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ANDERSON ECONOMIC GROUP

Market and Economic Impacts of a Tribal Casino in Wayland Township, Michigan

Anderson Economic Group

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Executive Summary

PURPOSE

Anderson Economic Group undertook an assessment of the impact that a proposed tribal casino in Wayland Township would have on Michigan's economy. This study complements our critical review of the economic impact study submitted to the Bureau of Indian Affairs (BIA) by the Match-E-Be-Nash-She-Wish Tribe, also know as the Gun Lake Band of Potawatomi Indians.

This report, commissioned by the Grand Rapids Area Chamber of Commerce, is intended to provide a realistic look at the economic impact of the casino. Anderson Economic Group limits its analysis to the economic and market issues involved with the development of the subject casino. We refrain from taking a side for or against casino development or gaming.

METHODOLOGY

Our analysis can be broken into two main parts. First, we begin by assessing the market for the Wayland Township Casino that the Gun Lake Band proposes. Then, we produce an economic model to simulate the impacts of the casino operations. Below is a summary of our methods used to complete each step.

Assessing the Market for Casinos

We incorporate the rigorous analytical techniques and data standards that we use in market studies for other industries into our casino impact study methodology. Although we recognize that no approach can ever model the market with complete accuracy, our methodology introduces a level of analytical thoroughness that exceeds that of other studies we have reviewed.

We begin by conducting a comprehensive analysis of the competitive casino market in Michigan and Northern Indiana. We use the same methodology to assess the market areas of all competitive casinos, including Wayland, and consider the effect that each casino will have on population groups included in the Wayland project's market area. A careful analysis allows us to distinguish market impact due to the Wayland Township project from impact attributed to one of its competitors.

We run our analysis under two competitive scenarios. Scenario One accounts for competition from existing casinos. Scenario Two accounts for competition from existing casinos, as well as new facilities in New Buffalo and Emmett Township. For each of these scenarios, we estimate the following figures:

1. Gaming expenditure at the Wayland casino (projected Wayland revenue);
2. Increase in total casino-gaming expenditure due to the introduction of the Wayland facility; and

3. Cannibalization of revenue from other casinos due to the introduction of the Wayland facility.

A detailed description of the methodology and conclusions from the market assessment are included in "Market Assessment" on page 8. In this section, we also include maps of the Wayland Township trade area, and the trade areas of its competitive casinos.

Determining Economic Impact

We use a sophisticated economic model to estimate the sources of casino revenues, the uses of the casino revenue, and related expenditures by out-of-state visitors traveling to the casino. The model also includes construction expenditures made initially on the facility. This particular model is adapted from the fiscal and economic impact model and related methodologies we have developed for analyzing other projects.

The model is implemented in a mathematical and simulation software environment that allows us to predict, over numerous periods, the impacts of different variables, as well as allowing different variables to interact with each other. For example, we can allow casino revenue to grow over time, while taking into account that growing casino revenue implies similarly increasing displaced income in other industries.

The model schematic, in graphical form, and data inputs are presented in the appendix.

Defining Economic Impacts

Our firm has rigorously completed, and critiqued, numerous economic impact analyses. We depart from many other practitioners by insisting on a specific, conservative, and realistic definition of "economic impact." We define economic impact as *bona fide,* new economic activity directly or indirectly caused by the subject development. In calculating the effects, we take into account both benefits and costs. In particular, we subtract from the total benefit figure any reductions in economic activity due to displacement or substitution effects.

The resulting findings are much more conservative, and realistic, than many reported analyses that fail to subtract costs, ignore substitution effects, or exaggerate benefits.

In reporting our analysis, we also identify key assumptions, describe our methodology, and identify in the text any important factors that cannot or were not quantified in our analysis.

SUMMARY OF FINDINGS

Market Assessment Conclusions

Table 1 summarizes the revenue projections from our market analysis for the two scenarios described in the methodology. The table includes projections for the total casino revenue, and the sources for this revenue. Our results also show the amount of the casino revenue that is redirected from non-casino gaming activities, compared to the amount that is redirected from expenditure at other casinos.

TABLE 1. Summary of Market Analysis Results

Variable	Scenario One[a]	Scenario Two[b]
Total Wayland casino revenue	$161,930,028	$91,207,822
Revenue from expenditure shifted from other industries	$92,163,963	$42,387,576
Expenditure shift rate	57%	46%
Revenue from *cannibalization* of other casinos' probable revenue	$69,766,065	$48,820,246
Cannibalization rate	43%	54%

a. Assumes competition from existing casinos in Detroit, Mount Pleasant, Manistee, Traverse City, Leelanau Peninsula, and Michigan City (IN).

b. Assumes competition from existing casinos, plus proposed casinos in New Buffalo and Emmett.

Based on our analysis, we find that:

- In neither scenario is the expected revenue figure for the Wayland Township casino as high as the revenue figure reported by the tribe to the BIA.
- The projected Wayland Township casino revenue under Scenario Two is 46% below the revenue projection expected by the Tribe based on the market analysis it submitted to the US Bureau of Indian Affairs. This difference calls into question the financial viability of the casino's business plan as proposed.
- Between $42- and $92-million of the casino's projected revenue will be redirected from expenditure on non-casino-gaming goods and activities. Between $49- and $70-million will be redirected from expenditure at other casinos. These figures represent losses in other areas of the economy that must be accounted for in the economic impact analysis.
- The majority of casino revenue will come from Michigan residents under either scenario. These expenditures will displace income to persons in other industries, particularly entertainment, travel, food, and lodging.

Economic Impact Conclusions

The following tables show the net economic impact of opening the proposed Wayland casino by region. Table 2 compares the net economic benefit to Allegan County to the net economic loss to the rest of Michigan. Table 3 further breaks down the economic effect by region.

TABLE 2. Summary of Net Economic Benefit, ($Millions)
Allegan County compared to rest of Michigan

Region	2004	2004 to 2014
Allegan County	97.5	1,185.9
Michigan (except Allegan)	(123.5)	(1,503.5)
Michigan Net Benefit (loss)	(26.10)	(317.57)

TABLE 3. Summary of Net Economic Benefit, by Region ($Millions)

Region	2004	2004 to 2014
Allegan County	97.5	1,185.9
Barry County	(6.0)	(73.6)
Kalamazoo County	(4.4)	(53.7)
Kent County	(49.7)	(605.2)
Ottawa County	(12.3)	(149.2)
Northern Michigan	(15.3)	(185.9)
Middle Michigan	(24.1)	(293.2)
Southeast Michigan	8.1	98.7
Other Southwest Michigan Counties[a]	(19.8)	(241.4)
Michigan Net Benefit (loss)	(26.10)	(317.57)

a. Berrien, Branch, Calhoun, Cass, St. Joseph, and Van Buren Counties.

Based on our analysis of net economic benefit, we find that:

- The areas outside of the immediate development area will experience a net economic loss due to the casino. This results from shifting local consumer expenditures to the casino, and away from other businesses in areas such as Kalamazoo, Ottawa and Kent Counties, and the Lakeshore.[1]
- Wayland Township and Allegan County as a whole will experience a net positive economic impact from the proposed casino. In 2004 we expect the

impact to the county economy to be $97.5 million. This figure includes payroll, return on investment, payments made to members of the tribe, purchases, economic spin off, and other economic activity. The benefit will likely be concentrated on the communities directly surrounding the casino. Some portions of the county economy, including the Lakeshore, may lose as economic activity is shifted away from other businesses. See Table 2 on page 4.

- The net benefits experienced by Allegan County will come at a cost of $123.5 million in 2004, and $1,503.5 million between 2004 and 2014, to the rest of the State of Michigan. See Table 2 on page 4.
- Kent County will experience the largest economic loss due to the opening of the Wayland casino. This is because much of the expenditure that otherwise would be directed to the Grand Rapids area economy without the casino, will be spent at the new casino in Wayland Township. Kent County will experience a net economic loss of $49.7 million in 2004, and $605.2 million between 2004 and 2014. See Table 3 on page 4.
- The overall net economic effect to the entire State of Michigan will be a loss of $26.1 million in 2004, and $317.6 million between 2004 and 2014. The loss represents a net transfer in economic activity outside of the state due to out-of-state payments to investors and management companies, purchases, and other expenditure that greatly exceed the expected revenue from out-of-state visits to the Wayland casino. See Table 3 on page 4.
- This overall net impact includes reasonable "multiplier" effects caused by new and displaces expenditures in Michigan, including payroll, purchases, and tourism-related expenditures by out-of-state visitors.

In addition to measuring the change in total net economic benefit to the State of Michigan and specific regions, we also determined the effect that the proposed casino would have on the State in terms of jobs lost or gained. Table 4 on page 6 shows the impact of the proposed Wayland Township casino on employment in Michigan.

1. Here, "Lakeshore" refers to Lake Michigan coastal communities such as Holland, Saugatuck, South Haven, and Grand Haven.

TABLE 4. Economic Impact to Michigan Jobs[a]

Year	Total Jobs Gained[b]	Total Jobs Lost	Net Change in MI Employment
2004	3,173	4,912	(1,738)
2005	2,416	5,010	(2,594)
2006	2,464	5,110	(2,646)
2007	2,513	5,212	(2,699)
2008	2,564	5,316	(2,753)
2009	2,615	5,423	(2,808)
2010	2,667	5,531	(2,864)
2011	2,721	5,642	(2,921)
2012	2,775	5,755	(2,980)
2013	2,830	5,870	(3,039)
2014	2,887	5,987	(3,100)

a. These figures represent a difference in annual jobs. For example, if the casino were opened, we expect there to be 2,864 fewer jobs in the economy by 2010.

b. Total jobs gained and lost include direct, indirect, and tourism induced jobs. Total jobs gained in 2004 includes 805 construction jobs, although construction will likely be spread out over multiple years.

When we analyze changes to employment, we find that:

- Temporary jobs created through the construction of the casino will reduce the initial negative impact of the casino on Michigan employment. Through construction and the first year of operation, the casino will result in a net decrease of 1,738 Michigan jobs, compared to a net decrease of 2,594 to 3,100 jobs per year in the ten years following construction.
- The casino will result in the creation of between 46 and 56 tourism-related jobs. We consider tourism-related jobs to be those jobs created through the expenditure from out-of-state visitors. This results in a minor overall effect on the economy.
- To support one job, it requires more expenditure at a casino than at the average non-casino establishment. This is because a large portion of the casino expenditure is directed (1) out of state, and (2) to uses that have a lesser spin-off effect on the economy.

For detailed tables and figures displaying the inputs and outputs of our economic model, please see "Appendix A: Model Inputs and Results" on page 31 and "Appendix B: Figures" on page 41. Additionally, "Appendix C: Model

Schematic" on page 45 graphically outlines the model used in calculating economic impacts.

Cautions in the analysis

While our market study and economic impact analyses were completed using a rigorous methodology, it is based on a number of assumptions that should be considered when reviewing the results. These cautions are summarized in "Cautions in the Analysis" on page 25.

Market Assessment

REVIEW OF GENERAL METHODOLOGY

The market assessment involves the analysis of market characteristics to determine (1) demand for the proposed facility in terms of visitors (customers) and (2) potential revenue. The basic steps involved in the analysis of a casino's market include:

1. Define relevant trade areas (the areas from which the casino will draw visitors).
2. Determine the gambling population within these trade areas based on the percentage of the adult population that will likely visit a casino annually.
3. Using a figures for the average number of casino visits by each casino visitor, determine the total number of casino visits per year.
4. Distribute the total projected annual casino visits between the subject casino and its competitors by using estimated market penetration or capture rates.
5. Determine the casino's annual revenue, using per-visit revenue (casino "hold") estimates, based in part on distance of the visitor from the casino.
6. Identify expenditure shifts from other activities and purchases, and cannibalization of revenue from other casinos.

We incorporate the rigorous analytical techniques and data standards that we use in market studies for other industries into the generally accepted casino impact study methodology. Although we recognize that no approach can ever model the market with complete accuracy, our technique introduces a level of analytical thoroughness that we have not seen in other casino impact studies.

We run our analysis under two scenarios. Scenario One accounts for competition from existing casinos. Scenario Two accounts for competition from existing casinos, as well as new facilities in New Buffalo and Emmett Township. For each of these scenarios, we calculate the following figures:

1. Annual Wayland Casino gaming visits;
2. Gaming expenditure at the Wayland casino (projected Wayland revenue);
3. Increase in total casino-gaming expenditure due to the introduction of the Wayland facility; and
4. Cannibalization of revenue from other casinos due to the introduction of the Wayland facility.

Our economic impact analysis uses the resulting factors as input variables in the model (see "Economic and Fiscal Impact Assessment" on page 20).

