



FINANCIAL REVIEW

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# Proposed Bucks Arena

MILWAUKEE, WISCONSIN



**SUBMITTED TO:**

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**PREPARED BY:**

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September 18, 2015

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Mr. Martin Matson  
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Re: Proposed Arena  
Milwaukee, Wisconsin

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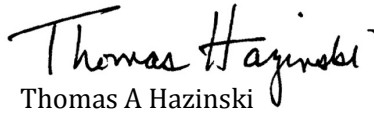
Dear Mr. Matson:


Attached you will find our Financial Review of a Proposed Bucks Arena in Milwaukee, Wisconsin.

We certify that we have no undisclosed interest in the Bucks Arena Project, and our employment and compensation are not contingent upon our findings. This study is subject to the comments made throughout this report and to all assumptions and limiting conditions set forth herein.

It has been a pleasure working with you. Please let us know if we can provide any additional services.

Sincerely,  
HVS Convention, Sports & Entertainment  
Facilities Consulting

  
Thomas A Hazinski  
Managing Director

  
Brian Harris  
Director

  
Catherine Sarrett  
Project Manager



Convention, Sports & Entertainment  
Facilities Consulting  
Chicago, Illinois

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# 1. Introduction and Executive Summary

## Nature of Assignment

The City of Milwaukee (“City”) retained HVS Convention, Sports & Entertainment Facilities Consulting (“HVS”) to perform a development review of the proposed Bucks Arena. With an estimated development cost of \$500 million, the Bucks Arena Project (“Arena Project”) would include a new arena for the Milwaukee Bucks, a structured parking facility, and an outdoor plaza. The financing plan for the development includes team owner contributions and public participation on the part of the State of Wisconsin, Milwaukee County, the City of Milwaukee, and the Wisconsin Center District (“WCD”). HVS reviewed the proposed project, assessing the feasibility of the financing plan and the overall value of the Arena Project to the City of Milwaukee.

## Methodology

In accordance with the Scope of Services, HVS performed the following tasks:

1. Conducted a site visit and client meeting in Milwaukee with Thomas Hazinski and Brian Harris on August 20, 2015. During this visit, they met with representatives of the Comptroller’s Office, the City of Milwaukee, and Milwaukee County,
2. Conducted phone interviews with representatives of and consultants to the City, the State of Wisconsin, and the Milwaukee Bucks.
3. Reviewed the arena development and financing plan and prepared a summary of sources and uses of funding for the project,
4. Reviewed the legislation authorizing the funding plan and associated commentary on those plans by the State of Wisconsin Legislative Fiscal Bureau and the Comptroller’s office.
5. Estimated the capacity of proposed funding sources to support the contributions to the project,
6. Projected the impacts of the development of the Bucks Arena on operations of the WCD,
7. Compiled data on 29 NBA arenas to assess trends in the levels of public participation in their development and operation,



8. Prepared case studies on three comparable cities which have developed entertainment districts surrounding professional sports arenas,
9. Prepared an economic and fiscal impact analysis for the Bucks Arena on the City of Milwaukee, and
10. Assessed the costs and benefits of public participation in the development of professional sports venues.

### **Bucks Arena Project**

The Milwaukee Bucks of the National Basketball Association (“NBA”) currently play their home games in the BMO Harris Bradley Center (“Bradley Center”). The 18,700-seat arena opened in 1988 and was primarily funded by a donation to the State of Wisconsin by Jane Bradley Pettit and Lloyd Pettit in memory of Jane’s father Harry Lynde Bradley. The City of Milwaukee also contributed significant resources by assembling land and building a parking structure to support the Bradley Center. Created by State law, the Bradley Sports & Entertainment Corporation owns and operates the Bradley Center, which is also home to the Marquette University Golden Eagles men’s basketball program and the Milwaukee Admirals of the American Hockey League.

The proposed \$500 million Arena Project would include the development of a 690,000 square foot Bucks Arena replacing the Bradley Center. Located on a vacant parcel between Highland and Juneau Avenues and 4<sup>th</sup> and 6<sup>th</sup> Streets, the Bucks Arena would be one block north of the Bradley Center site on land formerly occupied by the Park-East Freeway and right-of-way. Other elements of the Arena Project include a 1,243-space parking structure and a public plaza. Upon completion of the Bucks Arena, both the Bradley Center and the existing parking structure at 4<sup>th</sup> Street and Highland Avenue would be demolished to make way for future ancillary private development as part of the Greater Arena Project.

### BUCKS ARENA RENDERING



Source: Populous

The Arena Project is the first phase of the Greater Arena Project. Within walking distance to the Bucks Arena, the Milwaukee Public Museum, and the Marcus Theater for Performing Arts, as well as the WCD's existing venues, the Bucks are proposing \$400-500 million in private development in addition to the \$500 million for the proposed Arena Project. The Greater Arena Project would include the development of a practice facility for the Milwaukee Bucks, in addition to approximately 320,000 square feet of outdoor space, 250,000 square feet of entertainment and retail space, 780,000 square feet of multifamily residential units, a 300-room hotel, 250,000 square feet of office space, and 2,900 parking spaces.

Early conceptual images of the Greater Arena Project depict a new multi-purpose venue and entertainment district activated by sports, entertainment, residential and office uses. The proposed site, which primarily sits between 4th and 6th Streets from State Street to McKinley Avenue, would seamlessly link with active development on all sides, including Old World Third Street, Schlitz Park, The Brewery, the Milwaukee riverfront, Water Street and the Wisconsin Center.



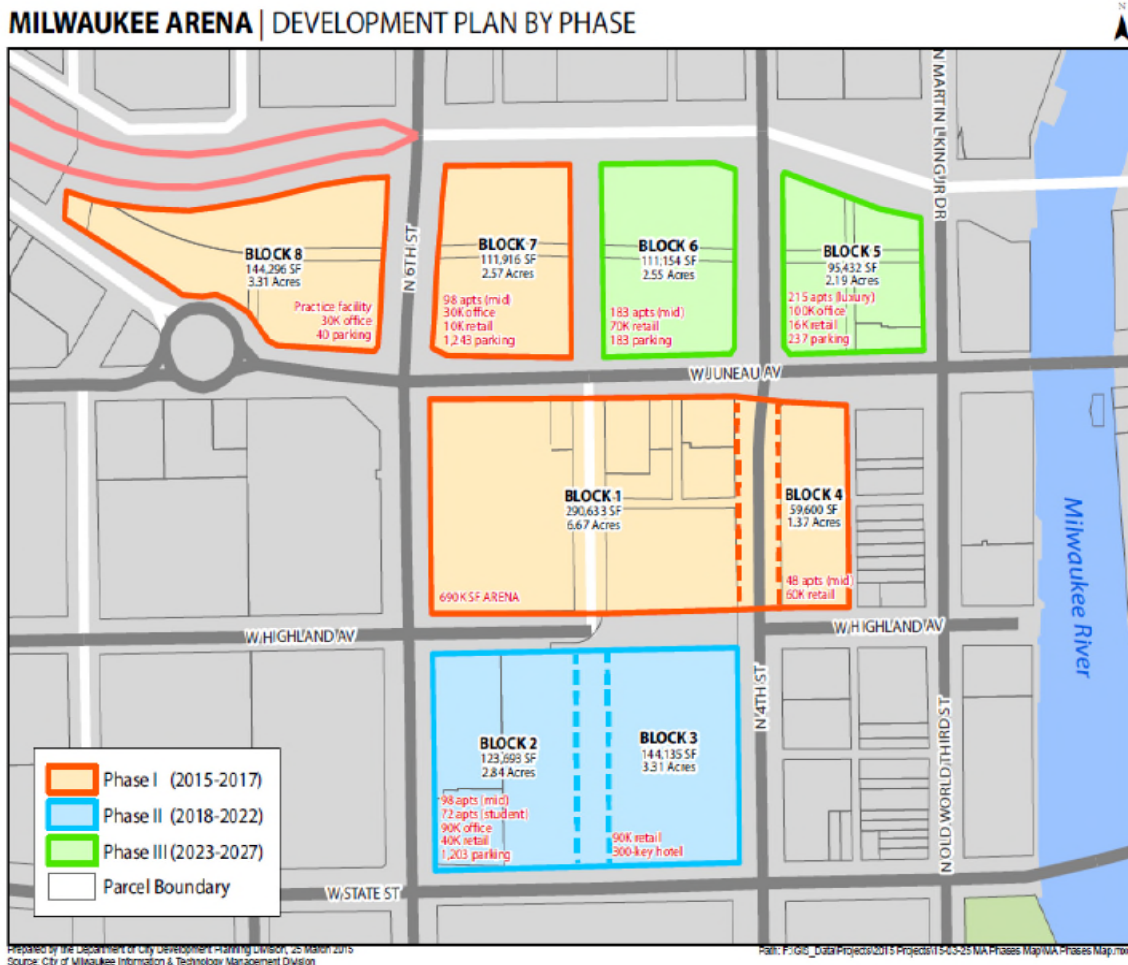
**GREATER ARENA PROJECT RENDERING**

Source: Populous

Current plans call for a phased development of the Greater Arena Project. The following map identifies the preliminary conceptual development program by phase and by block. A brief description of each phase follows.



### GREATER ARENA PROJECT PHASED DEVELOPMENT PLAN



Source Milwaukee Bucks

Phase 1 improvements include elements of the Arena Projects and the Greater Arena Project, including the following.

- The 690,000 square foot Bucks Arena and 130,000 square foot outdoor public plaza developed on Blocks 1 and 4,
- A 1,243-space public parking structure on Block 7,
- A 50,000 square foot practice facility for the Milwaukee Bucks on Block 8,





- Destination retail development on Block 4,
- Residential, retail, and office development on Block 7, and
- Residential and medical office development on Block 8.

Phase 2 improvements include elements of the Greater Arena Project to be constructed on the site of the Bradley Center (Blocks 2 and 3), including the following.

- A 1,203- space public parking structure,
- A 300-room hotel,
- Destination and convenience retail development,
- General office development, and
- Residential and student housing development.

Phase 3 improvements include elements of the Greater Arena Project to be constructed on sites north of the Bucks Arena (Blocks 5, 6, and 8), including the following.

- Residential development,
- General office development, and
- Retail development.

Construction timing for Phases 2 and 3 would be dependent upon market conditions at the time of development.

### **The Wisconsin Center District**

In 1994, The Wisconsin State Statute formed the WCD for the purpose of acquiring and managing exposition center facilities.” The WCD, which is not a unit of State, County or City government, is instead a semi-autonomous municipality called a “district”, meaning its leaders are appointed and it can issue bonds and collect taxes within strict limits. The WCD can impose a number of taxes to fund operation costs, including capital costs. Under the new statute and pending bylaws, a 17-member, unpaid Board of Directors governs the WCD. Board members are appointed by the Governor, Milwaukee County Executive, City of Milwaukee Mayor, and the City of Milwaukee Common Council President. The WCD’s capital assets include the Wisconsin Center, the Milwaukee Theatre, and the UW-Milwaukee Panther Arena.

The WCD generates revenue from its operations but as is typical of most convention centers, operating revenues run less than operating expenses. The



resulting operating deficit is covered by the distribution of certain unrestricted taxes to the WCD (a 7% lodging tax within the City of Milwaukee). These same tax revenues also pay for a significant portion of the operating expenses of Visit Milwaukee, the organization that provides destination marketing and group sales services to the Milwaukee metropolitan area. Unrestricted tax revenue alone, with three other sources of restricted tax revenue, are pledged to the repayment of debt. Thus, bondholders have a first claim on all WCD tax revenues. Only the remaining unrestricted tax revenues may be used for its operations needs.

### **2015 Wisconsin Act 60**

2015 Senate Bill 209 relating to constructing a sports and entertainment arena and related facilities was introduced by, and referred to, the Joint Committee on Finance on July 6, 2015. On July 15, the bill was withdrawn from the Finance Committee and taken up by the State Senate. The Senate adopted Senate Amendments 1 and 2 to the bill and passed the bill, as amended, by a vote of 21 to 10. On July 28, the State Assembly concurred in SB 209, as passed by the Senate, on a vote of 52 to 34. The bill was presented to the Governor on August 6 and signed into law on August 12 as 2015 Wisconsin Act 60 (“Act 60”). Act 60 was published on August 13 and became generally effective on August 14, 2015.

### **Arena Project Funding**

Act 60 expands the authority of the WCD to provide up to \$203 million in funding for the construction of the Arena Project. The WCD would use the following revenues to fund the debt service on the bonds they would issue for the project:

- \$55 million in bonding supported by a \$4 million annual general purpose revenue (“GPR”) appropriation for the State to make grants to the WCD;
- \$55 million in bonding supported by a separate \$4 million annual GPR appropriation from the State to make grants to the WCD which would be offset by a \$4 million GPR annual reduction in the county and municipal aid payment to Milwaukee County; and
- \$93 million in bonding financed by indefinitely extending the existing WCD taxes which would otherwise end after the WCD’s current debt is retired. Specifically, the WCD would extend its food & beverage, vehicle rental, and local room taxes, which are currently scheduled to end in 2032.

Before any State funding could be provided to the WCD for the project, the State’s Department of Administration (“DOA”) would have to determine that the City of Milwaukee has provided at least \$47 million in funding for the project. With these funds, the City would finance the construction of a \$35 million parking structure



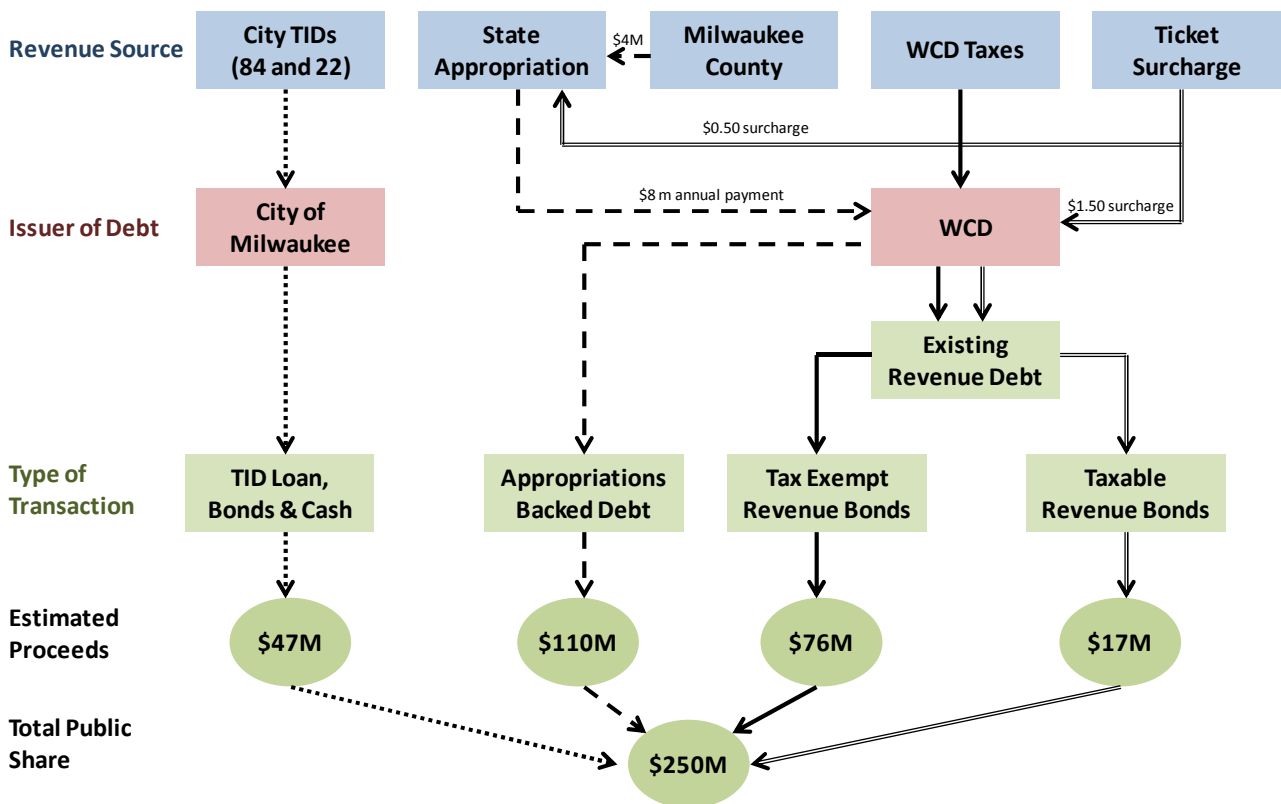
and issue \$12 million in bonds for a tax increment district (“TID”) development near the site of the Bucks Arena.

The Act also specifies that the WCD board require event sponsors to impose a \$2 surcharge on each ticket sold for all events held at the Bucks Arena. The WCD is further required to remit 25% of ticket surcharge collections to the DOA for deposit into the State’s general fund. The remaining funds would be retained by the WCD.

The following figure presents a summary of public funding sources for the proposed Arena Project. The remaining funding for the project, at least \$250 million, would be the responsibility of the Milwaukee Bucks.

