FIVE-YEAR LICENSE RENEWAL:
Argosy Casino

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INTRODUCTION

The Riverboat Gambling Act (Act), effective July 1, 1993, authorized the Indiana Gaming Commission to issue licenses for the express purpose of riverboat gambling in the state of Indiana. Part of the statutory criteria for issuance of these licenses, in addition to being financially capable of completing the project and passing an Indiana State Police investigation, is the applicant's ability to promote tourism and economic development in the home dock area while best serving the interest of the citizens of Indiana. The Indiana Gaming Commission (Commission) contracted with the Center for Urban Policy and the Environment (Center) of Indiana University's School of Public and Environmental Affairs to assist the Commission in performing the economic impact, fiscal impact, financial, management, and other analyses required to assist the Commission in awarding the initial riverboat casino licenses. Additionally, the Commission requested the Center's assistance in monitoring the economic impacts and fiscal returns from each riverboat operation.

In partnership with the Commission, the Center has, since 1993, completed evaluations for the granting of ten riverboat casino licenses. The Center also has completed annual performance reports for all operating riverboat casinos. In addition, the Center has provided other analyses for the Commission, as requested, and also served as the staff and conducted extensive research for the Indiana Gambling Impact Study Commission.

The Center uses analytic and decision facilitation competencies to inform policy choices about complex societal, economic, and political problems, especially in Central Indiana. The Center is non-partisan and non-ideological and works on a broad range of policy issues. Governments, nonprofit organizations, businesses, and foundations support projects at the center. Affiliated faculty from Indiana University–Purdue University Indianapolis and other universities, professional staff of the center, and graduate assistants form teams for projects.

On June 30, 1995, the Commission issued a Certificate of Suitability for a Riverboat Owner's License for a riverboat to be docked in Lawrenceburg, Indiana. Argosy Casino (Argosy) opened on December 13, 1996. The Act specifies that an owner's initial license expires five (5) years after the effective date of the license. This report is an analysis of Argosy's first five years of operation.

The Certificate specified certain levels of project development and incentive payments to be made by Argosy as well as specifying that Argosy abide by agreements made with the city of Lawrenceburg. Because this analysis must be completed before the completion of Argosy's fifth year of operations, in year five, data are shown for year five through July 31, 2001. In addition to the five-year totals of components included in the previous annual reports, this report includes an analysis of the tourism impact of Argosy visitors, a study of the employment impact, a descriptive analysis of the economic impact of the additional revenue received, and an analysis of the fiscal impact on local communities. This report is the sixth of ten analyses, one for each Indiana riverboat. The first, an analysis of Aztar was completed in February of this year. The next three, Empress, Trump, and Majestic Star were completed in July 2001. The fifth, Grand Victoria, also will be completed in November 2001. Each additional report will allow an opportunity to refine the methodology, improve data collection, and compare and contrast riverboat performance and its impacts on local communities.

PROJECT DEVELOPMENT AND GAMING ACTIVITIES

Argosy's permanent riverboat is approximately 78,000 square feet and accommodates 4,400 passengers and crew. Argosy's permanent facilities include an 187,000-square-foot pavilion and a 300-room hotel that opened in May 1998. In 1998, Argosy completed its "Party Room," a 5,000-square-foot banquet facility on the third floor of the pavilion, and the company added 250 slot machines to the casino. In the spring of 1999, Argosy completed the $1.4 million construction of a 7,500-square-foot, high-limit area for slots and blackjack. In 2000, Argosy spent $6.1 million on capital projects, including $3.1 million for new electronic gaming devices. Gaming activity reflects the number of riverboat patrons and how much money they spent. Spending is defined as the amount bet, less winnings received.

Project Development Certificate Compliance

In the Certificate of Suitability (referred to throughout as Certificate), Argosy committed to spend approximately $166 million on project development, in addition to pledging to the city of Lawrenceburg other incentives totaling several million dollars. As of July 31, 2001, Argosy had spent $237.5 million, $71.5 million more than agreed to in the Certificate for the development of the project. Argosy has spent money locally for both capital and operating expenses as well as through sponsorships and contributions. As Table 1 illustrates, since opening, Argosy has spent $13.3 million locally (in Dearborn, Franklin, Ohio, Switzerland, and Ripley counties). Additionally, Argosy has impacted the Lawrenceburg area through $554,442 in sponsorships and contributions to local area organizations. This excludes any contributions that were part of the local development agreement, which are discussed under Incentive Payments.

Table 1: Local Spending, Sponsorship, and Contributions

	1995-1997	1998	1999	2000	2001 through 7/31/01	Total
Local Spending	$3,725,017	$2,561,983	$2,991,026	$2,547,109	$1,501,682	$13,326,817
Sponsorships and Contributions	$21,217	$6,985	$78,091	$276,152	$171,996	$554,442

Gaming Activity

The Certificate did not require any specific levels of gaming activity by Argosy. As Table 2 illustrates, Argosy has had attendance of over 29 million people since opening and gross gaming receipts of over $1.25 billion, for an average of $43 per patron.

Table 2: Gaming Activity

Category	1996-97	1998	1999	2000	2001 through 7/31/01	Total/Average
Attendance	3,390,110	6,637,425	7,308,973	7,546,866	4,350,555	29,233,929
Gross Gaming Receipts	$132,978,037	$264,422,795	$308,166,114	$344,246,780	$200,933,332	$1,250,747,059
$ Per Patron per Cruise	$39	$40	$42	$46	$46	$43

Impact of Gaming Activity on Tourism

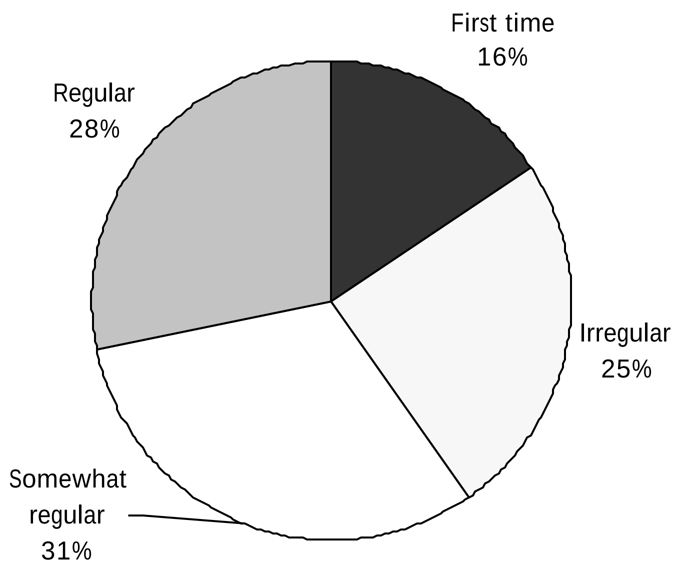
One argument for legalizing riverboats was that the projects would become a tourist destination and local businesses would benefit from the influx of visitors who would consume goods and services at local establishments as well as at the riverboat casino. It also was assumed that most of casino visitors would be tourists and local residents. With the cooperation of Argosy, the Center conducted face-to-face interviews with riverboat patrons over a four-day period in November 2001 (Friday through Monday) in the riverboat pavilion. During the four-day interview period, the Center acquired a 109-patron sample. In general, the estimated average distance traveled to the riverboat was 86 miles. Almost three percent of the interviewees were from Lawrenceburg or the remainder of Dearborn County, 23 percent were from the remainder of Indiana, and almost 75 percent from outside Indiana (64 percent from Ohio).[1]

To suggest that riverboat casinos increase tourism in local areas is to presume that the riverboat will draw people that otherwise would not have visited the area. To test that assumption, each interview patron was asked to provide the main reason for traveling to Lawrenceburg. Every one of the respondents indicated that his or her primary purpose for visiting Lawrenceburg was to visit the riverboat.

[1] While not a statistically representative sample, survey responses were consistent and provide information necessary to draw adequate conclusions

The patrons also were asked how often they visit the Argosy casino. Specifically, each interviewed respondent was asked to what degree he or she regularly visited the riverboat. Figure 1 illustrates the proportion of respondents who were categorized by broad categories: first time visitor, irregular visitor, somewhat regular visitor, or regular visitor. As shown, patrons of the riverboat were more likely to visit the riverboat somewhat regularly (31 percent). Forty-one percent of the interviewees were first time or irregular visitors (less than twice a year).

Figure 1: Regularity of Patron Visits to Argosy



First time visitor
- Visiting Argosy for the first time

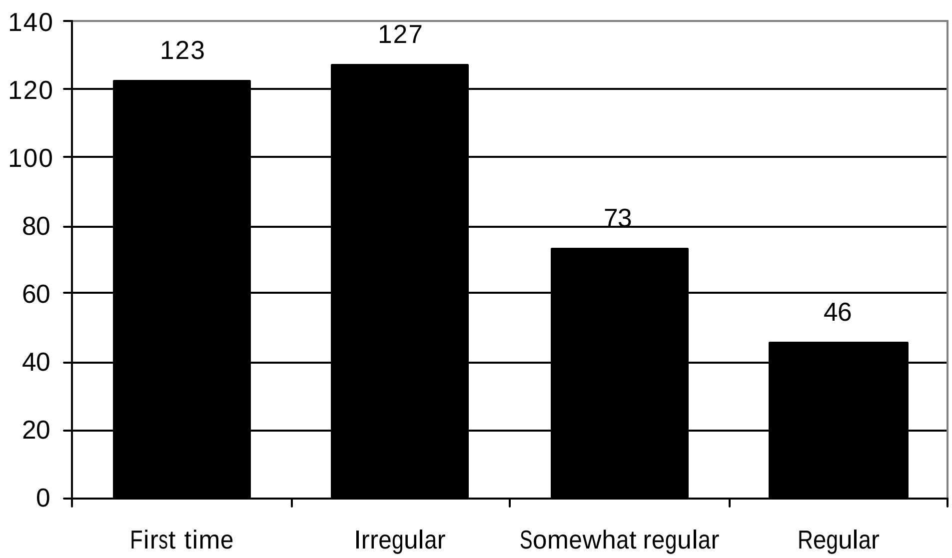
Irregular visitor
- Visit Argosy less than once a year
- Visit Argosy one or two times a year

Somewhat regular visitor
- Visit Argosy every couple months
- Visit Argosy once a month

Regular visitor
- Visit Argosy once a week
- Visit Argosy two or three times a week
- Visit Argosy everyday

Figure 2 illustrates the average estimated distance traveled to visit the riverboat by the regularity of visits. As shown, regularity of visits generally increases as distance traveled decreases. On average, first time and irregular visitors traveled 123 and 127 miles, respectively. Somewhat regular visitors traveled 73 miles and regular visitors traveled 46 miles, on average.

