly in Calhoun County over the three years. The number of embezzlement cases remained stable while DUI offenses increased over this time period in Calhoun County.
- In Emmett Township, the trends are quite variable. Larceny offenses decreased while disorderly conduct and DUI's increased. Embezzlement cases dipped slightly in 2005 and then increased, while fraud cases spiked in 2005 and then decreased significantly in 2006. The number of motor vehicle thefts in Emmett Township remained relatively consistent over this time.
- In Muskegon County, all crime offense categories under consideration increased to some degree other than embezzlement which remained constant.
- In Jackson County, the incidence of larceny, fraud, and DUI's all increased, while disorderly conduct decreased and embezzlement cases remained constant.

Table 16

Number of Crime Offenses by Geographic Area Per 10,000 in population							
	2004	2005	2006	2007	2008	2009	2010
<b>Larceny</b>							
Calhoun	319	301	291				
Emmett Twp	429	416	380				
Jackson	196	202	227				
Muskegon	361	365	381				
<b>Motor Vehicle Theft</b>							
Emmett Twp	20	18	19				
<b>Fraud</b>							
Calhoun	49	47	35				
Emmett Twp	55	95	39				
Jackson	33	40	35				
Muskegon	57	62	64				
<b>Embezzlement</b>							
Calhoun	5	6	5				
Emmett Twp	10	8	11				
Jackson	5	4	5				
Muskegon	4	5	4				
<b>DUI Alcohol or Narcotics</b>							
Calhoun	49	59	59				
Emmett Twp	35	35	42				
Jackson	72	70	84				
Muskegon	37	40	42				
<b>Disorderly Conduct</b>							
Calhoun	51	48	49				
Emmett Twp	64	61	71				
Jackson	58	56	54				
Muskegon	261	285	288				

Source: Michigan State Police Central Records Division

[http://www.michigan.gov/documents/msp/DomesticViolence\\_176016\\_7.pdf](http://www.michigan.gov/documents/msp/DomesticViolence_176016_7.pdf)

## Economic Opportunity

- Real property county equalized values decreased from 2004-2007 in Emmett Township, and in Calhoun and Jackson counties. Muskegon County experienced an increase in 2006 but was followed by a decrease in 2007.

Table 17

County Equalized Values							
	2004	2005	2006	2007	2008	2009	2010
<b>Calhoun</b>							
Real Property	3,416,683,253	3,603,448,362	3,780,157,478	3,907,381,095			
Percent Change	X	5.5%	4.9%	3.4%			
<b>Emmett Twp</b>							
Agricultural	6,685,550	9,593,869	10,117,900	9,365,850			
Commercial	67,548,500	74,584,699	77,174,286	77,900,685			
Developmental	3,621,450	3,275,796	3,211,700	1,840,650			
Industrial	3,301,450	3,742,953	3,587,700	4,057,500			
Residential	232,201,289	243,653,519	249,478,605	264,393,474			
Real Property	313,358,239	334,850,836	343,570,191	357,558,159			
Percent Change	X	6.9%	2.6%	4.1%			
<b>Jackson</b>							
Real Property	4,874,235,563	5,178,349,688	5,443,869,173	5,664,658,768			
Percent Change	X	6.2%	5.1%	4.1%			
<b>Muskegon</b>							
Real Property	4,469,290,770	4,674,174,842	4,917,670,733	5,148,965,554			
Percent Change	X	4.6%	5.2%	4.7%			

Source: County Assessors Offices

- Although the three counties experienced some steady employment growth during the first two years under review (2004 and 2005), employment growth has decreased during 2006-2007. Muskegon County experienced the most dramatic employment growth during this time period (3.2% in 2004 and 1.8% in 2005).

Table 18

Employment Growth							
Total Employed and Percent Change by County							
	2004	2005	2006	2007	2008	2009	2010
	Employed	Employed	Employed	Employed	Employed	Employed	Employed
<b>Calhoun</b>	66,932	67,320	66,258	65,365			
<b>Jackson</b>	72,321	73,375	72,987	71,591			
<b>Muskegon</b>	82,784	84,241	84,799	83,647			
	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
	Change	Change	Change	Change	Change	Change	Change
<b>Calhoun</b>	1.0%	0.6%	-1.6%	-1.3%			
<b>Jackson</b>	1.5%	1.5%	-0.5%	-1.9%			
<b>Muskegon</b>	3.2%	1.8%	0.7%	-1.4%			

Source: Michigan Department of Labor and Economic Growth

Calhoun County's unemployment rate has remained stable over time. However, unemployment rates decreased in 2005 in all counties.

Table 19

<b>Unemployment Rate</b>							
	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>Calhoun</b>	6.9%	6.6%	6.9%	6.9%			
<b>Jackson</b>	7.5%	6.8%	7.2%	7.6%			
<b>Muskegon</b>	7.7%	6.9%	6.9%	7.1%			

Source: Michigan Department of Labor and Economic Growth

## Literature Review of Casino Impact Studies

Author(s): Walker, Douglas M.  
 Affiliation: College of Charleston  
 Title: **Benefit-Cost Analysis: Problems in Quantifying the Social Costs and Benefits of Gambling**  
 Source: American Journal of Economics and Sociology v66, n3 (July 2007): 609-45  
 Standard No: ISSN: 0002-9246  
 Abstract: As casinos and other forms of gambling spread across the United States, voters and policymakers are becoming increasingly interested in the potential costs and benefits from expansion in gambling industries. Since the mid-1990s, a variety of cost-benefit research has been published, much of it using flawed methodologies. This paper examines some of the most important areas of debate and disagreement among gambling researchers, and explains why the quantification of the costs and benefits of gambling is problematic.