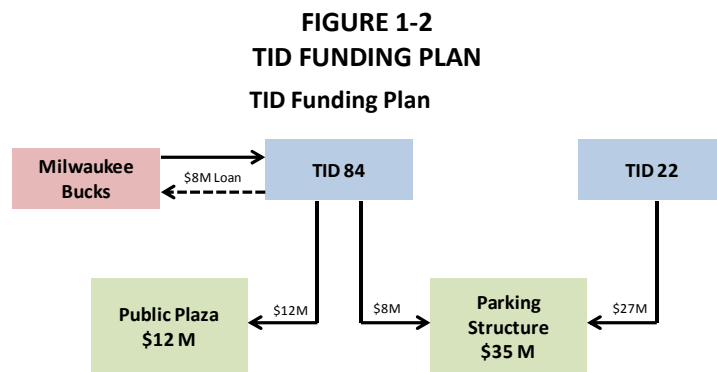
**FIGURE 1-1  
ARENA PROJECT FUNDING PLAN**

**Bucks Arena Public Funding Plan**





The following figure illustrates figure how the two City Tax Incremental Districts (“TIDs”) would fund the \$35 million parking structure and the \$12 million public plaza.



Section 2 of this reports provides a detailed description of the financing plan and an assessment of the capacity of the resources dedicated to proposed public sector investment in the Buck Arena project.

**Bradley Center**

In addition to the State’s contribution to the WCD for the development of the proposed Arena Project, the State has provided \$10 million GPR in fiscal year 2016-17 to assist the Bradley Center Sports and Entertainment Corporation in retiring its obligation and contractual liabilities. The appropriate funding flows through the Wisconsin Building Commission, which approved the release of up to \$10 million over the next two years.

The ownership and control of the Bradley Center would be transferred to the WCD and then to the Bucks once an agreement with the WCD is signed. The initial and subsequent ownership transfers would occur simultaneously, so the practical impact is transfer of control of the existing arena from the Bradley Center Sports and Entertainment Corporation to Milwaukee Bucks. As of this writing, the agreements for transfer of control and ownership of the Bradley Center have not been finalized.

**Team Agreements**

Act 60 requires that in consideration of the public contribution to the Arena Project and the Milwaukee Bucks (“Team”), or for the right to operate and manage the arena facilities, the Team would be required to enter into a non-relocation agreement with the WCD. The non-relocation agreement must contain the following provisions and commitments during the term of the lease the Team, shall:

- Play all of its home games at the sports and entertainment arena, once it is constructed;
- Maintain its membership in the National Basketball Association, or a successor league;
- Maintain its headquarters in Wisconsin;
- Include in its official team name, the name of the City of Milwaukee;
- Not relocate to another political subdivision during the term of the lease;
- Upon sale or ownership transfer, ensure that any person who acquires the professional basketball team, including upon foreclosure, commits to acquire the professional basketball team subject to the team's obligations under the non-relocation agreement; and
- During the last five years of the original 30-year lease, and during any five-year extension of the lease, negotiate, and enter into agreements, with third parties regarding the professional basketball team playing its home games at a site different from the site to which the lease applies after the conclusion of the lease.

As of this writing, the parties have not negotiated the specific terms of the arena lease. Act 60 requires that the lease contain at least all of the following provisions.

- The term of the lease shall be for 30 years, plus two extensions of five years each at the team's option,
- Provisions concerning the transfer of the Bradley Center and the land on which it is located and the subsequent demolition of the Bradley Center structure and that the team is responsible for all costs associated with the demolition,
- The team would be responsible for equipping, maintaining, operating, improving, and repairing arena facilities that are constructed pursuant to the development agreement entered into between the team and the WCD,
- The team would be entitled to receive all revenues, other than the ticket surcharge, related to the operation of the arena facilities, including but not limited to ticket revenues, licensing fees, sponsorship and naming rights revenues, food and beverage sales, merchandise sales, parking, and revenues generated by events on the outdoor plaza,
- A separate agreement would be negotiated between the Team and WCD concerning the development, construction, leasing, operation, maintenance, and repair of the parking structure to be built as a part of the Arena Project.

Act 60 further states that neither the State, the City of Milwaukee, nor Milwaukee County would be responsible for equipping, maintaining, operating, improving,



and repairing the Bucks Arena. All operating risk would be the responsibility of the Milwaukee Bucks, including the funding of ongoing capital improvements.

### Revised WCD Board

On its effective date, Act 60 expanded the WCD's Board from 15 to 17 members, modifying the current composition as follows.

- Two members are the Speaker of the Assembly and Majority Leader of the Senate, or their designees, rather than the Co-chairperson of the Joint Committee on Finance or their designees,
- Two additional Board members are the Minority Leader of the Assembly and the Minority Leader of the Senate, or their designees,
- Any designee of a member of the State Legislature to the Board has to be a member of the same house of the Legislature as the person making the designation,
- The members of the State Legislature, or their designees to the board, and the City of Milwaukee comptroller became board members on the effective date of the Act, and
- The DOA Secretary has to be a member of the Board rather than the Secretary's designee.

In addition, the DOA secretary became Chairperson of the WCD board on the effective date of the Act. The DOA Secretary continues to serve as Chairperson of the Board until that person certifies that the Bucks Arena is complete. As the Chairperson of the Board, the DOA Secretary shall negotiate the development agreement, lease, and non-relocation agreement with the Team on behalf of the WCD. The Secretary is allowed to enter into these agreements without approval of the Board.

Upon completion of the construction of the Bucks Arena, the WCD Board membership would remain at 17 members with the following modifications.

- The DOA Secretary could continue to serve on the Board, or may select a designee;
- One member would be comptroller or chief financial officer of Milwaukee County, rather than an employee or officer of a private sector entity appointed by the County Executive;
- Reduce the number of private members currently appointed by the Milwaukee County Executive from two to one. This appointee would have to continue to be primarily an employee or officer of a private sector entity that owns,





operates, or manages an enterprise located in the WCD and has significant involvement in the food and beverage or lodging industry,

- One member appointed by the Milwaukee County Executive from a municipality that meets the current law requirements could be either the municipality's executive officer or designee and
- The three private sector entity members previously appointed by the Governor would instead be appointed by the Milwaukee County Executive.

### Summary of Findings

HVS prepared an analysis of the Arena Project, assessing the financing capacity of the revenue streams dedicated to funding the project and estimating the economic and fiscal impacts the project would have on the City of Milwaukee economy. HVS compared the Arena Project funding plan to comparable NBA projects and assessed the costs and benefits of public participation in professional sports arenas.

### Analysis of Financing Capacity

The analysis of financing capacity described in Section 5 of this report concludes that under current credit market conditions, the funding sources for the Arena Project are sufficient to generate the desired \$250 million in project funds. Furthermore, it is reasonable to assume that sufficient excess revenues will be available after the payment of debt service to fund WCD operations, ongoing capital maintenance and to provide adequate funding to Visit Milwaukee. The figure below shows the combined sources and uses of funds.



**FIGURE 1-3  
ARENA PROJECT SOURCES AND USES OF FUNDS (000'S)**

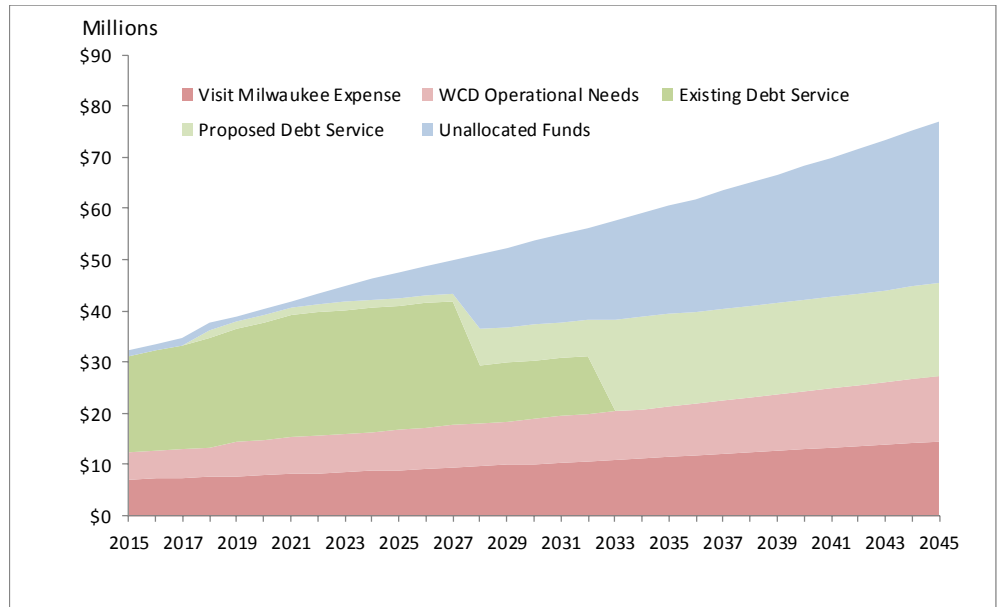
	State Appropriation Bonds	WCD Tax Exempt Debt	WCD Taxable Debt	TID 22	TID 84	Total
<b>Sources</b>						
Bond Proceeds	\$111,160	\$78,023	\$21,753	\$13,000	\$13,467	\$237,402
Excess Restricted Funds		7,000				7,000
Available Cash				14,000		14,000
Milwaukee Bucks Loan					8,000	8,000
<b>Total Sources</b>	<b>\$111,160</b>	<b>\$85,023</b>	<b>\$21,753</b>	<b>\$27,000</b>	<b>\$21,467</b>	<b>\$266,402</b>
<b>Uses of Funds</b>						
Arena Project Funding	\$110,048	\$76,050	\$16,967			\$203,066
Parking Structure Funding				27,000	8,000	35,000
Public Plaza Funding					12,000	12,000
<b>Sub-total Project Funding</b>	<b>\$110,048</b>	<b>\$76,050</b>	<b>\$16,967</b>	<b>\$27,000</b>	<b>\$20,000</b>	<b>\$250,066</b>
Reserve Account		7,802	2,175			9,978
Capitalized Interest			2,284		1,347	3,631
Issuance Costs	1,112	1,170	326		120	2,728
<b>Total Uses</b>	<b>\$111,160</b>	<b>\$85,023</b>	<b>\$21,753</b>	<b>\$27,000</b>	<b>\$21,467</b>	<b>\$266,402</b>

Under the proposed financing plan, a total issuance of \$266 million would be necessary to deliver \$250 million in project funding.

The WCD would pledge all of its available tax revenue to bond holders, and use the revenues available after payment of debt services to support its operations. HVS projected future availability of tax revenues to pay debt service and to support WCD operations. The following figure shows the availability of WCD resources for the 30-year period of the Arena Project.



**FIGURE 1-4  
AVAILABILITY OF REVENUE TO SUPPORT WCD OPERATIONS**



We conclude that it is reasonable to expect that the WCD will have sufficient funds to support its operations, capital maintenance requirements and to fulfill its commitment to funding Visit Milwaukee.

**Spending and Fiscal Impacts**

HVS identified new direct spending that would occur annually in the City of Milwaukee due to the operations of the Bucks Arena. HVS used IMPLAN input-output model to estimate indirect and induced spending impacts as well as the jobs created based on this spending. The following figure presents the sum results of this analysis as well as the corresponding annual fiscal impacts of this spending. All dollar values represent a stabilized year of demand in 2015 dollars.

**FIGURE 1-5  
SUMMARY OF ANNUAL SPENDING IMPACTS  
IN THE CITY OF MILWAUKEE**

Impact	City of Milwaukee
Spending Impacts	\$60.1 million
Fiscal Impact	\$161,000
Jobs Created	393



These annual recurring spending impacts reflect a gross transfer of income to the City of Milwaukee caused by the Arena Project. They do not quantify the net economic impacts to the City of Milwaukee or of the project as a whole.

### **Comparison to Other Cities**

HVS also identified three urban arena development projects that are comparable to the Milwaukee Greater Arena Project: the Gateway District in Cleveland, Ohio, the Arena District in Columbus, Ohio, and the Bricktown District in Oklahoma City, Oklahoma. A case study of each district includes a timeline of development and identifies the key factors that spurred economic growth in the surrounding district. These case studies reveal factors that contribute to success or failure of real estate development surrounding arena projects and add a perspective for assessing the probability of compatible real estate development adjacent to the Bucks Arena.

### **Assessment of Public Participation**

HVS compared the Arena Plan to the costs, financing plans, and lease deals for other NBA arenas. Key findings suggest that the total construction cost for the new Bucks Arena fits the recent trend of larger investments in all-inclusive sports arenas. HVS also found that the City of Milwaukee's contribution to total costs is relatively low, when compared to recent arena developments with similar market sizes. However, ongoing financial commitments to the project could materially alter the share of public participation in the project. This report highlights a number of factors that could increase or decrease the level of public expenditures on the Arena Project in the current development stage and over the 30-year life of the project. Even considering these potential changes in the public share, in our view, the public commitment to the project will remain lower than other recent comparable arena developments.

The proposed real estate development adjacent to the Bucks Arena promises to revitalize a blighted area of downtown Milwaukee. Our case studies of other cities demonstrate that arena development is compatible with investment in adjacent entertainment, retail, hospitality, and residential land uses. While the arena development is unlikely to be the sole cause of adjacent development, it can be viewed as one important element of range of potential investments in an urban entertainment district. The Milwaukee Bucks have incentive to make real estate investment that generates property tax revenues to repay its \$8 million loan to the TID. The City of Milwaukee has committed to related public infrastructure investment. If positive economic and credit market conditions continue through the investment period, the desired urban revitalization is likely to occur. The overall effect of the Greater Buck Arena development will be to create a new entertainment destination in downtown Milwaukee.

In the absence of public subsidies to support a new Bucks Arena, Milwaukee is likely to lose the team. The NBA has effective monopoly power over the supply of



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teams and Milwaukee is in competition with other second tier cities that would like to obtain an NBA franchise. Rather the decision to participate in the financing of the project should include consideration of the social and intangible benefits, which are not quantifiable, but none-the-less the significant. These should be the primary reasons for public support of arena development.



## 2. Analysis of Public Financing Capacity

### **Purpose of this Analysis**

This chapter provides an assessment of the public funding capacity for the Arena Project. The current plan as outlined in Wisconsin Act 60 (“Act 60”) provides a general approach to financing, but the actual structure of the financing has not yet been determined. This review is provided for a public assessment of the proposed financing plan and is not intended for use by bond investors or lenders.

HVS, is not a municipal advisor and HVS is not subject to the fiduciary duty set forth in section 15B(c)(1) of the Act (15 U.S.C. 78o-4(c)(1)) with respect to the municipal financial product or issuance of municipal securities. The reader is advised that any actual issuance of debt be done under the advice of bond counsel and financial advisors. The financial advisor would provide advice concerning the specific structure, timing, expected interest cost, and risk associated with any government loan or bond issue. Potential investors should not rely on representations made in this report with respect to the issuance of municipal debt.

### **Description of the Financing Plan**

The total Arena Project cost is estimated at \$500 million, with \$250 million coming from current and past owners of the Milwaukee Bucks professional basketball team (“Bucks”) and \$250 million from the public partners. The funding of the public portion of the Arena Project would be a joint effort between the State of Wisconsin (“State”), Milwaukee County (“County”), the City of Milwaukee (“City”), and the Wisconsin Center District (“WCD”).



**PROPOSED BUCKS ARENA**

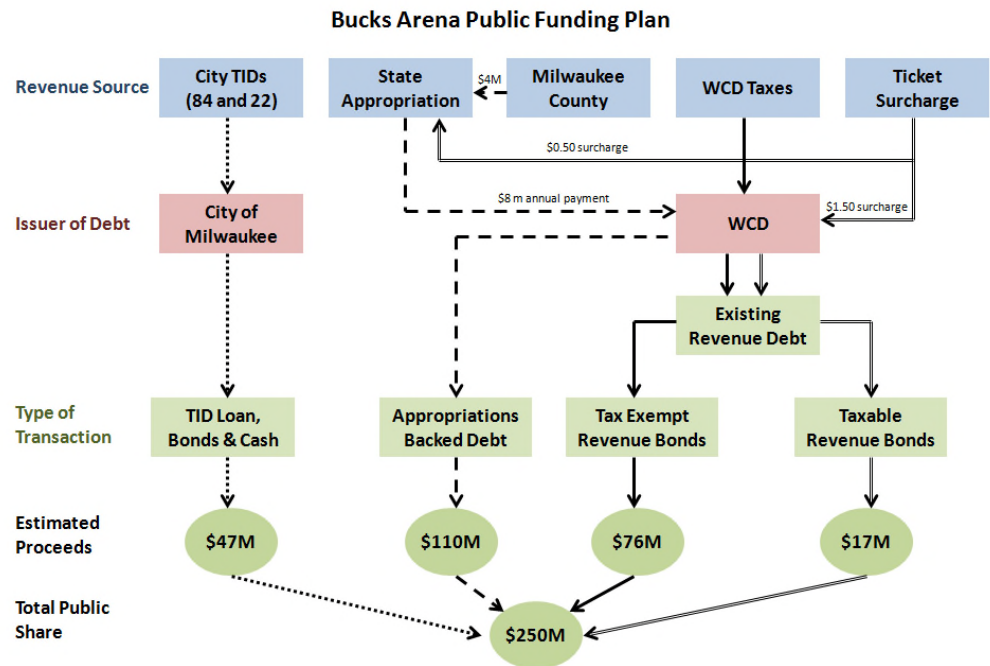
Source: Populous

The Bucks organization would act as the developer of the Arena Project and would bear any cost overrun risks or costs of upgrades beyond the \$500 million in funding. Under the Bucks Arena lease with the WCD the Bucks would retain all of the income and pay all of the expenses related to operating the Bucks Arena. The Bucks Arena would be exempt from local property taxes.