DEFINING MARKET AREAS

The technique used to define market areas differs widely. As a guide to determine the extent of a trade area, some analyses use distance rings; others use drive-time analysis; and others define a trade area based on political boundaries. Some of the analyses incorporate multiple trade areas for the subject casino, and some analyses extend this approach to consider multiple trade areas for each competitor.

Of all these approaches, the best analysis is the one closest to the actual market. This usually means using a reasonable methodology that can be applied to all of the competitive casinos in the area. Furthermore, it means acknowledging the overlap in market areas between multiple casinos. The use of drive times in the market area definition provides a better guide than the use of linear distances, as drive times provide an indication of both distance and travel time, which helps account for the cost to gamblers of traveling to a casino.

Wayland Township Casino Trade Areas

We define primary, secondary, and tertiary market areas for the proposed Wayland Township casino. These represent drive-time regions of 30 minutes, 1.5 hours, and 2.5 hours. The drive time analysis used to define these regions was completed using our in-house geographic information system (GIS). It was completed using the current network of roads, and assumes that drivers will adhere to the speed limit during their travels.[2] Our market areas are presented in "Map 1: Wayland Township Trade Areas" on page 11.

After defining the drive-time regions, we collect data on all block groups that fall within the areas.[3] The use of block groups instead of a larger geographic regions allows for more precise market areas. Through this technique, we calculate demand for each of the 2,968 block groups located in the proposed casino's trade areas, and then aggregate the numbers to determine the demand for larger geographic areas, such as counties or states.

Accounting for Visitors from Outside the Trade Areas

In our assessment, we limit Wayland Township market area to a 2.5 hours drive time. This does not indicate that we believe no one from outside of the casino's tertiary market area will gamble at a new casino in Wayland Township. How-

2. The definition of a market area using these parameters is based on our methodology used in market assessments for other industries. We adopt this method to account for the unique characteristics of the casino market. The drive times used in the analysis are based upon generally accepted travel distances for regional tourism markets, and similar in scope to the regions from which other studies have reported that customers are drawn. For example, see: Indiana University School of Public and Environmental Affairs, "Indiana State Gaming Commission Study," 1999.
3. Block groups are the smallest geographic regions defined by the US Census Bureau.

ever, gamblers that drive over 2.5 hours to Wayland will be offset by the loss of Wayland-area gamblers to casinos that are farther than 2.5 hours away.

Given that many other Michigan casinos are located in "destination" locations, we feel this assumption to create conservative trade area definitions. For example, non-gambling tourism draws to Traverse City, Leelanau Peninsula, Petoskey, St. Ignace, Detroit, New Buffalo, and other locations may enable casinos in these locations to attract more gaming visits from the Wayland trade area than our model predicts.[4]

Competitive Casino Trade Areas

We also define primary, secondary, and tertiary market areas for each of the proposed casino's competitors using the same drive-time analysis that we use for the subject development. Competitive casinos have at least one trade area that overlaps one or more of the proposed casino's trade areas.

Using this approach, we find that a Wayland Township casino will compete with the existing casinos in Mount Pleasant, Manistee, Suttons Bay on the Leelanau Peninsula, Traverse City, Detroit (3 casinos), and Michigan City (IN), as well as planned casinos in New Buffalo and Emmett Township.

"Map 2: Competitive Casinos, Overlap of Influence Regions" on page 12 shows the overlap between the trade areas of competitive casinos. They are divided between two layouts to simplify the display of the information.

4. Although Allegan County includes a relatively tourist-rich Lakeshore, we do not consider Wayland Township to serve as a "destination" location. The time involved with travel between the Lakeshore and Wayland Township will prevent the casino from taking advantage of the existing tourism base.

Map 1. Proposed Casino Trade Areas

Primary Market Area
30-minute drive time

Secondary Market Area
90-minute drive time

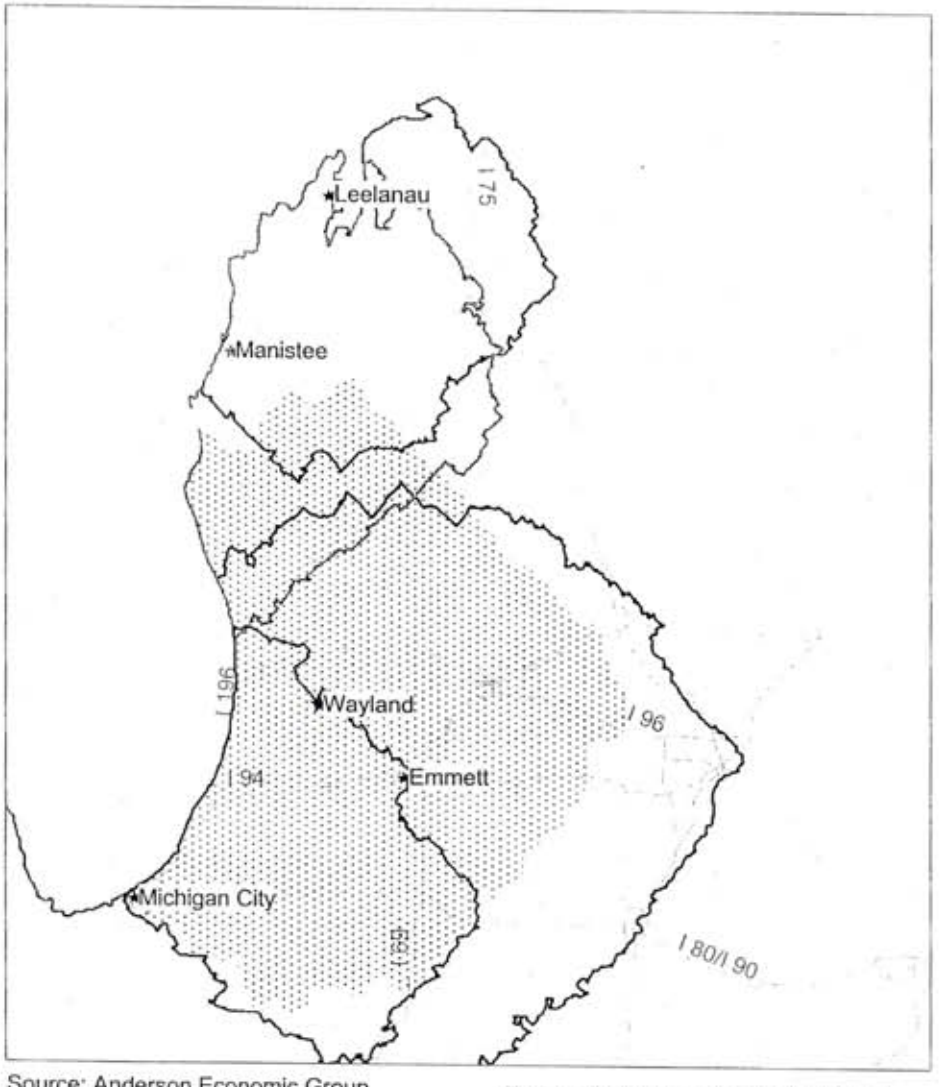
Tertiary Market Area
150-minute drive time

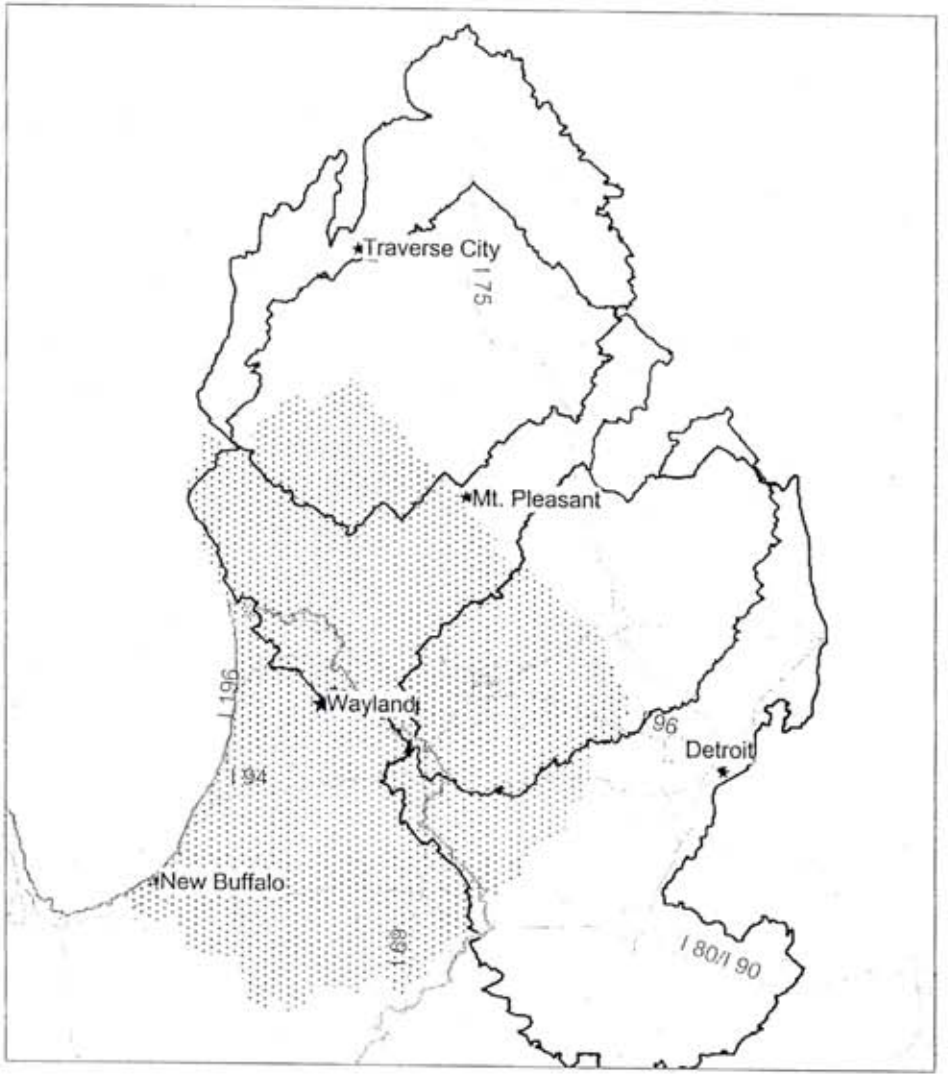
Population Center

County

Source: Anderson Economic Group
Generated: 12-Feb 2003
www.AndersonEconomicGroup.com

Map 2. Competitive Casinos: Overlap of Market Areas





Source: Anderson Economic Group
Generated: 12-Feb 2003
www.AndersonEconomicGroup.com
* Indicates proposed casinos

Tertiary Market Areas by Casino Location

- Michigan City
- Manistee
- Leelanau
- Emmett*
- Wayland*

Tertiary Market Areas by Casino Location

- Traverse City
- Mt. Pleasant
- New Buffalo*
- Detroit (3 Casinos)
- Wayland*

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ESTIMATING CASINO DEMAND

Calculating Total Casino Visits

For each block group, we calculate total casino visits based on the adult population, its propensity to gamble, and the average annual number of casino visits per gambler. This estimation includes the following steps:[5]

1. Collect population data for each block group to determine the population greater than 21 years of age.[6]
2. Calculate the number of adult gamblers in each block group by multiplying the adult population by the percentage of the adult population that attend a casino annually. We estimate that 40% of Michigan's adult population gambles at a casino annually.[7]
3. Calculate the total number of casino visits per block group by multiplying the number of casino gamblers by the average number of visits per year. We assume that, on average, gamblers closer to a casino will go to a casino more often than gamblers located farther away from a casino. This assumption reflects reasonable market behavior, not just in the casino industry, but in other industries as well.

   We account for the correlation between proximity to a casino and gaming frequency by determining the average number of casino visits based on the highest-level casino trade area in which a block group is located. If a block group is located in any casino's primary market area, we estimate that the average gambler within that block group will visit a casino 10 times per year. If its highest-level trade area is a secondary market area, we estimate that the average gambler will visit a casino six times per year. For tertiary market area casinos, the average number of visits is reduced to three.[8]

   Table 1 on page 14 shows the average annual number of casino visits by the highest-level trade area in which a population group is located. Because the cost of visiting a casino increases with distance to the casino, gamblers far-

5. We used assumptions presented in the Gun Lake Tribe's submission to the Bureau of Indian Affairs, (Michigan Consultants, "Updated Economic and Community Impact Analysis: Allegan County Native American Casino," October 2002) unless we had other sources we believed were significantly more accurate.
6. We use 2006 projections provided by Applied Geographic Solutions based on Census data and growth trends.
7. 40% is based on the figures reported by the Gun Lake Tribe in its submission to the Bureau of Indian Affairs. However, we believe that this is likely a liberal representation of the market. We further discuss the use of this number in our "Critical Review: Gun Lake Band of Potowattami Indians Environmental Impact Study; Economic and Community Impact Analysis," which was submitted to the BIA on Monday, February 10, 2003.
8. The average annual gaming visits shown in Table 1 on page 14 are adopted from the average numbers of 10, 5, and 3 used by KPMG in their assessment of similar projects. Because the Tribe's submission did not account for the relationship between distance and gambling frequency, we did not find its frequency assumptions reasonable.

ther from the casino are less likely to visit the facility as frequently as gamblers closer to the casino.

