



Institute for Survey and Policy Research
P. O. Box 413
Milwaukee, WI 53201

The Economic Impact of the Milwaukee Brewers

**Draft Report prepared for the Milwaukee Brewers Baseball Club (MBBC).
January 2005**

Do not release without express permission of MBBC or ISPR

Executive Summary

This study, undertaken on Behalf of the Brewers Inc., examined the economic impact of the Brewers franchise on the economy of the five-county area which includes Milwaukee, Ozaukee, Racine, Washington and Waukesha. The estimated direct and indirect impacts were computed using the Regional Input-Output Modeling System (RIMS II) developed by the Bureau of Economic Analysis of the US Department of Commerce. Final demand multipliers were applied to estimate output, earnings, and employment effects.

The economic impacts of the Brewers are as follows:

- Direct economic contributions from out-of-the-five-county area spectators are estimated to be \$292.5 million. This includes \$120.3 million in earnings, and 4,374 in employment.
- Indirect economic contributions from out-of-the-five-county area spectators are estimated to be \$34.8 million, including \$13.2 million in earnings, and approximately 309 jobs.
- Of the total 180 part-time and full-time employees of the Brewers, 177 or 98 percent live within the five-county area. About 55 percent of the workers own property in the area.

Total estimated direct and indirect impact of the Brewers on the five-county area is \$327.3 million in output and 4,683 full and part-time jobs.

It should be strongly emphasized that the estimated economic impact of the Brewers, including direct and indirect effects, is a net gain of \$327.3 million for the Milwaukee metropolitan five-county economy. Some critics of the economic impact studies of a sports franchise have argued that the measured impact is not really a net gain, for the money would have been spent on other goods and services within the area. This study has rendered such a criticism invalid by measuring the economic impact on the five-county area of expenditures by individuals from the rest of Wisconsin and particularly from outside of the State. For example, if twenty thousand Chicago Cubs fans come from Illinois to attend a Brewers game, their spending on hotels, restaurants, and at Miller Park

is a net gain which would not have been spent if the Brewers did not exist or were to leave Milwaukee.

It is difficult to compare the economic impact of the Brewers to that of other recreational and non-recreational facilities, but a recent newspaper article made one such comparative measure possible. A recent article in the Milwaukee Journal Sentinel (December 15, 2004) noted that Governor Jim Doyle believed it important that he travel to Washington, D.C. to make a case before Congress for the retention of four military bases in the State, citing their economic impact of \$919 million on four cities in the State. In comparison, the economic impact of the Brewers is over a third of that figure aside from the additional income and sales tax revenue which the State receives and the non-quantifiable and image-enhancement benefits.

INTRODUCTION

This is a study of the economic impact of The Milwaukee Brewers., a Major League Baseball franchise. It has be done by the Institute for Survey and Policy Research, University of Wisconsin-Milwaukee, using the standard methodology which is commonly used throughout the country in economic impact studies. It will focus particularly, but not exclusively, on the economic benefits to the Wisconsin Consolidated Statistical Area (WI-CSA), which includes Milwaukee, Ozaukee, Washington, Waukesha and Racine counties. These are the five counties which benefit most economically from the Milwaukee Brewers and the counties which paid a sales tax of .1% (\$.10 on \$100) to finance the construction in 2001 of Miller Park.

Cities throughout the country have competed strongly, and at times fiercely, to host a professional sports franchise. Such a franchise for a city projects a world class image which brings important economic benefits. This study will measure the most important economic benefits in quantitative terms, but it should be noted here that the economic benefits that are not subject to quantitative measurement, which will be briefly described at the end of this report, are very significant.

The following are the three types of economic benefit or impact that will be measured:

1. **DIRECT EFFECTS** - Total annual spending by visitors to Miller Park from outside the five county area including the subsequent effect on area employment and earnings.
2. **INDIRECT EFFECTS** – Total operating expenses of the Brewers including stadium operating and administrative expense and the earnings of Brewer employees who live in the five county area and the subsequent multiplier effect.
3. **INDUCED EFFECTS** – Sales tax and income tax revenue generated by the Brewers.