Figure 2: Average Miles Traveled by Regularity of Visits to Argosy



As mentioned previously, all of the interviewed patrons were in Lawrenceburg specifically for the riverboat. In addition, each patron was asked how long he or she planned to stay in Lawrenceburg during his or her visit. Table 3 indicates that 23 of the 109 interviewed patrons (21 percent) stayed in Lawrenceburg over eight hours. Those patrons who stayed for more than one day were more likely to have traveled further distances to visit the riverboat. In general, the average miles traveled by patrons who stayed more than a day (average 170 miles) was over two times greater than those who stayed less than eight hours (average 76 miles).

Table 3: Time Spent in Lawrenceburg

	Number of Patrons	Proportion of Respondents	Average Miles Traveled
8 hours or less	86	79%	76
9 to 24 Hours	10	9%	71
1 to 4 Days	13	12%	170
Total Sample	109	100%	86

Eleven of the interviewed patrons anticipated patronizing other Lawrenceburg businesses. Four of these visitors spent the night in another Lawrenceburg hotel because the Argosy Hotel was sold out of rooms. Others anticipated eating a meal in Lawrenceburg or buying gas at a local gas station.

Six of the interviewed patrons (6 percent) had visited or anticipated visiting anther Indiana riverboat on the same trip. Two of these visitors planned on visiting Grand Victoria (Rising Sun), 2 visitors planned on visiting Belterra (Vevay), and two visitors planned on visiting both Grand Victoria and Belterra.

EMPLOYMENT

Employment Certificate Compliance

Argosy did not identify specific hiring goals for women, minorities, or local residents in its application. As of July 31, 2001, 53 percent of Argosy employees were women, 8 percent were minorities, and 37 percent were from Dearborn County.

As Table 4 indicates, as of July 31,2001, Argosy had employment of 2,232 persons in the hotel and casino, above their five-year average of 2,162. Since opening, Argosy has paid almost $296 million in wages. Full- and part-time employees receive benefits that include health care coverage and vacation time.

Table 4: Employment and Wages

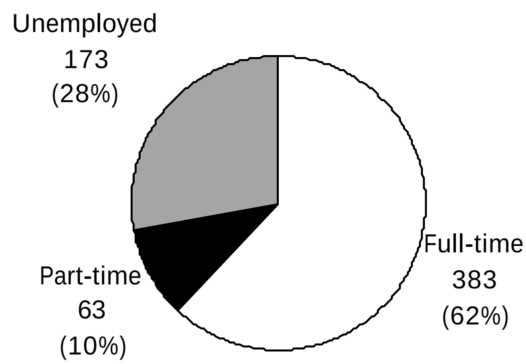
Category	1995-1997	1998	1999	2000	2001 through 7/31/01	Total/Average
Employment	1,659	2,262	2,397	2,259	2,232	2,162
Total Wages, Tips & Benefits	$37,500,304	$60,761,175	$71,015,832	$76,966,904	$49,727,251	$295,971,467

Impact on Argosy's Workforce

In testimony given to the Indiana Gambling Impact Study Commission in 1999, proponents of legal gaming asserted that gaming-related employment offers the chronically unemployed and under-employed an opportunity to establish a work record and skill set that may lead to even greater economic opportunity. Those who oppose legal gambling questioned the validity of this assertion and claimed that gambling-related jobs are often dead-end positions, plagued by high turnover rates. As part of the five-year analysis, current Argosy employees were asked to complete a survey of their past and current work history, including questions about the learning and skill-building opportunities presented to them. This analysis is based on 619 surveys received from the 2,232 total employees at Argosy riverboat casino. The results and conclusions are limited to the 619 respondents, who may or may not be typical of all employees.

Previous Employment Status
As shown in Figure 3, 28 percent of the current Argosy employees who responded to the survey were unemployed immediately prior to beginning work at the riverboat. Sixty-two percent had full-time jobs. The average wage of those employed at full-time jobs prior to beginning work at the Argosy was $23,250.

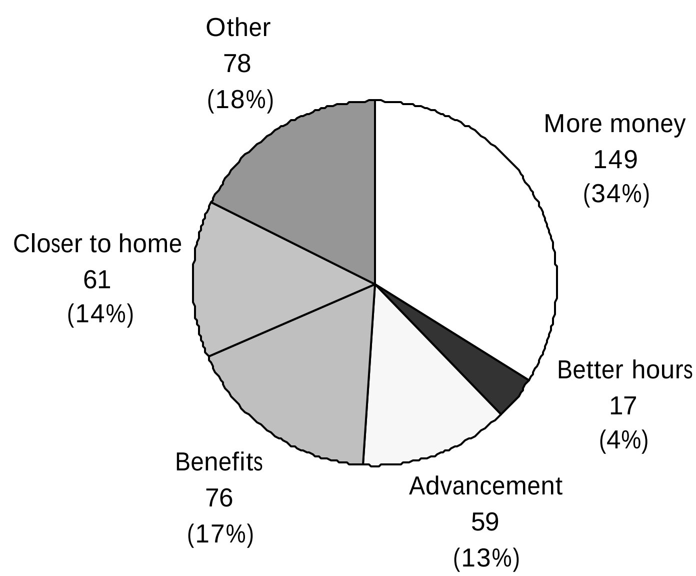
Figure 3: Employment Status Prior to Beginning Work at Argosy



Reasons for Leaving a Job to Accept Employment at Argosy

As shown in Figure 4, of the 440 respondents who left full- or part-time positions to begin work at Argosy, the principal reason for accepting employment at Argosy was more money (34 percent). Improved benefits (17 percent) and working closer to home (14 percent) were the second and third most common reasons for beginning employment at Argosy. The most common prior occupations of employees who left full- or part-time positions to begin work at Argosy were either service jobs (27 percent) or retail jobs (9 percent).

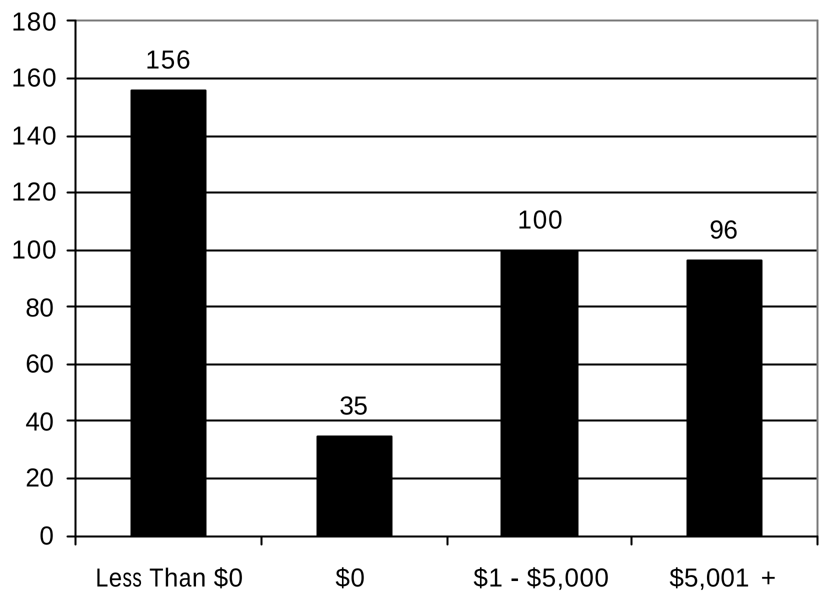
Figure 4: Why Previously Employed Accepted Job at Argosy



Change in Annual Wages Upon Beginning at Argosy

Of the 619 survey respondents, 387 provided information on previous wages and beginning wages at Argosy. As shown in Figure 5, 191 of those 387 employees (49 percent) experienced either no change or a decline in wages upon beginning work at Argosy. Fifty-one percent received a raise with nearly half of those receiving an increase in pay gaining more than $5,000. The average change in wages experienced when starting at Argosy, for the 387 employees reporting a previous wage and an Argosy starting wage, was $284 more in the first year at Argosy than in the last year at their previous job.

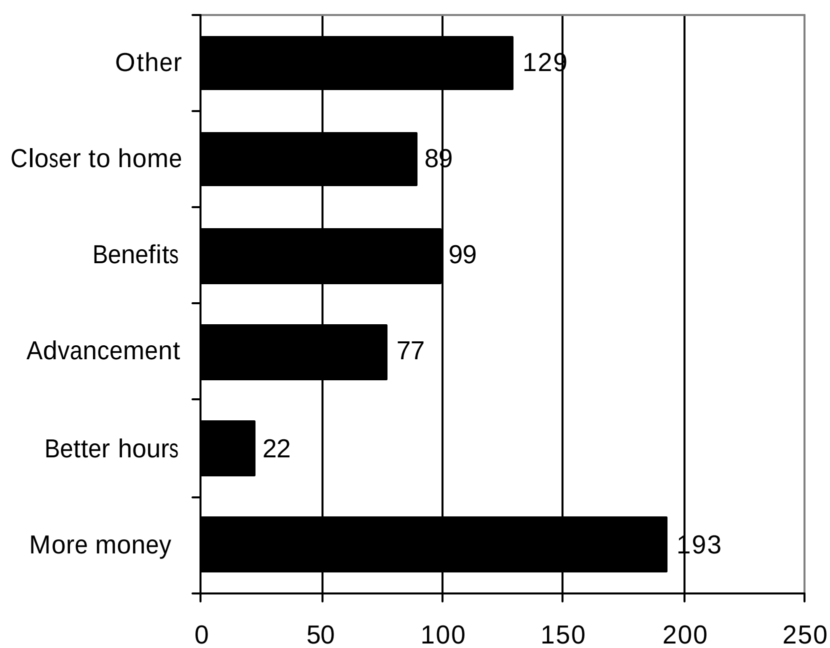
Figure 5: Change in Annual Wages from Previous Job to Starting at Argosy