TABLE 1. Average Number of Casino Visits by Highest-Level Trade Area

Variable	Primary	Secondary	Tertiary
Annual Visits per Gambler	10	6	3

Applying Market Share Between Casinos

We define the trade areas for each casino by the Census block groups they include. For each block group we then determine all casino trade areas of which it is part. For example, a single block group may be included in Wayland Township's primary market area, Emmett's secondary market area, and the tertiary market areas of New Buffalo and Michigan City.[9]

We then determine the market share that each casino pulls from each block group. In order to determine the portion of a block group's casino visitors that will likely go to each casino, we apply assumptions regarding penetration rates and market shares. Table 2 shows the penetration rate assumptions that we use in determining the market share that is attributed to each of the competitive casinos, including Wayland.

TABLE 2. Penetration Rate Analysis

Relevant Market Areas	Primary	Secondary	Tertiary
Primary Only	100%		
Primary, Secondary	80%	20%	
Primary, Tertiary	95%		5%
Primary, Secondary, Tertiary	76.8%	19.2%	4.0%
Secondary Only		100%	
Secondary, Tertiary		63.5%	36.5%
Tertiary Only			100%

We use the rates from the table to determine the penetration that a casino in each of the trade areas have in each block group. These percentages must be weighted if there are multiple casinos within each category. For example, if a block group falls within the primary market area of one casino, and the tertiary market area of a second casino, the primary and tertiary market area casinos would capture 95% and 5% of the market respectively. However, if the block

9. Block group inclusion in a trade area definition is based on the location of the block group's geographic centroid. The small size of the block group compared to a trade area enables us to closely adapt the actual drive time analysis to our data sources. Any discrepancy to the resulting population figures is insignificant.

group falls within the primary market area of one casino, and the tertiary market area of three casinos, the percentages must be weighted to account for multiple trade area overlap. The total non-weighted penetration rate for the block group would be 110% (95% + 5% times three casinos). In order to account for this, we divide each of the penetration rate percentages by 110%. Therefore, the primary market area casino would capture approximately 86.4% of the market, and each of the three tertiary casinos would capture approximately 4.5% of the market.

To determine the number of visits that a block group's population makes to each casino annually, we multiply its total annual casino visits by each casino's local market penetration. For the purposes of our analysis, we calculate the number of visits to the Wayland casino separately, and aggregate the visits to other casinos into primary, secondary, and tertiary market area categories.

Calculating Casino Revenue

After determining the number of visitors that travel to casinos from each block group, we calculate total casino expenditure by block group, as well as casino expenditure (i.e., revenue) at the Wayland Township venue. We do this by assigning an average casino hold figure to each visit.[10]

We assume that the amount of money that a gambler spends at a casino increases with the distance that the gambler traveled to attend the facility. The same behavior is seen in a variety of other examples. For example, people that live far away from a retail mall are likely to shop less frequently, but purchase more items every time that they do travel to a mall.

Table 3 shows the assumed average casino hold based on which of the casino's market areas the gambler traveled from to attend the casino.[11]

TABLE 3. Average Casino Hold by Visitor Trade Area

Variable	Primary	Secondary	Tertiary
Average Casino Hold by Visit	$40	$50	$65

In each block group, we multiply the average hold figures by the number of casino visits attributed to casinos in the respective market areas.[12] This provides a total casino expenditure figure for the block group.

10. Average casino hold refers to the net casino revenue per gaming visit. We also refer to it as "customer loss" or casino "revenue."

11. The average hold figures are adopted based on the numbers presented in the tribe's impact assessment: Michigan Consultants, "Updated Economic and Community Impact Analysis: Allegan County Native American Casino," October 2002.

To determine expenditure at the Wayland Township casino, we multiply the total number of casino visits likely directed to the proposed casino by the average Wayland casino hold for the market area in which the block group is located. The sum of expenditure at the Wayland casino from all block groups gives total projected revenue for the casino.

MEASURING SHIFTS IN EXPENDITURE AND REVENUE

We run our analysis under two scenarios to account for different levels of potential competition. Scenario One accounts for competition from existing casinos. Scenario Two accounts for competition from existing casinos, as well as new facilities in New Buffalo and Emmett Township. For both of these scenarios, we calculate the following revenue figures:

1. Total market-area expenditure on casino gaming given no Wayland casino;
2. Total market-area expenditure on casino gaming given the entrance of the Wayland casino;
3. Gaming expenditure at the Wayland casino.

Based on the resulting figures, we estimate the portion of the proposed Wayland Township casino's estimated revenue that is redirected from (1) non-casino-gaming expenditure, and (2) casino-gaming expenditure at other facilities.

To measure the amount of new casino expenditure that the introduction of the Wayland project creates, we estimate the difference in total casino expenditure that results from the introduction of the Wayland casino. The increase in casino expenditure represents a shift in expenditure away from expenditure on other activities, purchases, and investments.

We determine the amount of the Wayland Township casino's proposed revenue that is pulled away from other casinos by comparing the projected revenue for the Wayland casino with the increase in casino expenditure that results from the introduction of the Wayland facility. The difference in these figures show the amount of the proposed casino's revenues that is "cannibalized" from expenditure at other casinos. Without the market entrance of the Wayland casino, this revenue will be directed to casino gaming at other venues.

12. A "primary market area casino" refers to a casino with a primary market area that includes the subject block group. A "secondary market area casino" refers to a casino with a secondary market area that includes the subject block group. A "tertiary market area casino" refers to a casino with a tertiary market area that includes the subject block group.

ANALYSIS RESULTS

Our technique introduces a level of thoroughness that we have not seen in other market studies for casino developments, and adopts the analytical standards we employ in market studies for other industries to the unique characteristics of a casino development.

We evaluate the market for the proposed casino under two scenarios. Scenario One accounts for competition from existing casinos. Scenario Two accounts for competition from existing casinos, as well as new casinos in New Buffalo and Emmett Township. Table 4 summarizes the result of our analysis.

TABLE 4. Summary of Revenue Results

Variable	Scenario One[a]	Scenario Two[b]
Total Wayland casino revenue	$161,930,028	$91,207,822
Revenue from expenditure shifted from other industries	$92,163,963	$42,387,576
Expenditure shift rate	57%	46%
Revenue from *cannibalization* of other casinos' probable revenue	$69,766,065	$48,820,246
Cannibalization rate	43%	54%

a. Assumes competition from existing casinos in Detroit, Mount Pleasant, Manistee, Traverse City, Leelanau Peninsula, and Michigan City (IN).

b. Assumes competition from existing casinos, plus proposed casinos in New Buffalo and Emmett.

Highlights from the assessment include:

- Without competing casinos in New Buffalo and Emmett, the Wayland casino revenue will likely exceed $161 million per year of casino operation.
- The projected Wayland Township casino revenue under Scenario Two is $91 million, 46% below the revenue projection expected by the Tribe, based on the market analysis it submitted to the US Bureau of Indian Affairs. This difference calls into question the financial viability of the casino's business plan as proposed.
- Between $42 and $92 million of the casino's projected revenue will be redirected from expenditure on non-casino-gaming goods and activities. Between $49 and $70 million will be redirected from expenditure at other casinos. These figures represent losses in other areas of the economy that must be accounted for in the economic impact analysis.

Results by Region

In the following section of the report, we measure the economic impact of the casino on specific counties and regions in the state. To prepare for this, we

aggregate our revenue results for the regions analyzed in the economic impact assessment.[13]

Table 5 shows the results of the analysis for Scenario One, which accounts for competition from existing casinos.

TABLE 5. Regional Revenue Results (given competition from existing casinos)

Region	Total Wayland Revenue	From Expenditure Shift	From Shift in Casino Revenue
Total Wayland trade area	$161,930,074	$92,163,956	$69,766,118
Allegan County	$8,770,557	$5,642,740	$3,127,817
Barry County	$4,976,145	$3,874,668	$1,101,477
Kalamazoo County	$13,571,973	$9,658,084	$3,913,889
Kent County	$44,298,352	$28,207,001	$16,091,351
Ottawa County	$12,469,084	$9,788,773	$2,680,311
Northern Michigan Counties[a]	$10,746,674	$7,492,264	$3,254,410
Middle Michigan Counties[b]	$17,462,969	$11,438,388	$6,024,581
Southeast Michigan Counties[c]	$3,338,337	$278,424	$3,059,913
Other Southwest Michigan Counties[d]	$20,805,301	$11,083,833	$9,721,468
Total Out-of-State	$25,490,682	$4,699,781	$20,790,901

a. Revenue contributing counties include Isabella, Lake, Mason, Mecosta, Muskegon, Newaygo, Oceana and Osceola.

b. Clinton, Eaton, Genesee, Gratiot, Ingham, Ionia, Livingston, Montcalm, Saginaw and Shiawassee Counties.

c. Revenue contributing counties include Hillsdale, Jackson, Lenawee, and Washtenaw.

d. Berrien, Branch, Calhoun, Cass, St. Joseph, and Van Buren Counties.

If we account for competition from new casinos in Emmett and New Buffalo, the aggregate numbers are reduced. The level of reduction to each figure

13. Only counties that are included in the proposed casino's market area contribute to the casino's revenue. However, when we assess the net economic impact on these regions, we account for benefits to all counties in the region. For example, although our market assessment shows that Hillsdale, Jackson, Lenawee and Washtenaw Counties are the only Southeast Michigan counties to significantly contribute to Wayland casino revenue, we include gross benefit to the Detroit area in our analysis of the overall effect on the region.

depends on the proximity of the region to the Wayland casino, existing casinos, and new casinos in Emmett and New Buffalo.

Basis for Regional and Economic Impact Analysis

We use the Wayland casino revenue estimates from each region to calculate economic impact in the next section. Our analysis calculated economic impact under both scenarios; however, our discussion concentrates on the assumption that the Wayland casino will enter the market with the existing casinos only (Scenario One).

If Wayland enters the market along with other new casinos, its overall revenue—and both its positive and negative effects—will be smaller.

Economic and Fiscal Impact Assessment

PROPERLY DEFINING "IMPACT"

The economic impact of any new enterprise includes:

- The direct effect of *new* local purchases and payroll of the enterprise;
- The indirect effects attributable to the additional activity generated as purchases and payroll and re-spent in the regional economy; and
- The indirect and direct effects of *displaced* or *substituted* expenditures.

Unlike many economic impact analyses, we consider only *new* economic activity in the net economic impact. Activity that merely replaces or displaces other activity—purchases from one store that displace others—is subtracted out.

PROPER USE OF "MULTIPLIERS" FOR INDIRECT EFFECTS

Our analysis avoids the common errors that plague most "economic impact" analyses. For this analysis, we are careful to describe our use of economic "multipliers" in the model. We do so to illustrate the appropriate use of the multipliers.

Impact Analysis Avoids Common "Multiplier" Errors

This approach is much more conservative, and more accurate, than the common method of simply multiplying direct expenditures by a "multiplier" and ignoring all competitive and distributional effects. Our analysis of the Gun Lake Band's economic impact report filed with the Bureau of Indian Affairs (BIA) shows in some detail how taking all expenditures and multiplying them by two violates the assumptions under which impact multipliers are estimated.[14]

"Multipliers" in Economic Impact Analysis

Multipliers are appropriate for *bona fide* new economic activity in the state or region, and reflect the fact that a set of expenditures tend to be re-spent by their recipients, partially in the same region or state. Multipliers are not appropriate for activity shifted from one activity to another in the same region or state, because the displaced income would also be spent and re-spent regardless of the casino.

14. We excerpt in that report a number of sections of the US Bureau of Economic Analysis *RIMS II User Guide* in which the BEA explains the proper approach, and warns against including in the base of a multiplier analysis expenditures that are shifted from one activity to another. A complete copy of the report ("Critical Review: Gun Lake Band of Potawatomi Indians Environmental Impact Study; Economic and Community Impact Analysis," which was submitted to the BIA on Monday, February 10, 2003) is available online at http://www.AndersonEconomicGroup.com

Appropriate Multipliers on New or Displaced Income

While "multipliers" are commonly misused, there is an appropriate place for them in a correctly-performed economic impact analysis. In this analysis, we apply a multiplier to the following expenditures:

- The wage and salary earnings of casino employees in the State of Michigan
- The expenditures on purchases made in the State of Michigan for the operations of the casino.
- Expenditures made by out-of-state visitors on other goods and services while in the State of Michigan.
- The displaced income of Michigan residents, who shift their expenditures from other household goods and services to casino expenditures.