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Author(s): Walker, Douglas M. ; Jackson, John D.  
 Affiliation: College of Charleston; College of Charleston  
 Title: **Economic Development and Casinos: Do Casinos Cause Economic Growth?**  
 Source: American Journal of Economics and Sociology v66, n3 (July 2007): 593-607  
 Standard No: ISSN: 0002-9246  
 Abstract: Casino gambling is a popular form of entertainment and is purported to have positive effects on host economies. The industry surely affects local labor markets and tax revenues. However, there has been little evidence on the effects of casino gambling on state economic growth. This paper examines that relationship using Granger-causality analysis modified for use with panel data. Our results indicate that there is no Granger-causal relationship between real casino revenues and real per capita income at the state level. The results are based on annual data from 1991 to 2005. These findings contradict an earlier study that found that casino revenues Granger-cause economic growth, using quarterly data from 1991 to 1996. Possible explanations for the differences in short- and long-run effects are discussed.

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Title: **The Economics of Casino Gambling**  
 Author(s): Walker, Douglas M.  
 Publication: Heidelberg and New York: Springer, 2007  
 Description: xii, 207  
 Standard No: ISBN: 978-3-540-35102-3  
 Abstract: Explores the economic effects of casino gambling, particularly the economic growth and the social costs that may accompany legalized casino gambling. Papers discuss casino gambling and economic growth; misconceptions about casinos and growth; evidence on the growth effects of gambling; relationships among U.S. gambling industries; the social costs of gambling; miscellaneous social cost

## Appendix A

issues; problems in gambling research; and using research to inform policy. Walker is in the Department of Economics at Georgia College. Index.

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Author(s): Landers, James R.  
Affiliation: IN Legislative Services Agency  
Collection Au: Kalambokidis, Laura, ed.  
Title: **Analyzing Local Housing Values to Assess the Economic Development Effects of Midwestern Casinos**  
Source: In: Proceedings: Ninety-seventh Annual Conference on Taxation, Minneapolis, Minnesota, November 11-13, 2004, and Minutes of the Annual Meeting of the National Tax Association, Thursday, November 11, 2004; 412-19; Washington, D.C.: National Tax Association, 2005

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Author(s): Grinols, Earl L. ; Mustard, David B.  
Affiliation: Baylor U; U GA and IZA, Bonn  
Title: **Casinos, Crime, and Community Costs**  
Source: Review of Economics and Statistics v88, n1 (February 2006): 28-45  
<http://www.mitpressjournals.org/loi/qjec>  
Standard No: ISSN: 0034-6535  
Abstract: We examine the relationship between casinos and crime using county-level data for the United States between 1977 and 1996. Casinos were nonexistent outside Nevada before 1978, and expanded to many other states during our sample period. Most factors that reduce crime occur before or shortly after a casino opens, whereas those that increase crime, including problem and pathological gambling, occur over time. The results suggest that the effect on crime is low shortly after a casino opens, and grows over time. Roughly 8% of crime in casino counties in 1996 was attributable to casinos, costing the average adult \$75 per year.

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Title: **The Impact of Local Labor Market Conditions on the Demand for Education: Evidence from Indian Casinos**  
Author(s): Evans, William ; Kim, Wooyoung  
Publication: Center for Economic Studies, U.S. Census Bureau, Working Papers  
<http://www.ces.census.gov/>  
Year: 2006  
Description: 42 pages  
Abstract: Using restricted-use data from the 1990 and 2000 Census long-form, we analyze the impact of local labor market conditions on the demand for education using the economic shock produced by the opening of a new casino on an Indian reservation as the identifying event. Federal legislation in 1988 allowed Indian tribes to open casinos in many states and since then, over 400 casinos have opened, 240 of which have Las Vegas-style games. We demonstrate that the opening of a casino increased the employment and wages of low-skilled workers. Young adults responded by dropping out of high

## Appendix A

school and reducing college enrollment rates, even though many tribes have generous college tuition subsidy programs.

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Author(s): Stitt, Grant  
Affiliation: U. S. Department of Justice.  
Title: **Effects of Casino Gambling in Crime & Quality of Life in New Casino Jurisdictions, Final Report**  
Source:  
Year: 2002

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Title: **The Social and Economic Impact of Native American Casinos**  
Author(s): Evans, William N. ; Topoleski, Julie H.  
Publication: National Bureau of Economic Research, Inc, NBER  
Working Papers: 9198