Reason for Beginning Employment at Argosy

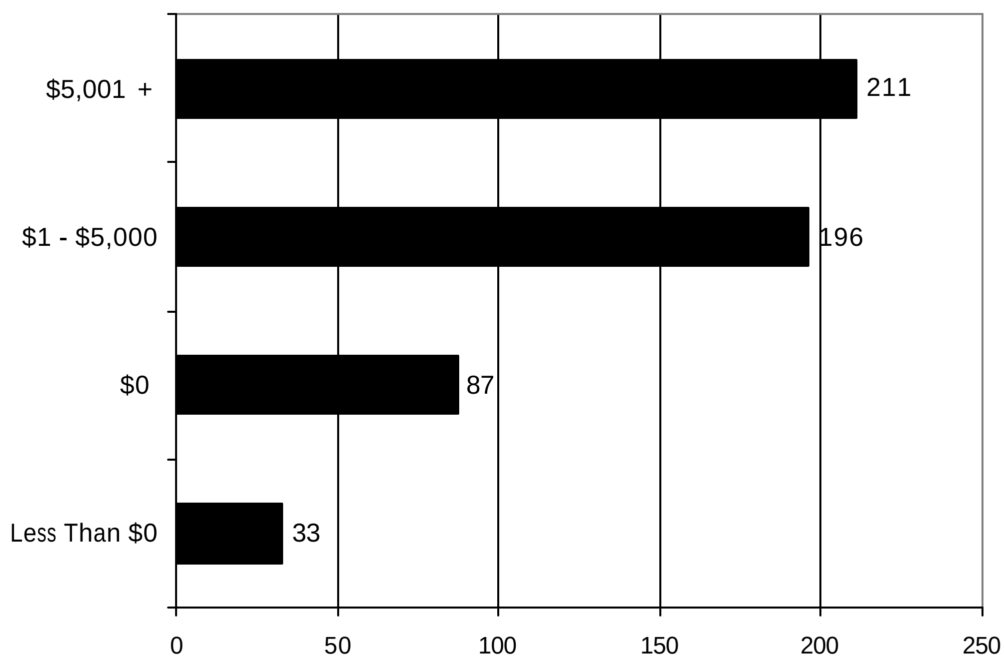
As shown in Figure 6, while 193 (32 percent) of the 609 Argosy employees who responded with a primary reason for beginning work there identified more money as their motivation, other reasons were nearly as important. Improved benefits received 16 percent of all responses, a work location closer to home received 15 percent of the total responses, and a better chance to advance received 13 percent of all responses.

Figure 6: Primary Reason for Beginning Employment at Argosy (All Respondents)



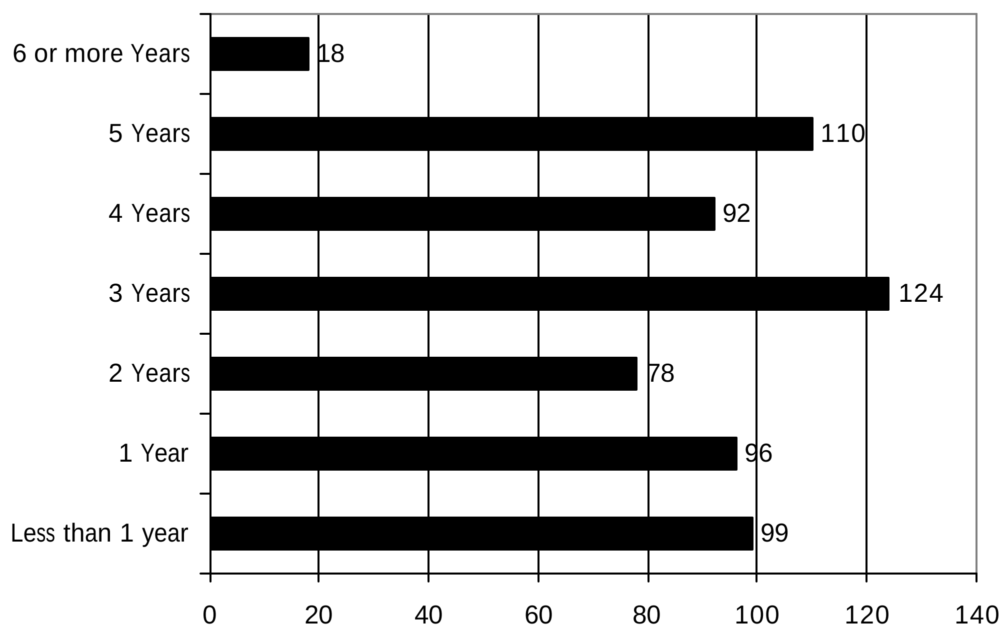
Argosy Employment History
Figure 7 shows that 407 of the 527 (77 percent) Argosy employees reporting current and beginning wages at Argosy have experienced an increase in wages over the period. Only 120 (23 percent) of the 527 workers experienced a decline or no increase in annual wages since beginning employment at Argosy. The average increase for all employees reporting both wages was $6,558 over the period. The median increase for all employees reporting both current and beginning wages at Argosy was $3,240. The average increase in per capita income in Indiana for the period was $3,295. The average percentage increase for all Argosy workers responding to the survey was 35.5 percent while the average per capita income increase in Indiana was 15 percent.

Figure 7: Change in Annual Wages Since Beginning Employment at Argosy



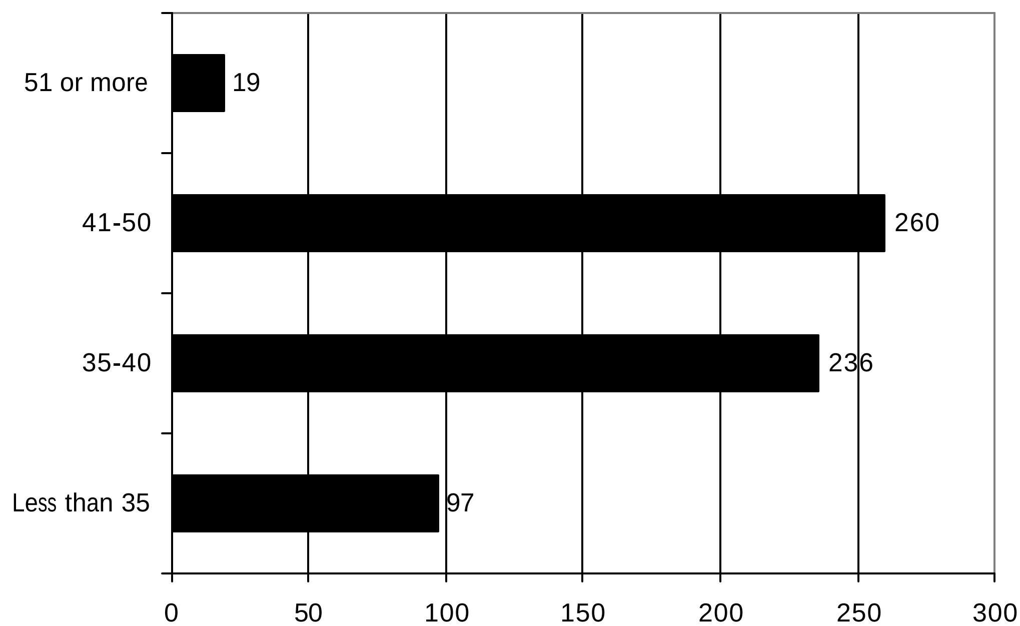
The average length of employment at the Argosy casino by survey respondents was three years and one month. The median length of employment by survey respondent was three years and three months. As shown in Figure 8, 110 workers or 18 percent of all respondents have worked at Argosy for the five years it has been open. Eighteen employees report that they have worked for Argosy longer than the casino has been open; while this may be reporting error it also is possible that these employees transferred from another Argosy casino operation.

Figure 8: Years Worked at Argosy by Number of Respondents



Eighty-four percent of the Argosy employees responding to the survey are full-time employees working between 35 and 50 hours per week. As shown in Figure 9, only 97 (16 percent of those responding) worked less than 35 hours a week. While it is possible that those who work full-time were more likely to return surveys, these results suggest the vast majority of respondents are employed by Argosy on a full-time basis.

Figure 9: Hours Worked Per Week by Argosy Employees

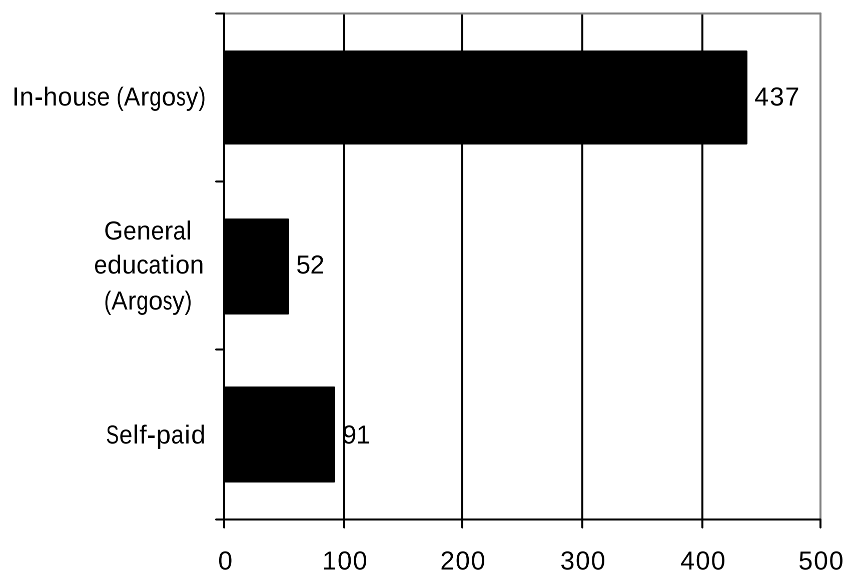


Eighty-nine survey respondents report moving from renting to homeownership since beginning work at Argosy and 26 percent (163) report undertaking a major home remodeling project.

Employee Training and Skill Building

While the data on wages and employment show that Argosy employees are experiencing improved economic conditions, training and skill enhancement are key levers to continued growth and opportunity. Figure 10 shows that while 75 percent of employees that responded to this question received training related to their job, few Argosy employees are accessing additional skill-building opportunities. Nine percent received general skill building paid for by Argosy and 16 percent sought additional skill-building opportunities on their own.

Figure 10: Training and Skill Building of Argosy Employees



Furthermore, while 63 percent of the high school graduates received in-house job-related skill building from Argosy, only nine percent of the high school graduates report receiving any general education or skill-building classes paid for by Argosy and nine percent report self-paying for any skill-building or general education courses. The figures are mixed for those reporting some college education, with six percent receiving general education or skill building paid for by Argosy and 21 percent paying for those efforts on their own. Eleven percent of those with college degrees reported receiving skill-building training paid by the Argosy. Twenty-four percent of the college graduates responding reported self-paying for additional skill building. With the information gathered from this survey, there are no means to determine if these results are because of employee decisions, lack of availability, or other factors.