The only logically-consistent use of multipliers is to apply them to *both* "new" and "displaced" expenditures. This means applying multipliers to lost expenditure in other areas of the state, as well as new expenditures in Wayland Township.

Expenditures Not Multiplied

Some expenditures were not multiplied, because they were not likely to be respent in the same manner as payroll or purchase expenditures. These include profit distributions, gaming tax revenue, and management fees.

CONSTRUCTION ANALYSIS

Our analysis properly segregates construction from operational activity. However, any construction analysis at this stage is speculative, because: (1) the actual facility plans are not available; and (2) our market analysis indicates that the likely revenue to the facility, if we assume that two competing facilities will open in the region, will be far less than that stated in the tribe's economic impact analysis. This calls into question the financial viability of the project.

Should construction take place, the economic impact is likely to be positive for Michigan, and for Allegan and the surrounding counties, for the following reasons:

- The source of the funds for construction would likely be largely from out-of-state investors, or from financial intermediaries that draw on out-of-state funds.
- Much of the construction expenditure—though not all—would be made in Michigan.
- Should construction begin in the current economic climate, there would be relatively little substitution or displacement of other construction projects in the region.

METHODOLOGY AND MODEL

We use a sophisticated economic model to estimate the sources, the uses of the casino revenue, and related expenditures by out-of-state visitors traveling to the casino. The model also includes construction expenditures made initially on the facility.

This particular model adapts the methodologies we have developed for analyzing the impact of other projects, including:

- The expansion of the Detroit-Wayne County Port;
- Major industrial installations in various regions of the state;
- Work stoppages and strikes in the airline, marine transportation, and automotive industries; and
- New retailers in various states, and in the Caribbean Basin.

Implementation of the Model

The model is implemented in Matlab and Simulink, which is a mathematical and simulation software environment developed by Mathworks, Inc.[15] This environment allows us to predict, over numerous periods, the impacts of different variables, accounting for complex interaction among the variables. For example, we can allow casino revenue to grow over time, while taking into account that growing casino revenue implies changes to the displaced income in other industries.

The model schematic is presented, in graphical form, in the appendix.

OUTLINE OF MODEL

Below, we describe each of the major building blocks in the model. These building blocks (or "subsystems") are illustrated in the schematic in the appendix.

1. Gaming Revenue
   We first estimate gaming revenue, based on the results of the market assessment. This generates casino revenue from various geographic areas for the entire period.

   In the schematic, gaming revenue is modeled by the box on the left. The outputs from the calculations in this subsystem are revenue from Michigan and non-Michigan sources.

2. Allocation of Casino Revenue
   Using the market demand to forecast total expenditures, we allocate expenditures based on likely expense categories for a casino enterprise. The largest allocation is for payroll, with smaller amounts for purchases, gaming and other taxes, management fees, and profits.

15. The Mathworks web site is at: http://www.mathworks.com.

In the schematic, allocation of casino revenue is modeled in the box to the right of the gaming revenue subsystem.

3. Impact of Expenditures
   The various allocations of expenditures are further apportioned between in-state and out-of-state expenditure, and, when appropriate, multiplied to account for re-spending in the region's economy. In particular, payroll and purchases in the state are multiplied to account for this re-spending.

   This is done in the two boxes shown on the schematic, to the right of the "allocation of gaming revenue" subsystem.

4. Displacement Effects
   Using the same market demand variables that drove casino expenditures, we calculate displaced income from various geographic sectors. For revenue from residents of the state, we multiply them to account for the loss of re-spending of those dollars.

   In addition, non-Michigan revenue is multiplied by a factor that accounts for additional expenditure by those visitors in the state, and this is then multiplied by an additional multiplier to account for re-spending from the tourism industry.

   This subsystem is at the bottom of the schematic, below the "allocation of gaming revenue" subsystem.

5. Net Benefits
   Finally, we take all spending in Michigan—including the re-spending estimated by using multipliers for payroll, purchases, and tourism-related expenditures in Michigan—and collect them in the "net benefits" subsystem. We subtract the displaced income from losses in other industries from these gross benefits to residents of the state to arrive at net benefits to the state.

   Then, using county- and region-specific allocation factors, we estimate the amount of the gross benefit that accrues to residents of different counties and regions. These amounts are compared to the gaming revenue supplied by residents of these same areas to arrive at net benefit estimates for each county or region.

   The net benefits subsystem is at the far right of the schematic of the model in the appendix.

ASSUMPTIONS

We use a number of input variables in our model, including:

- Revenue sources by county and region. These are described in the market analysis section of the report.
- Allocation factors for payroll, purchases, management fees, investor returns (including profits), gaming taxes, and other taxes. These were estimated on the basis of similar enterprises for which data are available.[16]
- Shares of the expenditures by the casino operation that would accrue to Michigan residents. These ranged from very high (for payroll), to 20% (for management fees).
- Plant and property data, which is speculative at this stage, and was not a significant factor in the conclusions of the analysis.
- Construction payroll, which again is speculative and not a significant factor in the conclusions of the analysis.
- Payroll, benefits, and other employment expenses, which includes average wages & payroll taxes, benefit ratios, and annual wage increase assumptions that are intended to reflect the average across both direct and indirectly affected jobs. As a simplifying assumption, we used these same factors for both "new" and "displaced" jobs.
- Impact multipliers, including those for payroll, purchases, and tourism-related expenditures. These are reasonably conservative, though properly reflect the actual re-spending that will occur from the expenditures for both new and displaced income.
- County and regional benefit and cost shares.
- Various simulation parameters, including the 2004-2014 time period. Given the relatively low inflation rate assumption, the starting date is not critical in the analysis. However, as discussed in the market demand analysis, the presence or absence of competing casinos in the region is critical.

These are summarized in the tables in the appendix.

16. The best available source was the *Annual Financial Statement Studies*, 2002-2003 edition, published by RMA (Risk Management Associates, formerly Robert Morris Associates). We primarily used the data for SIC 7999; (NAICS 48711 48721, 48799), which is for "entertainment, amusement, or recreation services," although the ratios for "coin operated amusements" are similar. Although we reviewed the data for "hotels," lodging is not a comparable enterprise to casino gaming. To the extent the facility, in future years, develops a substantial lodging and restaurant business, that portion of the impact could then be evaluated using data from the lodging and restaurant industries.

CAUTIONS IN THE ANALYSIS

We make a number of assumptions to simplify our analysis, and project future activities based on factors that cannot be known at this time. We identify below the most important cautions about the results of our analysis.

- As in any analysis of future economic activity, we assume baseline economic activity, residential patterns, road networks, and consumer preferences, as well as current laws. All of these factors will change, and some may change significantly.
- As noted in the market analysis section of the report, we do not know what competing casinos will open in the region. Furthermore, our analysis suggests that, should competing casinos in the region open, the proposed Wayland Township facility would likely not be feasibly, and may need to be scaled back in size and scope.
- A proper economic impact analysis accounts for both new and displaced income. Should the project be completed, however, the direct new jobs will be more visible to the observer than the displaced jobs.
- We made a simplifying assumption that the aggregate number of new and displaced jobs could be estimated using the same average salary and benefit figures. The actual pattern of new and displaced jobs will vary somewhat from this assumption.
- The casino operates for a full year, starting in 2004. We present information for the full year, even though the first full year may not start until after 2004. In reality, construction would precede operation, and would likely be included during the initial portion of the casino's first year of operation.
- We use multipliers in an appropriate manner. While the appropriate use is much more important than the size of the multiplier used, the size of the multipliers we use (for tourism, purchases, and payroll) are based on economy-wide analysis, using a number of strong assumptions. The actual multiplier effect will be somewhat different.

We make further simplifying assumptions about non-casino expenditures, including:

- Transportation expenses, in particular expenses for gasoline and gasoline taxes, on average pay for the cost of the service, including road maintenance. No additional benefit or displacement effects were included due to these expenditures.
- A good portion of the state gaming tax is used to pay for regulation of the industry.
- As the majority of the casino revenue comes from Michigan residents, the other state and local taxes (such as sales taxes and property taxes) can be ignored in the analysis. In reality, such taxes (especially property taxes that would have been paid by businesses that lost earnings due to substitution of casino visits) are likely to magnify the effect of the displaced income.

- The current use of the land generates no income tax or property tax revenue to the state, and the future use will not either. In reality, the current use generates some taxes, and the intended use would result in a tax-exempt status for much of the casino operations. This again makes the analysis conservative.
- The effect of federal income taxes can be ignored. In reality, federal income taxes would generate "leakages" from the state under both the current use of the land, and in any proposed casino development.

PROJECTED ECONOMIC IMPACT RESULTS

Using these assumptions and methodologies, and with the cautions mentioned above, we estimate the following economic impact for the State of Michigan, and for counties and regions within it. More detail regarding the projected impacts is available in this report's appendix, beginning on page 31.

The impacts discussed below assume competition from existing casinos only. If we assume that new casinos are opened in New Buffalo and Emmett, the gross benefits and losses due to the Wayland facility would be reduced. However, we found that the net effect of the new casino on the State of Michigan remained at a comparable level to the figures presented in the following results.

The following tables show the net economic impact of opening the proposed Wayland casino by region. Table 1 compares the net economic benefit to Allegan County to the net economic loss to the rest of Michigan. Table 2 further breaks down the economic effect by region.

TABLE 1. Summary of Net Economic Benefit, ($Millions)
Allegan County compared to rest of Michigan

Region	2004	2004 to 2014
Allegan County	97.5	1,185.9
Michigan (except Allegan)	(123.5)	(1,503.5)
Michigan Net Benefit (loss)	(26.10)	(317.57)

State of Michigan

The casino enterprise will generate substantial new economic activity in the state, especially in Allegan County. Much of the casino payroll and purchases will be made in Allegan and nearby counties. Profits and management fees, however, will be split between Michigan and non-Michigan residents.

The majority of the casino expenditures will come from gaming losses by residents of the state. These losses ("revenue" to the casino) displace other expendi-

tures in the state, as well as savings of Michigan residents that they would use to make purchases in the future.

Therefore, the gross expenditures arising from the new casino would be $192.22 million in 2004, provided the casino operated for the complete calendar year. Subtracting the displaced income of Michigan residents, in the amount of $218.32 million from the gross expenditures, however, results in a net economic benefit of $-26.1 million in 2004. Between 2004 and 2014, the Michigan economy will lose more than $315 million as a result of operations at the proposed casino.

This negative net benefit means that, after accounting for all benefits and all costs, the operation of the casino enterprise will result in dollars flowing out of the state.

Effect by Region

Below we discuss the net impact by region.

TABLE 2. Summary of Net Economic Benefit, by Region ($Millions)

Region	2004	2004 to 2014
Allegan County	97.5	1,185.9
Barry County	(6.0)	(73.6)
Kalamazoo County	(4.4)	(53.7)
Kent County	(49.7)	(605.2)
Ottawa County	(12.3)	(149.2)
Northern Michigan	(15.3)	(185.9)
Middle Michigan	(24.1)	(293.2)
Southeast Michigan	8.1	98.7
Other Southwest Michigan Counties[a]	(19.8)	(241.4)
Michigan Net Benefit (loss)	(26.10)	(317.57)

a. Berrien, Branch, Calhoun, Cass, St. Joseph, and Van Buren Counties.

Kent County

Kent County residents are likely to generate a substantial amount of casino revenue, meaning that Kent will have a significant amount of income displaced from other industries. Given its nearby location and business centers, Kent should also account for some of the payroll and purchases.

Subtracting the displaced income from the additional payroll and purchases generates an estimated economic loss of $49.7 million in 2004 for Kent County residents for a full year of casino operation. This figure increases to a $60.6 million loss per year by 2014.

Allegan County

Allegan receives the largest share of the payroll, based on our assumption that a substantial number of casino workers will reside in the county. In addition, payments to the tribe are assumed to be made in Allegan County.[17]

Allegan residents are assumed to provide only a small portion of the gaming revenue. Therefore, the net benefit to the county is a fairly substantial $97.5 million in 2004.

Note that this net economic benefit will be spread very unevenly within the county. Owners of commercial real estate in the areas near the casino, and investors in the casino or royalty-earning members of the tribe, could benefit handsomely. Owners of competing entertainment venues on the Lakeshore, however, could actually lose business.

Kalamazoo County

Kalamazoo county residents will have a pattern similar to that of Kent County, in that they will make up a substantial amount of gaming revenue, and get a smaller share of the benefits.

We estimate a net economic benefit for Kalamazoo county residents of $-4.4 million in 2004. This figure grows to -$5.4 in 2014.

Other Areas of Impact

Our model also shows negative economic benefits to Ottawa and Barry Counties. These counties, along with Kent and Kalamazoo, are in immediate proximity with the Wayland township site.