<http://www.nber.org/papers>

Year: 2002

Abstract: In the late 1980s, a series of legal rulings favorable to tribes and the subsequent passage of the Indian Gaming Regulatory Act of 1988 legalized gaming operations on reservations in many states. Today, there are over 310 gaming operations run by more than 200 of the nations' 556 federally-recognized tribes. Of these operations, about 220 are Las Vegas' style casinos with slot machines and/or table games. We use a simple difference-in-difference framework where we compare economic outcomes before and after tribes open casinos to outcomes over the same period for tribes that do not adopt or are prohibited from adopting gaming. Four years after tribes open c casinos, employment has increased by 26 percent, and tribal population has increased by about 12 percent, resulting in an increase in employment to population ratios of five percentage points or about 12 percent. The fraction of adults who work but are poor has declined by 14 percent. Tribal gaming operations seem to have both positive and negative spillovers in the surrounding communities. In counties where an Indian-owned casino opens, we find that jobs per adult increase by about five percent of the median value. Given the size of tribes relative to their counties, most of this growth in employment is due to growth in non-Native American employment. The increase in economic activity appears to have some health benefits in that four or more years after a casino opens, mortality has fallen by 2 percent in a county with a casino and an amount half that in counties near a casino. Casinos do, however, come at some cost. Four years after a casino opens, bankruptcy rates, violent crime, and auto thefts and larceny are up 10 percent in counties with a casino.

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Author(s): Garrett, Thomas A.  
Affiliation: Federal Reserve Bank of St Louis  
Title: **Casino Gaming and Local Employment Trends**  
Source: Federal Reserve Bank of St. Louis Review v86, n1  
(January-February 2004): 9-22

<http://research.stlouisfed.org/publications/review/>

Standard No: ISSN: 0014-9187  
 Abstract: Casino gambling has become a major industry in the United States. Economic development, especially through increases in employment, is the primary justification for casino development in a local area. This article estimates the employment effects of casino gambling for six counties in the Midwest and southern United States using ARIMA forecasting models. The results suggest that rural counties that adopt casino gambling as a major industry experience significant gains in payroll and household employment. The effects are less pronounced in urban counties, partly due to the higher volatility of their employment data relative to those of rural counties.

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Author(s): de la Vina, Lynda ; Bernstein, David  
 Affiliation: US Treasury Dept; US Treasury Dept  
 Title: **The Impact of Gambling on Personal Bankruptcy Rates**  
 Source: Journal of Socio-Economics v31, n5 (2002): 503-09  
 Standard No: ISSN: 1053-5357  
 Abstract: Both access to casino gambling and the personal bankruptcy rate have risen substantially in recent years. A reported correlation between greater access to gambling facilities and state and county bankruptcy rates suggests the increased availability of gambling might be an important factor explaining the increased national bankruptcy rate. A correlation between convenient access to gambling and high bankruptcy rates might also occur if distressed communities are more receptive to the introduction of casinos than prosperous communities. This paper utilizes panel data to investigate the impact of the introduction of casinos on county bankruptcy rates. The evidence reported here does not support the hypothesis that the introduction of gambling has impacted county bankruptcy rates.

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Author(s): Anders, Gary C.  
 Affiliation: AZ State U West  
 Collection Au: Vaughan Williams, Leighton, ed.  
 Title: **Reconsidering the Economic Impact of Indian Casino Gambling**  
 Source: In: **The economics of gambling**; 204-23; London and New York: Routledge,  
 Year: 2003  
 Standard No: ISBN: 0-415-26091-4.

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Author(s): Nichols, Mark W. ; Stitt, B. Grant ; Giacompassi, David  
 Affiliation: U NV; U NV; U Memphis  
 Title: **Casino Gambling and Bankruptcy in New United States Casino Jurisdictions**  
 Source: Journal of Socio-Economics v29, n3 (2000): 247-61  
 Standard No: ISSN: 1053-5357  
 Abstract: Using quarterly data on personal consumer bankruptcy for 1989:Q4 through 1998:Q1, this study examines the impact that the introduction of casino gambling has on per capita personal bankruptcy filings. Eight jurisdictions that have recently adopted



## Appendix A

gambling are compared with a set of matching control jurisdictions, communities without casinos that are economically and demographically similar to the eight communities. The results reveal that casino gambling is associated with an increase in personal bankruptcy in seven of the eight communities. In five of the seven the increase is statistically significant. However, an increase is not universal and in one community, Harrison County, Mississippi (Biloxi), bankruptcy per capita significantly decreased. It is speculated that this decrease is due to the features of both the community and the casino industry in Biloxi. Finally, the most significant changes in bankruptcy occur among Chapter 13, as opposed to Chapter 7, filings. This suggests that a growing portion of insolvents are creating repayment plans for their debts. Policy implications of the findings are discussed.

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Author(s): Gazel, Ricardo ; Rickman, Dan S. ; Thompson, William N.  
Affiliation: Inter-American Development  
Bank; OK State U; U NV, Las Vegas  
Title: **The Sources of Revenues for Wisconsin Native  
American Casinos: Implications for Casino Gaming as a Regional  
Economic Development Tool**  
Source: Review of Regional Studies v30, n3 (Winter 2000): 259-74  
Standard No: ISSN: 0048-749X  
Abstract: This paper ascertains the sources of revenues for  
Native American casinos in Wisconsin. Based on an examination of the  
sources, implications for casino gaming as a statewide economic  
development tool are discussed. The analysis is based on interviews of  
visitors to several casinos in 1994. Among the findings are that:  
noncasino areas in Wisconsin experience a net loss of funds to areas  
containing the casinos; expenditures in other businesses in the areas  
containing the casinos are likely displaced; and lower-income  
individuals and the unemployed are more adversely affected by the  
availability of casino gambling in the state than others.