ECONOMIC AND FISCAL ACTIVITY

Since opening in 1996, through July 31, 2001, Argosy has paid local governments $121 million in gaming-related taxes (admissions and wagering taxes) and has voluntarily contributed an additional $114 million to Lawrenceburg. Of the $121 million in gaming-related taxes, $92 million was distributed to the city of Lawrenceburg, with the remaining $29 million distributed to Dearborn County. The analysis of the economic benefits of spending of local gaming-related taxes and incentives is limited to expenditures made by the city of Lawrenceburg, Dearborn County, and the Lawrenceburg Conservancy District. Any expenditure of revenue that the city and county shared with several local governments, several local organizations, and the community foundation are not included.

In addition to the gaming-related taxes, Argosy also generates traditional local tax revenues, principally property taxes on the boat as well as other new facilities. The presence of the casino and its patrons creates additional costs for local government. For example, the boat and the accompanying change in traffic patterns and volume may require new infrastructure or more frequent maintenance and increased traffic control costs. The influx of new visitors may require additional public safety expenditures. Riverboat casino employees may choose to relocate within the community and pay new taxes (principally property) and demand new infrastructure and services, including police protection and schools. The fiscal impact of Argosy is determined by comparing the additional tax revenues attributable to the casino to the service and infrastructure costs. If added revenue exceeds cost the fiscal impact is said to be positive. If the added revenues fall short of costs, the fiscal impact is negative.

While there is much discussion and controversy regarding the economic benefits of the gaming industry, little attention has been focused on the economic benefits generated by the spending of the local tax dollars generated from the gaming industry. The Indiana Gambling Impact Study Commission found that those who support legalized gaming claim economic benefits such as new jobs at the casino, millions of dollars of private investment for gaming facilities, accompanied by spin-off benefits generated by visitors to and suppliers of the facilities. Those who question the economic benefits generated by the gaming industry claim that much of the spending is done by local residents and represents redirected rather than new dollars for the local economy. Opponents also claim that profits are exported to the corporate headquarters of the local casino and that there is no evidence of new visitor spending beyond the gaming facility.

This debate ignores the economic contributions made by the spending of the tax revenue generated by gaming facilities for local government. The manner in which local governments choose to invest the local gaming tax revenue has immediate and long-term impacts for the local economy. The immediate benefit occurs as a result of the spending of local tax dollars working their way through the local economy. The long-term benefit is determined by how well the spending contributes to the long-term economic competitiveness of the local economy.

This chapter of the analysis discusses the following:

- **Compliance:** documents the Argosy's compliance with mandatory tax payments and voluntary contributions
- **Fiscal Impact:** analyzes the new gaming-related costs and revenues generated by Argosy for taxing units in Lawrenceburg
- **Economic Benefits:** identifies the immediate economic benefits generated by Argosy's local gaming-related tax payments and voluntary contributions

Compliance

Tax Revenue

There are two sources of direct gaming revenue: the gaming tax, which is 20 percent of gross revenues, and the admission tax, a total of $3 per admission. The city of Lawrenceburg receives one quarter of the gaming tax and $1 per admission. The county also receives $1 per admission. In addition, another dollar is collected that is split several ways by the state. There are other revenues that are collected as a result of the gaming facility being located in the community—property taxes, sales taxes, and food and beverage taxes. There are at least two types of impact that the direct gaming revenues have had on the local community. The first type of impact we examine is the overall fiscal impact on the local governments in Lawrenceburg and Dearborn County, which is discussed in the Fiscal Impact of Tax Revenues on Local Government section. The second type is the economic impact that additional spending has generated. The impact of the additional spending is discussed in the Economic Benefits of Gaming-Related Taxes and Incentives section.

As Table 5 illustrates, Argosy has paid over $220 million in direct taxes to the state of Indiana since it opened.

Table 5: State Direct Taxes [2]

Category	1996-97	1998	1999	2000	2001 through 7/31/01	Total
Gaming Tax (State share)	$19,864,593	$39,599,336	$46,169,148	$51,301,712	$30,562,148	$187,496,936
Admission Tax (State share)	$3,390,110	$6,637,425	$7,308,973	$7,646,866	$4,350,555	$29,233,929
Sales and Use Tax	$289,105	$935,480	$1,086,687	$911,896	$528,845	$3,752,012
TOTAL	$23,543,808	$47,172,241	$54,564,808	$59,860,474	$35,441,548	$220,482,877

[2] Source: Argosy Casino

In addition, as Table 6 shows, Argosy has paid over $126 million in direct taxes (gaming, admission, and property taxes) to the local area (city and county) since it opened.

Table 6: Local Direct Taxes[3]

Category	1996-7	1998	1999	2000	2001 through 7/31/01	Total
Gaming Tax (City share)	$6,621,531	$13,199,779	$15,389,716	$17,100,571	$10,187,383	$62,498,979
Admission Tax (County share)	$3,390,110	$6,637,425	$7,308,973	$7,646,866	$4,350,555	$29,233,929
Admission Tax (City share)	$3,390,110	$6,637,425	$7,308,973	$7,646,866	$4,350,555	$29,233,929
Property Tax	$16,930	$899,047	$1,438,553	$1,827,315	$979,139	$5,160,984
TOTAL	$13,418,681	$27,373,676	$31,446,215	$34,221,618	$19,867,632	$126,127,821

The city of Lawrenceburg shares one-half of the admission and wagering tax revenue generated by Argosy. Each month, Dearborn County, six municipalities (St. Leon, Moores Hill, Greendale, Dillsboro, Aurora, and West Harrison), and several local nonprofit organizations (Aurora Library Foundation, Inc., Lawrenceburg Library Foundation, Inc., Sunman-Dearborn Education Foundation, Inc., Lawrenceburg Schools Education Foundation, Inc., South-Dearborn Schools Education Foundation, Inc., Ivy Tech State College, Area 12 Council on Aging and Community Services, Dearborn Adults, and Dearborn County Youth) receive a portion of the proceeds from Argosy. The revenue sharing plan, which started in July 1997, has distributed $46.2 million through July 2001. Dearborn County has received $23.1 million. In addition, Dearborn County also shares a portion of its revenues (25 percent of the admission tax) with the six municipalities mentioned above.

[3] Source: Argosy Casino

Incentive Payments
The largest impact of Argosy in the Lawrenceburg area (outside of taxes) has been through incentive payments. These payments are the result of agreements that were made with the city of Lawrenceburg as part of their application process. In its Certificate of Suitability, Argosy agreed to provide incentive payments, as detailed below. As Table 7 illustrates, Argosy is on or ahead of schedule with its incentive payments and has provided $114 million in incentive payments. While all the fixed incentives were completed in years one and two, the largest incentive, the contingent incentive, will continue into the future.

Table 7: Schedule and Description of Incentive Payments

Incentive	Promised Amount	Recipient	Amount Paid Through 7/31/01	Status
Utilities-Riverboat				
Water System	$25,000	City of Lawrenceburg	$25,000	Completed Year 1
Wastewater System	$200,000	City of Lawrenceburg	$200,000	Completed Year 1
Electrical	$1,000,000	City of Lawrenceburg	$1,000,000	Completed Year 1
Utilities-City system				
Water System	$1, 475,000	City of Lawrenceburg	$1, 475,000	Completed Year 1
Wastewater System	$10,309,000	City of Lawrenceburg	$10,309,000	Completed Year 1
Electrical	$750,000	City of Lawrenceburg	$750,000	Completed Year 1
Fire and Emergency Vehicles	$1,150,000	City of Lawrenceburg	$1,150,000	Completed Year 1
Improvements to U.S. 50/I-275	$7,024,000	City of Lawrenceburg	$500,000	Completed Year 1
Environmental Studies	$50,000	City of Lawrenceburg	$500,000	Completed Year 1
Infrastructure Improvements	$5,000,000	City of Lawrenceburg	$5,000,000	Completed Year 2
Infrastructure Improvements	$2,000,000	City of Lawrenceburg	$1,950,000	Completed Year 2
Unrestricted Grants	$12,000,000	City of Lawrenceburg	$11,600,000	Completed Year 1
Greater of $6 million or a percentage of AGR reduced by $60,000/yr.	0 to 150 = 5% 150 to 200 = 6% 200 to 250 = 9% 250 to 300 = 12% 300+ = 14%	City of Lawrenceburg	1997: $5,857,879 1998: $6,384,472 1999: $16,670,735 2000: $22,083,256 2001: $24,659,549 TOTAL: 75,655,891	Ongoing
U.S. 50 Improvements	Not in Certificate	Indiana Department of Transportation, Greendale Utilities	$3,899,000	Completed Year 1
TOTAL $114,013,891				

Fiscal Impact of Tax Revenues on Local Government
Riverboat casinos affect the revenues and costs of the local governments of the communities that host them. This is known as the fiscal impact. Riverboats pay new property taxes on the boat and

other new facilities. They pay the admissions and wagering taxes that the host cities and counties share with the state. Riverboats also may impose new costs on local governments. For example, they may require added infrastructure, traffic control, or public safety expenditures. In addition, riverboat employees may relocate within the community, and pay added property taxes, income taxes, charges, and fees. If they relocate in the riverboat communities, they also will demand new infrastructure, recreation facilities, police protection, and education for their children. Measuring the fiscal impact implies comparing these additional revenues and costs. If added revenues exceed added costs, the fiscal impact is said to be positive. If added revenues fall short of added costs, the fiscal impact is negative.

This analysis applies recognized fiscal impact methods, described in Appendix A, to assess the impact of the Argosy riverboat on the budgets of Dearborn County, the city of Lawrenceburg, and the Lawrenceburg Community School Corporation for the year 2000. The analysis for each unit shows the effect on the unit's budget for this single year. Assessments, tax rates, and appropriations levels change only gradually from year to year. This means that the results for the most recent year are typical, representative of all the years since the advent of the riverboat, and likely to be representative of years in the near future.

Overall Impact on Dearborn County

Table 8 shows total assessed value[4] in the assessment years 1988, 1994, and 2000 (that is, assessed values for taxes payable in 1989, 1995, and 2001). In Indiana as a whole, assessed value grew more slowly in 1994-2000 than it did in 1988-94. This is primarily because the 1980s saw more inflation in construction costs than the early 1990s. The 1989 reassessment increased taxable values more than did the 1995 reassessment. In Dearborn County, however, assessed value grew faster in the second, post-riverboat period, almost twice as fast as in the state as a whole. This is partly the result of the Argosy riverboat, which in 2000 accounted for about four percent of the county's total assessed value.