Methodology:

In order to critically evaluate the economic impact of the Milwaukee Brewers, we apply input-output multipliers to arrive at estimates of its effect on employment and output on Milwaukee, Ozaukee, Washington, Waukesha, and Racine counties.

A “Multiplier” measures the full effect of a given expenditure on a specific area of the economy. For example, spending \$1,000,000 on the purchase of a good or service will result in additional spending of the recipients of this \$1,000,000. In turn, the spending of these recipients will circulate to additional groups, although at each level of spending a significant amount of income will “leak” out of the local economy to other areas. A multiplier will measure the full effect on the local economy of the spending of \$1,000,000.

The Input-Output model captures the relationships between various sectors of the economy as they interact to produce and/or exchange goods and services. Through an input-output model changes (structural change or change in final demand) in the economy can be traced. Multipliers are quantitative measures of the degree to which an independent or exogenous change is expected to trigger changes (earnings and employment) in the economy, through a system of interdependencies.

The standard multipliers used in this study are provided by the Department of Commerce, Bureau of Economic Analysis. These are RIMS II (Regional Input-Output Modeling System) multipliers. RIMS II multipliers are very useful for impact analysis because they can be estimated for any region that is made up of one or more counties and for any industry or subgroup of industries. The multipliers used in this study were computed for Milwaukee-Racine-Waukesha, WI-CSA.

Regional Demographic and Economic Trends

Most of the impact of the Brewers is relevant to the five-county area which is made up of Milwaukee, Ozaukee, Racine, Washington, and Waukesha. To a lesser extent, the counties of Kenosha and Walworth are also directly impacted. Milwaukee County accounts for

more than half of the population of the five-county area. The Milwaukee-Waukesha, WI PMSA (Milwaukee, Ozaukee, Washington, and Waukesha) has a total population of 1.5million, according to the U.S.Census Bureau’s American Community Survey of 2003. Racine has a population of about 189,000. A demographic profile of the PMSA is presented in Table 1. The total population of the five-county area is about 28 percent of the entire state.

Table 1: Profile of General Demographic and Economic Characteristics			
	Wisconsin	Milwaukee County	Milwaukee-Waukesha, WI PMSA
Total Population	5,316,215	908,819	1,481,255
Male	2,621,030	437,569	720,242
Female	2,695,185	471,250	761,013
Median age	37.1	34.6	36.5
Male	36.4	33.3	35.2
Female	37.9	36.1	37.5
Total Households	2,159,083	374,840	596,924
Average household size	2.46	2.42	2.48
Families	1,399,885	223,212	386,299
Average family size	3.03	3.14	3.08
Total Housing Units	2,417,364	401,490	631,248
Occupied Housing Units	2,159,083	374,840	596,924
Median Household Income in the past 12 months (in 2002 inflation-adjusted dollars)	\$43,617	\$37,155	\$46,613
Median family income in the past 12 months (in 2002 inflation-adjusted dollars)	\$52,916	\$46,734	\$57,069
Per capita total personal income (2002)	\$30,050	\$30,456	\$37,243

Source: U.S. Census Bureau, American Community Survey 2003

Population projections reveal that the population of this area will grow substantially through the next decade and beyond. According to these projections, the Milwaukee-Waukesha, WI PMSA will grow from the present 1.5 million to about 1.6 million by the year 2020. Between 2000 and 2010, population in the PMSA is projected to grow by 5 percent. By 2020, the population would have grown by 10 percent. The counties of Racine, Kenosha, and Walworth will each show a substantial increase in population during the same period. These population projections are shown in Table 2. As depicted in Table 2, this region of the state will continue to represent a substantial proportion of the states population for the foreseeable future.