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Author(s): Nichols, Mark ; Giacomassi, David ; Stitt, B. Grant  
Affiliation: U NV; U Memphis; U NV  
Title: **Casino Gambling as a Catalyst of Economic  
Development: Perceptions of Residents in New Casino Jurisdictions**  
Source: Tourism Economics v8, n1 (March 2002): 59-75  
Standard No: ISSN: 1354-8166  
Abstract: Using survey data gathered in 1999 from eight new  
US casino jurisdictions, this research examines citizens' perceptions  
of casino gambling as a tool of economic and tourism development. In  
particular, the paper examines whether residents perceive that casinos  
have revitalized their communities by rejuvenating the local economy,  
attracting new industries and increasing tourism, or whether the  
impact has been more negative, resulting in, for example, business  
closure and in the casinos taking more out of the community than they  
contribute to it. The results suggest that, on average, casinos are  
perceived to be a positive catalyst for economic and tourism  
development. However, geographical proximity to the casino,  
demographic characteristics, and the structure of the industry are all

important determinants in the creation of these perceptions.

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Author(s): Grinols, Earl L. ; Mustard, David B.  
 Affiliation: U IL; U GA  
 Title: **Business Profitability versus Social Profitability: Evaluating Industries with Externalities, the Case of Casinos**  
 Source: Managerial and Decision Economics v22, n1-3 (January-May 2001): 143-62  
 Standard No: ISSN: 0143-6570  
 Abstract: Casino gambling is a social issue, because in addition to the direct benefits to those who own and use casinos, positive and negative externalities are reaped and borne by those who do not gamble. To correctly assess the total economic impact of casinos, one must distinguish between business profitability and social profitability. This paper provides the most comprehensive framework for addressing the theoretical cost-benefit issues of casinos by grounding cost-benefit analysis on household utility. It also discusses the current state of knowledge about the estimates of both the positive and negative externalities generated by casinos. Lastly, it corrects many prevalent errors in the debate over the economics of casino gambling.

---

Author(s): Gazel, Ricardo C. ; Rickman, Dan S. ; Thompson, William N.  
 Affiliation: Inter-American Development Bank; OK State U; U NV  
 Title: **Casino Gambling and Crime: A Panel Study of Wisconsin Counties**  
 Source: Managerial and Decision Economics v22, n1-3(January-May 2001): 65-75  
 Standard No: ISSN: 0143-6570  
 Abstract: The potential relationship between gambling and crime has been a key issue among supporters and opponents of the recent spread of casino gambling in the US. This paper empirically investigates the potential link between casino gambling and crime for Wisconsin counties using the theoretical framework of Becker. Our results show that the existence of a casino within the boundaries of a county led to an increase in the county's crime rates. The results also suggest that a strong spillover effect took place across space, with counties adjacent to casino-counties experiencing higher crime rates.

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Author(s): Miller, William J. ; Schwartz, Martin D.  
 Affiliation: OH U; OH U  
 Title: **Casino Gambling and Street Crime**  
 Source: Annals of the American Academy of Political and Social Science v556, (March 1998): 124-37  
 Standard No: ISSN: 0002-7162  
 Available From: <http://www.sagepub.co.uk/journalsProdDesc.nav?prodId=Journal200750>  
 Abstract: Although legalized gambling, and in particular casino gambling, has become an increasingly important American leisure activity, it has not escaped extensive controversy. Among the many evils forecast for communities that open casinos is a major increase

## Appendix A

in street crime. This article will review what we know about the relationship between street crime and casino gambling.

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Author(s): Blevins, Audie ; Jensen, Katherine  
Affiliation: U WY; U WY  
Title: **Gambling as a Community Development Quick Fix**  
Source: Annals of the American Academy of Political and Social Science v556, (March 1998): 109-23  
Standard No: ISSN: 0002-7162  
Available From: <http://www.sagepub.co.uk/journalsProdDesc.nav?prodId=Journal200750>  
Abstract: As small communities throughout the country felt the loss of federal programs and funding, four gold-mining towns in South Dakota and Colorado turned to the legalization of limited-stakes gambling as a means of economic revitalization. All four used the preservation of their historic Old West images to legitimate gaming, but differences in state legislation resulted in different patterns of development. In Deadwood, South Dakota, many small casinos were established, with most gaming tax revenues going toward the town's historic preservation. In Colorado, fewer but much larger casinos emerged, with the returns for historic preservation available to projects across the state, with the gambling communities of Cripple Creek, Central City, and Black Hawk benefiting little. Retail businesses were cannibalized as gambling became the dominant industry in all four towns. Resident populations and schools experienced little change; most of the change occurred in vehicular traffic, law enforcement, and the utilization of infrastructure.