Table 8: Assessed Value in Assessment Year, Dearborn County, 1988-00 ($000)

				Avg. Annual % Change	
	1988	1994	2000	1988-94	1994-2000
Dearborn County	168,257	260,994	417,874	7.6%	8.2%
Indiana	28,507,022	43,028,074	55,869,930	7.1%	4.4%

The riverboat is a major employer, with approximately 2,400 employees in Dearborn County in 1991. This figure represents about 12 percent of total employment in Dearborn County. Table 9 shows that Dearborn County employment grew at slightly more than the average rate for the state as

[4]Assessed value is the dollar value placed on real and personal property by local assessors, for property tax purposes. Real property is land and buildings (and, in Indiana, riverboats). Personal property is business equipment and inventories.

a whole during 1988-94, but that this rate more than doubled to 5.0 percent per year over 1994 to 1999. During this same period, Indiana average annual growth remained constant at 1.9 percent per year. Again, this added growth is likely due in part to the riverboat, which would account directly for more than half of the added jobs in the county in the 1994-99 period.

Table 9: Place-of-work[5] Employment in Dearborn County, 1988-99

				Avg. Annual % Change	
	1988	1994	1999	1988-1994	1994-1999
Dearborn County	13,472	15,377	19,652	2.2%	5.0%
Indiana	2,953,581	3,314,850	3,645,725	1.9%	1.9%

Dearborn County's per capita income is less than the state average (Table 10). Between 1988 and 1994, the gap between Dearborn County and the state widened, as the county's real per capital income fell slightly, while the state's grew. After 1994, Dearborn's real per capita income grew at a rate faster than the state's.

Table 10: Personal Income per capita in 1999 Dollars, Dearborn County, 1988-99

				Avg. Annual % Change	
	1988	1994	1999	1988-1994	1994-1999
Dearborn County	21,699	21,412	25,820	-0.2%	3.8%
Indiana	22,731	24,579	27,633	1.3%	2.4%

As shown in Table 11, Dearborn County experienced relatively rapid population growth before 1994. During the 1988-94 period, the county's growth rate was three times that of the state. Since 1994, growth has continued, but at a rate only slightly greater than Indiana's total. The total population increase in Dearborn was 2,882 between 1994 and 2000.

Table 11: Population in Dearborn County, 1988-2000

				Avg. Annual % Change	
	1988	1994	2000	1988-94	1994-2000
Dearborn County	38,109	43,227	46,109	2.1%	1.1%
Indiana	5,523,679	5,745,626	6,080,485	0.7%	0.9%

[5]Employees who work in Dearborn County, regardless of place of residence.

Table 12 shows school enrollment. Here we need not rely on countywide data, but can look at the Lawrenceburg School Corporation. The Argosy riverboat is within the borders of this school corporation. The Lawrenceburg Community School Corporation enrolled 124 fewer pupils in 2000 than it did in 1994. The 1988-94 period saw an increase of 47 pupils. During this period Indiana enrollment has increased slightly.

Table 12: School Enrollment in Lawrenceburg Community School Corporation, 1988-2000

				Avg. Annual % Change	
	1988	1994	2000	1988-1994	1994-2000
Lawrenceburg Community School Corporation	1,634	1,681	1,557	0.5%	-1.1%
Indiana	964,462	962,653	988,691	0.0%	0.4%

The arrival of the riverboats may well have increased assessed value, employment and real per capita income in Dearborn County. There seems to have been little impact on county population or on school enrollment in Lawrenceburg schools, however. From a fiscal impact perspective, this is important. Local revenues are more closely related to assessed value, jobs and income. Employment and income have grown much more rapidly since 1994; assessed value somewhat more rapidly, and considerably faster than the state's increase. Local costs are more closely related to population and school enrollment. Population actually grew more slowly in the post-riverboat period (1994-2000), compared to the preceding six years (1988-1994). Lawrenceburg school enrollment rose in that period, but has fallen since (1994-2000). These broad indicators suggest that the riverboats had a positive fiscal impact. The Lawrenceburg Community School Corporation enrollment decline may imply that the school corporation has excess capacity, meaning that the educational needs of any new pupils brought to the corporation by riverboat employees have been met by existing teachers and facilities.

Fiscal Impact of New Employment

In addition to the survey discussed previously, as part of the Gambling Impact Study Commission, in the fall of 1999 surveys were mailed to 1,750 riverboat employees representing seven of nine riverboats,[6] randomly sampled using payroll information. Seventy-four employees had relocated, decreasing the sample to 1,676. Four hundred and fifty-seven questionnaires were returned, for a response rate of 27.3 percent. For the Argosy riverboat, 245 valid surveys were mailed, and 72 were returned, for a response rate of 29.4 percent.

Table 13 shows the location of employees before and after they were hired by the Argosy riverboat. Of the 72 responses, 30 employees (42 percent) indicated that they relocated upon becoming riverboat employees. Of those 30 who relocated, 16 moved into Dearborn County, while 14 moved into a neighboring county. The remainder of employees were already residents of Dearborn County or the surrounding area when they took jobs with the Argosy riverboat.

[6] The tenth Indiana riverboat began operation in 2000 in Switzerland County.

Seventy-two employees is a small sample. In the statewide sample of 448 usable responses, the number of employees relocating (22 percent) was smaller than the results for Argosy which show a somewhat larger percentage (42 percent) of employees relocating. Extrapolating the survey results to all Argosy employees, 534 moved from elsewhere to Dearborn County, and 401 existing county residents took new jobs with the riverboat. The remainder live outside Dearborn County.

Table 13: Location of Employee Residence Prior to Employment

	Host County		Non-Host Area		Total	
	# of Employees	% Total	# of Employees	% Total	Total	Percent
New	16	22.2%	14	19.4%	30	41.7%
Existing	12	16.7%	30	41.7%	42	58.3%

Host: County in which riverboat is located
Non-Host Area: Surrounding area
New: Employee moved from outside area to obtain employment
Existing: Employee was a resident in area prior to employment

Fiscal Impact on Dearborn County

The riverboat adds $17.5 million in new assessed value (AV) to the county. The county's cumulative fund property tax rate adds $40,917 in new revenue to the county budget. The operating and welfare rates generate $226,510 in new revenue. However, the added riverboat AV is not enough to change the maximum levy limit on property tax levies for operating purposes. In effect, the riverboat produces no added operating revenue—each dollar of added riverboat tax is offset by a dollar decline in taxes paid by existing taxpayers. The same is assumed to be true for welfare. Welfare appropriations are determined by state rules, and we assumed that the advent of the riverboat does not change the number of eligible recipients. The added riverboat taxes for welfare are offset by lower welfare taxes on existing taxpayers. The debt service rate generates $37,430 in revenue, but again, this is offset by declines in property tax payments by existing taxpayers. Debt service payments remain constant when assessed value rises, so the debt service tax rate declines. These tax savings from the operating, welfare, and debt service rates do not provide additional revenue to county, but they do have a fiscal impact upon the citizens of Dearborn County, who pay lower property taxes than they would have without the riverboat.

Dearborn County has adopted the County Option Income Tax (COIT) at a rate of 0.6 percent. New taxable income is created by new riverboat employees residing in the county, and by pay increases existing residents receive when they take new riverboat jobs. The riverboat is estimated to have increased Dearborn County taxable income by $17.3 million. The county receives added revenue from this tax based on its share in the countywide property tax levy. The estimated increase in COIT revenue is $62,966. Other revenues include motor vehicle excise taxes, charges and fees, and additional miscellaneous revenue. The sum paid by the riverboat and its employees is $82,022. Overwhelmingly, the largest revenue source attributed to the riverboat is the admissions taxes received by the county, which total $7.5 million. Using the two cost estimate methods described in

Appendix A, the annual added costs to Dearborn County from the Argosy riverboat are estimated at $308,968 and $410,316. This is not a very wide range compared to the size of the total revenues generated by the riverboat.

Fiscal impact is calculated as the added revenues less the added costs of a development. For the county, eight different fiscal impact calculations were performed. Detailed results are presented in Table A1 in Appendix A. When riverboat admissions taxes are included, the fiscal impact is overwhelmingly positive, approximately $7.5 million. The added revenue is far more than the added costs. This is true if added revenues are counted without tax savings, or if total revenues are counted, and it is true under either estimate of added costs.

We also calculated the fiscal impacts with the riverboat taxes excluded: each of the cost estimates, with only added non-riverboat tax revenue and with total non-riverboat tax revenue. We calculated the fiscal impact without the added revenue from the riverboat because county riverboat tax revenues primarily have been assigned to capital improvements. Tax savings can be turned into added revenues through several avenues, including new bond issues (debt service), tax increment financing, and added cumulative fund rates. All of these, however, raise revenue for capital improvements. How are added operating costs to be funded? The county might have difficulty funding the added operating costs—sheriffs officers' wages, road maintenance, park maintenance and so forth—because virtually all the added revenue from the riverboat is devoted to capital improvements.

The fiscal impacts using only added revenue are negative—costs exceed added revenues, ranging from a negative fiscal impact of $123,063 to $224,410.[7]

Fiscal Impact on City of Lawrenceburg

The added $17.5 million in riverboat assessed value is taxed at Lawrenceburg's operating fund rate, which generates $647,302 in tax revenue. In Lawrenceburg, unlike the county, the added riverboat AV is enough to increase the city's maximum levy. This means the riverboat tax revenue is split between tax savings and added revenues. Tax savings are added riverboat taxes that reduce taxes paid by existing residents. Added revenues are taxes that the city can add to its budget. The riverboat adds $161,479 to the city budget, and provides existing taxpayers with $485,824 in tax savings. Lawrenceburg's share of the county COIT income tax paid by riverboat employees is $29,269. Other revenues sum to $16,760. Again, riverboat wagering and admissions taxes are by far the largest source of additional revenue, $24.8 million.

The detailed results for the city are presented in Table A2 in Appendix A. Even more than for the county, the fiscal impacts including riverboat taxes are overwhelmingly positive, at about $25 million. The annual tax revenue from the riverboat far exceeds the added costs. If both riverboat

[7] The negative fiscal impact without the added riverboat revenue may be overstated, because some of the added costs that might be generated by the riverboat and its employees are capital costs, such as new patrol cars, new roads, and other new infrastructure. The riverboat revenue will more than cover these costs.

taxes and tax savings are excluded, the fiscal impact is near zero, at negative $309. Added revenues approximately cover added costs.[8]

Fiscal Impact on Lawrenceburg Community School Corporation
School corporation finances differ from county and city finances. They operate under different sets of property tax controls. A major source of revenue is state aid, distributed by a complex formula. School corporations do not receive riverboat taxes directly, but do collect property taxes on riverboat assessed values.