Table 2							
Final Population Projections for Wisconsin Counties: 2000 - 2030							
(The 2000 Census counts include the latest corrections - November 25, 2003)							
County	2000	2005	2010	2015	2020	2025	2030
Milwaukee – Waukesha, WI PMSA							
Milwaukee	940,164	956,478	973,363	993,969	1,014,293	1,021,406	1,030,644
Ozaukee	82,317	85,047	87,238	89,692	92,496	95,417	97,668
Washington	117,496	123,570	129,085	134,255	139,214	145,314	150,485
Waukesha	360,767	374,891	386,460	397,922	409,570	424,472	436,986
PMSA Total	1,500,744	1,539,986	1,576,146	1,615,838	1,655,573	1,686,609	1,715,783
Racine	188,831	193,189	197,662	202,404	206,989	211,326	214,902
Kenosha	149,577	157,935	165,678	173,624	181,693	190,145	198,258
Walworth	92,013	96,182	100,634	106,588	111,237	113,506	117,833
WISCONSIN	5,363,715	5,563,896	5,751,470	5,931,386	6,110,878	6,274,867	6,415,923

Source: Wisconsin Dept. of Administration, Demographic Services.

Racine, with 188,831 in 2000 is projected to reach a population of 197,662 in 2010, an increase of 4.7 percent. In 2020 Racine’s population is projected to be 206,989, an increase of 9.6 percent. Similarly, Kenosha and Walworth counties also are projected to record substantial increases in population during the same time period.

Besides its strong population trends, this area of the state also contributes significantly to its personal income. Kenosha County, with total personal income of \$4.4 billion in 2002, ranked 8th among all the counties of Wisconsin. Its per capita income of \$28,775 ranks 21st in the state and is only 96 percent of the state’s personal income. Except for Kenosha and Walworth counties, all the other counties in the area have per capita personal income that is higher than the state average. Milwaukee County ranks first in the state in total personal income, and 10th in per capita personal income. Milwaukee County’s per capita personal income of \$30,456 in 2002 is 101 percent of the state average. A detailed ranking of personal income for the state and the seven-county area is depicted in Table 3.

**Table 3.
Personal Income**

County	Total Personal Income (TPI) (Thousands)					Per Capita Personal Income (PCPI)				
	2002	Rank in WI	Pct of WI	Pct Change from 2001	Average Annual Growth 1992-2002	2002	Rank in WI	Pct of WI	Pct Change from 2001	Average Annual Growth 1992-2002
Kenosha	\$4,432,404	8 th	2.7%	3.3%	5.8%	\$28,775	21 st	96.0%	2.0%	4.4%
Milwaukee	\$28,469,565	1 st	17.4%	2.4%	3.7%	\$30,456	10 th	101.0%	2.6%	4.0%
Ozaukee	\$3,979,542	11 th	2.4%	2.0%	6.4%	\$47,418	1 st	158.0%	1.2%	5.3%
Racine	\$5,784,866	5 th	3.5%	2.2%	4.5%	\$30,331	11 th	101.0%	1.6%	3.9%
Walworth	\$2,603,076	16 th	1.6%	2.2%	6.0%	\$27,364	27 th	91.0%	0.5%	4.1%
Washington	\$4,128,461	10 th	2.5%	1.9%	6.2%	\$34,149	4 th	114.0%	0.8%	4.4%
Waukesha	\$15,220,911	3 rd	9.3%	2.0%	6.1%	\$41,114	2 nd	137.0%	0.7%	4.6%
Wisconsin	\$163,463,550	18 th in U.S.		3.0%	5.2%	\$30,050	20 th in U.S.		2.3%	4.3%

Source: U.S. Department of Commerce, Bureau of Economic Analysis

Economic Impact of the Brewers

Besides the latest attraction – Miller Park – the Brewers baseball team has had a record of solid attendance since 1970, the year in which major league baseball returned to Milwaukee. Average attendance per game has remained strong – from 11,527 in 1970 to 20,992 in 2004. Since the completion of Miller Park, yearly attendance has exceeded 2,000,000 twice – first in 2001 with 2.8 million, and in 2004 with 2.1 million.