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Author(s): Eadington, William R.  
Affiliation: Institute for the Study of Gambling & Commercial Gaming, U NV  
Title: **Contributions of Casino-Style Gambling to Local Economies**  
Source: Annals of the American Academy of Political and Social Science v556, (March 1998): 53-65  
Standard No: ISSN: 0002-7162  
Available From: <http://www.sagepub.co.uk/journalsProdDesc.nav?prodId=Journal200750>  
Abstract: This study examines the underlying economic and political dynamics that have led to the rapid proliferation of permitted gambling in the United States and other countries over the past decade. It notes that much of the justification for gambling has come from an attempt to exploit the economic rents and spillover benefits that accompany the legalization of gambling, and little is accorded the value that accrues to consumers of the commodity. A framework is developed to evaluate the impact of such considerations on the community and the region where gambling is permitted. Different types of casino-style gambling--destination resort casinos, urban casinos, and widely dispersed gaming devices--are evaluated in light of their relative impacts.

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Author(s): Gabe, Todd ; Kinsey, Jean ; Loveridge, Scott  
Title: **Local economic impacts of tribal casinos: The Minnesota case**  
Source: Journal of Travel Research v34n3, (Winter 1996):

p.81-88 (8 pages)  
Standard No: ISSN: 0047-2875  
Abstract: The economic effects of Native American casinos on their surrounding rural counties are examined. The relationship between the presence of a casino and 4 measures of per capita income was analyzed using econometric methods. The study's data are from Minnesota, a state in which 16 casinos opened between 1990 and 1993. In their first 2 years, casinos were significantly correlated with an increase in income earned by workers in the eating and drinking industry and somewhat correlated with income earned by hotel and amusement industry workers. They had no significant effect on overall per capita income in their counties. Overall, the presence of a casino is not significantly related to overall per capital income, but the presence of a casino is positively related to the income earned by workers in complementary services industries.

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## WORKING PAPERS

### **Community Impact Analysis and Mitigation of a Casino-Resort in the Town of Middleborough, Massachusetts**

Middleborough Casino Gambling Study Committee  
July 2007

Abstract: A committee of volunteers focused on the impacts of hosting a casino-resort and presents the 14 negative impacts and possible mitigation.

[www.middleborough.com/general/impact%20and%20mitigation%20report.pdf](http://www.middleborough.com/general/impact%20and%20mitigation%20report.pdf) -

### **U.S. National Gambling Impact and Behaviour Study**

Dean R. Gerstein  
AGRI Fifth Annual Conference  
2006

### **The Potential Economic, Social and Image Impacts of a Casino in Moncton**

Citizens' Committee on Destination Gaming  
2001

Abstract: A report prepared by twelve member volunteer task force to review, study, and analyze the effects of a casino in Moncton, New Brunswick.

[gaming.uleth.ca/agri\\_downloads/727/casinofinalreport.pdf](http://gaming.uleth.ca/agri_downloads/727/casinofinalreport.pdf)

### **Community Leaders' Perceptions of Gaming Industry's Effects**

Peter D. Hart Research Associates, Inc.  
2005

Abstract: To explore the impact of gaming casinos around the country, Hart Associates, Inc. conducted a telephone survey of 201 local community leaders in jurisdictions with commercial casino gaming, including racetrack casinos.

### **The New Buffalo: A Comparative Examination of Tribal Casino Gambling in Michigan, 1993-2003.**

Central Michigan University Honors Program  
James P. Hill  
2007

Abstract: Professor James P. Hill, CMU's Honors Program director, along with faculty and honors students, created a tribal casino database from which the research team analyzed more than 50 different casino-related issues, ranging from jobs and business growth to crime and divorce rates. The 185-page report focuses on Michigan tribal casinos and the counties in which they are located since the first tribal casino compacts were approved in the state in 1993.

**The Impact of Local Labor Market Conditions on the Demand for Education: Evidence from Indian Casinos**

William Evans & Wooyoung Kim.

2006

Abstract: Using restricted-use data from the 1990 and 2000 Census long-form, we analyze the impact of local labor market conditions on the demand for education using the economic shock produced by the opening of a new casino on an Indian reservation as the identifying event. Federal legislation in 1988 allowed Indian tribes to open casinos in many states and since then, over 400 casinos have opened, 240 of which have Las Vegas-style games. We demonstrate that the opening of a casino increased the employment and wages of low-skilled workers. Young adults responded by dropping out of high school and reducing college enrollment rates, even though many tribes have generous college tuition subsidy programs.

<http://ideas.repec.org/p/cen/wpaper/06-14.html>

**Business Profitability and Social Profitability: Evaluating Industries with Externalities, The Case Casinos**

Earl L. Grinols & David B. Mustard.

2005

Abstract: Casino gambling is a social issue, because in addition to the direct benefits to those who own and use casinos, positive and negative externalities are reaped and borne by those who do not gamble. To correctly assess the total economic impact of casinos, one must distinguish between business profitability and social profitability. This paper provides the most comprehensive framework for addressing the theoretical cost-benefit issues of casinos by grounding cost-benefit analysis on household utility. It also discusses the current state of knowledge about the estimates of both the positive and negative externalities generated by casinos. Lastly, it corrects many prevalent errors in the debate over the economics of casino gambling.

<http://ideas.repec.org/p/wpa/wuwp/0509001.html>

**Casinos In The Upper Midwest: A Discussion Of The Impacts**

Dean A. BANGSUND & F. Larry LEISTRITZ.

