Report to the Indiana Gaming Commission

Disparity Study of Contracting and Purchasing Practices CY 2009-2011

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Report to Indiana Gaming Commission Disparity Study of Contracting and Purchasing Practices

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Executive Summary

Many cities and states have undertaken disparity studies seeking to evaluate their contracting and purchasing practices and determine the degree to which all "ready, willing, and able" minority business enterprises (MBE) and women business enterprises (WBE), equally compete with other firms for public sector contracts. These evaluations became common in 1989 when, in the *City of Richmond v. J.A. Croson Company* (488 U.S 469), the U.S. Supreme Court ruled that the city of Richmond had "failed to demonstrate a compelling interest in apportioning public contracting opportunities on the basis of race." Since that ruling, many cities and states have evaluated their public sector contracting and purchasing practices. Disparity studies have emerged as a common approach used in these evaluations

In general terms, a disparity study estimates an expected or potential level of public expenditures with MBE and WBE businesses. The estimated potential level of business is based on the proportion of all "ready, willing, and able" vendors designated as MBE or WBE, and is known as *capacity*. Once the potential or expected share of MBE and WBE business is estimated, it is then compared with the public agency's actual MBE and WBE expenditures. The actual expenditures are commonly referred to as *utilization*. The difference between the expected and actual expenditures is the *disparity*.

This disparity study of Indiana's riverboat casinos and racinos seeks to estimate capacity, measure utilization, and calculate disparity (or lack thereof) of the contracting and purchasing practices of 13 privately-owned, publicly-licensed riverboat casinos and racinos in Indiana. While many types of goods and services consumed by the riverboat casinos and racinos are consumed also by public sector organizations (e.g., construction, office supplies, etc.), these privately-owned riverboat casinos and racinos also purchase a set of goods and services that are directly related to gaming that would not be purchased by any governmental unit. Additionally, the riverboat casinos and racinos are not subject to the same set of bid and purchase rules as state and local governments. As a result, the approach used to estimate capacity for these private sector firms is somewhat different than disparity studies undertaken to evaluate the contracting and spending patterns of state or local government.

It is important to note that there are a variety of methods commonly used to estimate capacity and measure utilization. Furthermore, the method chosen to estimate capacity and measure utilization can potentially affect findings of disparity. While the primary purpose of this study is to define disparity, the study also may be used to further our understanding of MBE and WBE capacity and utilization. We suggest that increasing capacity and utilization are as important a goal as decreasing disparity, and that all three measures should be monitored consistently over time. Therefore, the estimate of capacity and measure of utilization used in this study must be replicable by any potential future disparity study vendor. We believe that the methods used to estimate capacity and measure utilization in this study provide the most accurate interpretation of available information while requiring the lowest level of personal judgment and interpretation. These measures will provide the opportunity for different vendors to undertake future studies, while assuring the ability to monitor changes in capacity and utilization over time and across multiple studies.

The capacity estimate in this analysis is based on data from multiple sources. First, we collected data from the 11 riverboat casinos and 2 racinos, including:

- firms that are contracted to provide goods and services,
- firms that have in the past three years provided the riverboat casinos and racinos with goods or services, and
- firms that have bid for or otherwise expressed interest in doing business with riverboat casinos and racinos but failed to successfully win contracts.

These riverboat casino and racino specific data were augmented by vendor lists collected from state (Indiana) and local governments (in the counties with riverboat casinos and racinos, and the city of Indianapolis). In an effort to ensure the inclusion of any firm, MBE, WBE or other, which believed it was "ready, willing, and able" to do business with one or more of the riverboat casinos and racinos, five outreach meeting were organized and conducted by Engaging Solutions. These meetings were held during the summer of 2012 in Lawrenceburg, Evansville, East Chicago, Fort Wayne, and Indianapolis. Engaging Solutions also organized and managed on online survey seeking to attract additional firms wishing to do business with the gaming industry in Indiana.

The utilization analysis in this study is based on actual expenditures made by the 11 riverboat casinos and 2 racinos between January 1, 2009, and December 31, 2011. The expenditure data was provided to PPI by the Indiana Gaming Commission. The Gaming Commission collects and monitors the expenditure data based on recommendations provided in the previous disparity report.

Findings

In 1997, the Urban Institute released a study summarizing the methodologies used and findings of 58 disparity studies. The Urban Institute found "substantial disparities between the share of contract dollars received by minority-owned firms and the share of all firms that they represent." Based on the 58 disparity studies included in the Urban Institute's analysis, MBEs, on average received only 57 cents for every dollar they would expect to receive (Urban Institute, 1997, p. 1). After separating all contracts into four broad industry groups (construction, procurement of supplies, professional services, and other services), the Urban Institute found disparity for all categories except construction subcontracting (in which very little disparity was found).

Similarly, the most recent disparity study completed for the state of Indiana found disparity in construction, professional service, and other services, while determining there was no disparity in procurement of supplies (BBC Research and Consulting, 2011).

Our findings for this study suggest no disparity exists for expenditures with MBE vendors in any of the four industry categories (Table ES1). Our analysis of the number firms, however, revealed that MBE vendors were underutilized in both the construction and other services industry categories. In other words, fewer of these types of firms sold services and supplies to the riverboat casinos and racinos than we would expect based on the proportion they represent of total firms. The absence of monetary disparity, in spite of an underutilization of vendors is explained by the difference in average contract amounts. For example, the average vendor expenditure (annual) to an MBE construction vendor was $540,110 compared to an average non-MBE/WBE expenditure of $295,995. Our findings show that there was no disparity for WBE firms when analyzing expenditures or the number of firms.

Table ES1: Summary of disparity findings by industry category and firm type (CY 2009-2011)

Firms	Construction	Procurement of services	Professional Services	Other Services	Totals
MBE capacity	73	286	89	120	568
WBE capacity	70	474	134	242	919
MBE utilization	65	301	108	112	586
WBE utilization	84	480	142	318	1,024
MBE disparity	(8)	15	19	(8)	18
WBE disparity	14	6	8	76	105
Expenditures	**Construction**	**Procurement of Services**	**Professional Services**	**Other Services**	**Totals**
MBE capacity	$23,190,993	$22,270,674	$8,532,819	$6,367,536	$ 60,362,021
WBE capacity	$22,076,041	$6,861,806	$12,861,060	$12,836,501	$84,635,408
MBE utilization	$35,107,154	$118,928,017	$16,250,435	$34,674,167	$204,959,773
WBE utilization	$23,902,104	$112,651,669	$13,296,370	$25,637,659	$175,487,803
MBE disparity	$11,916,161	$96,657,342	$7,717,616	$28,306,632	$144,597,751
WBE disparity	$1,826,063	$75,789,863	$435,310	$12,801,159	$90,852,395

Introduction

The Indiana University Public Policy Institute (PPI) has been engaged by the Indiana Gaming Commission (IGC) to prepare an update to the IGC's 2007 disparity study. While this updated study follows the same methodology as the previous study, there are two major differences. This update is based on the actions of 11 riverboat casinos (10 from the prior study and the more recent facility in French Lick), as well as the 2 racinos located at horse racing facilities in Anderson and Shelbyville. Additionally, the updated analysis benefits from the creation by the IGC of a database that records and verifies each transaction reported by Indiana's riverboat casinos and racinos.

An Overview of Disparity Analyses

In 1989, in *City of Richmond v. J.A. Croson Company (*488 U.S. 469), the U.S. Supreme Court ruled that the city of Richmond had "failed to demonstrate a compelling interest in apportioning contracting opportunities on the basis of race." Since that ruling, many cities and states have conducted formal evaluations of their public sector contracting and purchasing practices. Disparity studies have emerged as a common approach used in these evaluations.

In general terms, a disparity study estimates a predicted level of potential public expenditures with minority business enterprises (MBE) and women business enterprises (WBE). The estimated level of potential minority business is then compared with the organization's actual MBE and WBE expenditures. The difference between the estimated and actual expenditures is the disparity.

Capacity, *utilization*, and *disparity* are three key terms in any disparity analysis, defined as:

1. *Capacity:* The estimated amount of potential expenditures with MBE and WBE firms, based on the proportion of MBE and WBE businesses that are identified as ready, willing, and able to compete for business in the local market.
2. *Utilization:* The amount of actual expenditures with MBE and WBE firms made by or contracts entered into by the subject of the study.
3. *Disparity:* The difference between capacity and utilization. A statistical analysis is used to determine whether disparity is within an acceptable margin of error or is likely a result of practices that prevent MBE and WBE firms from gaining their estimated potential share of local business.

In 1997, the Urban Institute released a study summarizing the methodologies and findings of 58 disparity studies. The Urban Institute found "substantial disparities between the share of contract dollars received by minority-owned firms and the share of all firms that they represent." Based on the 58 disparity studies included in the Urban Institute's analysis, MBEs, on average received only 57 cents for every dollar they would expect to receive (Enchautegui, Fix, Loprest, von der Lippe, & Wissoker, 1997, p. 1). After separating all contracts into four broad industry categories (construction, procurement of supplies, professional services, and other services), the Urban Institute found disparity for all categories except construction subcontracting (in which very little disparity was found).

The most recent disparity studies completed for the Indiana Lottery Commission (Klacik, 2010) and the Indiana Gaming Commission (Klacik & Seymour, 2007) found little disparity. However, the disparity study completed for the city of Indianapolis in 2005, found disparity in all four industry groups (construction, procurement of supplies, professional services, and other services) for both MBE and WBE firms (Klacik, 2005). The state of Indiana's most recent analysis was completed in 2011 and found that

"disparity exists for MBE and WBE prime and sub-contractors across industry classifications and fiscal years" (Bucher & Christian Consulting, Inc., 2011).

There are two critical differences between disparity studies for the Hoosier Lottery and the Indiana Gaming Commission, and those for other governmental units. First, the private firms that own the riverboat casinos (the two racinos were not included in the previous Indiana Gaming Commission disparity study) and the Hoosier Lottery buy a set of goods and services that are much different than that of typical state and local governments. Secondly, and perhaps more importantly, governmental units typically use a sealed bid process with policies requiring the acceptance of the lowest responsive bid. Private firms and the Hoosier Lottery have more discretion in purchasing/spending, and as a result have the option of purchasing goods and services from MBE and WBE firms even when they are not the lowest responsive bidder.

Methodology Overview

The Urban Institute's review of disparity studies found that analysts use many different approaches to define capacity, utilization, and disparity. They also found that estimates of capacity were based on a variety of data sources ranging from the use of the U.S. Census Bureau's Survey of Minority-Owned Business Enterprises to information about firms that had previously contracted with the government entity being analyzed.