There is an ongoing debate regarding the benefits of professional sports organizations to cities. Indeed, it is a very important public policy since in most cases it often involves investment in sports facilities financed partly by taxpayers' dollars. The rationale for such public investment is often based on potential economic impact and positive spillover effects to the surrounding areas. Following this rationale, this study will argue that the location of Milwaukee Brewers in Milwaukee will benefit the Milwaukee-Waukesha, WI PMSA and Racine in particular, and the rest of the state in general. Other benefits to be derived from ball parks and professional sports include the projection of a “world class” image to the city. Such an image, hopefully, attracts respect and may be fortified by economic substance as external benefits from resultant civic pride. In the U.S. and elsewhere all over the world, identification with big-time sports carries with it some psychological benefits. Major league baseball has the potential to trigger positive economic externalities that may exceed external costs.

Direct Impacts:

In the three years after the construction of the Miller Park, the average operating expenses of the organization has been \$102.8 million. This amount is a substantial increase over the \$60.6 million that the organization recorded during the seven years prior to the opening of Miller Park.¹ Of this amount, \$52.0 million was spent on major league player compensation, and \$24.0 million on baseball operations.

Since 2000, the average annual attendance for a Brewers games has been 2,023,306. In 2001, the year Miller Park was opened, the attendance was a record 2.8 million. Attendance for 2004 reached 2.1 million. According to the Greater Milwaukee

¹ Metropolitan Milwaukee Association of Commerce, *Milwaukee Brewers Baseball Club Financial Review (1994-2003)*.

Convention and Visitors Bureau (GMCVB), a Wisconsin Department of Tourism (WDOT) survey found that visitors spent an average of \$118.13 a day. The study carried out on behalf of Milwaukee Brewers by Chamberlain Research Consultants (CRC) found that 57 percent of visitors to Miller Park were from outside the five-county area of Milwaukee, Ozaukee, Racine, Washington, and Waukesha counties. Of these, 41.1 percent of attendance was made up of visitors from other Wisconsin counties, 5.2 percent were from Illinois, and 10.7 percent were from out-of-state (other than Illinois). It is reasonable to assume that these proportions still hold today. The Chamberlain study also found that 17 percent of out-of-town visitors to Miller Park stayed an average of 2 days in the area. Of these, about 72.4 percent stayed an average of 2 nights. According to the CRC study, about 27.6 percent of out-of-town visitors stayed with family and friends in the area for an average of 2 nights.

Table 4 Direct Impact of the Brewers	
Average Attendance	2,023,306
Out of Area Visitors (57%)	1,153,284
Overnight Visitors	343,962
Overnight Visitors (2 nights in hotels)	249,029
Estimated Daily Spending Per Visitor	\$127.33
Total Estimated Spending (2 nights in hotels)	\$63,417,598.44
Overnight Visitors (2 nights with family/friends)	94,934
Estimated Daily Spending Per Visitor	\$82.14
Total Estimated Spending (2 nights with family/friends)	\$15,595,678.26
Daily Visitors	809,322
Estimated Daily Spending Per Visitor	\$68.79
Total Estimated Spending (for Daily Visitors)	\$55,673,287.90
Total Estimated Spending (All visitors)	\$134,686,564.60
Multipliers: (Spectator Sports)	
Employment multiplier (per \$1,000,000 spent)	32.474
Earnings multiplier	0.8929
Output multiplier	2.1716
Total Employment Impact	4,374
Total Earnings Impact	\$120,261,633.53
Total Output Impact	\$292,485,343.68

Spending by visitors from outside the five-county area is used to estimate the direct impacts on employment, output and earnings (see Table 4). As shown in Table 4, average annual attendance at Miller Park is 2,023,306 (2001 – 2004). Using the proportions

explained above, 1,153,284 are from out of the five-county area; 249,029 overnight visitors will spend an average of two nights in motels or hotels in the area; 94,934 overnight visitors will spend an average of 2 nights with friends and family in the area; and 809,322 will spend just the in the area. Total spending by overnight and daily visitors is estimated to be \$134.7 million (see Table 4). Applying final demand multipliers, the impact on the five-county area is expected to be \$292.5 million in output, \$120.3 million in earnings, and 4,374 in employment (see Table 4).