1997

Abstract: The recent expansion and proliferation of legalized casino gaming has spurred debate at all levels of government. As a result, a number of studies have attempted to quantify many of the economic, social, and fiscal impacts of legalized casino gaming. This study reviewed existing literature on the effects of casino gaming in the Upper Midwest and discussed some of the issues associated with casino activities. The impacts of casino gaming have generally been evaluated at either the local and/or state or regional level. Positive economic impacts have been quantified more often than negative economic impacts. Few studies have attempted to quantify the social costs of casino gaming. The economic impacts of casino activities on local economies have generally been positive, with some debate over the magnitude or importance of those impacts. Other impacts at the local level have been mixed. The economic impacts on state economies are generally measured using gross economic indicators, such as primary and secondary employment and overall economic activity. Many issues remain regarding the real or true economic impacts to state economies, as many studies have not adequately addressed the issue of whether or not gaming revenues represent new wealth to the state. The debate over the impacts of casino gaming is likely to continue. The gambling industry has grown dramatically in many regions of the United State

<http://ideas.repec.org/p/wop/ndsauer/378.html>

## WEBSITES

### **CasinoWatch.org**

<http://www.casinowatch.org/>

We are a single-issue, volunteer-driven organization, opposing the expansion of gambling since 1993.

### **National Gambling Impact Study Commission**

June 1999

<http://govinfo.library.unt.edu/ngisc/>

Final report: <http://govinfo.library.unt.edu/ngisc/reports/fullrpt.html>

Recommendations: <http://govinfo.library.unt.edu/ngisc/reports/ngisc-frr.pdf>

### **AmericanGaming.org**

<http://www.americangaming.org/>

The American Gaming Association (AGA) opened its office in Washington, D.C., in June 1995 with the fundamental goal of creating a better understanding of the gaming entertainment industry by bringing facts about the industry to the general public, elected officials, other decision makers and the media through education and advocacy.

The AGA represents the commercial casino entertainment industry by addressing federal legislative and regulatory issues affecting its members and their employees and customers, such as federal taxation, regulatory issues, and travel and tourism matters.

**Summary of Data Indicators Not Recommended for Inclusion  
Calhoun County Casino Baseline Study Committee**

<b>Family Impact</b>		
<b>Indicator</b>	<b>Description</b>	<b>Rationale for exclusion</b>
Child Abuse and Neglect Assignments and/or circuit court petitions	Cases assigned from a child abuse or neglect complaint and found to have merit	Although this number would reduce the number of duplicate counts from the complaints number and eliminate some of the unfounded reports of abuse and neglect, the larger number (complaints) for abuse and neglect was chosen as the indicator on the basis that it represents the specific layer of possible dysfunction or the depiction that something is amiss within the community fabric. The complaint figure was selected after consultation with community human services staff and director, behavioral health staff, state central data unit staff as well as the baseline study committee members. The circuit court petition data was also considered but similarly not selected since it represents an even further cut from the complaint level data.
Domestic Violence Convictions and/or shelter stays	Rate of domestic violence convictions; number of domestic assault shelter stays	Literature related to domestic violence and discussions with a shelter director and the Michigan Coalition Against Domestic and Sexual Violence all indicate that domestic violence rates are sorely underreported. Victims might be afraid or embarrassed to pursue such reporting and evidence also indicates that arrests are also subject to the judgment of the officers. As a result, the number of offenses reported was selected as the indicator for this category in order to follow any trends that may occur which reflect changes in family and household dynamics
Graduation Rates	High school graduation rates	Definitions are not uniformly applied across school districts. New state graduation requirements leave this indicator in a state of flux. Relationship to gambling appears to be quite distant.
School Expulsion	Rate of expulsions within the intermediate school district or within each district	Expulsion information is collected through the MEIS, single record student database and school infrastructure database. Other than the mandatory expulsion criteria outlined in the Michigan Common Law Revised School Code, the basis for school expulsion is determined by

		local school board policy and local school's implementation of policy. This indicator was not chosen due to lack of definition uniformity across districts.
Grades	Fluctuations in grade achievement in the district	Tracking changes in letter grade achievement was suggested as an indicator of stress in the family due to increased/addictive gambling activity. Given the complexity of how grading systems are administered across and within districts as well as the complexity of factors that can be attributed to student performance, grades were not recommended as an indicator.
College Applications and Enrollment	H.S. grads attending college	Lack of information showing that the presence of a Casino would significantly impact the ability of high school graduates to attend college.
Property Foreclosures Calhoun County Treasurer's Office	Provide listing of items included in the sheriff's sale of foreclosed properties.	This indicator may be too influenced by changes in the type of mortgage instruments available and interest rates.