Each capacity and, to a lesser extent, utilization definition, has strengths and weakness, and most require a degree of interpretation or judgment on the part of researchers. Most importantly, the method used to estimate capacity affects the disparity findings of the study. For this reason, the most critical part of any disparity analysis is the selection of the method used to define and determine capacity.

While the primary purpose of this study is to estimate capacity, define utilization, and measure disparity, a second and equally important goal is to establish a consistent method of analysis that can be replicated in future studies. A consistent and replicable analytical approach has two advantages. First, changes over time (in multiple study periods) in capacity can be compared fairly. Consistent measures over time will help determine if Indiana's riverboat casinos and racinos are undertaking efforts to attract greater numbers of MBE and WBE firms that are ready, willing, and able to do business with them. The change in capacity or number of these MBE and WBE firms is a critical piece of data that is not typically tracked by other disparity studies. The second advantage of an easily replicable method is that the Indiana Gaming Commission will maintain the option of selecting a different consultant firm for its next disparity study, while preserving consistency in comparisons over time.

Capacity and Utilization Definitions

Because there are many methods available to estimate capacity and the method used affects the determination of disparity, it is essential that stakeholders interested in and affected by the results of the study understand and accept as reasonable the method selected to estimate capacity. To ensure transparency, the Indiana Gaming Commission created a Disparity Study Advisory Group that included individuals from the public sector, as well as individuals representing MBE, WBE, and non-MBE/WBE firms competing for riverboat casino and racino contracts, and the riverboat casinos. The members of the Disparity Study Advisory Group are shown in Attachment A.

After careful consideration of the different methods discussed in the Urban Institute's analysis which ranged from the most inclusive definition of all firms identified in the Census to the least inclusive definition of only firms that have done business with one or more of Indiana's riverboat casinos, the Advisory Group

agreed that capacity be defined as the total number of firms that expressed being ready, willing, and able by:

1. Currently (2012) providing goods and services to Indiana's riverboat casinos and racinos.
2. Having in the past (January 1, 2009 to December 31, 2011) provided Indiana's riverboats and racinos with goods or services.
3. Having bid for or otherwise expressed interest in doing business with but failed to successfully obtain riverboat casino contracts by asking to be included on at least one riverboat casino vendor list.
4. The riverboat specific data (listed above in 1-3) was augmented by vendor lists collected from the state of Indiana, city of Indianapolis, and local governments in the counties with riverboat casinos.
5. PPI researchers reviewed the list of non-certified vendors supplying goods and services to the gaming industry during the study period and identified any firms that appeared likely to be either MBE or WBE.
6. At the request of the Advisory Group, five outreach meetings were held to identify any remaining firms by giving them the opportunity to express their interest in doing work with the riverboat casinos and racinos. These meeting were organized and conducted by Engaging Solutions and convened during the summer of 2012 in Lawrenceburg, Evansville, East Chicago, Fort Wayne, and Indianapolis. Engaging solutions also organized an online instrument where firms could express their interest in doing work with the riverboat casinos and racinos.

The utilization measure used in this study also was accepted by the Advisory Group. Utilization in this analysis is based on actual expenditures made by Indiana's riverboat casinos and racinos between January 1, 2009 and December 31, 2011 (Indiana Gaming Commission, 2012). While some disparity studies have used contracts, in our study expenditure data were used rather than contracted amounts because it was available and reflects actual (rather than intended) expenditures made. In the sections of the report dedicated to utilization and capacity, we provide more details about the methods and logic used to determine capacity and utilization.

The definitions of utilization and capacity in this analysis are identical to the definitions and analysis used in the prior Indiana Gaming Commission disparity study with one exception. With the ability to track expenditures, we were able to conduct a more refined analysis by using six- digit NAICS codes rather than two- digit NAICS codes.

Utilization

Utilization is the actual payments made by riverboat casinos and racinos to MBE, WBE, and non-MBE/WBE vendors. The utilization analysis in this study is based on actual expenditures made by Indiana's riverboat casinos and racinos between January 1, 2009 and December 31, 2011. The data were provided by the riverboat casinos and racinos to the Indiana Gaming Commission where they were organized and audited prior to being transmitted to PPI for analysis. The transaction data included the NAICS code which permits the identification of an industry group (construction, procurement of supplies, professional services, and other services), vendor name, transaction amount, and MBE/WBE certification status.

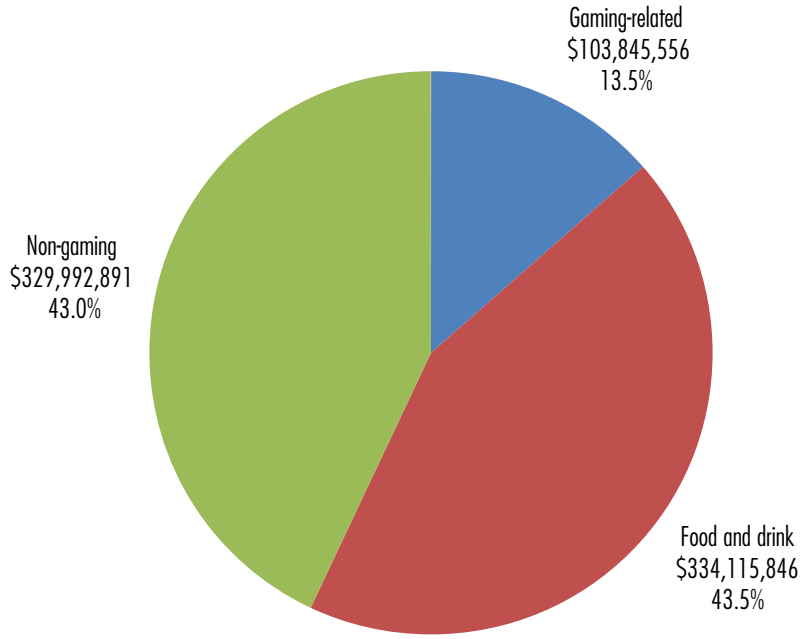
In utilization analyses of government expenditures, there are typically three (construction, procurement of supplies, and services) or four (construction, procurement of supplies, professional services, and other services) industry categories. In this analysis of riverboat casino and racino expenditures, and after discussion with the Advisory Group, it was determined that the use of the four industry categories was

appropriate. It also was decided that the use of the six digit NAICS codes would enable the analysis to be directed towards the specific behavior of riverboats and racinos.

Comparing City of Indianapolis, State of Indiana, and Riverboat Casino and Racino Utilization

As mentioned above, there are two important differences between the purchasing behavior of Indiana's riverboat casinos and racinos and that of the city of Indianapolis (Klacik, 2005) and the state of Indiana (BBC Research and Consulting, 2011). The first important difference is that Indiana's riverboat casinos and racinos purchase a set of goods that directly support gaming and are not typically purchased by units of government. These unique gaming-related goods range from slot machines and other electronic gaming devices to alcohol. As seen in Figure 1, the riverboat casinos and racinos purchase approximately the same share of non-gaming supplies as they do food and beverage supplies. They spend 14 percent on gaming-related goods. The non-gaming goods most closely resemble the typical purchase of supplies made by state and local governments in Indiana.

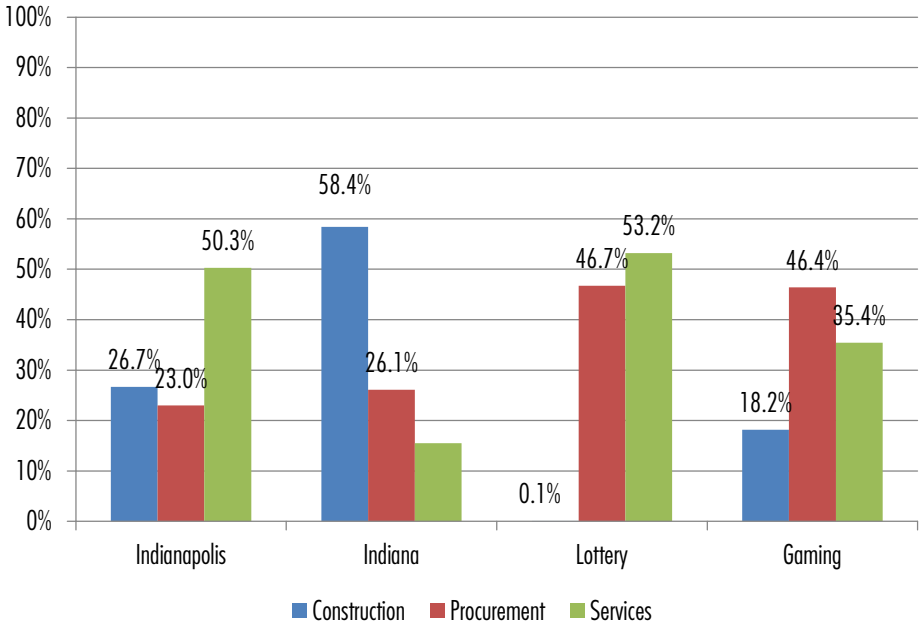
Figure 1: Casino/racino purchases of supplies by type (CY 2009-2011)



Source: Indiana Gaming Commission, *Casino Expenditure Tracking System*

The second important difference is that the riverboat casinos and racinos spend a higher share of total expenditures on services and a much lower share on construction compared to that of the city of Indianapolis and the state of Indiana. While the riverboat casinos and racinos enjoy similar procurement spending habits, as shown in Figure 2, the two critical differences between the riverboat casinos and racinos and the governmental entities (city and state) is that the riverboats and racinos spend proportionally less on construction and proportionally more for procurement of supplies. This difference in spending is important to remember as MBE and WBE capacity varies by utilization category and as a result, the different spending mix may affect overall utilization and disparity.