Other areas of the State are also likely to lose economic activity as a result of a Casino development in Wayland Township. In 2004, the Southwest Michigan Counties of Berrien, Branch, Calhoun, Cass, St. Joseph, and Van Buren will see a combined net benefit of $-19.8 million; the Mid-Michigan Counties of Clinton, Eaton, Genesee, Gratiot, Ingham, Ionia, Livingston, Montcalm Saginaw, and Shiawassee will lose a combined $24.1 million; and the Northern-Mid-

17. Note our allocation of profit in-state and out-of-state is about 50-50. This figure is not precise, though, given that tribe members in the state will presumably invest some of the funds out of the state. Similarly, we assume investors in the casino management firms will reside partially out of state, with some in-state partners.

Michigan Counties of Isabella, Lake, Mason, Mecosta, Muskegon, Newaygo, Oceana, and Osceola will lose a combined $15.3 million.

In addition to Allegan County, our model reveals a positive net economic benefit to only one other area of the State. In 2004 we see a net benefit of $8.1 million for Southeast Michigan. This results largely because 1) given the distance from the area to the casino, we expect that only 2% of the casino's total revenues will come from residents of Southeast Michigan, and 2) as home to many of the State's businesses, we expect a significant portion of the casino's expenditures, 7%, to be directed to Metro Detroit businesses.

Impact to Michigan Jobs

In addition to measuring the change in total net economic benefit to the State of Michigan and specific regions, we also determined the effect that the proposed casino would have on the State in terms of jobs lost or gained. Table 3 shows the impact of the proposed Wayland Township casino on employment in Michigan.

TABLE 3. Economic Impact to Michigan Jobs[a]

Year	Total Jobs Gained[b]	Total Jobs Lost	Net Change in MI Employment
2004	3,173	4,912	(1,738)
2005	2,416	5,010	(2,594)
2006	2,464	5,110	(2,646)
2007	2,513	5,212	(2,699)
2008	2,564	5,316	(2,753)
2009	2,615	5,423	(2,808)
2010	2,667	5,531	(2,864)
2011	2,721	5,642	(2,921)
2012	2,775	5,755	(2,980)
2013	2,830	5,870	(3,039)
2014	2,887	5,987	(3,100)

a. These figures represent a difference in annual jobs. For example, if the casino were opened, we expect there to be 2,864 fewer jobs in the economy by 2010.

b. Total Jobs Gained and Lost include direct, indirect, and tourism induced jobs. Total Jobs Gained in 2004 includes 805 construction jobs, although construction will likely be spread out over multiple years.

Temporary jobs created through the construction of the casino will reduce the initial negative impact of the casino on Michigan employment. During the first year of operation, the casino will result in a net decrease of 1,738 Michigan jobs, because our analysis assumes that construction will occur entirely in 2004, resulting in an additional 805 jobs gained during that year.

When we assume that the casino no longer supports temporary construction jobs, we see the net decrease in Michigan employment increase to a loss of 2,594 jobs in 2005. The net change in Michigan employment increases to 3,100 jobs by 2014.

By comparing these job figures with the regional sources-of-income data in Table 5 on page 18, we can infer that the change in jobs would be greatest in those counties that provide the most revenue. Therefore, it is likely that the majority of the job losses will come from Kent, Ottawa, and other counties in Southwest and Mid-Michigan. A very large majority of job gains will come into Allegan County, although the overall increase will be comprised of large gains around the casino, and smaller losses in the Lakeshore and other areas. Although we can fairly precisely define the county of residence of gaming patrons, we cannot define within similar precision the counties in which they spend their earnings. Therefore, we have not estimated county-by-county job loss figures.

The effect of the casino on tourism related jobs is minimal. We consider tourism related jobs to be those jobs created through the expenditure from out-of-state visitors. Our analysis finds that between 46 jobs in 2004 and 56 jobs in 2014 are created due tourism from out-of-state visitors. This results in a minor overall effect on the economy.

The results of our analysis show that it takes nearly twice as much expenditure at a casino to support the same number of jobs that average non-casino expenditure supports. This is because a larger portion of the casino expenditure is directed (1) out of state, and (2) to uses that have a lesser spin-off effect on the economy.[18]

18. We assumed that the average casino job pays the same as the average non-casino job in terms of wages and benefits, and that the multiplier effects for casino payroll, casino purchases, and displaced income in Michigan were all the same.

Appendix A: Model Inputs and Results

The following appendix contains:

Table A-1. Economic Impact Model Data

Allegan County Casino -- Base Case:

Variable Name	*Variables*	*Values*	
1. Gaming Revenue Sources	*Gaming Revenue from residents of:*	$millions	
Scenario 1			
out_of_state_rev	*Indiana, Ohio, Illinois, and other states*	$	25.49
allegan_rev	*Allegan County*	$	8.77
kent_rev	*Kent County*	$	44.30
kzoo_rev	*Kalamazoo County*	$	13.57
ottawa_rev	*Ottawa County*	$	12.47
barry_rev	*Barry County*	$	4.98
sw_mich_rev	*Southwest Michigan (Berrien, Branch, Calhoun, Cass, St Joseph and Van Buren counties)*	$	20.81
se_mich_rev	*Southeast Michigan (Hillsdale, Jackson, Lenawee and Washtenaw counties)*	$	3.34
mid_mich_rev	*Mid-Michigan (Clinton, Eaton, Genesee, Gratiot, Ingham, Ionia, Livingston, Montcalm, Saginaw and Shiawassee counties)*	$	17.46
n_mich_rev	*Northern Michigan (Isabella, Lake, Mason, Mecosta, Muskegon, Newaygo, Oceana and Osceola counties)*	$	10.75
Memo: Total Gaming Revenue		*$*	*161.94*
Scenario 2			
out_of_state_rev_2	*Indiana, Ohio, Illinois, and other states*	$	7.51
allegan_rev_2	*Allegan County*	$	6.17
kent_rev_2	*Kent County*	$	31.75
kzoo_rev_2	*Kalamazoo County*	$	6.46
ottawa_rev_2	*Ottawa County*	$	7.43
barry_rev_2	*Barry County*	$	3.17
sw_mich_rev_2	*Southwest Michigan (Berrien, Branch, Calhoun, Cass, St Joseph and Van Buren counties)*	$	7.99
se_mich_rev_2	*Southeast Michigan (Hillsdale, Jackson, Lenawee and Washtenaw counties)*	$	2.00
mid_mich_rev_2	*Mid-Michigan (Clinton, Eaton, Genesee, Gratiot, Ingham, Ionia, Livingston, Montcalm, Saginaw and Shiawassee counties)*	$	10.86
n_mich_rev_2	*Northern Michigan (Isabella, Lake, Mason, Mecosta, Muskegon, Newaygo, Oceana and Osceola counties)*	$	7.87
Memo: Total Gaming Revenue		*$*	*91.21*
1.a Units			
millions	*Revenue in units of millions US Dollars*	$	1,000,000
1.b Casino Revenue Displacement			
mi_casino_displacement	*Share of revenue displaced from other Michigan casinos.*		0.44
mi_casino_displacement2	*Casino Displacement, scenario 2*		0.54
Note: displaced casino revenue is treated the same as other displaced income in the impact analysis.			
2. Operations, Management, Gaming Tax, Profit			
rev_share_payroll	share of gaming revenue to payroll and employee expenses		0.55
rev_share_purchases	share of gaming revenue to purchases		0.15
mgmt_fee	Management Expenses, as share of gaming revenue		0.11
investor_share	Returns to investors and bondholders, as share of gaming revenue		0.09
gaming_tax_rate	State tax on gaming revenue		0.08
other_gaming_tax_rate	Other taxes as share of gaming revenue		0.02
audit check	*sum of shares must equal 100%:*		*1.00*

3. Michigan Shares

mi_purchase_share	*Michigan Purchase Share*		0.950
mi_mgmt_fees_share	*Michigan Management Fees Share*		0.200
use_share_gaming_tax	*Gaming Tax Use Share*		1.000
mi_profit_share	*Michigan Profit Share*		0.500

4. Plant and Property Data

initial_real_property_value	*Initial Real Property Value*		$	1,000,000
change_real_property_value	*Change in Real Property Value*		$	20,000,000
initial_personal_property_value	*Initial Personal Property Value*		$	100,000
change_personal_property_value	*Change in Personal Property Value*		$	10,000,000
real_growth	*Annual Growth Rate, Real Property*	%		2
personal_growth	*Annual Growth Rate, Personal Property*	%		1

Note: Proposed facility would be located on tax-exempt trust lands. See also note below on "construction".

5. Construction Payroll

construction_workers	*Number of Construction Workers, full-year FTE*			805
avg_annual_const_hours	*Average Annual Construction Hours*			2,080
avg_const_wage	*Initial Average hourly wage*		$	25.00

Note: No firm facility plans are available. Actual construction payroll could be significantly different.

6. Payroll, Benefits, and other Employment Expenses

mi_payroll_share	*Michigan residents' payroll, as share of casino payroll*	0.9
salary_job_direct	*Salary and payroll taxes, direct employment, FTE*	35,000
wage_growth	*Annual increase in wage and benefits costs*	0.02
benefit_rate	*Benefits and other employment overhead, as share of salary*	0.27

Memo:

Indirect and displaced jobs' salaries assumed, on average, the same as "direct" jobs.

7. Impact Multipliers

payroll_mult	*Payroll Multiplier*	1.60
local_purch_mult	*Local Purchase Multiplier*	1.60
tourism_mult	*Tourism Multiplier*	1.60
fed_tax_wedge	*Share of Michigan Earnings Foregone to Federal Taxes*	0.15
nonmich_nongame_spendingshare	*Non-Gaming Expenditures by Non-Michigan Residents, as share*	0.05

8. County-level Net Benefit and Cost Shares

county_shares_gain	*share of increased income to Michigan, for selected counties*	*See detail on sheet*
county_shares_displaced_income	*share of displaced income to Michigan, for selected counties*	*"county shares".*

Note: see "county shares" worksheet

9. Simulation Parameters

Tstart	*Model Start Time (year)*	2,004
Tstop	*Model Stop Time (year)*	2,014
Tstep	*Model Increments*	1

Table A-2. Economic Impact to Michigan: Income (in millions)

Years	Gross Benefit	Displaced Income	Net Benefit
2004	$ 192.22	$ 218.32	$ (26.10)
2005	$ 196.07	$ 222.69	$ (26.62)
2006	$ 199.99	$ 227.14	$ (27.15)
2007	$ 203.99	$ 231.68	$ (27.69)
2008	$ 208.07	$ 236.32	$ (28.25)
2009	$ 212.23	$ 241.04	$ (28.81)
2010	$ 216.47	$ 245.86	$ (29.39)
2011	$ 220.80	$ 250.78	$ (29.98)
2012	$ 225.22	$ 255.80	$ (30.58)
2013	$ 229.72	$ 260.91	$ (31.19)
2014	$ 234.32	$ 266.13	$ (31.81)
Total 2004 - 2014	$ 2,339.10	$ 2,656.67	$ (317.57)

Note: "Gross benefit" includes management fees, profits, payroll, purchases, and economic spin-offs in Michigan

Table A-3. Gross Benefits to Other States (in millions)

Years	Gross Benefit, Non-Michigan	Gaming Revenue Non-Michigan
2004	$ 25.10	$ 25.49
2005	$ 25.60	$ 26.00
2006	$ 26.11	$ 26.52
2007	$ 26.64	$ 27.05
2008	$ 27.17	$ 27.59
2009	$ 27.71	$ 28.14
2010	$ 28.27	$ 28.71
2011	$ 28.83	$ 29.28
2012	$ 29.41	$ 29.87
2013	$ 30.00	$ 30.46
2014	$ 30.60	$ 31.07
Total 2004 - 2014	$ 305.44	$ 310.18

Note: "Gross benefit" includes management fees, profits, payroll, and purchases to non-Michigan residents. No spin-off effects have been calculated for out-of-state expenditures.