<b>Family Impact</b>		
<b>Indicator</b>	<b>Description</b>	<b>Rationale for exclusion</b>
Physical Health Indicators	Statistics on diseases per thousand	Lack of evidence in the reviewed literature that shows a significant connection between health and gambling.
Behavioral Health Resources	Provide number of referrals received from state hot-line	A direct indicator of an increase in the number of persons in the county with a gambling problem. Note: This indicator will likely undercount the number of county residents with a gambling problem because many will not seek help or have alternative methods for seeking help, but it will show the trend, if any.
Delinquent Utility Bills	Percent or number of households who are behind in paying their electric bills.	The inability to pay the utility bill on time is a clear indicator of financial stress. Gas bill may be a better indicator; however, the numerous gas providers and the inability/unwillingness of the utilities to provide this data make such an indicator difficult to track.
Substance Abuse Treatment Assistance	Number of individuals seeking assistance for substance abuse treatment	Service delivery is fragmented based on ability to pay and severity/nature of an individual's condition. Oversight and reporting responsibility recently changed and the structure of reporting is still being finalized. Uniform reporting is not available across service providers which results in such an indicator being cost prohibitive. DUI arrests are included in the indicator series.
Traffic Accident Incidence	Report accidents near the casino	Any large traffic generators such as big box stores, shopping centers, or recreational opportunities such as a casino will likely cause an increase in accidents. Data on DUI arrests are included in the indicator series.
<b>Criminal Activity</b>		
Car Thefts	Rate of car thefts in Calhoun County over time	Car theft data is reported at the local, county and state levels. However, automobiles are not a liquid commodity and cannot be readily sold to generate money (e.g. for gambling purposes); car break-ins are a more likely occurrence which is partially the basis for including larceny in the indicator series.
9-1-1 Calls	Rate or number of 9-1-1 calls	9-1-1 calls could represent the level of stress in an area or the number or calls could be an indicator of the stress on emergency service personnel. The 911 dispatch office indicated that they could report the call types but were very hesitant about using this as a data source for

		these purposes due to the unreliability/ accuracy of this data because often times what the call comes in for is not what is actually happening and dispatch does not have any information as to the outcomes of the calls (if arrests were made, etc)
Silent Observer Calls	Number and nature of calls received through Silent Observer	There can be long-term delays between the time of the call and if and when an arrest is made. By its very nature, the accuracy of most calls cannot be confirmed if they do not lead to an arrest.
Prostitution Arrests	Rate of prostitution arrests	Prostitution arrests are tracked at the county and state level, however, the rate of arrests appears to be more of a function of the amount of time or sting operations police forces allocate to this area. The indicator was not chosen due to the inconsistent nature of how arrests are generated.

<b>Special Populations</b>		
<b>Indicator</b>	<b>Description</b>	<b>Rationale for exclusion</b>
Veterans	Number of veterans seeking assistance for utilities, food, health care, transportation	Veterans make up a greater share of the county's population than nationally, 13.5 % to 10.4% respectively. However, we could not find any evidence that supported a notion that Veterans, as a group, would be more vulnerable to gambling problems than other groups. In addition, services are fragmented across providers which results in both a lack of evidence or cost prohibitive in terms of gathering data.
<b>Economic Opportunities</b>		
Small business start-ups	Number of new businesses	The number of new businesses opening in the county is highly variable, and it will be very difficult to isolate the impact of the casino.
Per Capita Income	The County's total income divided by its population	Per capita income is the preferred measure of an area's economic well-being; nevertheless, it is influenced by factors that are much larger than the impact of the new casino, making it difficult to isolate the impact of the casino.
<b>Economic Stress</b>		
Cash Advance Outlets	Number of cash advance outlets changes	Lack of consistent data sources.
Food Pantry Usage	Number of food orders	Food pantry usage demand already significantly exceeds food pantry supplies and, therefore, any increased usage or demand may not be detectable due to the overall lack of supply to meet any further demand.
Pawn Shops	Prevalence of pawn shops and/or increase use of pawn shops	Lack of consistent data sources.
Poverty Rate	% of persons, households, and children living below the poverty rate	Although an important indicator of the economic well-being of county residents, it is more reflective of the area's age profile and family status and would likely not be impacted by the presence of the casino. Percent of students taking free and reduced-priced lunch is considered a better indicator.

**Summary of Recommended Indicators and their Data Sources**  
**Calhoun County Casino Baseline Study Committee (Updated 7.20.08)**

<b>Family Impact</b>				
<b>Indicator</b>	<b>Description</b>	<b>Rationale</b>	<b>Time Frame</b>	<b>Source</b>
Divorce Rate	Rates are the number of persons married but ended in divorce, annulment, or legal separation per 1,000 population.	Gambling problems could add serious stress to a marriage if it brings financial burdens and other issues into the marriage.	Annual February	Michigan Department of Community Health Vital Statistics <a href="http://www.mdch.state.mi.us/pha/osr/marriage/MxDivCounty.asp?MTyp e=2">http://www.mdch.state.mi.us/pha/osr/marriage/MxDivCounty.asp?MTyp e=2</a>
Child Abuse & Neglect Complaints	Number of child abuse and neglect complaints received by county	For parents with addictive gambling behaviors, parental responsibilities could become secondary leading to child neglect with the possibility of becoming abusive due to the increased stress on the family's financial situation and addictive behavior.	Annual February	Michigan Department of Human Services - PS004 Report. Contact: George Noonan 517-335-7756
Domestic Violence Reports to Law Enforcement	Offenses are defined as unlawful acts reported to a law enforcement agency	Gambling problems may result in family financial strain and domestic arguments that could end in violence or assault. Offenses are distinguished from cases submitted for arrest warrants, from prosecutions and from convictions.	Annual & Monthly if requested	Michigan State Police Uniform Crime Report – Other Crime Statistics Reports: Domestic Violence <a href="http://www.michigan.gov/msp/0,1607,7-123-1645_3501_4621---,00.html">http://www.michigan.gov/msp/0,1607,7-123-1645_3501_4621---,00.html</a>
Adult Protective Services Referrals	Referrals received by county	Family member(s) with a gambling problem could abuse other adults (parents) physically, emotionally or unlawfully use the dependent adult's money to further their gambling habit.	Annual February	Michigan Department of Human Services - from the WebI, ASCAP Universe. Contact: George Noonan 517-335-7756