Figure 2: Share of total utilization by industry category

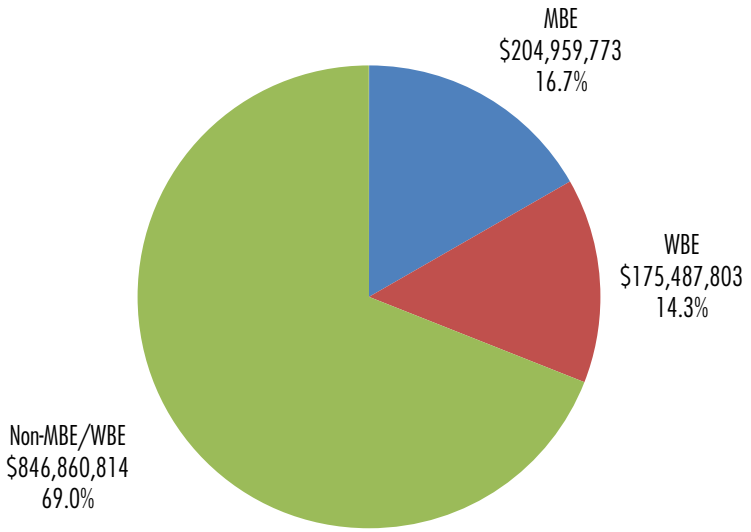


Sources: Klacik, 2005; BBC Research and Consulting, 2011; Klacik, 2010; Klacik & Seymour, 2007.

Overall Utilization

Collectively, Indiana's riverboat casinos and racinos made just over $1.2 billion in total expenditures during the study period. Nearly $205 million, or 17 percent, were made to MBE vendors. Over $175 million, or 14 percent, were made to WBE vendors.

Figure 3: Total casino/racino expenditures by firm type (CY 2009-2011)



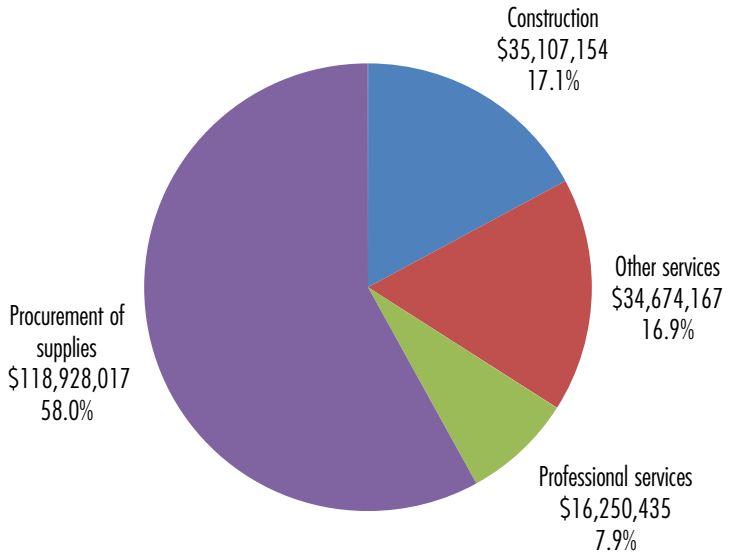
Source: Indiana Gaming Commission, *Casino Expenditure Tracking System*

As with disparity studies of local or state governments, not all vendors who would qualify for MBE or WBE status apply for certification, and to the degree that they do not apply, the data would undercount MBE/WBE expenditures. In an effort to address this concern, we compared the casino and racino vendor data with the certification data provided by the state of Indiana, local governments in the communities in which the riverboats casinos and racinos are located, and the certification list provided by the city of Indianapolis. If the vendor was certified on any of the lists, they were classified as MBE or WBE for the purposes of this study.

MBE Utilization

Indiana's riverboat casinos and racinos spent nearly $205 million with MBE firms. Over $118 million, well over half of these expenditures, were for the procurement of supplies (Figure 4). Professional services spending was over $16 million or 8 percent of all riverboat and racino expenditures with MBE firms

Figure 4: Total casino/racino expenditures with MBE firms by industry category (CY 2009-2011)

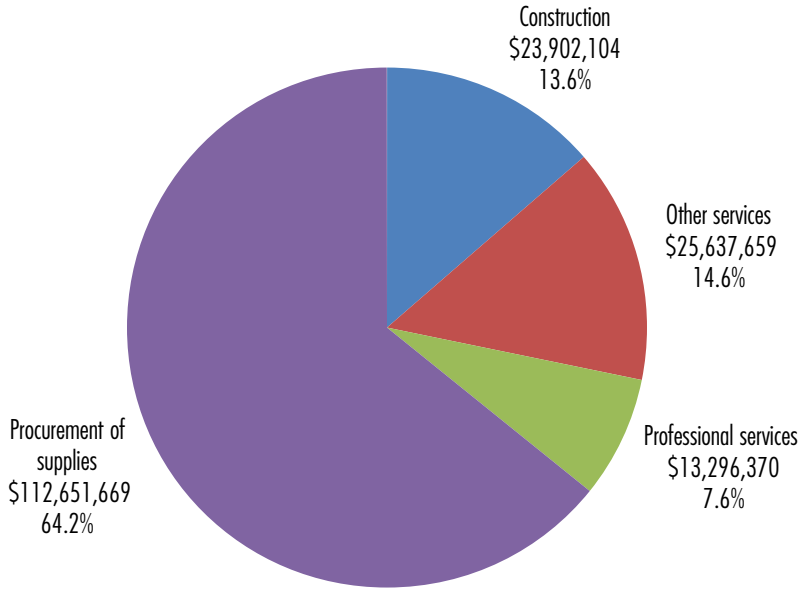


Source: Indiana Gaming Commission, *Casino Expenditure Tracking System*

WBE Utilization

Total riverboat and racino expenditures with WBE firms exceeded $175 million. As was the case with MBE firms the greatest share of WBE expenditures was with procurement firms. In the case of WBE firms, an even greater share of expenditures (64 percent) was for the procurement of supplies than for MBE firms (58 percent MBE).

Figure 5: Total casino/racino expenditures with WBE firms by industry category (CY 2009-2011)

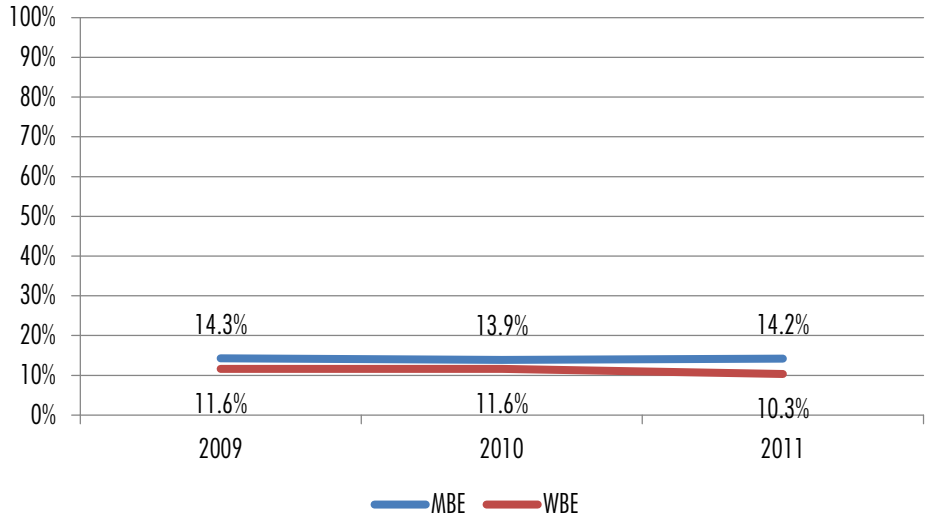


Source: Indiana Gaming Commission, *Casino Expenditure Tracking System*

Annual Utilization

During the study period, expenditures by Indiana's riverboat casinos and racinos with MBE firms as a share of total expenditures remained relatively constant while the share of WBE expenditures declined slightly in 2011 (Figure 6). Expenditures with WBE firms remained relatively consistent during the study period, ranging from 8.5 percent to 9.0 percent. It is important to note that total riverboat casino and racino spending declined from $572 million in 2009 to $364 million in 2011.

Figure 6: Casino/racino expenditures with MBE and WBE firms as a share of total expenditures (CY 2009-2011)

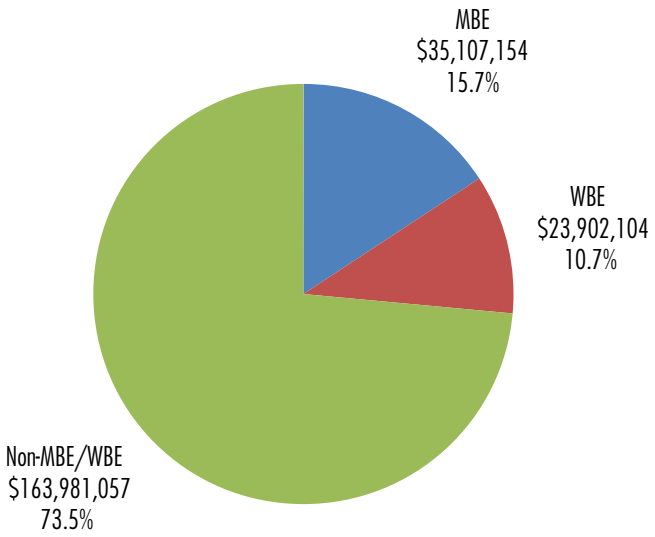


Source: Indiana Gaming Commission, *Casino Expenditure Tracking System*

Construction Utilization

Construction includes activities such as drywall, remodeling, paving, and trucking. The list NAICS codes included in the construction category is available in the capacity section of this report. During the study period, Indiana's riverboat casinos and racinos spent nearly $223 million on construction, or 18 percent of all riverboat casino and racino expenditures. Indiana's riverboat casinos and racinos spent $35 million or 16 percent of all construction-related expenditures with MBE firms (Figure 7). It spent $24 million or 11 percent with WBE firms. During the study period, the riverboat casinos and racinos utilized 64 MBE and 81 WBE firms. As might be recalled, Indiana's riverboat casinos and racinos spent a much lower share of their total expenditures on construction than did either the city of Indianapolis (Klacik, 2005) or the state of Indiana (Bucher & Christian, 2006) (Figure 2).