Indirect and Induced Impacts

The indirect impact of the Brewers includes the effect the daily operations of the Brewers facilities on the local area economy. The annual operations expenditure of the Brewers is estimated to be \$18.9 million. There are, also, 87 full-time and 93 part-time employees of the Brewers who live in the five-county area. Among these, 68 full-time and 30 part-time employees own property in the area. The impacts of the Brewers operations expenses are shown in Table 5.

Table 5	
Impacts of Brewers Facility Operations	
Operating Expenses	\$18,900,000
Earnings Multiplier	0.6972
Employment Multiplier	16.3475
Output Multiplier	1.8405
Estimated Earnings	\$13,177,080
Estimated Employment	309
Estimated Output	\$34,785,450

The estimated expenses in Table 5 include marketing, publicity, ticketing, stadium operation, maintenance, general and administrative expenses. The impact of the operating

expenses of \$18.9 million is \$34.8 million in output, \$13.2 million in earnings, and 309 in employment.

Some of the other indirect and induced impacts cannot be easily quantified. However, suffice it to mention that the Brewers generate a substantial amount of sales tax revenue for the state of Wisconsin, annually. This amount represents only a fraction of total sales tax generated by the Brewers. Indirectly, the Brewers generate sales tax from activities at concession stands, increase in sales for local businesses, etc. Indeed, a significant portion of the total economic impact of \$327.3 million is made up of sales tax revenue to the state. Besides, the employees who own property contribute to the local property tax base.

Conclusion

The economic impact of the Brewers organization to the five-county area (Milwaukee, Ozaukee, Racine, Washington, and Waukesha) is estimated to be \$292.5 million in economic contribution, including \$120.3 million in earnings, and 4,374 in employment. In addition to these direct effects on the local economy, the operations of the Brewers are also expected to generate indirect economic contribution of \$34.8 million, including \$13.2 million in earnings, and 309 in employment.

Another economic impact of the Brewers is the significant annual contributions in sales tax to the state of Wisconsin, and property tax revenue attributable to employees of the organization who own property in the area.

Not all of the economic impact of the Brewers is quantifiable. One example of this was supplied by a study of the Progressive Policy Institute, a Washington D.C. think tank. It ranked Milwaukee 40th of 50 metropolitan areas in a “New Economy Index” which measured the progress of these areas in adapting to the new economy. It further stated:

“Providing tax incentives to businesses and other similar initiatives are less important than improving an area’s quality of life so it is attractive to well educated professionals who today’s companies need to hire. Good schools and recreational opportunities can be very important.”

In aiding Milwaukee to achieve a place in the “new economy” and helping to decrease the recognized brain drain from Wisconsin, the Milwaukee Brewers play a significant role. In summary, the Milwaukee Brewers have a very significant economic impact, part of which is quantifiable and has been measured in this study and another part which is not quantifiable but is also of significant economic importance.

Finally, there are great intangible benefits which the Milwaukee Brewers and Miller Park contribute to the community. The Milwaukee Brewers and Miller Park take their place along with other statements a city can make about itself – the Calatrava addition to the Milwaukee Art Museum, our universities, our parks, Summerfest, and the growing vibrancy of our downtown area. It is a statement that Milwaukee sees itself as a world class city, as a major player in the new economy. It is clear that the Milwaukee Brewers are contributing significantly to getting this kind of message about Milwaukee to the region and the nation.

Addendum to “The Economic Impact of the Milwaukee Brewers” Report

In this addendum, we shall remedy an omission in the original report and compare the yearly amount of sales tax paid by taxpayers in Milwaukee, Ozaukee, Washington, Waukesha, and Racine counties to build and maintain Miller Park with the added sales and income revenue which is directly attributable to the existence of Miller Park and the Milwaukee Brewers.