The following figure provides an overview of public participation in the Arena Projects.



**FIGURE 2-1  
ARENA PROJECT FUNDING PLAN**



The Arena Project funding to be provided by the State, County, and WCD would be raised by municipal bonds to be sold by the WCD. Act 60 authorized up to \$203 million in project funds, plus expenses, to be raised by the sale of WCD municipal bonds. The bonds would be backed by two revenue streams, the State’s pledge of \$8 million a year for 20 years, and the WCD’s available revenues after existing debt service and costs. The Arena Project funding plan is for WCD to generate \$110 million in Arena Project funds by bonding against the anticipated State funding over the next twenty years, and the remaining \$93 million by bonding future WCD cash flow. The various taxes collected by the WCD have been extended beyond the maturity of the existing debt to provide funding for future debt payments on Arena Project bonds.

The WCD is allowed by Act 60 to issue bonds sufficient to produce up to \$203 million in proceeds for the construction of the Arena Project. To generate these proceeds, Act 60 allows the WCD to issue more than \$203 million in bonds to: 1) pay issuance and administrative expenses; 2) make deposits to reserve funds; 3) pay accrued or funded interest; and 4) pay the costs of credit enhancement.



The remaining \$47 million in public funding would come from City Tax Increment District (“TID”) funds. TIDs 22 and 84 would finance two key Arena Project components, the Public Plaza between Highland and Juneau Avenues, and a public parking structure. The proposed parking structure would replace, modernize, and expand the 4<sup>th</sup> and Highland parking structure, which is expected to be demolished after the Bucks Arena opens.

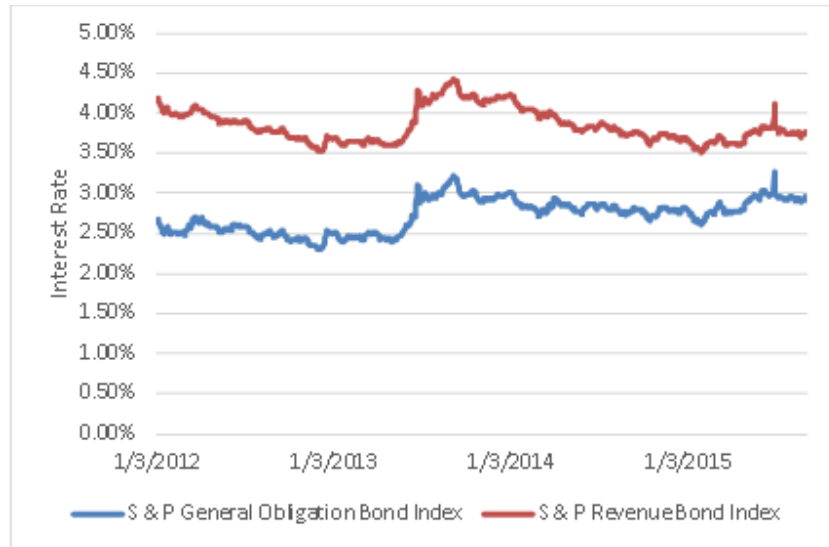
The proposed Bucks Arena would replace the BMO Harris Bradley Center (“Bradley Center”), which is currently the home of the Bucks, the Marquette University Golden Eagles men’s basketball team, and the Milwaukee Admirals of the American Hockey League. The Bradley Center is operated by the Bradley Sports & Entertainment Corporation, which was created by state law. The expectation is that upon opening of the Bucks Arena the Bradley Center would close and then be demolished at the expense of the Milwaukee Bucks.

Certain revenue streams would be generated by the Arena Project and paid to the State, City, and WCD. The WCD would receive surcharges on ticket sales at the proposed Bucks Arena, estimated at \$1.5 million a year. The City would receive 50% of the net parking revenues from the new 1,243-space parking structure. The State would receive an estimated \$500 thousand in annual ticket surcharges on tickets sales at the Bucks Arena to partially offset the annual \$8 million it has pledged for 20 years. The sizes of these revenue streams would vary in proportion to the overall success of the Greater Arena Project.

**Current Municipal  
Bond Market  
Conditions**

The current market conditions for debt issuance are a vital factor in any long-term borrowing. Interest rates have been at historically low levels, as shown in the following figure.

**FIGURE 2-2  
CURRENT S&P MUNICIPAL BOND INDICES**



Source: S&P

Given the credit ratings of the State, City, and WCD, any bond issues should receive market acceptance. Moody's Investor Services rates existing State, City, and WCD debt as follows:

- State's General Obligation Bonds – AA2,
- City's General Obligations Corporate Purposed Bonds – AA3,
- WCD's Senior Lien Dedicated Tax Revenue Bonds – A2, and
- WCD's Junior Dedicated Tax Revenue Bonds – Baa1.

The final structures of the bonds to fund the Arena Project were not available at the time of this financial review. The interest rates on debt obligation presented in this review are reasonable assumptions, but are intended for illustrative purposes. As of the date of this review the structures of the various bond issues have not been finalized, the bonds have not been rated, and the allocation of debt between taxable and tax-exempt bonds has not been determined by tax counsel.

HVS used the interest rates shown in the following figure for the purposes of this analysis.



**FIGURE 2-3  
INTEREST RATE ASSUMPTIONS**

Types of Bonds	Description	Rate
TID 22 Coupon Bond	4 Year level payments	1.80%
TID 84 Coupon Bonds	15 year ramped payments	4.75%
State Appropriation Coupon Bonds	20 year level payments	3.75%
District Zero Coupon Bonds	Mature 2028 to 2045	5.25%
District Taxable Coupon Bonds	30 years level payments	5.25%

While these are reasonable assumptions based on current market conditions, actual interest rates could vary materially from these assumptions at the time of financing. Interest rates could vary depending on the availability of capital, bond agency ratings, Federal Reserve actions, extraordinary events, and many other factors that affect the movements of bond markets.

Using these interest rate assumptions, HVS analyzed the capacity of 1) City TID Bonds, 2) State Appropriation Bonds, and 3) WCD Revenue Bonds. Discussions of each of these proposed debt issuances follow.



## State and County Arena Project Funding Obligations

### Overview

Over the life of the Bonds, the State will provide cash flows for the purpose of servicing debt from General Purpose Revenue (“GPR”) in two separate \$4 million annual payments over 20 years. One \$4 million payment would be a direct allocation, while the other \$4 million would be offset by an equal reduction in State aid to the Milwaukee County. These funds would be paid to the WCD, which would use them to make payments on debt issued to fund Arena Project costs. The strength of this revenue pledge is an important factor in this portion of the financing by removing both a reserve requirement and coverage requirement for debt backed by these funds.

In addition to these future cash flows, the Governor's 2015-17 capital budget recommendations to the Building Commission provide state funding for the continued operations of the Bradley Center. This funding takes the form of \$10 million in bonding for maintenance and repair projects at the Bradley Center over the next two years.

### Appropriation Bonds

The State-backed bonds anticipated in Act 60 are considered appropriation bonds. The State's annual disclosure document relating to its various types of bond issues indicates that the payment of principal and premiums, if any, and interest on the bonds are subject to annual appropriation. That is, payments due in a fiscal year are made only to the extent that sufficient amounts are appropriated by the Legislature. The State would not be legally obligated to appropriate the amounts for payment of debt service on the bonds, and if it does not do so, it would incur no liability to the owners of the bonds. This form of debt is not subject to the State's constitutional debt limit or any limitations relating to the issuance of public debt.

While payment of the bonds would be at the discretion of the Legislature, it has expressed its commitment to make timely appropriations from moneys in the general fund, as needed, to fulfill appropriation obligations. Known as a “moral obligation,” this pledge is widely accepted as a highly secure source of credit in municipal markets. The moral obligation pledge would apply to WCD bonds to be issued to raise \$110 million for the Arena Project backed by future State appropriations of funds.

### Bonds to be Issued by the WCD

The exact timing of payments from the State to the WCD has not yet been established. We assumed that bonds would be issued in the 4th quarter of 2015 and that State funding would be available in time to make the bond payments. Should the payments from the State be received in 2016, then either the issuance of the bond would need to be delayed or capitalized interest would need to be funded until State funds are available. The following figure shows the estimated funding capacity of the \$160 million in total payments from the State. Due to the



fixed nature of the payments from the State and the expectations of funding \$110 million in construction costs we calculated the highest interest rate that could be paid and produce the expected \$110 million of bond proceeds used for construction.

**FIGURE 2-4  
ESTIMATED BONDING CAPACITY  
FROM STATE APPROPRIATED FUNDS (000'S)**

Calendar Year	State Funds	Bond Principal	Rate	Interest	Total Debt Service
2016	\$8,000	\$3,830	3.75%	\$4,169	\$7,999
2017	8,000	3,970	3.75%	4,025	7,995
2018	8,000	4,120	3.75%	3,876	7,996
2019	8,000	4,280	3.75%	3,722	8,002
2020	8,000	4,440	3.75%	3,561	8,001
2021	8,000	4,610	3.75%	3,395	8,005
2022	8,000	4,780	3.75%	3,222	8,002
2023	8,000	4,960	3.75%	3,042	8,002
2024	8,000	5,140	3.75%	2,856	7,996
2025	8,000	5,340	3.75%	2,664	8,004
2026	8,000	5,540	3.75%	2,463	8,003
2027	8,000	5,740	3.75%	2,256	7,996
2028	8,000	5,960	3.75%	2,040	8,000
2029	8,000	6,180	3.75%	1,817	7,997
2030	8,000	6,410	3.75%	1,585	7,995
2031	8,000	6,660	3.75%	1,345	8,005
2032	8,000	6,900	3.75%	1,095	7,995
2033	8,000	7,160	3.75%	836	7,996
2034	8,000	7,430	3.75%	568	7,998
2035	8,000	7,710	3.75%	289	7,999
	\$160,000	\$111,160		\$48,825	\$159,985

Due to the State backing of the revenues we do not anticipate the need for a reserve account. To generate \$110 million in proceeds of debt for the project, the WCD would need to issue \$111.2 million in debt to cover issuance costs. The figure below presents the sources and uses of funds for the WCD bond issue backed by the State.



**FIGURE 2-5**  
**STATE APPROPRIATION BACKED BONDS (000'S)**

Sources and Uses of Funds		
Sources of Funds		
Bond Proceeds		<u>\$111,160</u>
Total Sources of Funds		\$111,160
Uses of Funds		
Issuance Costs	1.00%	\$1,112
Project Funds		<u>110,048</u>
Total Uses of Funds		\$111,160

We conclude, under current market conditions, the State funding sources provide sufficient capacity to issue the planned amount of debt.



## Revenue Bond Financing

### Wisconsin Center District Arena Project Funding Obligations

The WCD is a special purpose governmental unit, a public entity created by the City pursuant to Section 229.42, Wisconsin Statute, which oversees construction and operation of the Wisconsin Center, the City's primary convention center. The WCD's venues also include the Milwaukee Theatre and University of Wisconsin-Milwaukee Panther Arena. The construction of the Wisconsin Center was financed by \$185 million of revenue bonds sold by the WCD. Phase One of the Wisconsin Center was completed in 1998 and Phase Two was completed the next year. In 2001, the WCD issued \$30 million of bonds to renovate the Milwaukee Theatre. The WCD generates tax revenues from four sources:

- A 2.5% basic room tax on temporary lodging stays within the boundaries of Milwaukee County,
- A 7% additional room tax on temporary lodging stays within the boundaries of the City of Milwaukee,
- A 0.5% tax on food and beverage sales within the boundaries of Milwaukee County, and
- A 3% tax on local car rentals within the boundaries of Milwaukee County.

The WCD's taxes are collected, administered, and enforced for the WCD by the State of Wisconsin, Department of Revenue (the "DOR"). Each taxpayer is required to report its liability for WCD taxes to the DOR, and remit the full amount of such taxes, on or before the last day of the month following the end of such taxpayer's reporting period. The DOR is required to remit to the WCD the tax amount collected, less a 2.55% statutory deduction which is retained by the DOR to cover its administrative expenses. The WCD has entered into an agreement with the DOR under which the DOR will remit the net amounts collected, less the statutory deduction, by the 20<sup>th</sup> of each month. The following figure presents a summary of WCD taxes. A brief description of each tax follows.



**FIGURE 2-6  
WCD TAX RATES**

Tax	Taxing Area	Current Rate	Maximum Rate
Basic Room	Milwaukee County	2.50%*	3.00%
Food & Beverage	Milwaukee County	0.50%**	0.50%
Local Car Rental	Milwaukee County	3.00%	4.00%
Additional Room	City of Milwaukee	7.00%	7.00%

\* increased from 2.0% in January 2011  
\*\* increased from 0.25% in July 2010

Source: District

The WCD may only use revenues from the Local Food and Beverage Tax, the Local Car Rental Tax, and the Basic Room Tax (“Restricted Tax Revenues”) for the payment of the WCD’s debt service on its bond obligations. Revenues derived from the Additional Room Tax (“Unrestricted Tax Revenues”) do not have such limitations, but the WCD has pledged revenues derived from the Additional Room Tax as payment for its bonds. Unrestricted Tax Revenues in excess of debt service are used to fund expenses such as the WCD’s operating deficit, capital improvements to the WCD’s venues, and payments to Visit Milwaukee, the primary provider of destination marketing services to the greater Milwaukee area. As such, the financing plan should take into account the ongoing financial obligations of the WCD.

**Basic Room Tax**

The WCD currently imposes the Basic Room Tax at 2.5% on the gross receipts derived from the furnishing lodging by hotelkeepers, motel operators, and other persons furnishing accommodations to the public in the County. For the lodging to qualify as transient, the operator must furnish it to a person for a continuous period of less than one month. Subject to limited exceptions, the tax applies to all such lodging within the WCD’s jurisdiction.

Under the Authorizing Legislation, the WCD may impose the Basic Room Tax, at a rate not to exceed 3.0% (the maximum rate for the Basic Room Tax) by a vote of the WCD Board. The WCD raised the Basic Room Tax Rate from 2.0% to 2.5% on January 1, 2011.

On August 24, 1994, the WCD Board adopted a resolution providing that if the balance in a special debt service reserve fund of the WCD is less than the applicable special debt service reserve fund requirement, the Basic Room Tax rate shall become 3.0% as of the next succeeding January 1, April 1, July 1, or October 1. This increased tax rate cannot be repealed if any bonds issued by the WCD and secured by a special debt service reserve fund are outstanding.



The ability of the WCD to increase the Basic Room Tax to 3.0% from 2.5% under certain conditions is an important consideration in considering the overall quality of WCD debt.

**Additional Room Tax**

The WCD imposes an Additional Room Tax at 7.0% of the gross receipts derived by hotelkeepers, motel operators, and other persons furnishing accommodations available to the public. Subject to certain limited exceptions, the tax is imposed on all such lodging within the City. The Additional Room Tax is not assessed in the remainder of the WCD's jurisdiction. Under the Authorizing Legislation, the WCD has no authority to increase the rate. The WCD has pledged tax revenues derived from the Additional Room Tax as payment for its bonds.

**Restricted and  
Unrestricted Taxes**

The Additional Room Tax is not restricted like the Local Food and Beverage Tax, the Local Car Rental Tax, and the Basic Room Tax to the payment of the WCD's debt services on its bond obligations. Act 60 removes the restriction on using the Local Food and Beverage Tax, the Local Car Rental Tax, and the Basic Room Tax only for debt service and permits the currently restricted funds to pay expenses of operation after the payment of debt service. Bond council will need to determine if the current bond documents permit the release of the restricted funds or if the outstanding bonds will need to be fully repaid before the currently restricted funds can be released after paying debt service for operations expenses. For the purposes of this analysis we assume that the current restrictions on use of certain tax revenues for debt service only will remain in place for the life of the WCD's existing bonds.

**Local Food and  
Beverage Tax**

The WCD currently imposes the Local Food and Beverage Tax ("F&B Tax") at the rate of 0.5% on the gross receipts derived from the sale of food and beverages that are subject to the State sales or use tax. Subject to certain limited exceptions, the tax is imposed on all such sales within the WCD's jurisdiction of the County. The Food and Beverage Tax was modified in October 2009 to apply only to candy, soft drinks, and prepared food, as well as alcoholic beverages consumed on premises.

Under the Authorizing Legislation, the WCD increased the rate of the Local Food and Beverage Tax from 0.25% to 0.5% effective July 1, 2010 with the vote of a majority of the authorized members of the WCD Board. The current rate is the maximum rate allowed under the legislation.

**Local Rental Car Tax**

The WCD imposes the Local Rental Car tax at the rate of 3.0% on the gross receipts derived from the rental, for 30 days or less, of a car from companies engaged in the business of short-term car rental within the WCD's jurisdiction of the County, which includes Milwaukee Airport. The Local Rental Car Tax is not levied on the rental of motor vehicles that are exempt from the State sales tax.