Figure 7: Total casino/racino construction expenditures by firm type (CY 2009-2011)

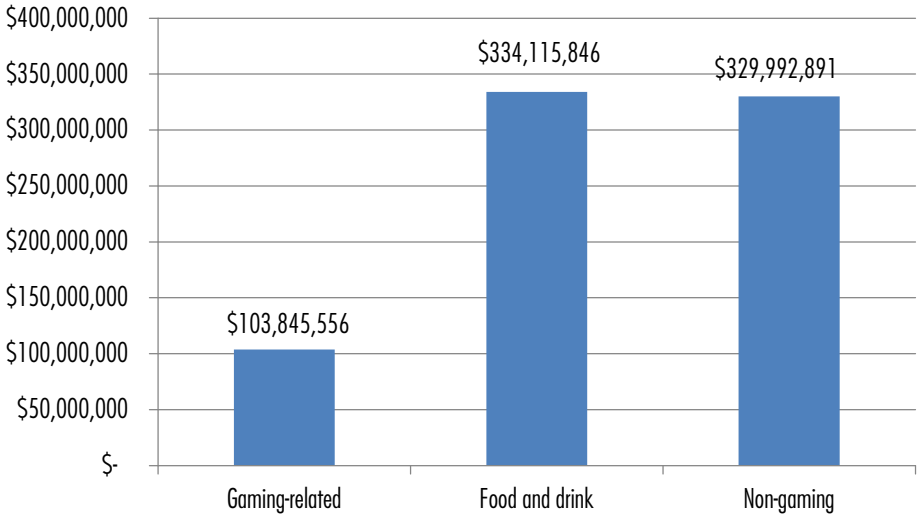


Source: Indiana Gaming Commission, *Casino Expenditure Tracking System*

Procurement of Supplies Utilization

Typically, in disparity analyses performed for units of government, procurement of supplies expenditures are for the purchase of consumable and durable goods and supplies such as furniture, office equipment, and cleaning equipment. In addition, to these supplies, Indiana's riverboat casinos and racinos purchase gaming-related supplies that would not be purchased by local units of government (such as gaming devices and alcohol). During the study period, Indiana's riverboat casinos and racinos spent nearly $768 million on supplies (Figure 8). Fifty-seven percent (or nearly $438 million) of all riverboat and racino expenditures were directed towards food and drink or gaming-related supplies. During the study period, the riverboat casinos and racinos utilized 73 MBE and 166 WBE firms. Because of the unique supplies used for gaming, the group of ready, willing, and able firms interested in competing for riverboat casino and racino procurement of supplies contracts is likely to be much different than the groups competing for city and state supply contracts.

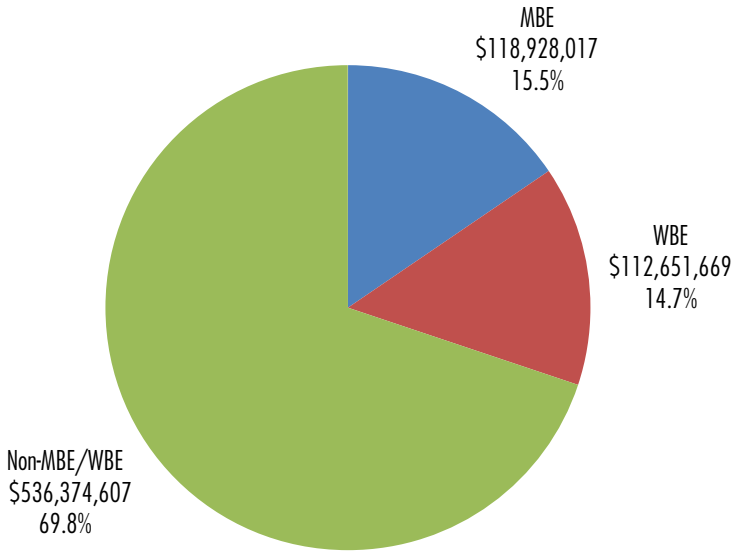
Figure 8: Casino/racino procurement of supplies expenditures by type (CY 2009-2011)



Source: Indiana Gaming Commission, *Casino Expenditure Tracking System*

The total procurement of supplies expenditures by Indiana's riverboat casinos and racinos with MBE and WBE firms was similar. For MBE firms expenditures were over $118 million (or 15 percent of all of this type of expenditure) and WBE expenditures exceeded $112 million (or 15 percent) (Figure 9).

Figure 9: Casino/racino procurement of supplies expenditures by firm type (CY 2009-2011)

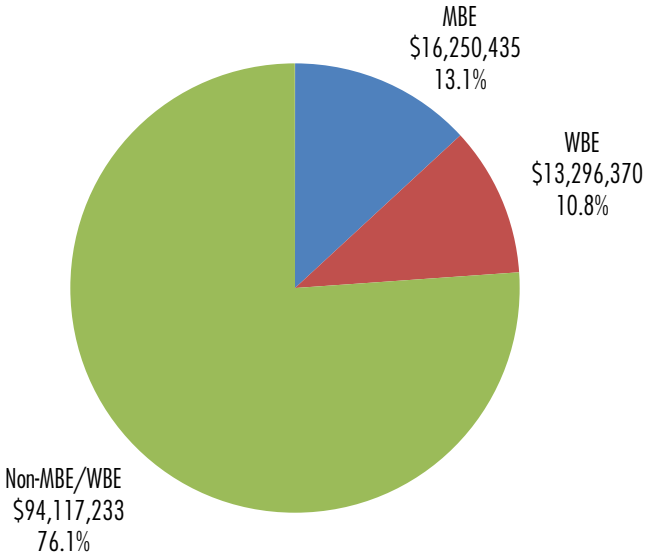


Source: Indiana Gaming Commission, *Casino Expenditure Tracking System*

Professional Services Utilization

Professional services includes work done by legal and financial firms, data management, other information-based vendors, and other services which are typically provided by individuals that have earned college degrees. Between January 1, 2009 and December 31, 2011, total spending in this category by riverboats and racinos was $123.6 million. $16.2 million (13 percent) was spent with MBE firms and $13.3 million (11 percent) was spent with WBE vendors (Figure 10). During the study period the riverboat casinos and racinos utilized 73 MBE and 106 WBE firms.

Figure 10: Casino/racino professional services expenditures by firm type (CY 2009-2011)

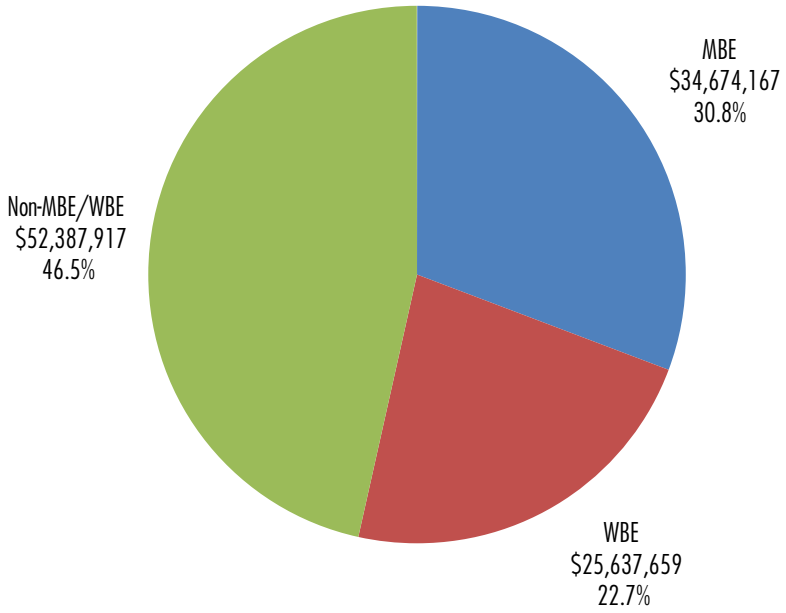


Source: Indiana Gaming Commission, *Casino Expenditure Tracking System*

Other Services Utilization

Other services includes non-degree services such as automotive repair, heating and cooling maintenance, janitorial services, and other labor-based service provision. Total spending for other services was $112.7 million). Of this amount, $34.7 million or 31 percent was spent with MBE firms. $25.6 million or 23 percent was spent with WBE firms. During the study period, the riverboat casinos and racinos utilized 36 MBE and 50 WBE firms. The other services category represented 9 percent of all expenditures by Indiana's riverboat casinos and racinos, yet accounts for 17 percent of all MBE and WBE expenditures. The 31 percent MBE and 23 percent WBE expenditures were the highest share of any of the four individual industry categories (construction, procurement of supplies, professional services, and other services).

Figure 11: Casino/racino other services expenditures by firm type (CY 2009-2011)



Source: Indiana Gaming Commission, *Casino Expenditure Tracking System*

Capacity

Capacity is the measure of the total number of MBE and WBE firms that are available to compete for riverboat casino and racino contracts/expenditures. The Urban Institute found that available studies use various measures of capacity. "There is no 'best' way to define which firms are available to perform government contracting work, although the choice of measure can affect the findings" (Enchautegui et al., 1997, p. 11). The Urban Institute's review of capacity studies determined that the five most common sources of data for defining capacity or availability are:

- Firms that have previously contracted with government,
- Firms that have previously bid on government contracts,
- Firms that have been certified by government units,
- Firms that have responded to surveys conducted for the study, and
- All firms.

Each of these data methods has strengths and weaknesses. The most important issue is the tradeoff between the **precision necessary to identify firms that are willing and able** to compete and the **broadness needed to be inclusive** enough to account for any past and present discrimination that may have affected the ability and willingness of MBE and WBE firms to compete for contracts. "The more narrowly a measure screens for capacity, the more prior discrimination it builds in" (Enchautegui et al., 1997, p. 12).

The Urban Institute researchers suggest that using all firms (by using Census or Dun and Bradstreet (Hoover's) data) is likely to best address past and present discrimination. The drawback of this option is that, there is also the likelihood that an unknown number of firms that are not ready, willing, or able to compete for a contract would be included in the study. Furthermore, the survey data include all who file a tax return indicating that they are self-employed, regardless of the share of income they earned while self-employed. Many of these self-employed individuals are unlikely to have the desire or the capacity to compete for riverboat casino contracts. Thus, using the broadest measure would overstate the capacity or availability of MBE and WBE firms to compete for riverboat contracts and result in an overstated degree of disparity.

On the other hand the method of counting only firms that have done, are currently doing, or are registered with one or more of Indiana's riverboat casinos as being interested in doing business with them is likely to under-represent the number of MBE and WBE businesses that are ready, willing, and able to do business with the Indiana riverboat casinos and racinos.

As mentioned earlier, a primary goal of this study is to identify the methodology that is most replicable while providing the best information with the least amount of judgment or interpretation. A key factor in enabling consistent replication is that the method for judging capacity requires the least possible amount of human interpretation. This provides an opportunity for different vendors to undertake a disparity study in the future and lets them measure changes in capacity and utilization consistently over time.