This analysis is based on assessments, tax rates, appropriation levels, enrollment, and the school funding formula for the year 2000. The analysis shows the effect on the school corporation's budget for the single year 2000. Assessments, tax rates, appropriations levels, enrollment, and the school formula change only gradually from year to year. This means that the results for the most recent year are typical, representative of all the years since the advent of the riverboat, and likely to be representative of years in the near future. School corporation revenue estimates are primarily based on property taxes and state aid. A detailed discussion of the methodology is included in Appendix A.

Most of the property taxes paid on the $17.5 million in Argosy riverboat assessed value become added revenue for the school corporation. Added revenue from property taxes amounts to $750,499. Only the debt service fund creates tax savings. The debt repayment schedule is unchanged by the added assessed value, so the rate required to raise these payments falls. This results in $188,326 in tax savings to existing taxpayers. Other revenues are relatively small in comparison, totaling $16,750 in added revenue.

State aid decreases by $527,459. Assessed value per pupil is increased by the advent of the riverboat. This reduces the amount paid to the school corporation in per-pupil aid. The survey estimates for the Lawrenceburg Community School Corporation imply no increase in enrollment from the riverboat. The riverboat increases assessed value per pupil, so with no new enrollment aid falls.

Note that this aid reduction is a comparison to what would have happened had the riverboat not added its assessed value to the school corporation's tax base. Between 1994 and 2000, Lawrenceburg Community School Corporation's state aid actually increased, by an average of 3.4 percent per year. In the six years prior to 1994, though, aid was rising by 15.8 percent per year. Without the riverboat, the school corporation would have financed its operations with less property taxes, and more in state aid. In total, the school corporation realizes $239,790 in added revenue, $428,115 in total, including tax savings.
Added costs for school corporations are estimated on a per-pupil basis. Lawrenceburg Community School Corporation enrollment fell between 1994 and 2000, by 124 pupils. Undoubtedly some

[8] The analysis implies that new riverboat employees and their families add 116 new people to Lawrenceburg's population. However, the Census estimates that Lawrenceburg population rose by only 73 people between 1994 and 2000. Had the riverboat not arrived, perhaps Lawrenceburg's population would have fallen, which could imply some local government cost savings. It would be defensible, though, to count the added population at only 73, in which case the fiscal impact with no riverboat taxes nor tax savings would be positive, at $48,430.

riverboat employees located in the school corporation and sent their children to its schools. However, this added enrollment was not enough to offset declining enrollment. This implies that without the riverboat, the decrease would have been more. But it also means that prior to the riverboat's arrival, the school corporation was providing services to more pupils than it is now. New riverboat pupils merely replaced some lost enrollment. It is defensible to count the costs of added enrollment at zero, and that is the method used here.[9] With no added costs, of course, the fiscal impact of the Argosy riverboat on the Lawrenceburg Community School Corporation is *positive*. The fiscal impact is $239,790 without tax savings, $428,115 with tax savings.

Economic Benefits of Gaming-Related Taxes and Incentives

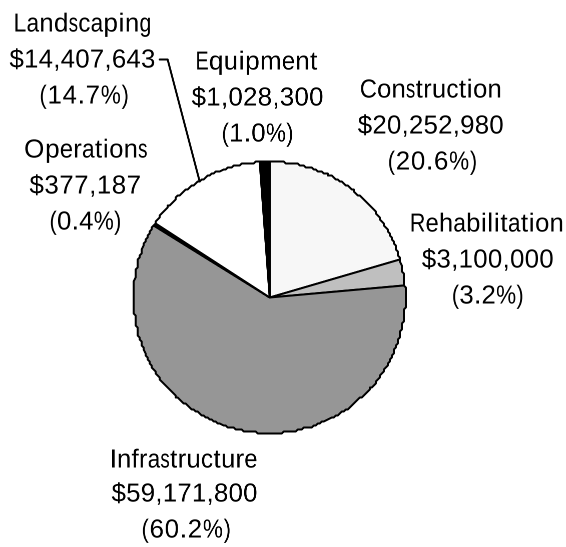
Between 1996 and 2001, the Argosy riverboat casino has paid approximately $233 million in local taxes and voluntary negotiated contributions. Detailed expenditure information is available for approximately $98.3 million of the total local gaming-related tax and voluntarily negotiated contributions. The analysis of the economic benefits of spending of local gaming-related taxes and incentives is limited to expenditures made by the city of Lawrenceburg, Dearborn County, and the Lawrenceburg Conservancy District. Any expenditure of revenue that the city and county shared with several local governments, several local organizations, and the community foundation are not included.

[9] Lawrenceburg enrollment could rise by as many as 38 pupils and still have a positive fiscal impact, according to the basic analysis. This implies that new facilities would be needed, however, which seems unlikely because just six years before, the corporation was serving 124 more pupils. If new facilities costs are ignored, 47 more pupils can be served with a positive fiscal impact.

Total Spending
As Figure 11 illustrates, gaming-related tax and incentive-related revenue has been spent on:

- Infrastructure (primarily road improvements)
- Landscaping (primarily park improvements)
- Construction of new facilities (fire stations, senior citizen housing, and many other public facilities)
- Capital equipment (police and fire vehicles and equipment, computers for schools and government, telecommunications equipment, and many other types of equipment)
- Operations (job training, comprehensive planning, not-for-profit assistance, the arts, youth services, and many others)
- Rehabilitation (a variety of public and not-for-profit buildings, including improved access for the disabled)

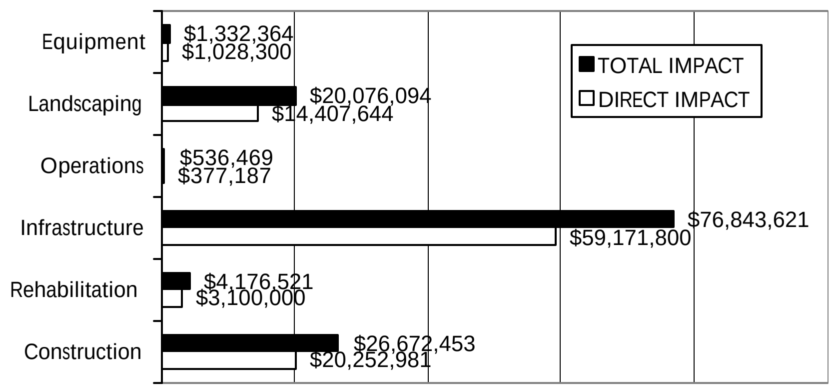
Figure 11: Total Spending of Riverboat-Related Tax and Incentive Payments



Total Benefits
From 1996 through 2000, the total immediate short-term economic benefit provided by local spending of the $98.3 million of the tax and negotiated incentive payments of the Argosy casino was nearly $130 million. How the tax and incentive dollars are spent determines both the short- and long-term economic benefits generated within the local economy. The short-term benefits are the immediate result of the spending—principally the new jobs, wages, and business generated as spent tax dollars work their way through the local economy. The long-term benefits are related to the degree to which the spending supports or develops competitive advantages in the local economy. These long-term benefits are not immediately measurable. However, if the tax dollars are spent wisely, they will support the local economy for many years.

Economic Benefit by Type of Expenditure
In Figure 12, the direct impact bars represent gaming-related tax and negotiated incentive payment expenditures by Lawrenceburg, Dearborn County, and the Lawrenceburg Conservancy District. For example, approximately $59 million was spent on infrastructure improvements, principally roads. The total impact bars represent the full economic benefit of local spending decisions as they work their way through the economy. For example, the $59 million spent on infrastructure results in a total economic benefit of $76.8 million in Dearborn, Ohio, Ripley, and Switzerland counties.

Figure 12: Economic Contribution of Spending of Riverboat-Related Revenue



Each type of expenditure provides a different measurable level of immediate local benefits. For example, each dollar spent on new government and not-for-profit operations results in the highest return; an additional 42 cents of economic activity for each tax and incentive dollar spent. Each dollar spent on equipment purchases results in the lowest return: an additional 29 cents of economic activity. The average local return for all tax and incentive expenditures is 32 cents of additional economic activity.[10]

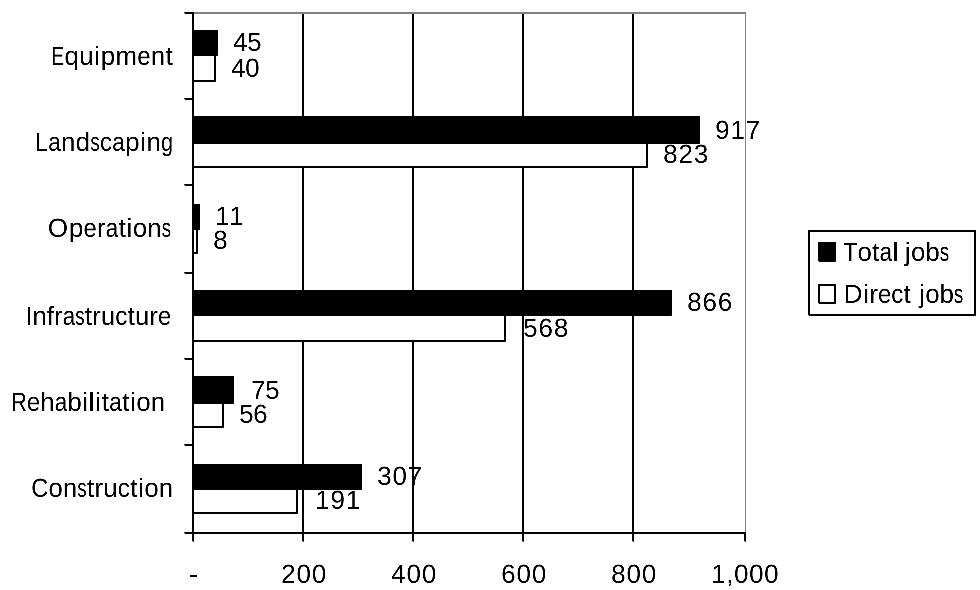
The rate of return offers local officials one perspective from which to evaluate the benefits of investing gaming-related tax revenues. However, the rate of return provides only a short-term perspective, with the benefit ending soon after the last dollar is spent. From a long-term perspective, the value of the investment must consider the lasting value of improvements made. Thus, while the immediate return on operations exceeds that of construction and infrastructure, the lasting benefit of improved roads may outweigh the immediate benefits of operations. From this perspective, the key questions that must be answered by local officials revolve around the degree to which the investments contribute to the economic competitiveness of local firms, the local workforce, and the area's quality of life.