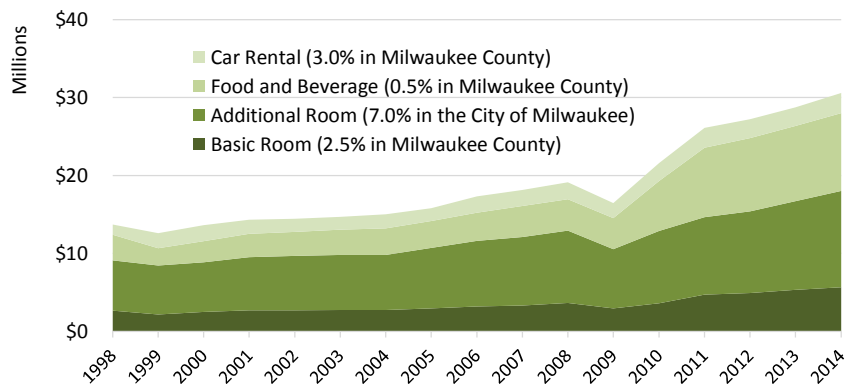


Under the Authorizing Legislation, the maximum rate for the Local Rental Car Tax is 4.0%. The Local Rental Car Tax cannot be raised from 3.0% to 4.0% until the State makes a payment under Section 229.50(7) of the Wisconsin Statutes pursuant to its moral obligation pledge to a special debt service reserve fund of the WCD, such as the existing Junior Debt Service Reserve Fund. Under the Authorizing Legislation, if the State makes such a payment, a majority of the WCD's authorized Board of Directors may vote to increase the rate of the Local Rental Car Tax to 4.0%. On August 24, 1995, a majority of the WCD's Board voted that if the State makes such a payment, the rate of the Local Rental Car Tax would increase to 4.0%. The wording of the Authorizing Legislation will require that the WCD's Board re-adopt the increase following a payment under Section 229.50(7) of the Wisconsin Statutes.

**Total Historical Tax Collections**

The following figure summarizes historical changes in Gross Tax Collections.

**FIGURE 2-7  
HISTORICAL GROSS WCD TAX COLLECTIONS**



Source: WCD

WCD tax revenues grew consistently until the economic crisis of 2009 and the Great Recession. As the economy began to recover, so did revenues and the WCD increased the Basic Room Tax rate in 2011 and the Food and Beverage Tax in 2010..

**Historical Growth of Tax Collections**

The following figure summarizes historical changes in gross tax collections. Historical revenues were adjusted to reflect current rates for the Basic Room Tax and Food & Beverage Tax.



**FIGURE 2-8  
HISTORIC CHANGES – GROSS AND NET TAX COLLECTIONS (000'S)**

Year	Gross Tax Collections							Gross WCD Tax Collections		
	Basic Room *		Additional Room		Food & Beverage**		Car Rental			
1998	\$3,295		\$6,448		\$6,595		\$1,304		\$17,643	
1999	2,718	-18%	6,267	-3%	4,470	-32%	1,889	45%	15,344	-13%
2000	3,075	15%	6,344	1%	5,373	22%	2,026	7%	16,818	10%
2001	3,366	7%	6,819	7%	6,038	11%	1,784	-12%	18,008	7%
2002	3,353	0%	6,958	2%	6,190	3%	1,699	-5%	18,200	1%
2003	3,391	1%	7,086	2%	6,348	5%	1,639	-3%	18,465	1%
2004	3,398	0%	7,111	0%	6,968	4%	1,824	11%	19,301	5%
2005	3,699	10%	7,745	9%	6,311	1%	1,675	-8%	19,430	1%
2006	3,969	7%	8,411	9%	7,251	6%	2,094	25%	21,725	12%
2007	4,155	5%	8,770	4%	7,949	10%	2,057	-2%	22,931	6%
2008	4,510	9%	9,286	6%	8,100	2%	2,181	6%	24,077	5%
2009	3,688	-18%	7,573	-18%	7,983	-1%	1,931	-11%	21,174	-12%
2010	4,469	21%	9,306	23%	8,437	10%	2,316	20%	24,529	16%
2011	4,699	5%	9,938	7%	8,901	1%	2,540	10%	26,078	6%
2012	4,908	4%	10,482	5%	9,406	6%	2,414	-5%	27,211	4%
2013	5,308	8%	11,396	9%	9,624	2%	2,389	-1%	28,717	6%
2014	5,644	6%	12,345	8%	10,004	4%	2,595	9%	30,588	7%
Average Annual Change										
Last 15 Years		5.3%		5.0%		5.7%		2.7%		4.9%
Last 10 years		5.7%		6.1%		4.0%		4.2%		5.0%

\* Basic Room Tax was increased in 2011 to 2.5% in the County  
\*\* Food and Beverage Tax was increased in 2010 to .5% in the County

Source: WCD

**Ticket Surcharge**

Act 60 also specifies that the WCD Board is to impose a \$2 surcharge on each ticket that is sold for an event at Bucks Arena. Estimated revenues from the surcharge would be \$2 million annually after the arena construction is complete and events begin. The WCD Board is required to remit 25% of the surcharge revenues to the Department of Administration (“DOA”) for deposit in the general fund and the WCD would retain the remainder of the surcharge revenues, which the Board could use to offset the WCD’s cost of arena construction. It is estimated that GPR revenues to the State would increase by approximately \$500,000 annually to reflect the deposit of these funds to the general fund, which would offset a portion of the State’s cost for the arena facilities.

We assume that surcharge revenues would be pledged to repay debt. Certain private use considerations arise with respect to the use of Ticket Surcharge



Revenues. Bond council will need to determine the tax status of debt repaid with Surcharge Revenues. For purposes of this review we assume that all of the ticket surcharge received by the WCD would be expended on repayment of taxable bonds.

**Tax Projections**

Adjusted historical cash flows provide a basis for projection of future revenue growth. We relied on the average growth rate of adjusted revenues to project the future tax collections for the next 10 years. After 10 years, we assume tax revenues will grow at an inflationary rate of 2.5%. For the purposes of this analysis we allow for the possibility that future growth could be less than historical growth. The following figure shows our assumptions of tax revenue growth.

**FIGURE 2-9  
HISTORICAL AND PROJECTED FUTURE TAX REVENUE GROWTH RATES**

	Historical Growth Rate		Projected Growth Rate	
	Last 10 Year	Last 15 Year	First 10 Years	After 10 Years
Basic Room Tax	5.73%	5.34%	4.00%	2.50%
Additional Room Tax	6.14%	4.96%	4.00%	2.50%
Food & Beverage	4.02%	5.65%	3.50%	2.50%
Car Rental	4.19%	2.68%	2.50%	2.50%

**Projected Collections**

The WCD would also receive revenues from the previously discussed Ticket Surcharge. The figure below shows our estimates of WCD Taxes from 2015 to 2045 based on the assumptions described herein.



**FIGURE 2-10**  
**PROJECTED GROSS WCD COLLECTIONS ( 000'S)**

Year	Basic Room Tax	Additional Room Tax	Food & Beverage Tax	Car Rental Tax	Ticket Surcharge	Total Gross Tax Collections	% Change
2015	\$5,869	\$12,838	\$10,354	\$2,660	0	\$31,722	
2016	6,104	13,352	10,717	2,727	0	32,900	3.7%
2017	6,348	13,886	11,092	2,795	0	34,121	3.7%
2018	6,602	14,442	11,480	2,865	\$1,500	36,888	8.1%
2019	6,866	15,019	11,882	2,936	1,500	38,204	3.6%
2020	7,141	15,620	12,298	3,010	1,500	39,568	3.6%
2021	7,427	16,245	12,728	3,085	1,500	40,984	3.6%
2022	7,724	16,895	13,173	3,162	1,500	42,454	3.6%
2023	8,033	17,570	13,634	3,241	1,500	43,979	3.6%
2024	8,354	18,273	14,112	3,322	1,500	45,561	3.6%
2025	8,563	18,730	14,464	3,405	1,500	46,663	2.4%
2026	8,777	19,198	14,826	3,491	1,500	47,792	2.4%
2027	8,996	19,678	15,197	3,578	1,500	48,949	2.4%
2028	9,221	20,170	15,577	3,667	1,500	50,135	2.4%
2029	9,452	20,674	15,966	3,759	1,500	51,351	2.4%
2030	9,688	21,191	16,365	3,853	1,500	52,597	2.4%
2031	9,930	21,721	16,774	3,949	1,500	53,875	2.4%
2032	10,178	22,264	17,194	4,048	1,500	55,184	2.4%
2033	10,433	22,821	17,624	4,149	1,500	56,526	2.4%
2034	10,694	23,391	18,064	4,253	1,500	57,902	2.4%
2035	10,961	23,976	18,516	4,359	1,500	59,312	2.4%
2036	11,235	24,575	18,979	4,468	1,500	60,757	2.4%
2037	11,516	25,190	19,453	4,580	1,500	62,239	2.4%
2038	11,804	25,820	19,939	4,694	1,500	63,757	2.4%
2039	12,099	26,465	20,438	4,812	1,500	65,314	2.4%
2040	12,401	27,127	20,949	4,932	1,500	66,909	2.4%
2041	12,711	27,805	21,473	5,055	1,500	68,544	2.4%
2042	13,029	28,500	22,009	5,182	1,500	70,220	2.4%
2043	13,355	29,212	22,560	5,311	1,500	71,938	2.4%
2044	13,689	29,943	23,124	5,444	1,500	73,699	2.4%
2045	14,031	30,691	23,702	5,580	1,500	75,504	2.4%

Source: HVS

WCD collections are projected to grow at over 3.5% from 2015 to 2024 due to growth in taxable revenues. A new source of collections is introduced in 2018 when the Bucks Arena opens, the surcharge on ticket sales. This would cause a one-time spike in revenue growth of 8.1% in 2018.



**Collections Costs**

The DOR collects, administers, and enforces the WCD Taxes. Under the WCD’s Authorizing Legislation, the DOR collects the net amounts on behalf of the WCD, less an Administrative Fee of 2.55%. The State returns to the WCD any funds not needed for administrative expenses. The figure below summarizes the estimated percentage of the Administrative Fee returned by the State and the net effective rate.

**FIGURE 2-11  
ADJUSTED COST OF COLLECTIONS**

	2014	2013
Gross Tax Collection Charges (2.55%)	\$779,987	\$732,283
State Collection Refund	\$646,726	\$612,950
Net Cost of Collection	\$133,261	\$119,333
Net Tax Collection Cost	0.44%	0.42%
Percentage Refunded	83%	84%

Source: WCD

The figure below summarizes the HVS projections of WCD collections from 2015 to 2045 net of adjusted administrative fees.



**FIGURE 2-12**  
**ESTIMATED NET WCD COLLECTIONS (000'S)**

Year	Total Gross Collections	Net Administrative Fees*	% of Gross	Net WCD Collections	% Change
2015	\$31,722	\$159	0.50%	\$31,563	
2016	32,900	165	0.50%	32,736	3.7%
2017	34,121	171	0.50%	33,950	3.7%
2018	36,888	177	0.48%	36,711	8.1%
2019	38,204	184	0.48%	38,020	3.6%
2020	39,568	190	0.48%	39,378	3.6%
2021	40,984	197	0.48%	40,787	3.6%
2022	42,454	205	0.48%	42,249	3.6%
2023	43,979	212	0.48%	43,767	3.6%
2024	45,561	220	0.48%	45,341	3.6%
2025	46,663	226	0.48%	46,437	2.4%
2026	47,792	231	0.48%	47,561	2.4%
2027	48,949	237	0.48%	48,712	2.4%
2028	50,135	243	0.49%	49,892	2.4%
2029	51,351	249	0.49%	51,102	2.4%
2030	52,597	255	0.49%	52,342	2.4%
2031	53,875	262	0.49%	53,613	2.4%
2032	55,184	268	0.49%	54,916	2.4%
2033	56,526	275	0.49%	56,251	2.4%
2034	57,902	282	0.49%	57,620	2.4%
2035	59,312	289	0.49%	59,023	2.4%
2036	60,757	296	0.49%	60,461	2.4%
2037	62,239	304	0.49%	61,935	2.4%
2038	63,757	311	0.49%	63,446	2.4%
2039	65,314	319	0.49%	64,995	2.4%
2040	66,909	327	0.49%	66,582	2.4%
2041	68,544	335	0.49%	68,209	2.4%
2042	70,220	344	0.49%	69,876	2.4%
2043	71,938	352	0.49%	71,586	2.4%
2044	73,699	361	0.49%	73,338	2.4%
2045	75,504	370	0.49%	75,134	2.4%

\* No Administrative Fee on Ticket Surcharge

Source: HVS

**Debt Coverage Ratios  
on Existing Debt**

The WCD currently has outstanding bonds issued to fund past projects as follows:

- 1) Senior Dedicated Tax Revenue Bonds, Series 1996A (“Series 1996A”)
- 2) Senior Dedicated Tax Revenue Refunding Bonds, Series 2003A (“Series 2003A”)



- 3) Junior Dedicated Tax Revenue Refunding Bonds, Series 1999 (“Series 1999”).
- 4) Junior Dedicated Tax Revenue Refunding Bonds, Series 2013A

The following figure below presents the projections of the WCD’s total tax revenue available for debt service. The figure below shows the debt service coverage ratios associated with each year’s total Available Tax Revenues and debt service payments.

**FIGURE 2-13  
OUTSTANDING WCD DEBT SERVICE (000’S)**

	Projected Revenues	Senior Bonds Debt Service	Junior Bonds Debt Service	Theatre Bonds Debt Service	Total Debt Service	Coverage
2015	\$32,511	\$7,400	\$9,649	\$1,798	\$18,847	1.72
2016	33,717	7,400	10,386	1,795	19,581	1.72
2017	34,969	7,400	11,165	1,797	20,362	1.72
2018	37,813	7,400	11,967	1,793	21,159	1.79
2019	39,161	7,400	12,812	1,793	22,005	1.78
2020	40,559	7,400	13,695	1,798	22,894	1.77
2021	42,011	7,400	14,612	1,798	23,810	1.76
2022	43,517	7,400	15,047	1,796	24,243	1.80
2023	45,079	7,400	15,040	1,795	24,235	1.86
2024	46,701	7,400	15,044	1,795	24,239	1.93
2025	47,830	7,400	15,040	1,792	24,233	1.97
2026	48,987	7,400	15,043	1,795	24,238	2.02
2027	50,173	7,400	15,040	1,796	24,236	2.07
2028	51,389	7,305	0	4,045	11,350	4.53
2029	52,635	7,310	0	4,042	11,352	4.64
2030	53,912	7,305	0	4,046	11,351	4.75
2031	55,221	7,310	0	4,041	11,351	4.86
2032	56,563	7,310	0	4,043	11,353	4.98

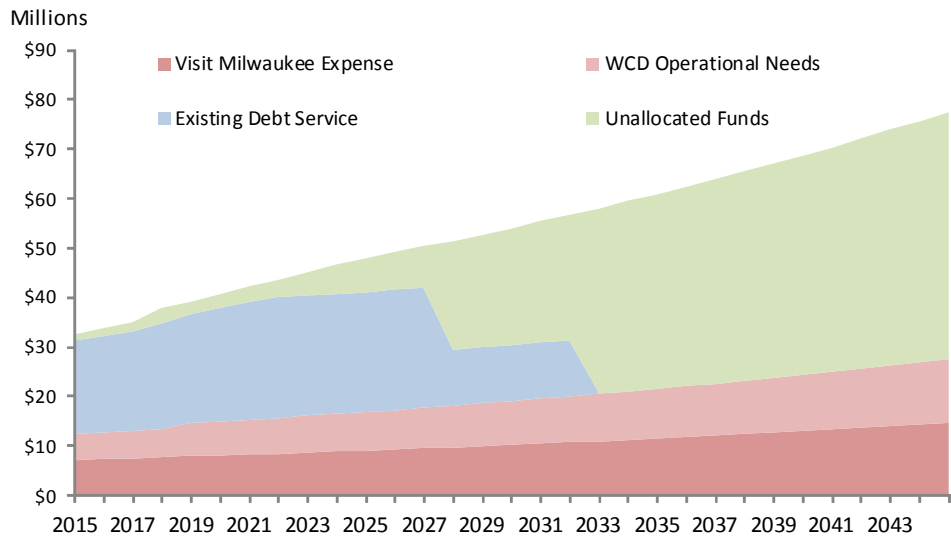
Source: WCD

**Tax-Exempt Zero  
Coupon Bonds**

The Arena Project funding plan calls for the WCD to generate \$93 million in bond proceeds for the Bucks Arena Project. Considering its current operational needs, the WCD does not have sufficient annual cash flow to support additional debt service until 2028 when debt service declines, and later in 2033 when the debt is ultimately retired. See the figure below.



**FIGURE 2-14**  
**AVAILABLE UNALLOCATED TAX REVENUE (000'S)**



The limited availability of unallocated funds, without reduction in expenditures, does not provide sufficient resources for additional debt until 2028. Consequently, tax-exempt zero coupon bonds would provide a likely debt instrument for funding the majority of the WCD's \$93 million contribution to the Arena Project. Zero coupon bonds would not repay any interest or principle within the first ten years of the bonds. Act 60 allows WCD tax collections to continue indefinitely as a source of Arena Project funding.

The figure below shows the yields or interest costs that would be necessary to generate a total of approximately \$82 million in bond proceeds.