<b>Family Impact (continued)</b>				
<b>Indicator</b>	<b>Description</b>	<b>Rationale</b>	<b>Time Frame</b>	<b>Source</b>
School Attendance Rate	K-12 attendance rates by county	Families in distress may be unable to get their children to school in a timely or consistent manner.	Annual August	Michigan Department of Education, Office of Educational Assessment and Accountability
Rate of students taking free or reduced-price lunches	Percentage of students K-12 living in low-income households	An increase in the percentage of students living in households that are eligible for free or reduced-priced lunches would suggest an increase in the number of households in economic distress.	Annual August	Michigan Dept. of Education, Center For Educational Performance and Information <a href="http://www.michigan.gov/cepi/0,1607,7-113-21423_30451_36965---,00.html">http://www.michigan.gov/cepi/0,1607,7-113-21423_30451_36965---,00.html</a>

<b>Financial Impact</b>				
<b>Indicator</b>	<b>Description</b>	<b>Rationale</b>	<b>Time Frame</b>	<b>Source</b>
Financial Assistance Information Requests at Volunteer Center 2-1-1 Help Line	13 assistance request call categories will be tracked by county: payment for gas, electric, rent, water, heating, prescription, mortgage, medical, property tax, dental, telephone, and car payments	Gambling expenses could cause families and individuals to be unable to pay their utilities, medical or other household payments.	Annual February	2-1-1 Annual Reports of Service Requests Calhoun: Kari L. Marciniak Phone: (269) 966-4189 KARI@volcenterbc.org  Jackson County: Brenna M. Wheeler Phone: 800-284-8288 x 2519 Brenna.wheeler@lifewaysmco.com  Muskegon County: Susan Howell susan@call-211.org
Personal Bankruptcy Filings	Report F-5A on the PACER system provides county level filing info by type of bankruptcy from the U.S. Bankruptcy Court Michigan	Individuals who are unable to control their gambling have a greater probability to file for personal bankruptcy. Note: Bankruptcy laws changed effective October 17, 05. Significant surge in filings in Sept & Oct 05 prior to new code. Now more difficult to file chapter 7 –full liquidation.	Quarterly	U.S. Bankruptcy Court PACER Service Center  <a href="https://pacer.uspci.uscourts.gov/cgi-bin/statistics.pl?puid=01215624999&amp;rpt_type=f5a">https://pacer.uspci.uscourts.gov/cgi-bin/statistics.pl?puid=01215624999&amp;rpt_type=f5a</a>
Calhoun County Senior Services – Senior Millage Financial Services Assistance Requests	Annual reports of service assistance by category including: energy and money mgt. assistance	Evidence suggests that seniors make up a large portion of the people who gamble in casino. It provides social entertainment and meals to individuals who may be living alone. Unfortunately, it is possible that some could develop gambling problems	Annual March	Calhoun County Senior Services – Senior Millage Annual Report 269-781-0846 <a href="mailto:rstealy@calhouncountymi.com">rstealy@calhouncountymi.com</a>

<b>Crime Offenses</b>				
<b>Indicator</b>	<b>Description</b>	<b>Rationale</b>	<b>Time Frame</b>	<b>Source</b>
Offense totals for DUI/OUI, fraud, larceny, embezzlement, disorderly conduct, and Emmett Charter Township motor vehicle theft	Annual reports of offenses at the county level. Motor vehicle theft is tracked at the township level due to the physical location of the casino in the township	It is important to monitor these activities on the township and county levels to determine if the casino causes increases or decreases in offenses in the hosting government unit.	Annual February	Michigan State Police General Report Wendy Easterbrook, Central Records Division, (517) 322-5520

<b>Economic Opportunity</b>				
<b>Indicator &amp; Source</b>	<b>Description</b>	<b>Rationale</b>	<b>Time Frame</b>	<b>Contact</b>
Unemployment Rate	% of the county's workforce unemployed	The county's unemployment rate provides a timely indicator of employment conditions.	Monthly	MDLEG and BLS
Employment Growth Rate	Net number of new jobs by place of work	This data could provide information on the number of spin-off jobs as well as the number of jobs lost due to displacement impacts of the casino.	Monthly	MDLEG and BLS
Property Equalized Values	Real property equalized values within each county and the calculated percentage change each year. Change in the six types of real estate values as well as personal property values in Emmett Township	This data would be a means to capture the spin-off capital investment – hotel, eateries and the like that may result from the casino. Caution must be used when considering this measure's negative displacement impacts because property valuations adjust slowly. More detail is provided for Emmett Township given the casino's location in the township.	Annual	County Assessors offices