PPI researchers and the Advisory Group considered many factors (including previous disparity experiences, the degree of judgment needed in various capacity measures, the fact that riverboat casinos and racinos are private firms rather than public entities, and the methods used in the previous disparity study of riverboat casinos in 2007) in determining the method to use to estimate capacity in the study. As a result of the prior study of riverboat capacity, the Indiana Gaming Commission requires that the riverboat casinos and racinos report this information for all purchases of goods and services. The data reported by the casinos and racinos includes vendor, purchase type, and most importantly NAICS codes. The NAICS codes data allows for the precise definition of the types of goods and services consumed by the riverboats and racinos. For example an analysis of all construction firms would include 32 6-digit NAICS codes while the riverboat casinos and

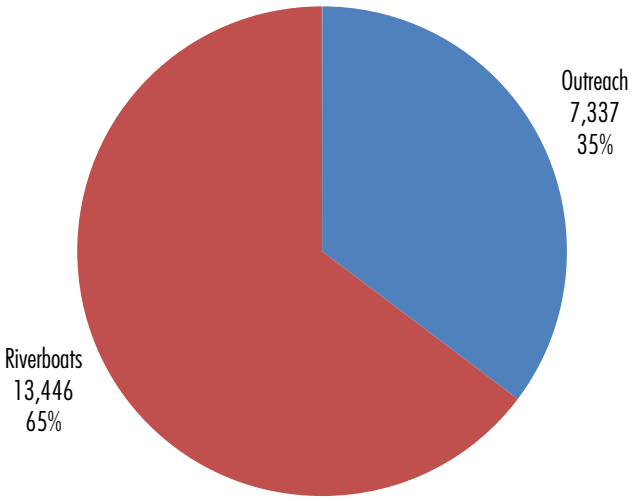
racinos only reported purchasing services from 21 codes. The ability to identify the specific NAICS codes associated with all four types of goods and services enables this analysis to be limited to the specific collection of goods and services used by the riverboat casinos and racinos.

As with the 2007 study, capacity is measured as the number of vendors who have notified the riverboats that they are ready, willing, and able by either doing or having done business with the riverboat casinos in the past three years (the study period) or by having notified the riverboats that the firm would be ready, willing, and able by asking to be notified of contracting opportunities. Additionally, it was decided that the riverboats lists would be complemented with public sector data requested from the city/town and county in which each riverboat casino or is located as well as the state of Indiana's vendor list.

It also was decided that since some firms might provide goods or services that would be purchased by a riverboat casino or racino but not by the public sector (e.g., gaming devices, alcohol, etc.) a series of outreach meetings would be held in the regions where Indiana's riverboat casinos and racinos are located and in Indianapolis to capture these specialized firms. The five outreach meetings were organized and run by Engaging Solutions, LLC, and held during the summer of 2012 in Lawrenceburg, Gary, Indianapolis, Evansville, and Fort Wayne. The Fort Wayne outreach meeting was added to the 2007 list of locations based on feedback from the prior study and at the request of the current Advisory Panel. Additional components of Engaging Solutions outreach plan included the development and distribution of a vendor survey for use at the outreach meetings. This vendor survey was made available electronically at the IGC website and Facebook page. Finally, the vendor survey and notice of the outreach meetings were provided to the Indiana Chamber of Commerce, Indiana Department of Administration, Office of Minority and Women Business entities, Indiana Minority Supplier Development Council, National Association of Women Business Owners, selected MBE and WBE firms, and the Indiana Casino purchasing departments. Additionally, Engaging Solutions worked with local media, (including print, talk radio, and public service announcements) to further publicize the opportunity for firms to express their availability to do business with Indiana's riverboat casinos and racinos and to publicize the outreach efforts and other means of accessing the vendor survey. As a result of these efforts Engaging Solutions and the advisory group believe that maximum number of MBE, WBE, and non-MBE/WBE vendors were made aware of business opportunities with Indiana's riverboat casinos and included in the study.

In the final analysis, there were 35,785 unique vendors included in the capacity study. Approximately 13,000 of the firms (or 65 percent) included in the study were derived from the riverboat casino and racino vendor lists. The additional 7,337 firms (or 35 percent) were identified from the city, town, county, and state vendor lists and specific outreach efforts. To the best of our knowledge, no vendor firms are duplicates. Some firms provide more than one type of good or service and as such are included in the capacity estimate for multiple categories of expenditures.

Figure 12: Firms included in capacity estimate by source



Sources: Indiana Gaming Commission, *Casino Expenditure Tracking System;* Engaging Solutions, *Outreach Meeting Vendor Survey*.

Construction Capacity

Riverboat casinos and racinos reported purchasing construction-related services in 21 NAICS codes between 2009 and 2011, including:

236115	New single-family housing construction
236118	Residential remodelers
236210	Industrial building construction
236220	Commercial and institutional building construction
237110	Water and sewer line and related structures construction
237310	Highway, street, and bridge construction
238120	Structural steel and precast concrete contractors
238130	Framing contractors
238140	Masonry contractors
238150	Glass and glazing contractors
238190	Other foundation, structure, and building exterior contractors
238210	Electrical contractors and other wiring installation Contractors
238220	Plumbing, heating, and air-conditioning contractors
238290	Other building equipment contractors
238310	Drywall and insulation contractors
238320	Painting and wall covering contractors
238340	Tile and terrazzo contractors
238910	Site preparation contractors
238990	All other specialty trade contractors
332322	Sheet metal work manufacturing
484220	Specialized freight (except used goods) trucking, local

For perspective, according to Dun and Bradstreet (Hoover's, 2012), there are 20,853 firms operating in Indiana in these codes and 387 or 2 percent are identified as MBE and 1,158 or 6 percent as WBE. However, not all the firms on this list are ready, willing, and able to do business with Indiana's riverboat

casinos and racinos; and furthermore, some firms that are by evidence of having done business with the riverboats and racinos between 2009 and 2011 are not located in Indiana.

The capacity methodology for this study described previously yielded 1,511 total firms ready, willing, and able to provide construction services. We estimate that there are 157 MBE firms, 150 WBE firms, and 1,204 non-MBE/WBE firms that are ready willing and able to do business with riverboat casinos (Table 1).

In total, 64 of the MBE firms identified as available provided construction services to the riverboats and racinos during the study period, 92 MBE firms were identified though the outreach efforts, and 1 non-certified firm was identified as a MBE by PPI researchers (Table 1). Similarly, there were 81 WBE firms that did work or were interested in doing work with the riverboat casino and racinos during the study period. An additional 66 WBE firms were identified from outreach efforts, and 3 non-certified firms were identified by PPI researchers. Of the 1,204 non MBE/WBE firms, 558 either did business with a riverboat casino or racino or were interested in doing business with a riverboat casino or racino, and 650 additional firms were identified during outreach effort. The four non-certified firms identified as either MBE or WBE were subtracted from the Non-MBE/WBE total.

While the construction analysis includes some out-of-state vendors, the final estimate of capacity suggests that approximately 7 percent of all construction firms in the state are ready, willing, and able to do business with the industry. However, the percentage is not spread evenly across the disparity study categories as we estimate that 41 percent of all MBE and 13 percent of all WBE and only 6 percent of the non-MBE/WBE construction firms fall into this category.

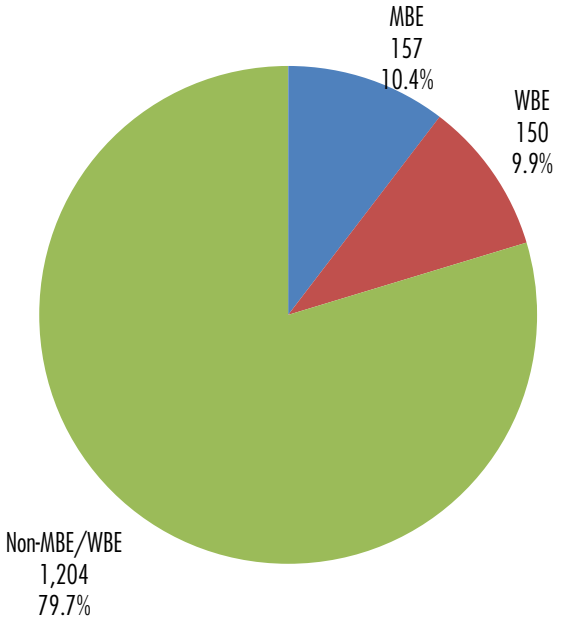
Table 1: Firms included in construction capacity estimates by source

	MBE	% MBE	WBE	% WBE	Non MBE/WBE	% Non MBE/WBE	Total
Riverboats, casinos, and racinos	64	9.1%	81	11.5%	558	79.4%	703
Outreach	92	11.4%	66	8.2%	650	80.4%	808
Non-certified adjustment	1		3		-4		0
Adjusted total	157	10.4%	150	9.9%	1,204	79.7%	1,511

Sources: Indiana Gaming Commission, *Casino Expenditure Tracking System;* Engaging Solutions, *Outreach Meeting Vendor Survey.*

In summary, the capacity for construction services includes 1,511 firms (Table 1 and Figure 13). Of these, 157 are MBE construction firms that have expressed the interest and ability to do business with Indiana's riverboat casinos and racinos. These MBE firms represent 10 percent of all construction firms that PPI researchers identified as available. The 150 WBE construction companies identified represents 10 percent of all construction firms in the analysis.

Figure 13: Construction capacity by firm type



Sources: Indiana Gaming Commission, *Casino Expenditure Tracking System;* Engaging Solutions, *Outreach Meeting Vendor Survey*.