**FIGURE 2-15**  
**WCD TAX EXEMPT ARENA FUNDING (000'S)**

Calendar Year	Proposed Annual New Debt Service	Zero Coupon Yield	Zero Coupon Price	Bond Proceeds by Maturity
2015				
2016		4.00%	0.962	\$0
2017		4.00%	0.925	-
2018	-	4.00%	0.889	-
2019	-	4.00%	0.855	-
2020	-	4.00%	0.822	-
2021	-	4.00%	0.790	-
2022	-	4.00%	0.760	-
2023	-	4.00%	0.731	-
2024	-	4.00%	0.703	-
2025	-	4.00%	0.676	-
2026	-	4.00%	0.650	-
2027	-	4.00%	0.625	-
2028	5,500	5.00%	0.530	2,917
2029	5,500	5.00%	0.505	2,778
2030	5,500	5.00%	0.481	2,646
2031	5,500	5.00%	0.458	2,520
2032	5,500	5.00%	0.436	2,400
2033	16,480	5.00%	0.416	6,848
2034	16,480	5.00%	0.396	6,522
2035	16,480	5.00%	0.377	6,211
2036	16,480	5.25%	0.341	5,627
2037	16,480	5.25%	0.324	5,347
2038	16,480	5.25%	0.308	5,080
2039	16,480	5.25%	0.293	4,826
2040	16,480	5.25%	0.278	4,586
2041	16,480	5.25%	0.264	4,357
2042	16,480	5.25%	0.251	4,140
2043	16,480	5.25%	0.239	3,933
2044	16,480	5.25%	0.227	3,737
2045	16,480	5.25%	0.215	3,551
	\$241,740			\$78,023

In addition to raising the funds required for the Bucks Arena project, WCD bonds must also raise sufficient funds to cover the issuance costs, required reserves, and capitalized interest.



**Available Restricted  
Tax Revenues**

The WCD currently reports a \$7 million balance of excess Restricted Tax Revenue funds. These revenues have accumulated because Restricted Tax Revenues have exceeded debt payments on existing debt. These funds cannot be used for purposes other than the retirement of debt. For the purposes of this analysis, we assume that the fund balance of accumulated Restricted Tax Revenues could be used to fund \$7.0 million of a \$7.8 million debt service reserve account. Bond Council will need to determine whether accumulated restricted revenues can be used to fund a debt service reserve account.

Under the assumptions used herein, tax-exempt zero coupon bonds could generate in excess of \$76 million in project funds as shown in the figure below.

**FIGURE 2-16  
TAX EXEMPT ARENA BONDS SOURCES AND USES (000'S)**

Sources of Funds		
Bond Proceeds		\$78,023
Excess Restricted Funds		<u>7,000</u>
Total Sources of Funds		\$85,023
Uses of Funds		
Issuance Cost	1.50%	\$1,170
Reserve Account	10.00%	7,802
Project Funding		<u>76,050</u>
Total Uses of Funds		\$85,023

**Taxable Bonds**

The remainder of the proceeds could be generated from bonds repaid with the WCD's share of the Ticket Surcharge revenues. Since Ticket Surcharge revenues would be generated by private use of the Bucks Arena, it is unlikely that these revenues could be used for tax-exempt municipal bonds. Consequently, we modeled a separate taxable bond issue based on the assumption that the WCD's share of Surcharge Revenues would be \$1.5 million per year for the life of the bonds.

The following figures shows the taxable coupon bonds that would be issued by the WCD to fund almost \$17.0 million in project costs. While the intended source of repayment would be Ticket Surcharge revenues, all legally available WCD revenues would be pledged for repayment of debt. This gross revenue pledge would allow the use of all available Ticket Surcharge revenues for debt service.



**FIGURE 2-17**  
**WCD TAXABLE BONDS (000'S)**

Calendar Year	Principal	Coupon Rate	Interest	Total Bond Payments	Capitalized Interest	Net Bond Payments
2015						
2016			\$1,142	\$1,142	-\$1,142	\$0
2017			1,142	1,142	-1,142	0
2018	\$358	5.25%	1,142	1,500		1,500
2019	377	5.25%	1,123	1,500		1,500
2020	397	5.25%	1,103	1,500		1,500
2021	417	5.25%	1,083	1,500		1,500
2022	439	5.25%	1,061	1,500		1,500
2023	462	5.25%	1,038	1,500		1,500
2024	487	5.25%	1,013	1,500		1,500
2025	512	5.25%	988	1,500		1,500
2026	539	5.25%	961	1,500		1,500
2027	567	5.25%	933	1,500		1,500
2028	597	5.25%	903	1,500		1,500
2029	629	5.25%	871	1,500		1,500
2030	662	5.25%	838	1,500		1,500
2031	696	5.25%	804	1,500		1,500
2032	733	5.25%	767	1,500		1,500
2033	771	5.25%	729	1,500		1,500
2034	812	5.25%	688	1,500		1,500
2035	854	5.25%	646	1,500		1,500
2036	899	5.25%	601	1,500		1,500
2037	946	5.25%	554	1,500		1,500
2038	996	5.25%	504	1,500		1,500
2039	1,048	5.25%	452	1,500		1,500
2040	1,103	5.25%	397	1,500		1,500
2041	1,161	5.25%	339	1,500		1,500
2042	1,222	5.25%	278	1,500		1,500
2043	1,287	5.25%	213	1,500		1,500
2044	1,354	5.25%	146	1,500		1,500
2045	1,425	5.25%	75	1,500		1,500
	\$21,753		\$22,531	\$44,284	-\$2,284	\$42,000

The proposed sources and uses for the taxable bonds to be issued by the WCD are shown in the following figure.





**FIGURE 2-18**  
**TAXABLE BONDS SOURCES AND USES (000'S)**

Sources of Funds		
Bond Proceeds		\$21,753
Total Sources of Funds		\$21,753
Uses of Funds		
Issuance Cost	1.50%	\$326
Reserve Account	10.00%	2,175
Capitalized Interest		2,284
Project Funding		16,967
Total Uses of Funds		\$21,753

The total of \$106 million in available funding from taxable and tax-exempt revenue bonds could provide a total of \$93 million in project funds.

**Affect New Debt on  
WCD Operations**

Since tax and facility surcharge revenues would be pledged to the repayment of existing and future WCD debt, the availability of operating funds would depend on the amounts of Unrestricted Taxes available after the payment of debt service or “debt service coverage.” The financing plan can only be considered feasible if one can reasonably assume that such operating funds will be available.

HVS projected the operating needs of the WCD with respect to: 1) net annual operating needs, 2) capital replacement expenditures, and 3) funding Visit Milwaukee. Visit Milwaukee is a non-profit organization contracted with the WCD to provide destination marketing services to the greater Milwaukee area. As is typical of most destination marketing organizations in the US, Visit Milwaukee is primarily funded with lodging tax revenue.

**WCD Operational  
Expenses**

HVS based the projections for the WCD’s future demand and financial operations on its previously completed study of the WCD, which investigated the feasibility of an expansion of the Wisconsin Center. In that study, HVS projected financial operations for both the expansion of the Wisconsin Center and a no-expansion scenario. For the purpose of this analysis, we updated the analysis with current information on historical operations and assumed that an expansion of the Wisconsin Center does not take place during the projection period. In this no-expansion scenario, HVS projected that the WCD would experience declining demand for conventions and trade show, primarily due to increased competition from other convention centers throughout the United States.<sup>1</sup>

The following figure presents projections for uses of Unrestricted Tax Revenue.

<sup>1</sup> The HVS analysis of WCD operational needs is available upon request.



**FIGURE 2-19**  
**WCD USES OF UNRESTRICTED TAX REVENUE (000'S)**

Year	WCD Operations	Capital Improvements	Visit Milwaukee	Total
2015	\$1,365	\$3,822	\$7,058	\$12,245
2016	1,425	3,929	7,227	12,581
2017	1,502	3,934	7,400	12,836
2018	1,787	4,033	7,578	13,398
2019	2,589	4,134	7,760	14,483
2020	2,657	4,237	7,946	14,841
2021	2,724	4,343	8,137	15,205
2022	2,790	4,452	8,333	15,575
2023	2,862	4,563	8,534	15,959
2024	2,933	4,677	8,740	16,350
2025	3,006	4,794	8,951	16,751
2026	3,081	4,914	9,167	17,163
2027	3,159	5,037	9,389	17,584
2028	3,237	5,163	9,616	18,016
2029	3,318	5,292	9,849	18,459
2030	3,401	5,424	10,088	18,913
2031	3,486	5,560	10,333	19,379
2032	3,574	5,699	10,583	19,856

The following figure shows that sufficient amounts of tax revenues would be available to pay debt service.

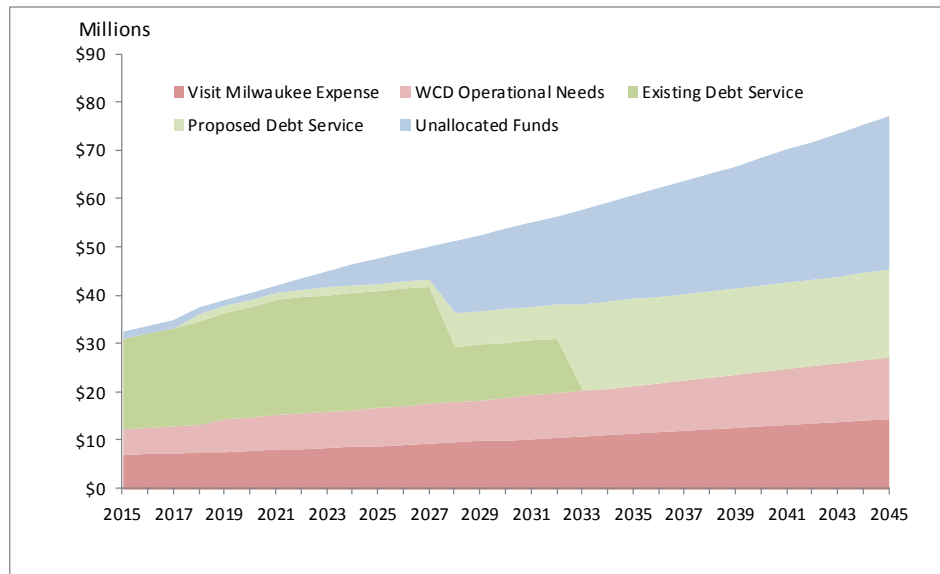
**FIGURE 2-20**  
**PROJECTED WCD CASH FLOW AFTER COMBINED DEBT SERVICE (000'S)**

Calendar Year	Projected Net Tax Collections	Existing Debt Service	Proposed New Debt Service	Combined Debt Service	Unallocated Funds after Debt Service	Coverage Combined Debt Service
2015	\$32,511	\$18,847		\$18,847	\$13,664	1.72
2016	\$33,717	19,581		19,581	14,136	1.72
2017	\$34,969	20,362		20,362	14,607	1.72
2018	\$37,813	21,159	\$1,500	22,659	15,153	1.67
2019	\$39,161	22,005	1,500	23,505	15,656	1.67
2020	\$40,559	22,894	1,500	24,394	16,166	1.66
2021	\$42,011	23,810	1,500	25,310	16,701	1.66
2022	\$43,517	24,243	1,500	25,743	17,774	1.69
2023	\$45,079	24,235	1,500	25,735	19,344	1.75
2024	\$46,701	24,239	1,500	25,739	20,962	1.81
2025	\$47,830	24,233	1,500	25,733	22,097	1.86
2026	\$48,987	24,238	1,500	25,738	23,249	1.90
2027	\$50,173	24,236	1,500	25,736	24,437	1.95
2028	\$51,389	11,350	7,000	18,350	33,039	2.80
2029	\$52,635	11,352	7,000	18,352	34,283	2.87
2030	\$53,912	11,351	7,000	18,351	35,562	2.94
2031	\$55,221	11,351	7,000	18,351	36,871	3.01
2032	\$56,563	11,353	7,000	18,353	38,211	3.08
2033	\$57,939	-	17,980	17,980	39,959	3.22
2034	\$59,348	-	17,980	17,980	41,368	3.30
2035	\$60,794	-	17,980	17,980	42,814	3.38
2036	\$62,275	-	17,980	17,980	44,295	3.46
2037	\$63,793	-	17,980	17,980	45,813	3.55
2038	\$65,349	-	17,980	17,980	47,369	3.63
2039	\$66,944	-	17,980	17,980	48,964	3.72
2040	\$68,579	-	17,980	17,980	50,599	3.81
2041	\$70,255	-	17,980	17,980	52,275	3.91
2042	\$71,973	-	17,980	17,980	53,993	4.00
2043	\$73,734	-	17,980	17,980	55,754	4.10
2044	\$75,538	-	17,980	17,980	57,558	4.20
2045	\$77,388	-	17,980	17,980	59,408	4.30

The WCD would have future unallocated funds as shown in the following figure. We assume a portion of those funds may need to be retained in a Restricted Revenue Account for the payment of future debt service. Act 60 removes the requirement that Restricted Tax Revenues can only be used for debt service. Bond Council will need to determine whether existing bond documents require that certain taxes remain restricted. The figure below shows the uses of annual WCD tax revenues and the amounts of unallocated funds that would be available after all projected obligations are met.



**FIGURE 2-21  
PROJECTED WCD UNALLOCATED FUNDS  
AFTER PROPOSED DEBT SERVICE**



The WCD's existing debt service requirements decline significantly in 2028 and end completely in 2032. HVS concludes that it is reasonable to expect that Unrestricted Tax Revenues, would be sufficient to support all known operation needs until all funds become unrestricted as permitted by Act 60.



**Overview of City  
Obligations to Arena  
Project**

**City of Milwaukee Arena Project Funding Obligations**

The City’s \$47 million contribution to the Arena Project would come from two Tax Incremental Districts (“TIDs”) which would provide funding for the construction of the proposed public plaza and a parking structure.

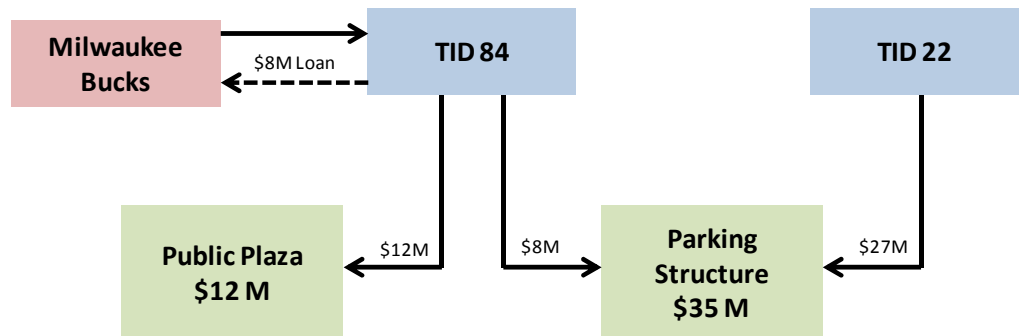
TIDs are authorized by state statute and subject to a rigorous approval process. This financing mechanism establishes a baseline of property tax revenues and captures revenues generated by projects within the TID to the extent that they exceed a baseline amount. The TID may issue bonds that are repaid with incremental revenues. State statute allows 27 years to pay off all TID costs, but the average payback period is approximately 15 years.

The TID captures incremental property taxes of the City of Milwaukee, Milwaukee County, Milwaukee Public Schools, the Milwaukee Technical School System, and the Milwaukee Metropolitan Sewerage District (“MMSD”). Once project costs are repaid, the TID is terminated and all the taxing jurisdictions receive tax revenue from the full value of the TID (both the base value and the increment).

In principle, participating government entities do not experience a loss of revenue because the incremental revenues would not occur but for the development of TID projects. But some level of development could occur within the TID at some future date in the absence of incentives. The analysis of TID impact typically does not include consideration of hypothetical developments that could occur without incentives.

The figure below illustrates the proposed sources and uses of TID funding for the Bucks Arena Project.

**FIGURE 2-22  
TID FUNDING PLAN**



The TIDs would: 1) provide \$35 million for a new parking structure and, 2) \$12 million for a new Public Plaza outside of the proposed Bucks Arena. They would be funded as follows:

- The \$35 million parking structure would be financed by \$8 million from TID 84 and \$27 million from TID 22.
- The Bucks would purchase the \$8 million in TID 84 debt for the parking structure, which would be repaid at an interest cost of 4.5% after the bonds to fund \$12 million for the Public Plaza has been repaid by TID 84.
- The Public Plaza would be financed by a \$12 million contribution to construction cost from TID 84.

## TID 22

TID 22 was created in 1993. Funds from TID 22 originally contributed to redevelopment of the Soo-Line railroad right-of-way and riverfront land adjacent to North Commerce Street and North Riverboat Road. The definition of the TID 22 project has undergone a number of revisions including, authorizing additional funding for public improvements (namely, the riverwalk), expanding the district boundary by 30 acres, and permitting donations to other underperforming TIDs.

The 4<sup>th</sup> amendment to TID 22 would allow \$27 million to be contributed to a new parking structure within one mile of the boundary of TID 22. The proposed parking structure would fit within this boundary. The \$27 million contribution would be raised in two methods. \$14 million would be raised by a contingent borrowing to be repaid by the debt service fund with excess TID increment. The remaining \$13 million would be funded through a 4 year general obligation note at an estimated interest rate of 1.8%. TID 22 must terminate by December 22, 2020 and must complete the final expenditure by December 22, 2015.