Table A-4: Net Benefits by County

$millions

Years	Allegan	Kent	K'zoo	Ottowa	Barry	SW Mich	SE Mich	Mid Mich	N Mich
2004	$ 97.5	$ (49.7)	$ (4.4)	$ (12.3)	$ (6.0)	$ (19.8)	$ 8.1	$ (24.1)	$ (15.3)
2005	$ 99.4	$ (50.7)	$ (4.5)	$ (12.5)	$ (6.2)	$ (20.2)	$ 8.3	$ (24.6)	$ (15.6)
2006	$ 101.4	$ (51.7)	$ (4.6)	$ (12.8)	$ (6.3)	$ (20.6)	$ 8.4	$ (25.1)	$ (15.9)
2007	$ 103.4	$ (52.8)	$ (4.7)	$ (13.0)	$ (6.4)	$ (21.1)	$ 8.6	$ (25.6)	$ (16.2)
2008	$ 105.5	$ (53.8)	$ (4.8)	$ (13.3)	$ (6.5)	$ (21.5)	$ 8.8	$ (26.1)	$ (16.5)
2009	$ 107.6	$ (54.9)	$ (4.9)	$ (13.5)	$ (6.7)	$ (21.9)	$ 9.0	$ (26.6)	$ (16.9)
2010	$ 109.8	$ (56.0)	$ (5.0)	$ (13.8)	$ (6.8)	$ (22.3)	$ 9.1	$ (27.1)	$ (17.2)
2011	$ 111.9	$ (57.1)	$ (5.1)	$ (14.1)	$ (6.9)	$ (22.8)	$ 9.3	$ (27.7)	$ (17.5)
2012	$ 114.2	$ (58.3)	$ (5.2)	$ (14.4)	$ (7.1)	$ (23.2)	$ 9.5	$ (28.2)	$ (17.9)
2013	$ 116.5	$ (59.4)	$ (5.3)	$ (14.7)	$ (7.2)	$ (23.7)	$ 9.7	$ (28.8)	$ (18.3)
2014	$ 118.8	$ (60.6)	$ (5.4)	$ (14.9)	$ (7.4)	$ (24.2)	$ 9.9	$ (29.4)	$ (18.6)
Net Benefit 2004-14:	$1,185.9	$ (605.2)	$ (53.7)	$ (149.2)	$ (73.6)	$ (241.4)	$ 98.7	$ (293.2)	$ (185.9)

net benefits include additional payroll and purchases (with indirect effects); net of additional gaming revenue paid to casino (with indirect displaced income).

Table A-5: Regional and County Shares

Scenario 1		revenue [a]	*county_shares_displaced_income* (as share of Mi gaming revenue)	*county_shares_spending* (as share of Michigan spending) [b]
out_of_state_rev	$	25.49	n/a	
allegan_rev	$	8.77	6%	58%
kent_rev	$	44.30	32%	11%
kzoo_rev	$	13.57	10%	9%
ottawa_rev	$	12.47	9%	4%
barry_rev	$	4.98	4%	1%
sw_mich_rev	$	20.81	15%	7%
se_mich_rev [c]	$	3.34	2%	7%
mid_mich_rev	$	17.46	13%	2%
n_mich_rev	$	10.75	8%	1%
Memo: Total Gaming Revenue	*$*	*161.94*	*100%*	*100%*
less: Non-Michigan rev	$	25.49		
equals: Michigan rev	*$*	*136.45*		

(a) Southeast Michigan includes purchases in metro Detroit area.

(b) Estimated based on population, industry, and geography

(c) Revenue figures based on market assessment scenario 1

Table A-6. Economic Impact to Michigan: Jobs

Years	Direct Operations: Jobs Gained	Direct Operations: Jobs Lost (c, d)	Total (Direct Operations, Indirect, Tourism, and Construction): Jobs Gained (a, b)	Total (Direct Operations, Indirect, Tourism, and Construction): Jobs Lost (c, d)	*Net Change in Michigan Employment (e)*: Jobs Gained less Jobs Lost (e)
2004	1,803	3,070	3,173	4,912	*(1,738)*
2005	1,839	3,131	2,416	5,010	*(2,594)*
2006	1,876	3,194	2,464	5,110	*(2,646)*
2007	1,914	3,258	2,513	5,212	*(2,699)*
2008	1,952	3,323	2,564	5,316	*(2,753)*
2009	1,991	3,389	2,615	5,423	*(2,808)*
2010	2,031	3,457	2,667	5,531	*(2,864)*
2011	2,072	3,526	2,721	5,642	*(2,921)*
2012	2,113	3,597	2,775	5,755	*(2,980)*
2013	2,155	3,669	2,830	5,870	*(3,039)*
2014	2,198	3,742	2,887	5,987	*(3,100)*

notes

a Construction assumed to occur entirely in 2004; actual construction will be spread over multiple years.

b Facility size is unknown, so construction estimate is not precise.

c Consumer expenditures per job, and average salary and overhead, and income multipliers assumed the same for both new (casino-related) and displaced jobs

d Direct and indirect jobs include all casino-related employment from payroll and purchases in Michigan.

e Net change is the difference between total new jobs (direct operation, indirect, tourism and construction) gained, and total jobs lost, for the State of Michigan.

TABLE A-7: Gaming Visits and Revenue Sources by County, Competitive Scenario One

Competitive Market Made Up of Current Casinos Only

County	Gamblers 21+ years	Current Casinos (No Wayland, New Baffalo, or Emmett) Annual Total Casino Visits	Annual Total Casino Revenue	Current Casinos plus Wayland Annual Total Casino Visits	Annual Total Casino Revenue	Annual Wayland Visits	Annual Wayland Revenue
Totals	1,120,090	4,620,843	$ 262,985,005	6,594,170	$ 355,148,957	3,190,658	$ 161,930,074
La Porte, IN*	21,247	209,579	$ 8,426,440	209,579	$ 8,706,697	11,841	$ 769,732
St. Joseph, IN	76,656	459,966	$ 22,998,600	459,966	$ 25,516,937	167,888	$ 10,912,840
Elkhart, IN	53,700	316,058	$ 15,894,708	316,058	$ 17,591,569	116,192	$ 7,552,196
Steuben, IN	10,025	30,069	$ 1,954,368	30,069	$ 1,954,368	15,031	$ 977,184
Lagrange, IN	9,367	28,986	$ 1,857,702	28,986	$ 1,867,334	14,257	$ 926,608
De Kalb, IN*	8,406	25,222	$ 1,639,482	25,222	$ 1,639,482	12,613	$ 819,741
Noble, IN*	12,675	38,027	$ 2,471,898	38,027	$ 2,471,898	19,016	$ 1,235,949
Marshall, IN*	3,400	20,396	$ 1,019,760	20,396	$ 1,131,423	7,443	$ 483,876
Kosciusko, IN*	16,571	57,298	$ 3,497,016	57,298	$ 3,580,047	26,603	$ 1,729,172
Mason, MI*	658	3,950	$ 197,520	3,950	$ 219,148	1,442	$ 93,723
Lake, MI*	3,024	17,125	$ 1,024,472	17,125	$ 1,039,921	3,009	$ 195,647
Osceola, MI*	4,909	29,457	$ 1,733,217	29,457	$ 1,763,932	5,037	$ 327,372
Oceana, MI	7,858	37,726	$ 2,140,925	37,726	$ 2,235,220	11,449	$ 744,088
Newaygo, MI	14,090	48,109	$ 3,030,095	67,854	$ 4,033,364	27,220	$ 1,458,547
Mecosta, MI	11,416	68,492	$ 3,969,461	68,492	$ 4,050,276	15,132	$ 956,823
Isabella, MI*	13,341	128,049	$ 5,248,622	128,049	$ 5,425,103	8,279	$ 538,229
Saginaw, MI*	1,123	6,737	$ 400,801	6,737	$ 407,263	1,174	$ 76,292
Muskegon, MI	48,254	144,760	$ 9,409,686	264,896	$ 15,479,300	125,712	$ 6,432,245
Montcalm, MI	17,732	104,740	$ 5,317,547	106,402	$ 5,667,453	45,242	$ 2,557,225
Gratiot, MI*	11,022	88,405	$ 3,876,798	88,405	$ 4,119,190	14,458	$ 939,835
Kent, MI	164,429	495,239	$ 32,132,094	1,265,059	$ 60,339,095	1,017,839	$ 44,298,352
Genesee, MI*	6,204	35,208	$ 1,870,697	35,208	$ 1,928,570	5,002	$ 325,062
Ottawa, MI	68,712	204,141	$ 13,268,970	412,282	$ 23,057,743	249,383	$ 12,469,084
Shiawassee, MI*	19,331	64,026	$ 4,078,869	64,026	$ 4,092,248	12,414	$ 806,763
Ionia, MI	16,908	53,068	$ 3,379,230	101,456	$ 5,693,708	59,224	$ 2,922,694
Clinton, MI	18,652	90,387	$ 5,496,245	96,331	$ 5,894,633	18,720	$ 1,162,625
Livingston, MI*	39,553	237,323	$ 12,427,598	237,323	$ 12,844,468	32,976	$ 2,143,419
Ingham, MI	75,355	233,520	$ 15,036,519	285,983	$ 17,991,918	67,341	$ 3,899,687
Barry, MI	16,655	32,657	$ 2,122,770	129,525	$ 5,997,438	113,813	$ 4,976,145
Eaton, MI	30,242	90,714	$ 5,896,566	174,486	$ 10,579,796	52,168	$ 2,629,367
Allegan, MI	29,960	86,451	$ 5,619,042	244,452	$ 11,261,782	206,122	$ 8,770,557
Washtenaw, MI*	6,465	38,791	$ 1,951,699	38,791	$ 2,041,896	6,125	$ 398,143
Jackson, MI	46,189	173,150	$ 10,320,992	173,150	$ 10,459,215	32,711	$ 2,126,316
Calhoun, MI	38,791	113,432	$ 7,372,950	221,130	$ 13,105,802	87,080	$ 4,392,697
Kalamazoo, MI	68,422	205,280	$ 13,342,836	421,882	$ 23,000,920	276,819	$ 13,571,973
Van Buren, MI	21,413	92,548	$ 5,166,612	128,491	$ 6,818,274	73,953	$ 3,697,595
Berrien, MI	45,769	287,744	$ 14,059,280	287,744	$ 15,295,070	99,659	$ 6,202,134
Lenawee, MI*	2,846	9,429	$ 586,254	9,429	$ 590,555	2,198	$ 142,913
Hillsdale, MI*	12,224	35,974	$ 2,336,284	36,677	$ 2,383,992	10,326	$ 670,965
Branch, MI	13,431	39,364	$ 2,559,024	44,991	$ 2,835,040	23,495	$ 1,437,378
Cass, MI	14,677	83,229	$ 4,233,756	88,055	$ 4,721,745	38,764	$ 2,204,502
St. Joseph, MI	17,533	53,452	$ 3,448,836	90,440	$ 5,148,360	55,205	$ 2,870,995
Williams, OH*	855	2,565	$ 166,764	2,565	$ 166,764	1,283	$ 83,382

* Denotes that a portion of county is not included in the Wayland Township market area and is therefore not included in the county results depicted here.
Source: Anderson Economic Group market assessment

TABLE A-8: Gaming Visits and Revenue Sources by County, Competitive Scenario Two

Competitive Market Made Up of Current Casinos Plus the New Buffalo and Emmett Casinos