Procurement Capacity

In this capacity study the term procurement is intended to represent the purchase of goods and supplies rather than services. More specifically, the riverboat casinos and racinos reported making procurement purchases from 52 NAICS codes between 2009 and 2011, including:

315299	All other cut and sew apparel manufacturing
321911	Manufactured home (mobile home) manufacturing
322232	Envelope manufacturing
325611	Soap and other detergent manufacturing
325992	Photographic film, paper, plate, and chemical manufacturing
337214	Office furniture (except wood) manufacturing
339914	Costume jewelry and novelty manufacturing
339943	Marking device manufacturing
339950	Sign manufacturing
422400	Whole sale durable goods
422990	Whole sale trade
423210	Furniture merchant wholesalers
423420	Office equipment merchant wholesalers
423430	Computer and computer peripheral equipment and software merchant wholesalers
423450	Medical, dental, and hospital equipment and supplies merchant wholesalers
423610	Electrical apparatus and equipment, wiring supplies, and related equipment merchant wholesalers
423710	Hardware merchant wholesalers
423720	Plumbing and heating equipment and supplies (hydronics) merchant wholesalers
423730	Warm air heating and air-conditioning equipment and supplies merchant wholesalers
423830	Industrial machinery and equipment merchant wholesalers
423840	Industrial supplies merchant wholesalers
423850	Service establishment equipment and supplies merchant wholesalers
423940	Jewelry, watch, precious stone, and precious metal merchant wholesalers
424110	Printing and writing paper merchant wholesalers
424120	Stationery and office supplies merchant wholesalers
424130	Industrial and personal service paper merchant wholesalers

424410 General line grocery merchant wholesalers
424420 Packaged frozen food merchant wholesalers
424460 Fish and seafood merchant wholesalers
424490 Other grocery and related products merchant wholesalers
424690 Other chemical and allied products merchant wholesalers
424720 Petroleum and petroleum products merchant wholesalers, except bulk stations and terminals
424940 Tobacco and tobacco product merchant wholesalers
424950 Paint, varnish, and supplies merchant wholesalers
424990 Other miscellaneous nondurable goods merchant wholesalers
425120 Wholesale trade agents and brokers
441110 New car dealers
442110 Floor covering stores
443120 Paint and wallpaper stores
444130 Hardware stores
444190 Other building material dealers
451110 Sporting goods stores
453110 Florist
453210 Office supplies and stationery stores
453220 Gift, novelty, and souvenir stores
453991 Tobacco stores
453998 All other miscellaneous store retailers, except tobacco stores
454390 Other direct selling establishments
517110 Wired telecommunications carriers
532490 Other commercial and industrial machinery and equipment rental and leasing
533110 Lessors of nonfinancial intangible assets
722110 Full-service restaurants
236115 New single-family housing construction
236118 Residential remodelers
236210 Industrial building construction
236220 Commercial and institutional building construction
237110 Water and sewer line and related structures construction
237310 Highway, street, and bridge construction
238120 Structural steel and precast concrete contractors
238130 Framing contractors
238140 Masonry contractors
238150 Glass and glazing contractors
238190 Other foundation, structure, and building exterior contractors
238210 Electrical contractors and other wiring installation contractors
238220 Plumbing, heating, and air-conditioning contractors
238290 Other building equipment contractors
238310 Drywall and insulation contractors
238320 Painting and wall covering contractors
238340 Tile and terrazzo contractors
238910 Site preparation contractors
238990 All other specialty trade contractors
332322 Sheet metal work manufacturing
484220 Specialized freight (except used goods) trucking, local

For perspective, there are 34,563 procurement firms operating in Indiana in these codes and 517 or 2 percent are identified as MBE and 2,798 or 8 percent as WBE. (Hoover's, 2012), However, not all the firms are ready, willing, and able to do business with Indiana's gaming industry, and furthermore, some firms that are have done business with the riverboats and racinos between 2009 and 2011 are not located in Indiana.

Using the same data sources and methodology described in the introduction to the capacity section (and identical to the 2007 process) our procurement capacity estimates are based on 12,124 total firms. We

estimate that there are 354 MBE firms, 584 WBE firms and 11,186 non-MBE/WBE firms that are available for business with riverboat casinos (Figure 14).

In total, 73 of the MBE firms identified as ready, willing, and able sold goods to the riverboats during the study period; 53 additional MBE firms were identified through Engaging Solution's outreach efforts including other lists of certified vendors, the outreach meetings, and the online survey; and 228 non-certified firms were identified by PPI researchers. Similarly, there were 166 WBE firms that sold procurement goods to the riverboats during the study period, an additional 104 WBE firms were identified from outreach efforts, and 314 non-certified firms were identified by PPI researchers. Of the 11,186 non-MBE/WBE firms, 9,090 sold procurement goods to at least one riverboat casino. The 542 non-certified firms identified as either MBE or WBE by PPI were subtracted from the non-MBE/WBE total.

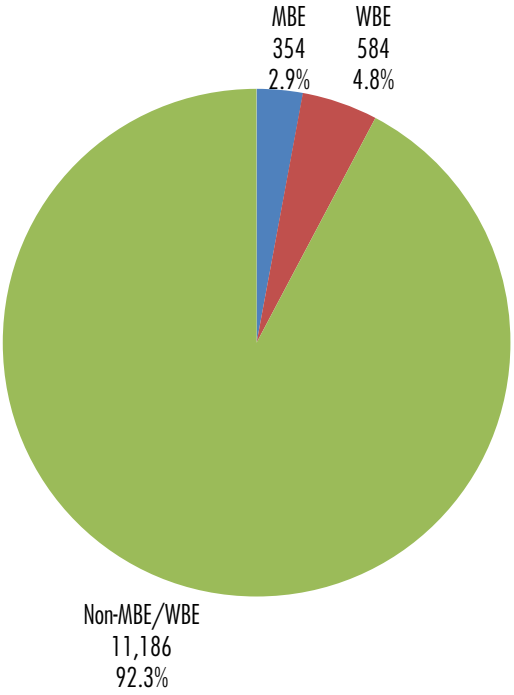
Thus, while not all firms included in the procurement capacity analysis are from Indiana (as the estimate includes out-of-state vendors used by the riverboats and racinos between 2009 and 2011), the final estimate of capacity suggests that approximately 35 percent of all procurement firms in the state are ready, willing, and able to do business with the industry. However, the percentage is not spread evenly across the disparity study categories, as we estimate that 68 percent of all MBE, 21 percent of all WBE, and 36 percent of the non-MBE/WBE procurement of firms are available to sell goods to Indiana's riverboat casinos and racinos. Table 2, displays the sources of data used in the study.

Table 2: Firms included in procurement capacity estimates by source

	MBE	% MBE	WBE	% WBE	Non MBE/WBE	% Non MBE/WBE	Total
Riverboats, casinos, and racinos	73	0.8%	166	1.8%	9,090	97.4%	9,329
Outreach	53	1.9%	104	3.7%	2,638	94.4%	2,795
Non-certified adjustment	228		314		(542)		-
Adjusted total	354	2.9%	584	4.8%	11,186	92.3%	12,124

Sources: Indiana Gaming Commission, *Casino Expenditure Tracking System;* Engaging Solutions, *Outreach Meeting Vendor Survey*.

Figure 14: Procurement of supplies capacity by firm type



Sources: Indiana Gaming Commission, *Casino Expenditure Tracking System;* Engaging Solutions, *Outreach Meeting Vendor Survey*.

Professional Services Capacity

The list of the 24 NAICS categories that the riverboat casinos and racinos reported contracting for professional services from between 2009 and 2011 includes:

524210	Insurance agencies and brokerages
541110	Offices of lawyers
541310	Architectural services
541320	Landscape architectural services
541370	Surveying and mapping (except geophysical) services
541410	Interior design services
541430	Graphic design services
541511	Custom computer programming services
541611	Administrative management and general management consulting services
541612	Human resources consulting services
541613	Marketing consulting services
541618	Other management consulting services
541690	Other scientific and technical consulting services
541810	Advertising agencies
541820	Public relations agencies
541890	Other services related to advertising
541990	All other professional, scientific, and technical services
561520	Tour operators
611430	Professional and management development training
611699	All other miscellaneous schools and instruction
621340	Offices of physical, occupational and speech therapists, and audiologists
621511	Medical laboratories
624310	Vocational rehabilitation services
711410	Agents and managers for artists, athletes, entertainers, and other public figures

For perspective, there are 31,871 firms operating in Indiana in these codes and 625 or 2 percent are identified as MBE and 2,611 or 7 percent as WBE (Hoover's, 2012). However, not all the firms are ready, willing, and able to do business with Indiana's riverboat casinos and racinos, and some firms which have done business with Indiana riverboats and racinos are not located in Indiana.

Using the same data sources and methodology described for construction and procurement (and identical to the 2007 process), our professional services capacity estimates are based on 2,671 total available firms. We estimate that there are 184 MBE firms, 278 WBE firms, and 2,209 non-MBE/WBE firms (Figure 15).

In total, 73 of the MBE firms identified as ready, willing, and able did work with the riverboats during the study period; 76 MBE firms were identified though Engaging Solution's outreach efforts including other lists of certified vendors, the outreach meetings, and the online survey; and 35 non-certified professional service firms were identified by PPI researchers. Similarly, there were 106 WBE firms that did or were interested in doing work with the riverboats during the study period, an additional 136 WBE firms were identified from outreach efforts, and 36 non-certified firms were identified by PPI researchers. Of the 2,209 non-MBE/WBE firms, 1,110 did professional services work with a riverboat casino. The 71 non-certified firms identified as either MBE or WBE were subtracted from the non-MBE/WBE total.

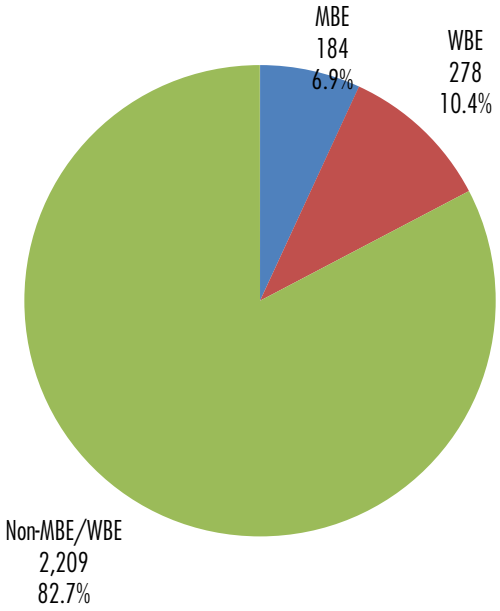
Thus, while not all firms included in the construction analysis are from Indiana (as the estimate includes out of state vendors used by the riverboats and racinos between 2009 and 2011), the final estimate of capacity suggests that approximately 8 percent of all professional service firms in the state are ready, willing, and able to do business with the industry. However, the percentage is not spread evenly across the disparity study categories, as we estimate that 29 percent of all MBE, 11 percent of all WBE, and only 7 percent of the non-MBE/WBE professional service firms are ready, willing, and able to do business with Indiana's riverboat casinos and racinos. Table 3 displays the sources of data used in the study.

Table 3: Firms included in professional services capacity estimates by source

	MBE	%MBE	WBE	%WBE	Non MBW/WBE	% Non MBE/WBE	Total
Riverboats, casinos, and racinos	73	5.7%	106	8.2%	1,110	86.1%	1,289
Outreach	76	5.5%	136	9.8%	1,170	84.7%	1,382
Non-certified adjustment	35		36		(71)		-
Adjusted total	184	6.9%	278	10.4%	2,209	82.7%	2,671

Sources: Indiana Gaming Commission, *Casino Expenditure Tracking System;* Engaging Solutions, *Outreach Meeting Vendor Survey.*

Figure 15: Professional service capacity by firm type



Sources: Indiana Gaming Commission, *Casino Expenditure Tracking System;* Engaging Solutions, *Outreach Meeting Vendor Survey*.