The following figure presents the TID 22 sources and uses of funds for the parking structure.



**FIGURE 2-23**  
**TID 22 PARKING STRUCTURE FUNDING (000'S)**

<b>Sources of Funds</b>	
Available Cash	\$14,000
4 Year Bond Issue	13,000
<b>Total Sources of Funds</b>	<b>\$27,000</b>
<b>Uses of Funds</b>	
Parking Structure Funding	27,000
<b>Total Uses of Funds</b>	<b>\$27,000</b>

Source: City of Milwaukee

HVS reviewed feasibility studies and analysis of the TID 22 financing plan<sup>2</sup>. The preliminary sources and uses did not include issuance cost, however sufficient excess funds should exist to cover those expected costs due to surplus currently estimated at \$800 thousand in 2020. TID 22 has the following features which make it feasible.

- As an existing increment it is likely to provide a reliable source of future cash flow and projections of cash flows can be based on historical revenues.
- Cash on hand of \$14 million provides over half of the proposed funding.
- Repayment of the 4-year bond issue of \$13 million is assured because surplus cash flow already exists.
- A general obligation pledge from the City of Milwaukee will reduce interest cost and remove reserve requirement. The 4-year note may be taxable.

It is reasonable to expect that TID 22 financing plan will generate the anticipated proceeds for the parking structure.

**TID 84**

The proposed TID 84 is bound by North 6th Street on the west, West McKinley Avenue and West Vilet Street on the north, North Old World 3rd Street and the Milwaukee River on the east, and West State Street and West Kilbourne Avenue on the south. The proposed TID consists of 70 properties totaling 44.82 acres. All parcels associated with the Greater Arena Project are located within the proposed TID 84 boundary.

<sup>2</sup>Comptroller Review - TID 22 – Beerline“B” – Office of the Comptroller – August 24th 2015.

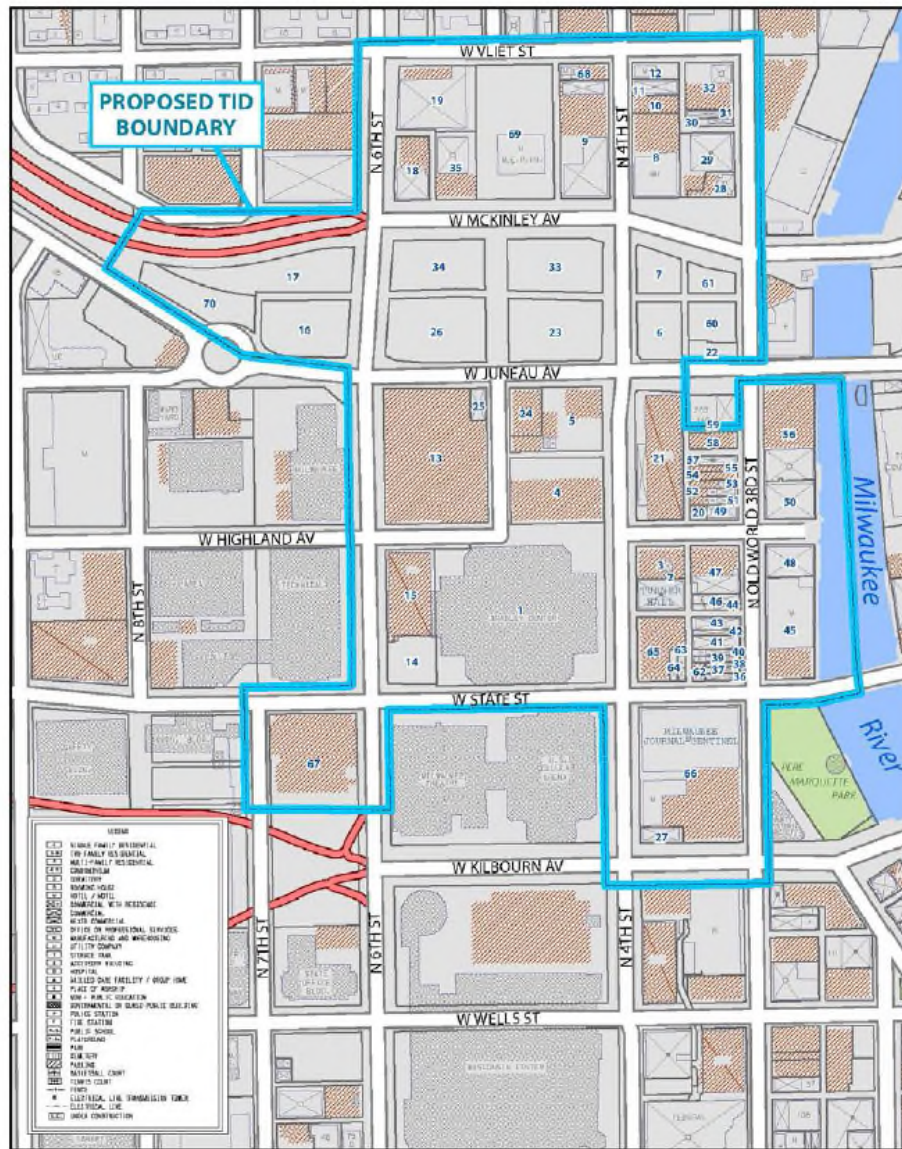
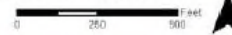




### TID 84 BOUNDARIES

#### TID 84: WEST MCKINLEY AND WEST JUNEAU MAP 1: BOUNDARY AND EXISTING LAND USE

Prepared by the Department of City Development Planning Division, 12 June 2016.  
Source: City of Milwaukee Information & Technology Management Division



Source: SB Friedman Feasibility Report

The figure below shows the proposed projects that would occur in Phase One of development and within TID 84.





**FIGURE 2-24**  
**PHASE ONE DEVELOPMENT PROGRAM**

Component	Units	Location
Structure Parking	1243 Parking Spaces	Block 7
Bucks Practice Facility	50,000 square feet	Block 8
Medical Office	30,000 square feet	Block 8
Destination Retail	60,000 square feet	Block 4
Mid-Range Apartments	98 units	Block 7
Convenience Retail	10,000 square feet	Block 7
General Office	20,000 Square feet	Block 7
Phase 1-A		
Mid-Range Apartment	48 units	Block 8

Source: SB Friedman TID 84 Feasibility Study

The Economic Feasibility Report by SB Friedman Development Advisors made several assumptions concerning the proposed issuance of debt.

- The bond issue for \$12 million in proceeds would be taxable.
- The bonds would be issued late 2015.
- Interest rate on the bonds would average 4.75%.
- Costs of issuance would be .89% of proceeds.
- The bonds would have 10% of proceeds allocated to capitalized interest.
- After capitalized interest, debt would be repaid over 15 years of level principal and interest payments.
- Excess funds after bond payments would be placed in a surplus fund and invested in the Local Government Investment Pool earning 4.0% annual interest.
- The bonds may be issued as a General Obligation bond removing the requirement for a reserve account,
- Excess money in the surplus funds would be used to pay down the Bucks Loan.
- The final TID legal tax collection would be in Calendar Year 2043 but would likely end by 2040 when the Bucks Loan is projected to be fully repaid.



The following figure summarizes the sources and uses of TID 84 funds.

**FIGURE 2-25  
PROPOSED TID 84 BOND ISSUE (000'S)**

Sources of Funds		
Bond Proceeds		\$13,467
Bucks Loan		8,000
Total Sources of Funds		\$21,467
Uses of Funds		
Bond Expenses	0.89%	\$120
Bond Capitalized Interest	10.00%	1,347
Parking Structure		8,000
Public Plaza Funding		12,000
Total Uses of Funds		\$21,467

Source: City of Milwaukee

HVS reviewed documents related to the approvals of the TID 84<sup>3</sup> and we offer the following observations on key elements of the financing plan.

- Cash flow is dependent on the level of development and timing of those developments within the TID and the level of development and timing is uncertain. But, a set of projects has been clearly identified and certain projects, such as the Bucks training facility, seem likely to occur.
- Excess funds after bond payments accumulate and are used to repay a portion of the Bucks Loan after all bonds have been paid. This provides incentive for the Milwaukee Bucks to complete the proposed development since repayment of the loan is contingent on generating sufficient property tax revenue.
- It is reasonable to expect that projected TID 84 revenues remaining after TID 84 debt service will be sufficient to pay off the Buck's \$8 million contribution towards the construction of the parking structure.
- Bonds will be issued to fund capitalized interest until tax collections start. The amount required for capitalized interest is not known at this time and will depend on the timing, structure, and prices of debt issuance.

<sup>3</sup>Comptroller Review - TID 84 West McKinley & West Juneau, Office of the Comptroller, August 24th 2015. and Economic Feasibility Report, Proposed West McKinley and West Juneau Increment District. SB Friedman Development Advisors. June 2015.



- The proposed GO pledge will reduce interest cost and remove debt service reserve requirements.

## **Conclusion**

HVS reviewed or modeled each of the components of the proposed financing plan to determine whether the resources dedicated to the project are sufficient to raise \$250 million in public capital. We conclude that under current and immediately foreseeable market conditions, it is reasonable to expect that the proposed issuance of debt will be successful and sufficient resources are available to repay that debt. Furthermore, after the payment of debt service, the WCD should have sufficient resources to meet anticipated operational and capital costs and to fulfill its commitment to fund Visit Milwaukee. This opinion is subject to all assumptions and limiting conditions described in this report.



### 3. Economic and Fiscal Impacts

HVS identified the incremental spending that would occur in the City of Milwaukee due to the development of the Bucks Arena. HVS only considered spending that would otherwise not occur in the City of Milwaukee if not for the Bucks Arena. For the purpose of this analysis, HVS defined incremental spending as spending that occurs both inside and outside the Bucks Arena and is directly related to the operations of the Milwaukee Bucks professional basketball team. HVS assumes that other events that would be hosted by the Bucks Arena, including concerts, would occur in the local market regardless of the development of the Bucks Arena.

HVS's direct spending estimates only include spending that originates from outside the local market area, defined as the City of Milwaukee, Wisconsin. Spending by attendees who live within the local market area is a transfer of income from one sector of the area's economy to another. Therefore, this analysis does not count spending by local residents as an economic impact.

#### Direct, Indirect, and Induced Spending

Incremental spending that makes an impact on the local economy falls into three categories:

- **Direct spending** includes the new spending of event attendees and visiting team players and staff. For example, an attendee's expenditure on a restaurant meal is direct spending.
- **Indirect spending** follows from the business spending that result from the initial direct spending. For example, an event attendee's direct expenditure on a restaurant meal causes the restaurant to purchase food and other items from suppliers. We consider the portion of the restaurant's purchases that remain within the City of Milwaukee as indirect impacts.
- **Induced spending** represents the change in local consumption due to personal spending by employees whose incomes change from direct and indirect spending. For example, a waiter at a local restaurant may have more personal income as a result of an event attendee dining at the restaurant. The amount of the increased income that the waiter spends in the local economy is an induced impact.

To generate direct spending estimates, HVS applied assumptions about the amounts of spending generated by events. HVS then used the IMPLAN input-output model of the local economy to estimate indirect and induced spending. The sum of direct, indirect, and induced spending estimates make up the total estimated incremental spending impact of the Bucks Arena. Indirect and induced



impacts are sometimes called multiplier effects. The relationship between direct spending and the multiplier effects varies based upon the specific size and characteristics of a local area's economy.

### Sources of Direct Spending

HVS estimates that the Bucks Arena would generate incremental direct spending from three major sources: overnight attendees, daytrip attendees, and visiting team players and staff. Estimation of new spending from each of these sources involves three assumptions: 1) the number of visitors to the market, 2) the geographic location of their spending, and 3) the amounts typically spent by each of the sources.

- **Overnight Attendees** are visitors to Milwaukee who require overnight lodging. Overnight guest spending includes tickets, food and beverage, parking, lodging, retail shopping, and other goods and services purchased while in town. HVS assumes that 90% of overnight guests are from outside the City of Milwaukee and require lodging in Milwaukee. Some overnight guests may stay with friends and family or outside the market.
- **Daytrip Attendees** are visitors to Milwaukee who do not require overnight lodging. Day-trippers typically spend money on tickets, food and beverage, parking, retail shopping, and other goods and services while in town. Based on historical Milwaukee Bucks attendance and market population figures, HVS estimates that 74% of daytrip attendees are from outside the City of Milwaukee.
- **Visiting Team Players and Staff** are visitors to Milwaukee who require overnight lodging. Visiting team player and staff spending includes lodging, food and beverage, retail shopping, and other goods and services while in town. HVS estimates that 100% of the visiting team players and staff are from outside the City of Milwaukee and require lodging in Milwaukee.

For the purpose of this analysis, HVS assumes that 650,000 spectators attend Milwaukee Bucks games in a single season. HVS further assumes that 10% of these total spectators require overnight lodging.

HVS estimates that 40 visiting team players and staff visit Milwaukee for each home game at the Bucks Arena.

The figure below shows the estimated number of visitors from outside the City of Milwaukee that generate visitor spending.



**FIGURE 3-1  
SOURCES OF SPENDING IMPACTS**

Event Type	Overnight Visitor Days	Day Trips	Visiting Players & Staff
Milwaukee Bucks Games	58,500	430,500	1,700

**Visitor Spending Parameters**

In order to estimate average spending by overnight visitors, day trippers, and visiting team players and staff, HVS compiled and evaluated data from several recent surveys which researched spending by individuals and families attending NBA and other professional sporting events in various cities throughout the United States. HVS aggregated this data and adjusted it using the 2015 Corporate Travel Index (“CTI”) survey, which tracks the hotel and dining costs for visitors in the top 100 destinations in the U.S., to more accurately reflect the probable level of spending in Milwaukee. Based on these sources, HVS estimated total spending by overnight attendees, day trippers, and visiting team players and staff outside the arena. HVS added estimates of spending inside the arena, including game tickets, concessions purchases, merchandise purchases, and parking fees. All spending parameters are stated as the daily spending by individual overnight guests and day trippers in 2015 dollars. The following figures present the direct spending estimates for each spending category.



**FIGURE 3-2  
SPENDING ESTIMATES PER VISITOR**

<b>Daily Spending Per Overnight Visitor</b>	<b>Amount in 2015 Dollars</b>	<b>\$138.39</b>	
Lodging Costs	\$49.52	36%	
Food services and drinking places	23.76	17%	
Retail stores - general merchandise	11.53	8%	
Retail stores - gasoline stations	6.08	4%	
Spectator sports companies	45.00	33%	
Parking	2.50	2%	
<b>Total</b>	<b>138.39</b>	<b>100%</b>	
<b>Daily Spending Per Day-trip Visitor</b>			
		<b>\$88.87</b>	
Food services and drinking places	\$23.76	27%	
Retail Stores - General Merchandise	11.53	13%	
Retail Stores - Gasoline Stations	6.08	7%	
Spectator Sports Companies	45.00	51%	
Other personal services	2.50	3%	
<b>Total</b>	<b>88.87</b>	<b>100%</b>	
<b>Daily Spending per Visiting Team Player/Staff</b>			
		<b>\$137.56</b>	
Food services and drinking places	\$50.44	37%	
Lodging Costs	61.89	45%	
Retail Stores - General Merchandise	25.22	18%	
<b>Total</b>	<b>137.56</b>	<b>100%</b>	

Sources: Spending survey, STR, CTI

**Other Team and Facility Revenues**

In addition to spending by game attendees and other visitors to Milwaukee, the Milwaukee Bucks also generate additional revenues in the local market through their team operations. These revenues include advertising and sponsorship sales, premium seating sales, and broadcast media contracts. While some of these revenues may remain in the Milwaukee market, HVS does not include them in this analysis. For the purpose of this report, HVS only considered direct attendee spending related to out of town visitation.

**Gross Direct Spending**

HVS applied the previous sources of spending and spending parameters to estimate gross direct spending for a stabilized year.



**FIGURE 3-3  
GROSS DIRECT SPENDING IN 2015 DOLLARS**

City of Milwaukee				
<b>Direct overnight visitor spending</b>	=	58,500	overnight visitors	x \$138.39 = \$8.1 M
<b>Direct day trip spending</b>	=	430,500	daytrip visitors	x \$88.87 = \$38.3
<b>Direct visiting team spending</b>	=	1,700	visitors	x \$137.56 = \$0.2
<b>Total Gross Direct Spending</b>				= \$46.6 M

**IMPLAN Impact Modeling**

HVS used the IMPLAN input-output model to estimate indirect and induced spending and its impact on employment. IMPLAN is a nationally recognized model developed at the University of Minnesota and commonly used to estimate economic impacts. An input-output model generally describes the commodities and income that normally flow through the various sectors of a given economy. The indirect and induced spending and employment effects represent the estimated changes in the flow of income, goods, and services caused by the estimated direct spending. The IMPLAN model accounts for the specific characteristics of the local economy and estimates the share of indirect and induced spending that it would retain.

The IMPLAN model relies on spending categories defined by the U.S. Census according to the North American Industry Classification System (NAICS). Because the data from the spending surveys did not match the NAICS spending categories, HVS translated the spending categories into the NAICS categories that most closely matched.