[10] The low rate of return, relative to previous reports, is a result of the relatively small local economy and the fact that much economic activity is likely exported to Cincinnati and northern Kentucky. For example, when a riverboat employee purchases a car or goes out to dinner in Kentucky or Ohio, that spending is not part of the economic benefit in the four-county area. Similarly, when the casino purchases goods and services from suppliers in Kentucky or Ohio, that economic benefit also is not captured.

Jobs Created

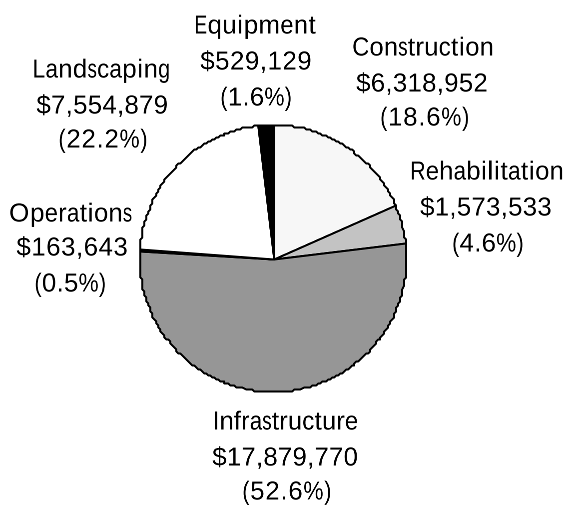
Figure 13 displays the number of jobs attributable to each category of investment made with gaming-related tax revenue. There were 2,221 total jobs generated in the four-county area as a result of the spending of gaming-related revenue. Spending on landscaping (park and levee improvements) produced the largest number of jobs (917). Each new job represents an annual full-time equivalent measure of employment. For example, one individual employed for four years while working at a landscaping firm represents four jobs.

Figure 13: Total Employment Attributable to the Spending of Riverboat-Related Revenue



Wages Generated
Figure 14 shows the total gaming-related earnings generated in the four-county area. Since Argosy began operations, Lawrenceburg and Dearborn County's spending of gaming-related revenue produced $34 million in wages. Infrastructure-related wages were the largest single category ($17.9 million) and landscaping and new construction produced an additional $13.8 million. Rehabilitation-related jobs have the highest average earnings of $20,980 and landscaping-related jobs have the lowest average earning of $8,246.

Figure 14: Total Employee Earnings Attributable to Spending of Riverboat-Related Revenue



OTHER ISSUES

According to Argosy, 38 lawsuits have been filed against them since 1996; 18 were filed by patrons and 20 by employees. According a phone interview with the Lawrenceburg Police Department, Argosy-related arrests for public intoxication, DWI, and minor theft, as well as traffic accidents in the area have increased slightly each year from 1997 to 2000. Lawrenceburg has added two police officers since the boat opened to deal with the increased caseload.

Argosy has made efforts to minimize negative impacts. Argosy posts problem gambling awareness signs at casino entrances, ATM machines, and ticketing windows, as well as print information about problem gambling on all tickets and collateral materials. It has created and distributed a brochure on compulsive gambling that included local, regional, and national help numbers. Argosy has presented seminars to employees on compulsive gambling as well as a program on underage gambling, Project 21, a program developed by Harrah's Casinos. Argosy's Community Affairs Coordinator serves on the board of directors of the Indiana Council on Problem Gambling and Argosy is a special corporate member of the Kentucky Council on Problem Gambling. Argosy also has a permanent self-eviction program for individuals who wish to be banned from the facility. Any attempts by these individuals to enter the casino can result in their arrest for trespassing. The self-banned patron is excluded from all future mailings.

As Table 14 indicates, in an effort to prevent underage gambling, Argosy has verified 492,965 identifications. In addition, they have turned away 7,768 patrons for being under 21 or not having identification.

Table 14: Argosy's Efforts to Prevent Underage Gambling

	1998	1999	2000	2001 Through 8/01	Total
Number of IDs verified	143,416	132,440	132,243	84,866	492,965
Number of patrons turned away – under 21 or no ID	2,584	2,276	1,837	1,071	7,768

SUMMARY OF FINDINGS

Project Development Certificate Compliance

- As of July 2001, Argosy had spent $237.5 million, $71.5 million more than agreed to in the Certificate for the development of the project.
- Since opening, Argosy has spent $13 million locally.
- Argosy has contributed $554,442 to local area organizations.

Gaming Activity

- Argosy has had attendance of over 29 million people since opening and gross gaming receipts of $1.25 billion, for an average of $43 per patron.

Impact of Gaming Activity on Tourism

- According to a survey of patrons, 100 percent of the patrons stated that their main reason for traveling to Lawrenceburg was to visit Argosy.
- Twenty-one percent of the patrons planned to stay in Lawrenceburg for more than eight hours.
- According to a survey, ten percent of the respondents anticipated visiting other businesses and/or attractions.

Employment Certificate Compliance

- As of July 2001, Argosy had employment of 2,232 persons, above their five-year average of 2,162. Since opening Argosy has paid almost $296 million in wages.
- As of July 2001, 53 percent of Argosy employees were women, and eight percent were minorities.

Impact on Argosy's Workforce

- According to a survey of employees, before beginning employment with Argosy, approximately 38 percent of employees were either not working or working part-time.
- When respondents were asked to select one reason for taking a job with Argosy, 32 percent chose more money as their primary reason, an additional 16 percent chose improved benefits as their reason for accepting employment, and 15 percent chose to begin work at Argosy because it was closer to home.
- According to a survey, the average increase in wages for employees, since they began work at Argosy is $3,240.
- The average length of employment at Argosy was three years and three months.
- Seventy-five percent of all respondents reporting receiving training say the training is related to their position at Argosy. Only nine percent received general or basic skill training, either from Argosy or reimbursed by Argosy.

Tax Revenue Collected

- Argosy has paid over $220 million in direct taxes to the state of Indiana since it opened.
- Argosy has paid over $126 million in direct taxes to the local area since it opened.

Incentive Payment Certificate Compliance

- Argosy is on or ahead of schedule with its incentive payments and has provided $114 million in incentive payments.
- While all the fixed incentives were completed in years one and two, the largest, the contingent incentive, will continue into the future.

Fiscal Impact of Tax Revenues on Local Government

- In total, the fiscal impact of the Argosy riverboat on Dearborn County, the city of Lawrenceburg and the Lawrenceburg Community School Corporation is positive; total added revenues greatly exceed total added costs.
- In the city and county, most of the admissions and wagering tax revenues from the riverboat are devoted to capital projects. There is little doubt that any infrastructure requirements imposed on these units by the riverboat are met with this added revenue. For the city, the fiscal impacts using only added revenue *without riverboat admissions* tax are near zero. Without the riverboat revenues or tax savings, the city approximately breaks even. However, the fiscal impact analysis implies that for the county, the revenue that actually can be added to the budget may not be enough to meet the added operating costs that the riverboat and its employees may create.
- The school corporation receives no riverboat taxes, but the added revenue from property taxes and state aid are added to its budget, for the most part. The positive impact results from the relatively small increase in enrollment, compared to the large increase in assessed value.

Economic Benefits of Gaming-Related Taxes and Incentives

- The total economic benefit produced through the spending of Argosy's local gaming revenue was almost $130 million.
- Local area employment attributable to this economic benefit was 2,221 jobs with earnings of over $34 million.

Other Issues

- Argosy, in an effort to prevent underage gambling, has verified 492,965 identifications. In addition, they have turned away 7,768 patrons for being under 21 or not having identification.

APPENDIX A:
METHODOLOGY FOR ESTIMATING LOCAL REVENUES AND COSTS

City and County Revenue Estimates

The first step in revenue modeling was to obtain the assessed value (AV) of each riverboat project. Local assessors and personnel from the Indiana State Board of Tax Commissioners aided in this effort. Assessments were obtained for 1999 pay 2000, that is, the assessed values of March 1, 1999, upon which year 2000 tax payments were based. The real and personal property assessed value for the many parcels owned by the riverboats were summed. The value of the land prior to its purchase by the riverboat companies was used to estimate the AV before construction. The incremental AV, found by subtracting the pre-development AV from the total of developed lots, avoids double-counting revenues that would have been collected in the absence of development. Deductions and exemptions were then subtracted from the incremental AV to produce the added net taxable AV.

A jurisdiction's AV could also increase if riverboat employees construct new homes. None of the Argosy employee survey respondents reported that they were living in a home constructed since 1995. The analysis assumes that no new homes were constructed. While it seems unlikely that there were actually no new homes built for these employees, clearly the advent of the riverboat did not create very much additional taxable residential property.

In Indiana, property tax revenue is not simply the product of the local rate and the taxable AV. Property tax controls limit the amount of revenue that can be raised. For civil jurisdiction (non-school) operating funds, the state places a ceiling on the amount of property taxes that can be raised, called the maximum levy. In almost every jurisdiction, the maximum levy rises by five percent per year, no matter what changes occur in AV. Thus, in most cases added AV *will not increase* the amount of operating fund tax revenue that is collected by civil jurisdictions-the levy would have increased by five percent in any case. This is the case here for Dearborn County.

Exceptions occur when a project is so large relative to existing assessed value that it causes the three-year average of AV growth to exceed five percent. This occurs here for the city of Lawrenceburg.

If AV rises but the levy does not, the tax rate will fall. Existing taxpayers receive tax reductions. The fiscal impact of a development must be divided into two parts: added revenue to the local government, and tax savings to existing taxpayers.

Non-operating funds operate under different rules. The welfare fund is not subject to the same controls as the operating fund, yet new welfare revenue is unlikely to be raised by the addition of new AV. Welfare expenditures are typically targeted to meet specific needs, determined by state eligibility rules and court mandates. It is assumed that the welfare levy does not change with the added AV, so the welfare portion of the property tax rate falls. Again, this produces tax savings for existing taxpayers, because the higher AV means the welfare bill can be paid with a lower tax rate.

The property tax cumulative funds are subject to specific rate controls, rather than levy controls; so new AV will be taxed at the current rate. Added AV produces new revenue for jurisdiction cumulative funds. The revenue raised by the cumulative fund property tax is simply the product of the rate and the new development's AV.