County	Gamblers 21+ years	Current and Proposed Casinos (No Wayland): Annual Total Casino Visits	Annual Total Casino Revenue	Current and Proposed Casinos plus Wayland: Annual Total Casino Visits	Annual Total Casino Revenue	Annual Wayland Visits	Annual Wayland Revenue
Totals	1,120,090	6,365,803	$ 351,250,908	7,316,026	$ 392,778,195	1,879,971	$ 91,207,822
La Porte, IN*	21,247	209,579	$ 8,572,501	209,579	$ 8,706,697	1,934	$ 125,728
St. Joseph, IN	76,656	463,528	$ 24,636,114	463,528	$ 25,610,442	41,590	$ 2,703,262
Elkhart, IN	53,700	317,117	$ 16,904,952	317,117	$ 17,573,462	29,504	$ 1,917,821
Steuben, IN	10,025	60,137	$ 3,489,119	60,137	$ 3,577,649	6,346	$ 412,339
Lagrange, IN	9,367	56,211	$ 3,223,855	56,211	$ 3,311,574	5,813	$ 377,901
De Kalb, IN*	8,406	26,173	$ 1,687,994	26,173	$ 1,690,793	6,271	$ 407,466
Noble, IN*	12,675	38,987	$ 2,520,900	38,987	$ 2,523,727	9,473	$ 615,547
Marshall, IN*	3,400	20,396	$ 1,088,056	20,396	$ 1,131,423	1,863	$ 120,969
Kosciusko, IN*	16,571	57,298	$ 3,563,614	57,298	$ 3,593,648	11,966	$ 777,776
Mason, MI*	658	3,950	$ 197,520	3,950	$ 219,148	721	$ 46,862
Lake, MI*	3,024	17,125	$ 1,024,472	17,125	$ 1,039,921	1,608	$ 104,483
Osceola, MI*	4,909	29,457	$ 1,733,217	29,457	$ 1,763,932	2,518	$ 163,689
Oceana, MI	7,858	37,726	$ 2,140,925	37,726	$ 2,235,220	7,294	$ 474,006
Newaygo, MI	14,090	48,109	$ 3,045,511	67,854	$ 4,104,371	22,231	$ 1,198,865
Mecosta, MI	11,416	68,492	$ 3,994,432	68,492	$ 4,068,652	7,975	$ 496,186
Isabella, MI*	13,341	128,049	$ 5,277,847	128,049	$ 5,441,915	2,746	$ 178,483
Saginaw, MI*	1,123	6,737	$ 407,263	6,737	$ 411,808	500	$ 32,487
Muskegon, MI	48,254	144,760	$ 9,409,686	264,896	$ 15,847,560	101,161	$ 5,204,711
Montcalm, MI	17,732	104,740	$ 5,852,223	106,402	$ 5,965,495	27,132	$ 1,464,832
Gratiot, MI*	11,022	88,405	$ 4,119,190	88,405	$ 4,262,867	5,087	$ 330,632
Kent, MI	164,429	797,106	$ 47,312,365	1,265,059	$ 63,037,224	738,683	$ 31,753,949
Genesee, MI*	6,204	35,208	$ 1,928,570	35,208	$ 1,972,368	2,354	$ 153,086
Ottawa, MI	68,712	206,145	$ 13,399,230	412,282	$ 24,570,714	148,517	$ 7,425,816
Shiawassee, MI*	19,331	70,368	$ 4,446,810	70,368	$ 4,464,990	9,409	$ 611,538
Ionia, MI	16,908	93,533	$ 5,329,621	101,456	$ 5,562,547	37,460	$ 1,877,151
Clinton, MI	18,652	111,932	$ 6,572,661	111,932	$ 6,633,525	9,784	$ 594,307
Livingston, MI*	39,553	237,323	$ 12,828,107	237,323	$ 13,144,210	14,440	$ 938,964
Ingham, MI	75,355	452,107	$ 27,237,091	452,107	$ 27,225,748	49,964	$ 2,881,562
Barry, MI	16,655	108,536	$ 5,761,290	138,142	$ 6,410,288	74,589	$ 3,170,902
Eaton, MI	30,242	188,951	$ 11,119,964	188,951	$ 10,767,567	39,311	$ 1,980,841
Allegan, MI	29,960	158,727	$ 9,315,067	244,452	$ 11,817,499	147,352	$ 6,174,756
Washtenaw, MI*	6,465	38,791	$ 1,964,818	38,791	$ 2,034,889	2,444	$ 158,845
Jackson, MI	46,189	277,171	$ 16,047,322	277,171	$ 16,319,838	20,384	$ 1,324,638
Calhoun, MI	38,791	380,358	$ 17,030,620	380,358	$ 17,400,585	37,055	$ 1,870,294
Kalamazoo, MI	68,422	472,728	$ 24,980,708	484,064	$ 24,694,374	133,314	$ 6,456,927
Van Buren, MI	21,413	128,491	$ 6,728,929	128,491	$ 6,639,699	34,772	$ 1,738,719
Berrien, MI	45,769	308,386	$ 15,363,401	308,386	$ 15,826,755	27,078	$ 1,622,464
Lenawee, MI*	2,846	17,078	$ 999,137	17,078	$ 1,017,170	1,445	$ 93,888
Hillsdale, MI*	12,224	73,352	$ 4,354,670	73,352	$ 4,428,770	6,499	$ 422,455
Branch, MI	13,431	84,151	$ 4,750,070	84,151	$ 4,854,988	9,682	$ 595,083
Cass, MI	14,677	88,055	$ 4,572,750	88,055	$ 4,669,242	14,500	$ 790,337
St. Joseph, MI	17,533	105,199	$ 6,020,593	105,199	$ 5,899,624	26,468	$ 1,369,951
Williams, OH*	855	5,131	$ 297,723	5,131	$ 305,277	734	$ 47,724

* Denotes that a portion of county is not included in the Wayland Township market area and is therefore not included in the county results depicted here.
Source: Anderson Economic Group market assessment

Appendix B: Figures

This appendix includes:

Figure 1. Gaming Revenue Sources, 2004

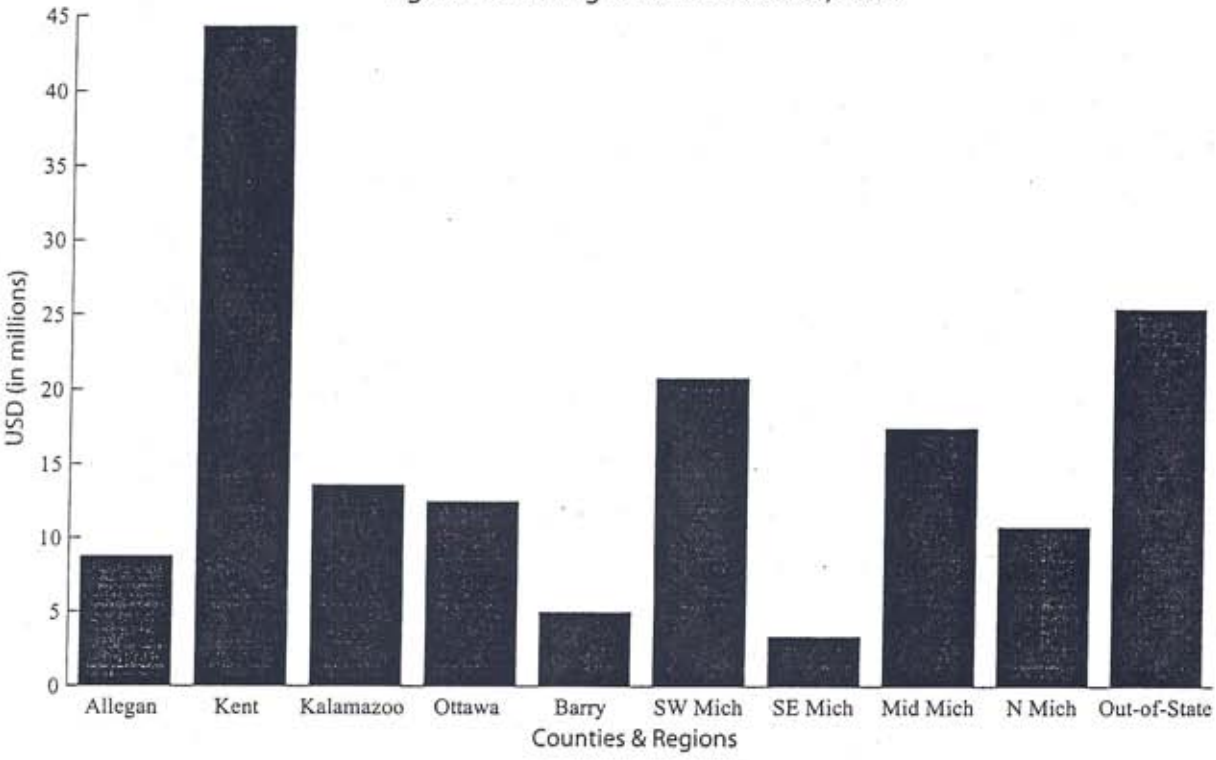
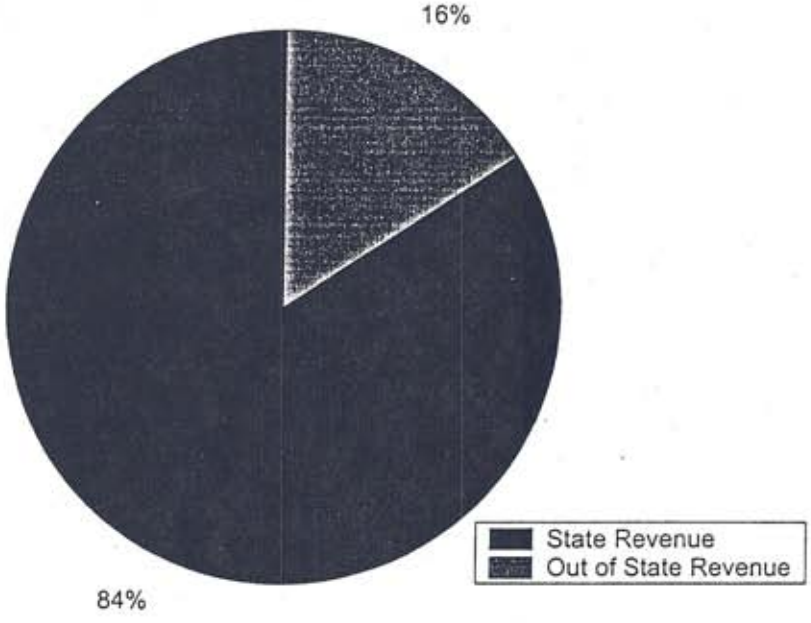


Figure 2. State vs. Out-of-State Revenue, 2004



Generated on 13-Feb-2003

Figure 3. Gross Expenditures in Michigan Economy, 2004-2014

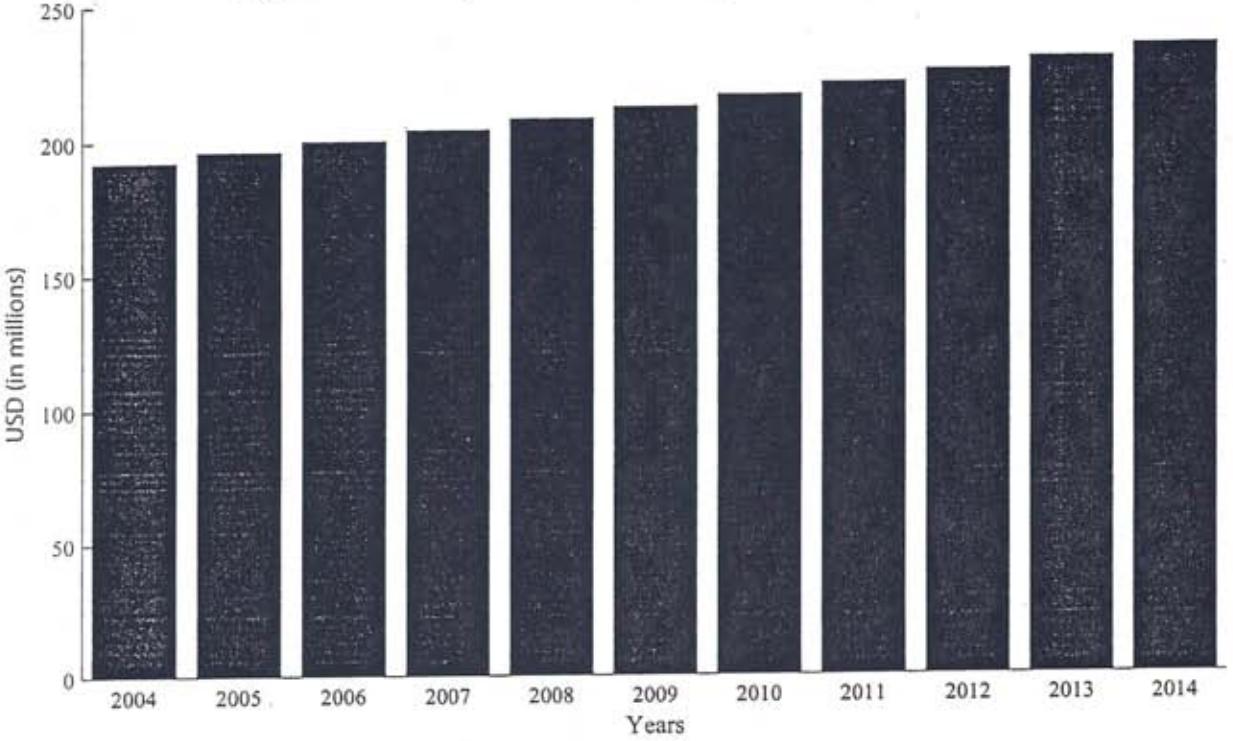
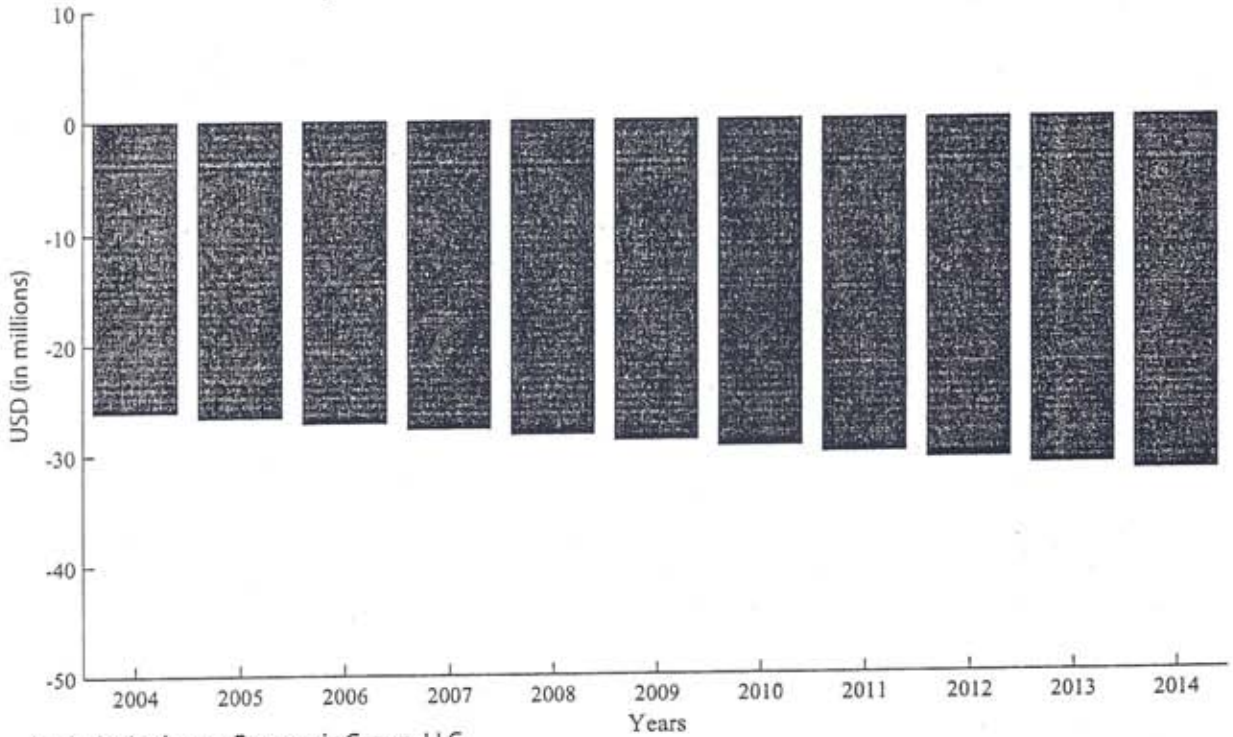