**Annual Net Direct Spending**

Some gross direct spending occurs outside the local economy. HVS adjusted gross direct spending to account for income that leaks out of the local economy by estimating retail margins and local purchase percentages. As a result, the realized direct spending (“net direct spending”) is lower than the gross direct spending in the market area.

**Retail Margins**

Spending at retailers creates a smaller economic impact compared to spending in other industries. Retailers add value equal to the margin or price increase of the good above the original price paid to obtain the good. The IMPLAN model is product-based, so HVS used the IMPLAN margin numbers to account for the difference between the wholesale and retail prices of goods sold.

**Local Purchase Percentage**

To accurately measure spending impacts, HVS only counts spending on products and services located within the market area. Most economies, however, cannot accommodate all direct spending demand with local goods and services. For example, an event organizer may need to buy novelty items for attendees, but find that the local market area does not produce these items. This effect occurs for





**Indirect and Induced Spending**

direct, indirect, and induced spending. HVS uses the IMPLAN SAM model values to track the percentage of goods purchased within the market area.

The relationship between direct spending and the multiplier effects can vary based on the specific size and characteristics of a local area’s economy. HVS entered the gross direct spending estimate into the IMPLAN input-output model for local economies to estimate the net direct, indirect and induced spending. HVS obtained the most recent available data from IMPLAN for the City of Milwaukee.

**Annual Net Spending Impacts**

The figure below shows the estimated annual net direct, indirect and induced spending generated by the Bucks Arena in the City of Milwaukee. HVS calculated the full-time equivalent jobs supported by the spending in each economic sector.

**FIGURE 3-4  
NET ECONOMIC IMPACT**

Impact (\$ millions)	City of Milwaukee
<b>Spending Estimates</b>	
Net Direct	\$39.0
Indirect	8.1
Induced	13.0
<b>Total</b>	<b>\$60.1</b>
<b>Job Estimates</b>	
Direct	269
Indirect	51
Induced	73
<b>Total Permanent Jobs</b>	<b>393</b>

By a stabilized year of demand, the Bucks Arena would induce \$60.1 million (in 2015 dollars) in new spending in the City of Milwaukee. This spending would support 393 permanent full-time equivalent jobs.

The total spending generated by the Bucks Arena in the Milwaukee economy would be responsible for \$26.2 million in employee compensation. When considering the employment impact of the arena, including full-time, part-time, and temporary, IMPLAN suggests that this results in the equivalent of 393 full-time jobs.



**Present Value of Net Spending**

The proposed capital investment in the development of the Bucks Arena would likely be repaid over a 20- to 30-year period that coincides with the useful life of the asset. As a point of comparison with the capital investment, HVS calculated the present value of the net spending that the arena is expected to generate over a 20-year period. We assumed a 5% discount rate that approximates weighted cost of public sector capital. Over a 20-year period, the present value of net spending in the City of Milwaukee is \$899 million. This impact should be weighed against the potential capital investment in the project.

**Fiscal Impacts**

Fiscal impacts represent the public sector’s share of the economic impacts from tax collections on new spending. The previously discussed spending estimates provide a basis for estimating potential tax revenue, as the City of Milwaukee would collect tax on some of these transactions.

The IMPLAN analysis classified direct, indirect, and induced spending into hundreds of detailed spending categories. HVS evaluated each of these spending categories to determine which taxes would apply to each category of spending. The arena’s construction induces more lodging transactions, which the City taxes at a rate of 7%. HVS estimated the total amount of tax revenue generated by multiplying the lodging tax rate by the estimated additional lodging revenues.

The following figure shows the potential tax revenue from this source.

**FIGURE 3-5  
FISCAL IMPACTS FOR CITY OF MILWAUKEE IN 2015 DOLLARS**

Tax Category	Tax Base	Nominal Tax Rate	Estimated Tax Revenue
<b>Additional Lodging Tax</b>	\$2,300,500	7.00%	\$161,000
			<u>\$161,000</u>

Sources: IMPLAN and HVS

In a stabilized year of operation, the additional lodging tax collected would add approximately \$161,000 to the WCD’s annual tax revenue.

These economic and fiscal impact estimates are subject to the assumptions and limiting conditions described throughout the report. Numerous assumptions about future events and circumstances form the basis for these estimates. Although we consider these assumptions to be reasonable, we cannot provide assurances that the project will achieve the forecasted results. Actual events and circumstances are likely to differ from the assumptions in this report and some of those differences



may be substantial. The readers should consider these estimates as a mid-point in a range of potential outcomes.

## Conclusion

We based the spending estimates presented herein on the assumption that visitors from outside the City of Milwaukee will import certain amounts of income into the City of Milwaukee. The results should not be interpreted as an assessment of the spending impact of the Bucks Arena on the State and County. Fewer attendees are likely to originate outside the County and most attendees would come from within the State. Consequently, new spending imported to the County or the State would be much less than the new income imported into the City. The spending estimate in this report represents a redistribution of income within the State of Wisconsin. The transfer of this income primarily benefits business interests located in downtown Milwaukee.

Nor should the estimates presented here be interpreted as a measure of the net economic impact on the City. We have not considered negative impacts or new costs to the City that would result from the Bucks Arena operation such as the cost of municipal services (e.g. police, fire, emergency medical services, etc.). Forgone property taxes could also have a negative impact on the City since the Bucks Arena would be exempt from property taxes. If the arena were not developed, property taxes could be collected from alternative developments on the site. The timing and scale of alternative projects cannot be predicted with any certainty. Therefore, an estimate of the value of foregone property taxes is not possible.

These results should be narrowly interpreted as new spending focused in downtown Milwaukee. This report provides a further discussion of costs and benefits impacts in Section 5.



## 4. Case Studies

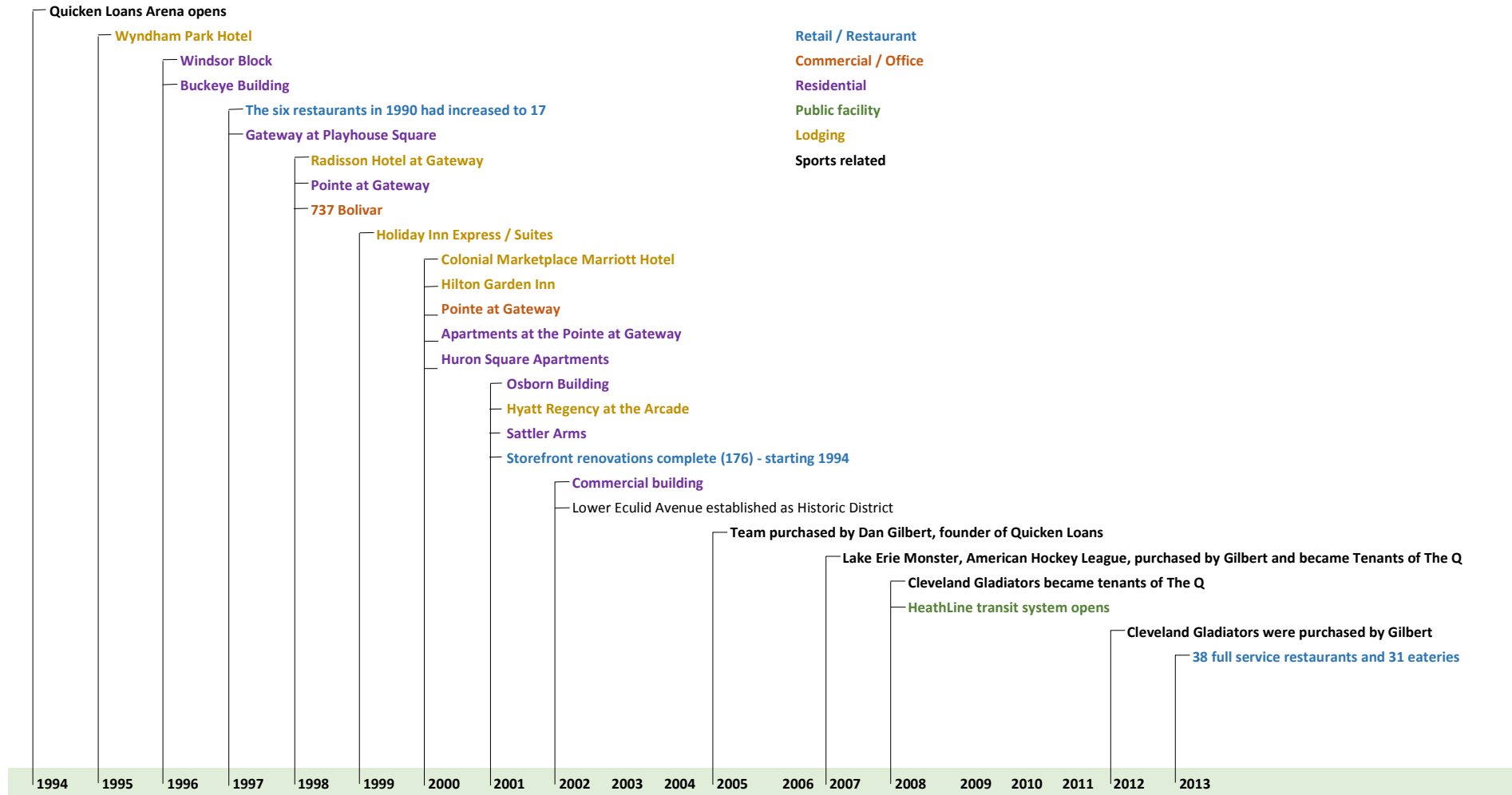
One of the potential benefits of arena construction is that under proper conditions, the facility can induce development in the surrounding area. Although the exact economic impacts are heavily contended, many cities have constructed sports facilities in efforts to revitalize downtowns and city centers. In this section, HVS presents the case studies of three city districts that are comparable to the WCD and have successfully used a major sports stadium as the focal point for broader development. Like Milwaukee, all three cities struggled with blighted downtown areas. The following case studies – of the Gateway District in Cleveland, Ohio, the Arena District in Columbus, Ohio, and the Bricktown District in Oklahoma City, Oklahoma – broadly showcase how development flourished around the respective sports complexes.

In all three districts, local government officials and private-sector leaders set the foundation for the influx of retail, entertainment, lodging, and, most importantly, residents.

### **Gateway District – Cleveland, Ohio**

The figure below shows a timeline of development surrounding the Quicken Loans Arena in Cleveland, Ohio, home of the NBA franchise the Cleveland Cavaliers.

**FIGURE 4-1  
GATEWAY DISTRICT TIMELINE**



In the late 1980s, the Cleveland's Gateway area was in need of urban redevelopment. Located in an accessible part of downtown, this historic area was in need of revival. Within 10 years of the stadium's completion the project had already seen some success, over 800 residential units were opened in the district, historic buildings were renovated, and new hotels arrived<sup>1</sup>. The district attracts millions of visitors per year and has played a significant role in downtown Cleveland's population growth from 7,261 in 1990 to over 13,000 in 2014<sup>2</sup>.

The Gateway district was once a vibrant retail corridor in a prime location of downtown Cleveland. The deterioration of the urban core that affected most of the U.S. hit Cleveland as hard as any American city, and by the 1980s, Gateway was an area most notable for its abundant parking. However, in 1988, the Cleveland City Planning Commission decided on Gateway as the center of a downtown redevelopment project<sup>3</sup>. The project began with the construction of a large sports arena and continued with other residential and commercial development. Developers aimed to adapt old buildings as much as possible in order to maintain the unique character of the area and "bolster historic pride" in the process<sup>4</sup>. They also strived to make the area walkable, with amenities and spaces that could accommodate the traffic generated by the sports complex.

The original plans envisioned a single, privately funded, multi-sport stadium. Soon it became a stadium, arena, and office development that cost \$467 million and was largely financed using public funds<sup>5</sup>. Progressive Field (originally called Jacobs field) and Quicken Loans (originally Gund Arena) opened a few months apart in 1994. Progressive field was funded in part (52%) by Indians owner Richard Jacobs, and Quicken Loans was funded in part (22%) by an organization of top executives in Cleveland called Cleveland Tomorrow<sup>6</sup>. The remainder of the costs of the Gateway Sports Complex was funded by a county-wide 15-year sin tax of "4.5 cents per pack [of cigarettes], 16 cents per gallon on beer, 32 cents per gallon on

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<sup>1</sup> Chapin, T.S. (2004). Sports facilities as urban redevelopment catalysts. *Journal of the American Planning Association*, 70, 193-209.

<sup>2</sup> "Development Downtown." - Downtown Cleveland Alliance<sup>SM</sup>. N.p., n.d. Web. 14 Sept. 2015.

<sup>3</sup> Chapin

<sup>4</sup> Ibid.

<sup>5</sup> Ibid.

<sup>6</sup> "QUICKEN LOANS ARENA." *Encyclopedia of Cleveland History: QUICKEN LOANS ARENA*. Case Western Reserve University, 12 Sept. 2008. Web. 14 Sept. 2015.

wine and mixed beverages, 24 cents per gallon of cider and \$3 per gallon of hard liquor”<sup>7</sup>.

In the following years, renovations and re-uses blossomed in the district. The Buckeye Building was refurbished and made into 36 apartments”<sup>8</sup>. Warehouses, such as one at 737 Bolivar, were turned into “commercial and office space,” and historic landmarks such as The Arcade and Colonial Marketplace were turned into establishments that combined retail, office space, and lodging (Historic Gateway Neighborhood Development Corporation). Developments in Gateway district are ongoing, as historic buildings continue to be renovated and the under-development nuCLEus project--a “three-acre site... to be filled with apartments, offices, stores, restaurants, hotel rooms and parking,”--promises to alter Cleveland’s skyline with a 54-story tower.<sup>9</sup>

Several factors contributed to the successful development of Cleveland’s Historic Gateway District: it is easily accessible by transportation, it is proximate to other popular areas like Playhouse Square and Tower City Center, and it contains three nationally and locally designated historic districts.

The Gateway Neighborhood is at the end of the I-77 and I-71 interstates highways. It is just east of the Greater Cleveland Regional Transit Authority’s (RTA) rail system which connects to the airport, the western suburbs, and east side Cleveland neighborhoods. A local bus transit system also connects much of the downtown area, and Greyhound, Amtrak, and Megabus all have departure points in Gateway. The area is pedestrian friendly, with East Fourth Street designated as a pedestrian-only zone<sup>10</sup>. The result is a district that is very well connected to downtown and to the rest of Cleveland.

The neighborhood also lies in between Playhouse Square, the city’s theatre district, and Tower City Center, a historic mixed-use facility. Playhouse Square has undergone substantial renovation since the 1970s. It is now home to many

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<sup>7</sup> Tobias, Andrew J. "Renewal of Cuyahoga County's 'sin Tax' to Pay for Stadiums Is Officially on the Table." Cleveland.com. Northeast Ohio Media Group, 14 Jan. 2014. Web. 15 Sept. 2015.

<sup>8</sup> Schneider, Keith. "An Enclave of Entertainment in Cleveland." The New York Times. The New York Times, 07 July 2009. Web. 14 Sept. 2015.

<sup>9</sup> McFee, Michelle Jarboe. "First Look: NuCLEus Project Renderings Show 54-story Tower in Downtown Cleveland (gallery)." The Plain Dealer. N.p., n.d. Web. 14 Sept. 2015.

<sup>10</sup> Hgn Development Guide / Updated December 2010. DEVELOPMENT GUIDE TO CLEVELAND’S HISTORIC GATEWAY NEIGHBORHOOD (n.d.): n. pag. [Http://www.clevelandgatewaydistrict.com/](http://www.clevelandgatewaydistrict.com/). Dec. 2010. Web.



theaters, including the Playhouse Square Theater, which is the second largest performing arts center in the United States<sup>11</sup>. Tower City Center includes the Terminal Tower (a nationally registered historic place), a mall, a casino, the city's main rapid transit terminal, and a couple of hotels. The development in Gateway was well-located to capitalize on the demand generators from these two destinations and provide downtown Cleveland with a well-concentrated cluster of attractions.

Finally, the designation of three main drags as national and local historic districts facilitated revitalization efforts with tax incentives that are provided to preserving such areas. East Fourth Street is the most well-known of these, but Lower Prospect and Lower Euclid Avenue are also historic districts that continue to benefit from subsidized redevelopment<sup>12</sup>. These historic districts highlight Gateway's unique character; As a historic neighborhood, Gateway manages to be more than just an entertainment district, because it means something to the city of Cleveland and can also attract tourists with a bent towards history. These historic districts provided a memorable area for Cleveland residents and tourists alike.

#### **Arena District – Columbus, Ohio**

The following figure shows a timeline of development surround the Columbus Ohio arena district.