Other Services Capacity

The list of the 39 NAICS categories that the riverboat casinos and racinos reported contracting for other services between 2009 and 2011 includes:

221122	Electric power distribution
323110	Commercial lithographic printing
323112	Commercial flexographic printing
323113	Commercial screen printing
323114	Quick printing
323119	Other commercial printing
332996	Fabricated pipe and pipe fitting manufacturing
485320	Limousine service
485510	Charter bus industry
485990	All other transit and ground passenger transportation
488330	Navigational services to shipping
488490	Other support activities for road transportation
493110	General warehousing and storage
511110	Newspaper publishers
541860	Direct mail advertising
541870	Advertising material distribution services
541921	Photography studios, portrait
561320	Temporary help services
561510	Travel agencies
561599	All other travel arrangement and reservation services
561621	Security systems services (except locksmiths)
561720	Janitorial services
561730	Landscaping services
561790	Other services to buildings and dwellings
561990	All other support services
562910	Remediation services
562998	All other miscellaneous waste management services

711320	Promoters of performing arts, sports, and similar events without facilities
722211	Limited-service restaurants
722310	Food service contractors
722320	Caterers
811192	Car washes
811212	Computer and office machine repair and maintenance
811420	Reupholstery and furniture repair
812320	Dry cleaning
812331	Linen supply
812332	Industrial launders
812930	Parking lots
812990	All other personal services

For perspective, there are 55,311 firms operating in Indiana in these codes and 581 or 1 percent are identified as MBE and 2,297 or 4 percent as WBE (Figure 16) (Hoover's, 2012). However, not all the firms are ready, willing, and able to do business with Indiana's gaming industry and some firms that have done business with the riverboats and racinos between 2009 and 2011 are not located in Indiana.

Using the same data sources and methodology described for construction, procurement of supplies and professional services (and identical to the 2007 process) our other services capacity estimates are based on 4,477 total ready, willing, and able firms. We estimate that there are 253 MBE firms, 510 WBE firms, and 3,714 non-MBE/ WBE firms that are ready, willing, and able to do other services business with riverboat casinos.

In total, 23 of the MBE firms identified as ready willing and able did work with the riverboat casinos and racinos during the study period; 141 MBE firms were identified though outreach efforts, and 76 non-certified non-professional service firms were identified by PPI researchers. Similarly, there were 38 WBE firms that did or were interested in doing work with the riverboats during the study period, an additional 192 WBE firms were identified from outreach efforts, and 268 non-certified firms were identified by PPI researchers. Of the 3,714 non-MBE/WBE firms, 2,039 did other services work with a riverboat casino. The 344 non-certified firms identified as either MBE or WBE were subtracted from the non-MBE/WBE total.

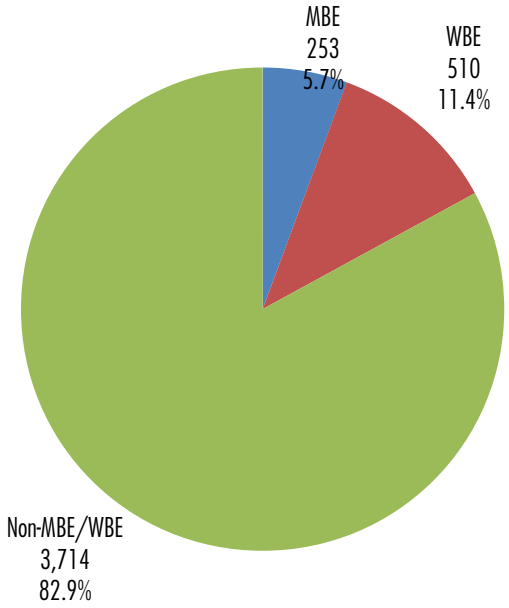
Thus, while not all firms included in the construction analysis are from Indiana (as the estimate includes out of state vendors used by the riverboats and racinos between 2009 and 2011), the final estimate of capacity suggests that approximately 8 percent of all professional service firms in the state are ready, willing, and able to do business with the industry. However, the percentage is not spread evenly across the disparity study categories, as we estimate that 29 percent of all MBE, 11 percent of all WBE, and only 7 percent of the non-MBE/WBE professional service firms are available. Table 4 displays the sources of data used in the study.

Table 4: Firms included in other services capacity estimates by source

	MBE	% MBE	WBE	% WBE	Non MBE/WBE	% Non MBE/WBE	Total
Riverboats, casinos, and racinos	36	1.7%	50	2.4%	2,039	96.0%	2,125
Outreach	141	6.0%	192	8.2%	2,019	85.8%	2,352
Non-certified adjustment	76		268		(344)		-
Adjusted Total	253	5.7%	510	11.4%	3,714	82.96%	4,477

Sources: Indiana Gaming Commission, *Casino Expenditure Tracking System;* Engaging Solutions, *Outreach Meeting Vendor Survey*.

Figure 16: Other services capacity by firm type



Sources: Indiana Gaming Commission, *Casino Expenditure Tracking System;* Engaging Solutions, *Outreach Meeting Vendor Survey*.

Capacity Summary

Table 5 presents a summary of the capacity estimates for all four industry groups. The highest estimated MBE capacity is in the construction services industry category while the lowest WBE capacity estimate is in the procurement of supplies category.

Table 5: Capacity estimates by industry category and firm type

	Total Firms	MBE	WBE	Non-MBE/WBE
Construction	1,511	10.4%	9.9%	79.7%
Procurement of supplies	27,987	1.6%	2.9%	95.5%
Professional services	2,671	6.9%	10.4%	82.7%
Other services	4,477	5.7%	11.4%	83.0%

Disparity Determinations

Disparity is defined as the difference between capacity and utilization. A statistical analysis known as the z-test is used to determine whether the disparity is within an acceptable margin of error or is likely a result of discriminatory practices that prevent MBE and WBE businesses from gaining the estimated potential share of riverboat casino and racino expenditures.

Ideally, capacity and utilization would be identical and the disparity measure would be zero. For the purposes of a disparity study, a disparity measure of less than zero (a negative number) suggests an underutilization of MBE or WBE firms, and a disparity measure of greater than zero suggests overutilization.

This analysis presents disparity in terms of the difference in dollars estimated to be expended (estimated capacity) and actual dollars spent (utilization), as well as the difference in the estimated number of firms (estimated capacity) and the actual number of firms contracting with Indiana's riverboat casinos (utilization). As with the previous measures of utilization and capacity the data are presented by category: construction, procurement of supplies, professional services, and other services. A summary table addressing disparity findings in all industry groups concludes this analysis.

The following are the definitions of terms and calculation methods for expenditure disparity:

- *Estimated capacity of dollars* available is calculated by determining the average amount spent per firm and then multiplying that amount by the estimated number of firms. For example, the total amount spent by Indiana's riverboat casinos and racinos on construction during the study period was $248,631,117 and 489 total firms were utilized. When we divide the total amount spent by Indiana's riverboat casinos and racinos by the total number of construction firms, the result is an average expenditure of $508,448 per firm. We then multiply the average expenditure by the expected number of firms to determine the estimated dollars available. In the case of construction firms (MBE), this means that the estimated capacity of dollars available is 114 (the expected utilization of MBE firms) times $508,448 (the average dollars spent per firm) or $57,780,471.

- *Actual utilization of dollars* is the sum of all dollars reported as being spent by the type of firm within each industry category.

- *Actual share of dollars* expended is calculated by dividing the amount spent by type of firm by the total dollars spent in each category.

- *Estimated share of dollars* spent is calculated by dividing the estimated capacity of dollars available for each type of firm by the total dollars spent by Indiana's riverboat casinos and racinos in each industry category.

- *Disparity of dollars* is the difference between the expected and actual expenditures by Indiana's riverboat casinos by type of firm. As previously stated, a disparity rating of less than zero (a negative number) indicates under utilization, and a disparity rate of greater than zero indicates over utilization of firms.

The definitions of terms and calculation methods for firm disparity follow:

- *Industry* includes any of the four categories suggested by the Urban Institute study: construction, procurement, professional services, and other services.

- *Firm* is distinguished by three types: MBE, WBE, or non-MBE/WBE.

- *Estimated capacity of firms* for each category in an industry group is calculated by dividing the share of actual firms by type expressing interest and ability in doing business into the total number of firms expressing interest and ability in that industry.

- *Actual utilization of firms* in each category represents the number of firms doing business with Indiana's riverboat casinos and racinos during the study period.

- *The difference* in number of firms is calculated by subtracting the estimate capacity of firms from the actual utilization of firms. A negative number represents an underutilization of firms.

- *Actual share of firms* is calculated by dividing the number of firms of each type by total firms. For example, the actual share of MBE construction firms was calculated by dividing the number of MBE construction firms being utilized by the total number of construction firms utilized.

- *Expected share of firms* is calculated by dividing the expected number of firms to be utilized by the total number of firms utilized.

- *Disparity of firms* is the difference between the expected and actual share of firms. As previously stated, a disparity rating of less than zero indicates underutilization and a disparity rate greater than zero indicates an over utilization of firms.

Disparity of Expenditures

Disparity of expenditures (dollars) is the difference between the expected and actual expenditures made by Indiana's riverboat casinos and racinos. A negative disparity rate represents an underutilization of MBE or WBE firms and a positive disparity rate represents an overutilization of MBE or WBE firms.

Construction Disparity

Construction spending with MBE and WBE firms exceeded expected expenditure levels (Table 6). Indiana's riverboat casinos and racinos spent $12 million more with MBE construction firms than might have been expected. WBE firms experienced a $1.8 million dollars of spending over estimated capacity.

Table 6: Construction expenditure disparity (CY 2009-2011)

	Estimated Capacity	Actual Utilization	Dollar Disparity	Estimated Capacity	Actual Utilization	Rate Disparity
MBE	$23,190,993	$35,107,154	$11,916,161	10.4%	15.7%	5.3%
WBE	$22,076,041	$23,902,104	$1,826,063	9.9%	10.7%	0.8%
Non-MBE/WBE	$177,723,281	$163,981,057	$(13,742,224)	79.7%	73.5%	-6.2%

Source: Author's calculations.