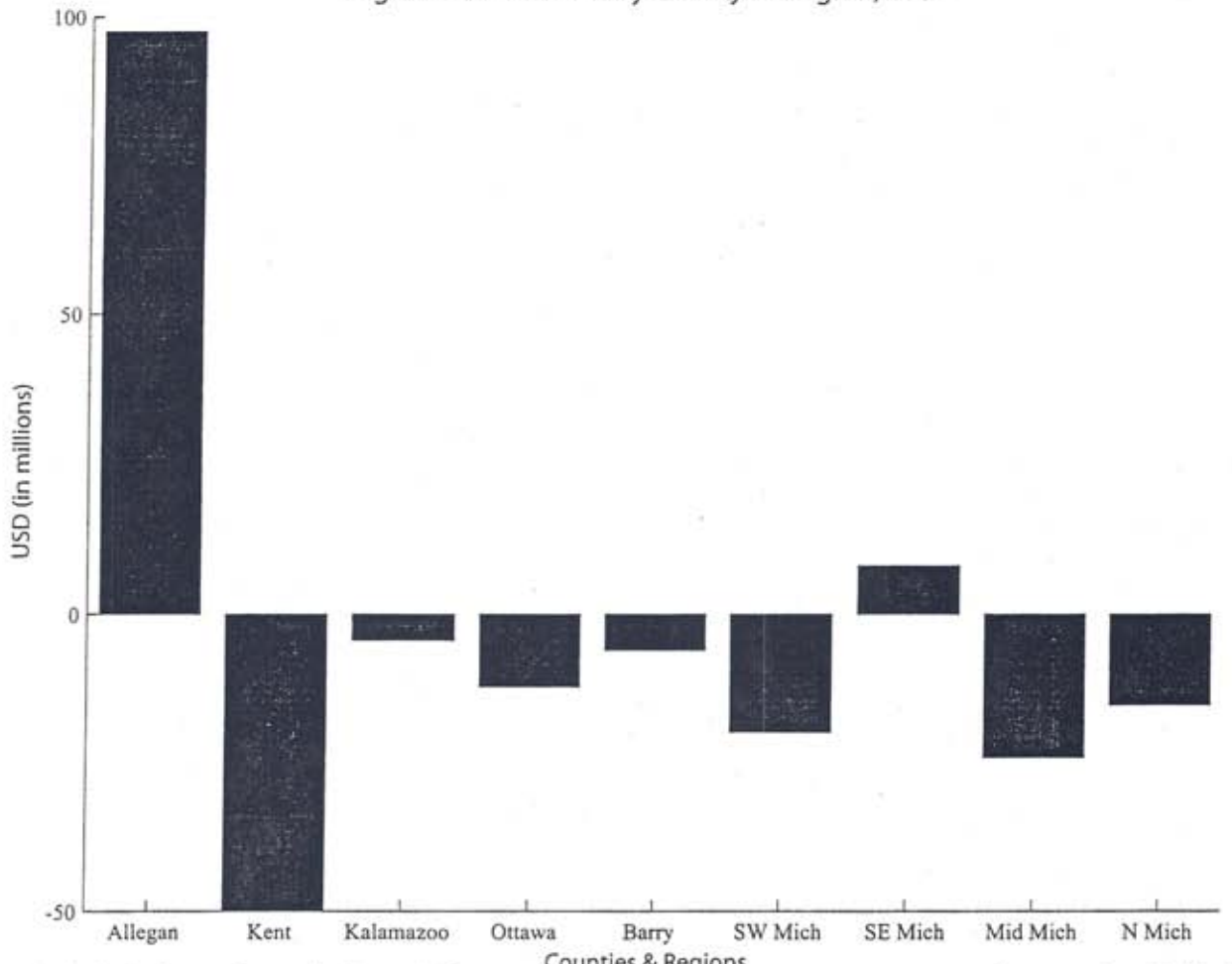
Figure 4. Net Benefit to Michigan Economy, 2004-2014



Analysis: Anderson Economic Group, LLC
Data: Anderson Economic Group, LLC

Generated on 13-Feb-2003

Figure 5. Net Benefit by County or Region, 2004



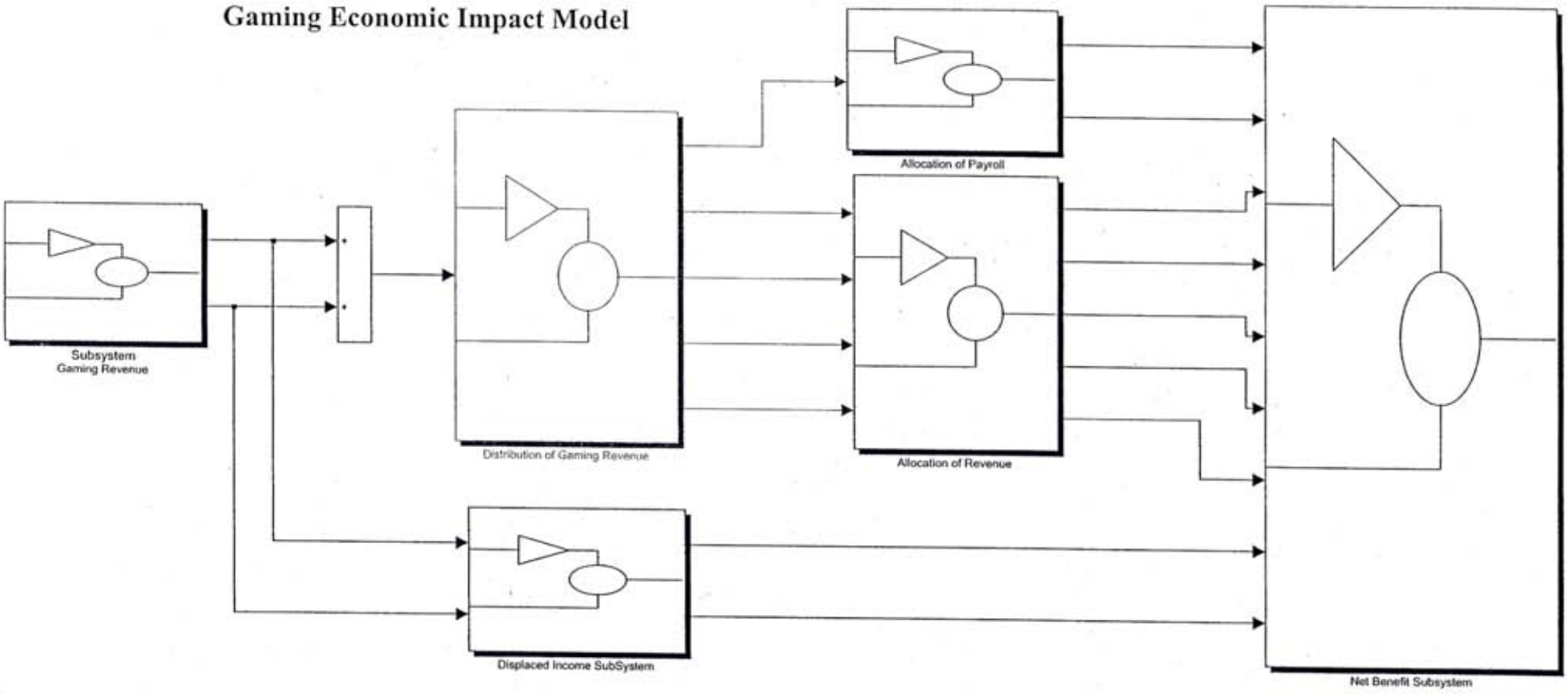
Analysis: Anderson Economic Group, LLC

Generated on 13-Feb-2003

Appendix C: Model Schematic

Appendix C includes:

Gaming Economic Impact Model



Local Economic Impact Model
Version 2.318, Modified 12-Feb-2003 17:38:01
Gaming Economic Impact Model.
The Revenue Module calculates the net gaming revenue from residents of different areas.
The Distribution module allocates the gaming revenue into the components of business expenses, management fees, taxes, and returns to investors.
The Payroll module further refines the estimates of payroll expenses.
The Displacment subsystem models displacement effects and multiplier effects.
"Patrick L. Anderson"

About Anderson Economic Group

FIRM PROFILE

Anderson Economic Group, L.L.C. specializes in providing consulting services in economics, finance, public policy, and geographic market assessments. Our approach to work in these fields is based on our core principles of professionalism, integrity, and expertise.

We insist on a high level of integrity in our analyses, together with technical expertise in the field. For these reasons, work by Anderson Economic Group is commonly used in legislative hearings, legal proceedings, and executive strategy discussions.

Since our founding in 1996, our analysis has helped publicly-held corporations, private businesses, governments, and non-profit organizations. Our work has included markets throughout the United States, as well as in Canada, Mexico, and Barbados. Recent Anderson Economic Group clients include:

Governments

- State of Michigan
- State of Wisconsin
- State of North Carolina
- City of Detroit, Michigan
- Oakland County, Michigan
- Van Buren, Ionia, Barry, and Berrien Counties, Michigan
- Detroit-Wayne County Port Authority
- City of Norfolk, Virginia
- City of Fort Wayne, Indiana
- City of Big Rapids, Michigan

Businesses

- General Motors Corporation
- PG&E Generating
- Becks, North America
- SBC and SBC Ameritech
- The Detroit Lions
- Labatt USA
- Honda, Toyota, Mercedes-Benz, Lincoln-Mercury, and Ford dealerships or their associations

Nonprofit and Trade Organizations

- International Mass Retailers Association
- Hudson Institute
- Michigan Retailers Association
- Michigan Chamber of Commerce
- Telecommunications Association of Michigan
- Automation Alley
- American Automobile Manufacturers Association

Anderson Economic Group follows a quality assurance program based on the elements of ISO 9000. Among the quality assurance steps we insist upon are the use of a written methodology; documentation of important sources; file organization and retention schedules; proper summarization of technical work for use in public hearings or executive discussions; and high quality standards for written reports and graphics.

Our firm's web site, http://AndersonEconomicGroup.com, provides additional information about AEG, its services, and past projects.

PROJECT TEAM

This project team was led by Patrick L. Anderson, Principal, Anderson Economic Group. He has nearly twenty years of professional economics experience, including serving as the deputy budget director for the State of Michigan, chief of staff for the Michigan Department of State, and as an economist for two of Michigan's largest financial institutions, as well as a graduate fellow in the Central Intelligence Agency. He is the author of over 85 published monographs and articles, which have appeared in *The Wall Street Journal, Detroit News, Detroit Free Press, Crain's Detroit Business, Michigan Forward, American Outlook* and other publications.

Christopher Cotton and Scott Watkins served as coauthors of the report. Mr. Cotton, Consultant, has a background in economic development, market assessments, and Geographic Information Systems (GIS) analysis. He serves as AEG's lead market consultant, and has led the expansion of the firm's market assessment services. Mr. Watkins, Consultant and Director of Marketing and Administration at AEG, has a public policy and marketing background. He has experience on AEG projects involving economic development and market assessments.

Also contributing to the research and analytical portions of the project was Ilhan K. Geckil, Economist. Mr. Geckil assisted in the design of the economic impact model.