For the years 1996 through 2004, the total revenue raised by the 0.1% increase in sales tax for the five city areas was \$189,320,000 or an average of \$21,035,000 per year. Following the analysis of the Chamberlain report to the Wisconsin Legislature, it was determined that spending by those attending Brewers games from out of state and out of the five counties on hotels, restaurants, and other spending was \$193.9 million and generated \$10.5 million in sales tax revenue. This assumes sales tax rate of 5.6% in Milwaukee, Ozaukee and Washington counties and 5.1% in Racine and Waukesha counties, and that the total sales tax revenue is prorated by the population of each county. This \$10.5 million of sales tax revenue which is returned to the five counties offsets 50% of the \$21.0 million which these counties pay to the Miller Park Stadium District Board.

In addition, the additional income tax revenue going to the State and the five counties which is attributable to the Brewer visitors was computed. If Miller Park had not been built and the Brewers had not stayed in Milwaukee, it is reasonable to assume that the baseball players, coaches, and the administrative staff located in Miller Park would not have continued to work in the State. The income of this group for 2005 and the Wisconsin income tax withheld were as follows:

	Salary Subject to WI Income Tax	WI Income Tax WITHHELD ⁽³⁾
Milwaukee Brewer players, coaches and administrative staff ⁽¹⁾	\$22,734,942	\$1,676,540
Visiting Team Payroll ⁽²⁾	<u>\$32,250,653</u> \$54,985,595	<u>\$2,176,919</u> \$3,853,459

⁽¹⁾ **This includes only Brewer player salary when playing in Milwaukee**

⁽²⁾ **Since this amount was higher than normal because the Yankees were in town, their higher salaries were reduced to an average visiting team payroll.**

⁽³⁾ **These data are the amount actually withheld by Milwaukee Brewers. The exact amount paid by each individual obviously is not available.**

Since the \$3.8 million of additional income tax revenue went to the State, an additional computation is necessary. A 2005 estimate found that the population of the five areas comprises 30.84% of the total population of Wisconsin. Therefore, a rough estimate of the income tax revenue which will flow back to the five county areas is \$1.2 million.

When we add this \$1.2 million of added income tax revenue to \$10.5 million of additional sales tax revenue there should be a total flow of \$11.7 million to the five counties to offset \$21.0 million in sales taxes paid annually for Miller Park.

Finally, it is very important to note that the Stadium District Board which was created to manage the 0.1% sales tax reported that “2014 is the likely year for the end of the district’s tenth of a cent sales tax” (Milwaukee Journal Sentinel, June 15, 2005). Therefore, while the sales tax levy on the five counties will end by 2014, the sales tax return for these counties and the State of Wisconsin will continue for as long as the Brewers continue to play baseball in Milwaukee.

Aside from the benefits accruing to the five counties, the State of Wisconsin will receive the following additional income tax revenue:

- 1) Of the \$327.3 million of direct and indirect benefits which were found in our original report, \$133.4 million are earned income and are, therefore, subject to the State income tax. Conservatively estimating at a tax rate of 6%, the State will receive \$8.0 million of additional income tax revenue.
- 2) The Brewers withheld \$3.8 millions of income tax from the baseball players, coaches, and the administrative staff located in Miller Park. On the basis of an allocation of the Wisconsin population between the five counties and the rest of the state, it was found that \$1.2 million would flow back to the counties and the other \$2.6 million would be retained by the State. The total additional revenue accruing to the State of Wisconsin is, therefore, \$8.0 plus \$2.6 or \$10.6 million.

In summary, in addition to the direct and indirect benefits of \$327.3 million which were found in our original report to have accrued to the five counties, \$11.7 million of added sales and income tax revenue must be added. (The state will also receive \$10.6 million in added income tax revenue generated by additional earnings due to the Brewers presence in Milwaukee). Therefore, the total economic benefits accruing to the five counties as a result of Miller Park and the Milwaukee Brewers are an extremely significant and more than complete offset to the taxes levied against them.