While there is neither MBE nor WBE disparity for riverboat casino and racino construction spending, combined estimated construction capacity for the riverboat casino and racinos is 20.3 percent, which is

well above the range of estimated construction capacity (10.5 percent to 15.5 percent) in BBC's Research and Consulting 2010 report for the state of Indiana. It is possible that the higher capacity is in part explained by the different types of construction services consumed by riverboat casinos and racinos. The construction capacity estimates in this analysis also exceeds the estimated share of all Indiana firms within the NAICS codes used by Indiana's riverboat casinos and racinos (1.9 percent MBE and 5.6 percent WBE).

Procurement Disparity

Riverboat casino and racino expenditures on supplies to both MBE and WBE firms exceeded the estimated capacity (Table 7). MBE procurement firms received over $96 million more than might have been expected. WBE firms received over $75 million more than the estimated capacity.

Table 7: Procurement of supplies expenditure disparity (CY 2009-2011)

	Estimated Capacity	Actual Utilization	Dollar Disparity	Estimated Capacity	Actual Utilization	Rate Disparity
MBE	$22,270,674.	$118,928,017	$96,657,342	2.9%	15.5%	12.6%
WBE	$36,861,806	$112,651,669	$75,789,863	4.8%	14.7%	9.9%
Non-MBE/WBE	$708,821,813	$536,374,607	$(172,447,206)	92.3%	69.8%	-22.5%

Source: Author's calculations.

Professional Service Disparity

There was no MBE or WBE disparity in professional services expenditures (Table 8). Spending on MBE professional service firms was nearly twice the estimated capacity.

Table 8: Professional services expenditure disparity (CY 2009-2011)

	Estimated Capacity	Actual Utilization	Dollar Disparity	Estimated Capacity	Actual Utilization	Rate Disparity
MBE	$8,532,819	$16,250,435	$7,717,616	6.9%	13.1%	6.2%
WBE	$12,861,060	$13,296,370	$435,310	10.4%	10.8%	0.4%
Non-MBE/WBE	$102,270,160	$94,117,233	$(8,152,927)	82.7%	76.1%	-6.6%

Source: Author's calculations.

While there is neither MBE nor WBE disparity for riverboat casino or racino professional service spending, while the estimated MBE capacity for professional services capacity is lower than BBC's estimates the riverboat casino and racinos utilization of 13.1 percent exceeds BBC's highest estimate of MBE professional services capacity (11.3 percent). BBC's lowest estimate of capacity was 7.1 percent compared to the estimated 6.9 estimate of capacity for the gaming industry. It is possible that the lower capacity estimates are explained in part by spending on gaming-related consulting services not typically consumed by governments being located outside the primary market area (Indiana). Finally, both capacity estimates exceed of all Indiana firms within the NAICS codes used by Indiana's riverboat casinos and racinos (1.8 percent MBE and 7.4 percent WBE).

Other Services Disparity

Both MBE and WBE other service firms were overutilized from a spending perspective. MBE firms received over $28 million more than would have been expected and WBE firms received over $12 million more than expected (Table 9).

Table 9: Other services expenditure disparity (CY 2009-2011)

	Estimated Capacity	Actual Utilization	Dollar Disparity	Estimated Capacity	Actual Utilization	Rate Disparity
MBE	$6,367,536	$34,674,167	$28,306,632	5.7%	30.8%	25.1%
WBE	$12,836,501	$25,637,659	$12,801,159	11.4%	22.7%	11.4%
Non-MBE/WBE	$93,495,708	$52,387,917	$(41,107,790)	83.0%	46.5%	-36.5%

Source: Author's calculations.

As with professional services capacity while estimates for other services trail the BBC estimate of capacity (between 8.5 and 14.0 percent MBE and 21.2 and 25.6 percent WBE), actual expenditures of the riverboat casinos and racinos with MBE firms exceeds even BBC's estimate. Furthermore, WBE utilization by the gaming industry exceeds BBC's low estimate of WBE capacity while trailing its highest estimate.

Disparity of Firms

Disparity of firms is the difference between the expected and actual share of firms utilized by Indiana's riverboat casinos and racinos. The analysis is based on total firms used during the study period. For example four one-year contracts with firm AAA counts as one firm, similarly if the firm AAA is used by three different riverboat casinos that counts as one firm event. As previously stated, a disparity rating of less than zero indicates underutilization and a disparity rate greater than zero indicates an overutilization of firms

Construction

As shown in Table 10, MBE construction firms were underutilized during the study period. Based on the data available, it would be expected that Indiana's riverboat casinos and racinos would have contracted with 73 MBE firms, yet only 65 MBE firms received riverboat contracts during the study period. From a share of total firms' perspective, it would have been expected that 10 percent of all construction contracts would have been with an MBE firm, whereas the actual utilization was 9 percent. WBE construction firms were not underutilized during the study period. In fact, 14 more WBE firms were utilized than might have been expected.

Table 10: Construction firm disparity (CY 2009-2011)

	Estimated Capacity	Actual Utilization	Firm Disparity	Estimated Capacity	Actual Utilization	Rate Disparity
MBE	73	65	(8)	10.4%	9.2%	-1.2%
WBE	70	84	14	9.9%	11.9%	2.0%
Non-MBE/WBE	560	554	(6)	79.7%	78.8%	-0.9%

Source: Author's calculations.

Procurement

As shown in Table 11, neither MBE nor WBE firms were underutilized during the study period.

Table 11: Procurement of supplies firm disparity (CY 2009-2011)

	Estimated Capacity	Actual Utilization	Firm Disparity	Estimated Capacity	Actual Utilization	Rate Disparity
MBE	286	301	15	2.9%	3.0%	0.1%
WBE	474	480	6	4.8%	4.9%	0.1%
Non-MBE/WBE	9,111	9,090	(21)	92.3%	92.1%	-0.2%

Source: Author's calculations.

Professional Services

As shown in Table 12, neither MBE nor WBE professional service firms were underutilized during the study period.

Table 12: Professional service firm disparity (CY 2009-2011

	Estimated Capacity	Actual Utilization	Firm Disparity	Estimated Capacity	Actual Utilization	Rate Disparity
MBE	89	108	19	6.9%	8.4%	1.5%
WBE	134	142	8	10.4%	11.0%	0.6%
Non-MBE/WBE	1,066	1,039	(27)	82.7%	80.6%	-2.1%

Source: Author's calculations.

Other Services

As shown in Table 13, MBE firms were slightly underutilized during the study period, this underutilization has occurred despite that fact that in terms of dollars MBE firms (25 percent) enjoyed the highest rate of utilization This difference between firm and dollar disparity can occur when a smaller than expected number of firms receives higher than expected expenditures.

Table 13: Other services firm disparity (CY 2009-2011)

	Estimated Capacity	Actual Utilization	Firm Disparity	Estimated Capacity	Actual Utilization	Rate Disparity
MBE	120	112	(8)	5.7%	5.3%	-0.4%
WBE	242	318	76	11.4%	15.0%	3.6%
Non-MBE/WBE	1,763	2,039	276	83.0%	96.0%	13.0%

Source: Author's calculations.

Conclusions

While there was no MBE or WBE spending disparity, MBE construction and other services firms were underutilized (Table 14). The higher than expected expenditures coupled with underutilization of firms occurs when the smaller than expected number of firms receives a higher than expected average contract. Table 15 displays the average per firm expenditure per contact. Only in WBE professional services was the spending overutilization within the margin of error.

Table 14: Disparity by industry category (CY 2009-2011)

Firms	Construction	Procurement of supplies	Professional services	Other services	Totals
MBE capacity	73	286	89	120	568
WBE capacity	70	474	134	242	919
MBE utilization	65	301	108	112	586
WBE utilization	84	480	142	318	1,024
MBE disparity	(8)	15	19	(8)	18
WBE disparity	14	6	8	76	105
Expenditures	**Construction**	**Procurement of supplies**	**Professional services**	**Other services**	**Totals**
MBE capacity	$23,190,993	$22,270,674	$ 8,532,819	$ 6,367,536	$60,362,021
WBE capacity	$22,076,041	$36,861,806	$12,861,060	$12,836,501	$84,635,408
MBE utilization	$35,107,154	$118,928,017	$16,250,435	$34,674,167	$204,959,773
WBE utilization	$23,902,104	$112,651,669	$13,296,370	$25,637,659	$175,487,803
MBE disparity	$11,916,161	$96,657,342	$7,717,616	$28,306,632	$144,597,751
WBE disparity	$1,826,063	$ 75,789,863	$435,310	$12,801,159	$90,852,395

Table 15: Average contract by industry category and firm type

	MBE	WBE	Non-MBE/WBE
Construction	$540,110	$284,549	$295,995
Procurement	$395,110	$234,691	$59,007
Professional services	$150,467	$93,636	$90,584
Other services	$309,591	$80,622	$25,693

References

BBC Research and Consulting. (2011). *Indiana disparity study – Final report*. Denver.

Bucher and Christian Consulting, Inc. (2006). *Statistical analysis of utilization of state contracts for the State of Indiana*. Indianapolis.

City of Richmond v. J.A. Croson Co. 488 U.S. 469 (1989).

Hoover's. (2012, June 19). Data retrieved from Hoover's OnDemand Center on June 19, 2012 from www.hoovers.com

Enchautegui, M.E., Fix, M., Loprest, P., von der Lippe, S.C., & Wissoker, D. (1997). *Do minority-owned businesses get a fair share of government contracts?* Washington DC: The Urban Institute. Retrieved from www.urban .org/UploadedPDF/DMOBGFSGC.pdf

Indiana Gaming Commission. (2012). *Casino Expenditure Tracking System, January 1, 2009 to December 31, 2011* [Data file].

Klacik, D. (2005). *A disparity analysis for city of Indianapolis expenditures between January 1, 1999, and October 4, 2002*. Indianapolis: Center for Urban Policy and the Environment.

Klacik, D. (2010). *Indiana Lottery Commission disparity study*. Indianapolis: Center for Urban Policy and the Environment.

Klacik, D., & Seymour, A. (2007). *A disparity study for the Indiana Gaming Commission*. Indianapolis: Center for Urban Policy and the Environment.

Attachment A: Disparity Study Advisory Group

Disparity Study Advisory Group

- The Honorable Greg Taylor, Indiana Senate
- Stacy Shew, Executive Director, NAWBO Indy
- Philip Sicuso, Of Counsel, Bingham Greenebaum Doll LLP
- Mike Smith, President & CEO, Casino Association of Indiana