The amount of annual debt service is usually fixed by the conditions of the bond sale. Added AV decreases the tax rate required to raise this debt service, so it produces tax savings for existing taxpayers. There are several other categories of local government revenue, including income taxes, motor vehicle excise taxes, license and permit fees, fines, and other miscellaneous sources. There are three local income taxes available to Indiana civil governments, known as the County Adjusted Gross Income Tax (CAGIT), the County Option Income Tax (COIT), and the County Economic Development Income Tax (CEDIT or EDIT). Dearborn County uses COIT at 0.6%.

All cars, light trucks, and motorcycles are subject to Indiana's motor vehicle excise tax. The employee survey results were used to estimate the number of new vehicles brought into the jurisdiction by riverboat employees. The total amount of excise tax is calculated using the excise tax schedule. Some state aid is tied to excise tax collections, and this amount was added to excise tax collections. The county, city, and school corporation each receive a fraction of this countywide revenue, based approximately on that unit's share in countywide property taxes.

Charges, fines, fees, and other revenues are assumed to be directly linked to population increase, so an average costing method of estimating the revenue is employed. Two categories of data, charges and fees and other revenues, were collected from Indiana's Local Government Database. The amounts collected were divided by the most recent jurisdiction population estimates. These per capita amounts were multiplied by the number of new residents to obtain added revenue estimates. The riverboat projects themselves are assumed to generate no additional charges and fees. The largest revenue impact of a riverboat, of course, are the riverboat taxes paid to the county and city governments. The school corporation does not receive riverboat taxes.

City and County Cost Estimates

In the analysis of the county, several methods are used. Regression equations were estimated to show the effects of changes in employment and population on appropriations. Each 10 percent increase in population is found to increase appropriations by about 7.5 percent. Population measures the demands of county residents for county services. Each ten percent increase in employment is found to increase appropriations by about 0.8 percent. Employment is "place-of-work" employment, that is, the number of full- and part-time employees of firms in the county, regardless of where those employees live. This variable is used to indicate the level of commercial/industrial development in the county, which also places demands on county services.

Riverboats increase population and employment. The percentage increase in population and employment, times the regression coefficients, yields the percentage increase in appropriations. City data on employment are not available, so the regression method cannot be used for the Lawrenceburg fiscal impact.

Another set of methods used to calculate the added local government costs of riverboats for civil governments are labeled "FIA methods," for "fiscal impact analysis methods." These are derived from the techniques presented by Burchell and Listokin in their 1978 classic *Fiscal Impact Handbook*. Per capita appropriations are calculated for the county and city, by dividing total appropriations by jurisdiction population. The added population resulting from the riverboat is then multiplied by per capita appropriations to estimate the costs of added people.

The FIA method used for the riverboat itself is called proportional valuation. In its simplest form, this method attributes a share of existing appropriations to the costs imposed by existing commercial/industrial property, equal to the share of commercial/industrial real assessed value in total real assessed value. If, for example, a county spends one million dollars a year, and real commercial/industrial property is 15 percent of real assessed value, $150,000 would be assigned as costs due to existing commercial/industrial property. The next step takes the new development's real assessed value as a percentage of existing commercial/industrial real assessed value. This percentage is multiplied by the appropriations attributed to existing commercial/industrial property, to give the estimated cost impact of the new development. For example, if the new development is 10 percent of existing commercial/industrial real AV, it is estimated that commercial/industrial costs will rise by 10 percent, or $15,000 in this example.

Burchell and Listokin refined this method to recognize that a small number of large commercial/industrial parcels are less expensive to serve than a large number of small commercial/industrial parcels. Economies of scale and location are the reasons. One multi-lane road serving a big development costs less than many two-lane roads serving many small developments. Police and fire protection may be provided more cheaply to a single large location than to many small, scattered locations.

Burchell and Listokin's refinement coefficients reduce costs attributed to existing commercial/industrial firms the larger is the average commercial/industrial parcel compared to the average parcel overall. They reduce costs attributed to the new development the larger is the development compared to existing average commercial/industrial parcel. The refinement coefficients were based on a review of a large number of commercial/industrial cost studies.

Table A1: Fiscal Impact Estimates for Dearborn County

Revenues		Added Revenue ($)	Tax Savings ($)	Total ($)
	Property Tax	40,917	263,940	304,857
	Operating	-	172,502	172,502
	Welfare	-	54,008	54,008
	Cumulative	40,917	-	40,917
	Debt Service	-	37,430	37,430
	Local Income Tax	62,966	-	62,966
	Other Revenues	82,022	-	82,022
	Riverboat Taxes	7,546,866	-	7,546,866
	TOTAL	7,732,772	263,940	7,996,712
Costs		FIA Methods	Regression	
	TOTAL	308,968	410,316	
	Fiscal Impacts (Revenues less added costs)		Added Revenue Only ($)	Total ($)
		FIA Methods	7,423,803	7,687,743
		Regression	7,322,456	7,586,396
	Fiscal Impacts w/o Riverboat Taxes		Added Revenue Only ($)	Total ($)
		FIA Methods	(123,063)	140,877
		Regression	(224,410)	39,530

Table A2: Fiscal Impact Estimates for Lawrenceburg

Revenues		Added Revenue ($)	Tax Savings ($)	Total ($)
	Property Tax	161,479	485,824	647,302
	Operating	161,479	485,824	647,302
	Welfare	-	-	-
	Cumulative	-	-	-
	Debt Service	-	-	-
	Local Income Tax	29,269	-	29,269
	Other Revenues	16,760	-	16,760
	Riverboat Taxes	24,771,063	-	24,771,063
	TOTAL	24,978,570	485,824	25,464,394
Costs		FIA Methods		
	TOTAL	207,816		
	Fiscal Impacts (Revenues less added costs)		Added Revenue Only ($)	Total ($)
		FIA Methods	24,770,754	25,256,578
	Fiscal Impacts w/o Riverboat Taxes		Added Revenue Only ($)	Total ($)
			Revenue	Total
		FIA Methods	(309)	485,515

School Corporation Revenue Estimates

Schools receive most of their revenue from two sources, property taxes, and state aid. Property tax impacts may be calculated as the existing tax rate times the new assessed value. For debt service, the levy is assumed to remain the same, since it is based on the fixed debt repayment schedule. Added assessed value reduces the rate required to raise this part of the levy, producing tax savings.

The majority of state funding comes in the form of the Basic Grant. The Basic Grant is calculated using a complicated formula requiring specific information concerning past and current enrollment, tax rates, and the assessed value and revenues of the school district over the past few years. Other grant programs include the At-Risk Grant, the ADA Flat Grant, the Special Education Grant, the Academic Honors Grant, and the Vocational Education Grant.

Using the actual state aid formula to calculate riverboat fiscal impact introduces a number of intractable problems. For example, the previous year's tax levy and state aid level are elements in the current year's formula calculation. To isolate the impact of the riverboat, presumably the previous year's figures should not include the riverboat's influence. Of course, for the aid calculation in 2000, the 1999 levy and aid figures did include the riverboat's influence, and were themselves the results of calculations that included the levy and aid figures for 1998. Further, go back more than two years and the formula calculations themselves are different.

As an alternative, state aid per pupil can be modeled with reasonable accuracy using a simpler "foundation" formula:

State Aid per pupil = Target Spending per pupil - (Target Tax Rate x AV per pupil). The result is multiplied by enrollment to give total state aid. The formula implies that as assessed value per pupil increases, state aid per pupil decreases. More state aid is delivered to school corporations with lower wealth per pupil. In addition, as enrollment increases, state aid increases. Thus, any new development that increases both AV and enrollment may increase or decrease state aid, depending on the values of target spending and the target tax rate, and on the relative increase in AV and enrollment.

Regression analysis can be used on data for 2000 to reduce the actual formula distribution of aid to this simpler form. The result is the formula: State Aid per pupil = $5,279 - (0.0301 x AV per pupil). The 0.0301 figure is the target tax rate, and means $3.01 per $100 assessed value. Each added $1,000 AV per pupil reduces aid per pupil by about $30. This formula allows a calculation of the effect of the riverboat on state aid. The riverboat adds assessed value, the new resident riverboat employees' children add enrollment. This alters AV per pupil, and hence state aid per pupil. The new state aid per pupil times enrollment is the estimate of the riverboat's impact on total aid.

School Corporation Cost Estimates

School corporation costs are estimated using the service standard method. This method asks what added expenditures would have been needed to maintain the existing level of service given the additional enrollment. The pupil-teacher ratio is the best indicator of service standard available, though of course it does not fully capture the level of educational service provided. If new development brings higher enrollment, new teachers must be hired to maintain the current class size. The number of new teachers to be hired equals new enrollment divided by current class size. The result is multiplied by the school corporation's average teacher salary.

Capital expenses deal with the expansion of physical facilities, including the building of new schools or expansion of existing structures. Students across all school districts typically require similar facilities, so the standard chosen to represent capital costs is building area per student. According to Indiana's 1995 School Construction Benchmark Committee report, the amount of space required by the average student is 150 square feet. The report also sets the cost of physical expansion at $100 per square foot.

It is important to note that while the other categories of costs in this model are annual costs, capital expenses are a long-term investment. Local government bonds finance expansion of school facilities and the costs are amortized over a several years. It is assumed that the school corporation will finance the capital expense with a 20-year bond at the current state and local bond interest rate of 5.1 percent (as of September 2001, according to the Federal Reserve Board). Multiplying the additional enrollment by the service standard for required facility space gives the necessary area of expansion. The total cost of this expansion is calculated at $100 per square foot. The annual annuity payment to finance this total cost is calculated over 20 years at 5.1 percent.

Other school operating expenditures include a myriad of categories, such as nurse services, food preparation, transportation, and building maintenance. These are summed and divided by enrollment to yield a per pupil average. This average is multiplied by the increase in enrollment to estimate added other costs.

Table A3: Fiscal Impact Estimates for Lawrenceburg School Corporation

Revenues		Added Revenue ($)	Tax Savings ($)	Total ($)
	Property Tax	750,499	188,326	938,824
	General Fund	581,098		581,098
	Debt Service Fund	-	188,326	188,326
	Capital Projects Fund	110,942	-	110,942
	Transportation Fund	56,706	-	56,706
	Other Funds	1,752		1,752
	Other Own-Source Revenues	16,750	-	16,750
	Other Taxes	16,750	-	16,750
	Charges and Fees	-		-
	Other Revenues	-		-
	State Aid	(527,459)	-	(527,459)
	TOTAL	239,790	188,326	428,115
Costs		Per Pupil		
	TOTAL	-		
	Fiscal Impacts		Added Revenue Only ($)	Total ($)
		Per Pupil	239,790	428,115