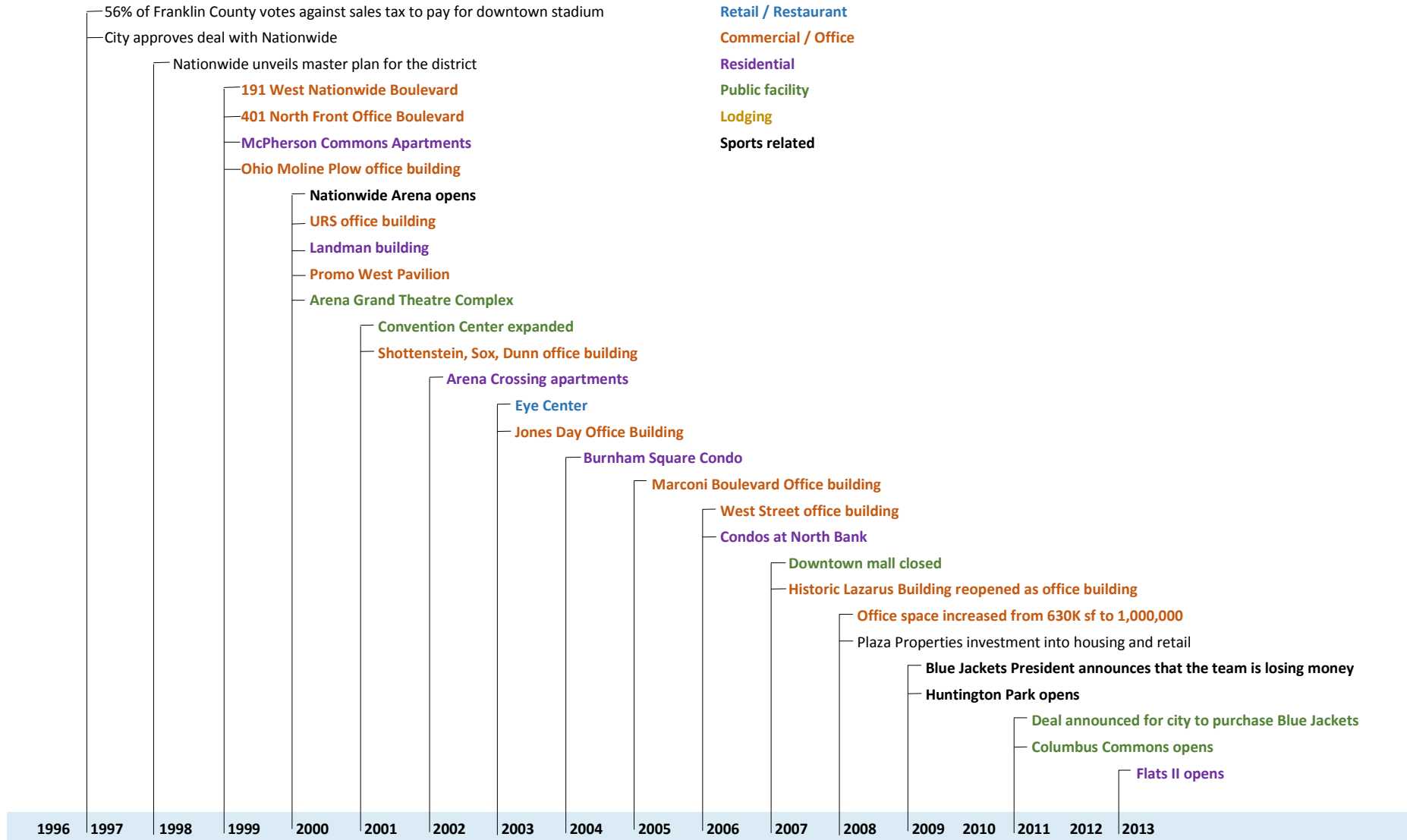
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<sup>11</sup> "PlayhouseSquare :: History." PlayhouseSquare. N.p., n.d. Web. 14 Sept. 2015.

<sup>12</sup>Hgn Development Guide.



**FIGURE 4-2  
ARENA DISTRICT TIMELINE**



The funding of the Columbus Arena District differs from the Bricktown and Gateway developments due to the involvement of Nationwide Realty Investors. Although the Nationwide Arena was built almost entirely with private funds, the City of Columbus has invested over \$35 million in the district. By 2008, housing downtown had grown by “more than 1000 units,” office space and occupancy had grown, the number of businesses had ballooned by over 50%, and property values had exploded in the district<sup>13</sup>.

Although Columbus was a growing city for the latter half of the 20<sup>th</sup> Century, its growth was mostly due to an annexation policy that sacrificed population density<sup>14</sup>. In 1989 a downtown mall was built with public subsidies in the hopes that it would spur further development, but retail traffic stayed out of the city center<sup>15</sup>. Through their hopes of urban renewal, city leaders in Columbus became desperate to host a major sports team in the late-90s. When the NHL announced that it would expand, these city leaders advocated for a 0.5 percent sales tax to fund the construction of an arena<sup>16</sup>. In 1997, the tax was put up for a vote in Franklin County but failed to pass.

Later that same year, Nationwide agreed to pay the cost of the new arena in exchange for certain conditions. The conditions included: the city would pay for the “needed infrastructure improvements” and “fund the needed environmental remediation,” while Nationwide would be designated as the “master developer” of the arena and its surrounding area, and would not have to pay property taxes on the development<sup>17</sup>. Within a year, Nationwide broke ground on the arena and had developed its “master plan for the rest of the district”<sup>18</sup>.

The site of the new arena was the old Ohio Penitentiary, which had been closed since the mid-80s. Demolition of the building’s “imposing 24-foot stone walls”

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<sup>13</sup> Wirick, D. , et al. Assessment of the gross impact of the Arena District on Greater Columbus, 2008, John Glen School of Public Affairs, Ohio State University, <http://bluejackets.nhl.com/ext/2008/AssessmentGEIArenaDistrictonGreaterColumbus.pdf>.

<sup>14</sup> 2010. "2010 DOWNTOWN COLUMBUS STRATEGIC PLAN." (n.d.): n. pag. 2010. Web.

<sup>15</sup> Rosentraub, M.S. (2009). Sports facilities, a new arena in Edmonton, and the opportunities for development and a city’s image: Lessons from successful experiences.

<sup>16</sup> "Key Dates in the Nationwide Arena Deal." The Columbus Dispatch. N.p., 15 Sept. 2011. Web.

<sup>17</sup> Rosentraub.

<sup>18</sup> Key Dates, Columbus Dispatch.

began in 1997<sup>19</sup>. Three years later, Nationwide Arena opened its doors and opened the doors to further development in the area. Within the next year, PromoWest Pavilion, an indoor-outdoor concert venue, now known as Lifestyle Communities Pavilion, opened, as did the Arena Grand Theatre, all within steps of the sports facility. In the midst of the 2004 NHL lockout, Nationwide continued to develop and opened the district's first residential development, Arena Crossing, and the 10,000 square-foot Arena District Athletic Club<sup>20</sup>.

By 2006, it was clear that Nationwide's investments were paying off. The Arena District had become home to 170 businesses, a 50% increase since the arena was opened<sup>21</sup>. The following year, city leaders claimed an empty downtown mall was "harming property values" and tore it down. Development in the district persisted as the Burnham Square Condos sold out and ground was broken for Huntington Park, a minor league baseball park. By 2008, office space reached "over 1 million square feet" with occupancy rising to 95%. In those eight years, employment in the Arena District rose from under 3,000 to over 7,000.

At the end of the decade, Columbus's NHL team, the Blue Jackets, made it clear to the public that they were not a profitable enterprise. Mike Priest, the team's president, claimed that the franchise had lost \$80 million since 2002, partially due to their arena lease agreement<sup>22</sup>. This would eventually lead to a deal for the Franklin County Convention Facilities Authority to institute a casino tax and buy the arena. Nevertheless, downtown Columbus, and the Arena District in particular, was more vibrant and growing than it had been since 1950. The Flats on Vine apartments opened in 2010, followed by Flats II in 2013<sup>23</sup>. The city invested in the large development of green space, called Columbus Commons, built on the site of the old downtown mall<sup>24</sup>.

According to a report on the economic impact of Arena District done by the John Glenn School of Public Affairs at Ohio State University, over \$800 million was invested in the Arena District. The area has become a well-furnished entertainment district, with sports, movies, music, and events, in addition to bars,

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<sup>19</sup> Ferenchik, Mark. "Arena District Offers Residents a Sense of Community." The Columbus Dispatch. N.p., 17 Feb. 2014. Web.

<sup>20</sup> Leonard, Martha. "Lockout Leads to Rent Cut." Columbus Business First. N.p., 18 Oct. 2004. Web.

<sup>21</sup> Wirick.

<sup>22</sup> Key Dates, Columbus Dispatch.

<sup>23</sup> Ball, Brian R. "Arena District's Flats II Apartment Rates Released as Nationwide Realty Begins Marketing." Columbus Business First. N.p., 14 May 2013. Web.

<sup>24</sup> Ferenchik, Mark. "New Park Stands out like an Emerald in the City." The Columbus Dispatch. N.p., 26 Mar. 2011. Web.



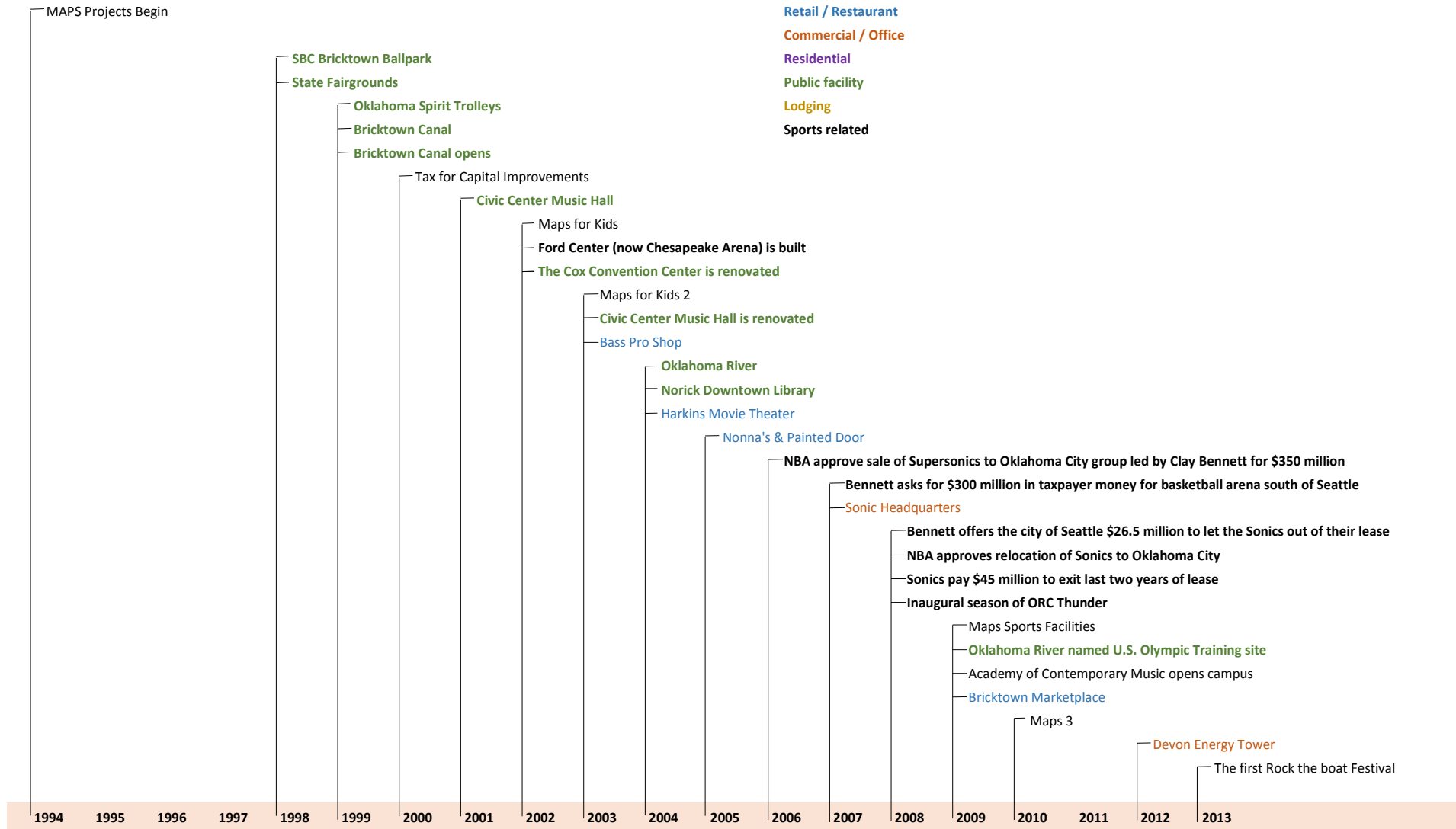
Convention, Sports & Entertainment  
Facilities Consulting  
Chicago, Illinois

restaurants, shopping, and residential spaces. There is still a question as to whether this development is benefiting the city at large; especially as property tax breaks have been extended. Nevertheless, the downtown population continues to grow, and visitors continue to spend time and money within the Arena District.

**Bricktown District-  
Oklahoma City,  
Oklahoma**

The following figure shows the timeline of development in the Bricktown District in Oklahoma City.

**FIGURE 4-3  
BRICKTOWN DISTRICT TIMELINE**



Although the Thunder didn't arrive in Oklahoma City until 2008, Chesapeake Energy Arena (then called Ford Center) was built in 2002. The arena is a result of OKC's Metropolitan Area Projects Initiative (MAPS), a program intended to fund downtown development through a temporary 1% sales tax<sup>25</sup>. The tax was first levied in 1994, but many of the developments were not completed until the late nineties and early 2000s due to the MAPS requirement that "all project funds be fully collected prior to beginning construction"<sup>26</sup>. While the Thunder is now a well-known team, and have brought prestige to Oklahoma City, the NBA franchise is more of an exclamation mark at the end of Bricktown's revival, rather than its inception.

Bricktown was founded in 1889 and was a significant traffic hub due to its high connectivity and central location in the country. It became a highly residential area until the sixties when families began to move out of downtown into the surrounding area. The neighborhood fell into disarray and the buildings "became dilapidated or were torn down"<sup>27</sup>. By the 1990s, OKC was poised for a revival. City leaders took a cue from urban centers with more revived downtowns, such as Indianapolis, and initiated the MAPS program in 1994<sup>28</sup>. The construction of the Bricktown Ballpark, a minor league baseball park, was completed in 1998. It was followed by renovations to the fairgrounds, a downtown trolley system, and the Bricktown Canal. Inspired by the San Antonio Riverwalk, this one mile canal soon spurred development of retail and restaurants along its banks<sup>29</sup>.

The MAPS program also funded the renovation and expansions of the Civic Center Music Hall and the Cox Convention Center, but the sports arena was its largest investment. Billed at \$87.7 million, Chesapeake Energy Arena was initially a barebones sports center that met the minimum requirements for NBA and NHL stadiums, since the city had no professional sports team at the time<sup>30</sup>. It was eventually expanded and renovated with funds from a follow-up MAPS specifically intended for sports facilities levied from 2009 to 2010.

Retail and entertainment developments soon followed as Bricktown became a destination. In 2003, a Bass Pro Shop was built, controversially, with a \$17 million

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<sup>25</sup> Review of Economic Impact of Selected Professional Sports Venues and Downtown Revitalization Efforts in Oklahoma City, Report by the Legislative Reference Bureau (April, 2013)

<sup>26</sup> Ibid.

<sup>27</sup> "History." Welcome to Bricktown. N.p., n.d. Web.

<sup>28</sup> "The Bricktown Collection." Retro Metro OKC RSS. N.p., n.d. Web. 14 Sept. 2015.

<sup>29</sup> Marini, Richard A. "A River Runs through OKC, Too - Well, Sort of." San Antonio Express-News. N.p., 24 May 2012.

<sup>30</sup> Review of Economic Impact.



subsidy. In the next year, a top of the line *Cine Capri*-style Harkins Movie Theater was built<sup>31</sup>. Creative gift shops and other interesting retail, such as Nonna's & Painted Door, began to arrive in 2005. Other retail establishments such as The Red Dirt Emporium and Bricktown Marketplace, which is "home to 50 locally-owned booths selling a range of items," joined the district by the end of the decade.

In the time since, development has continued. While Bricktown does not aggressively compete with the Central Business District for office space, it is an area that can be attractive to those seeking a "niche office market." Bricktown is home to a few major corporations such as Devon Energy, Sonic, OG&E, and Sandridge Energy<sup>32</sup>. It is also the home of the Academy of Contemporary Music (ACM) at the University of Central Oklahoma. Though not directly in Bricktown, residential spaces in Deep Deuce and Maywood Park have benefited from proximity to the district. In 2015, Brickopolis, a new entertainment center that includes mini-golf, laser tag, an arcade, and dining options, has opened right in front of the Bricktown Canal<sup>33</sup>. It joins "more than 45 restaurants, many bars, clubs, and retail shops, as well as family-friendly attractions, museums and galleries"<sup>34</sup>.

According to the Oklahoma City Planning Department, Bricktown now boasts 7.5 million annual visitors and generates "more sales tax revenue" than any other district in the city<sup>35</sup>. Although the city funded most of the initial investment, the discipline imposed by the MAPS program has allowed the city to spend judiciously. The result is an entertainment district with the amenities to attract traffic, and the developments to capitalize on the traffic they generate.

## Conclusion

It is impossible to say that an arena or sports complex single-handedly caused development in these three case studies. It is clear that the arena developments were one component of a larger development strategy and that development incentives encouraged many different types of land uses. More specifically, it is impossible to determine whether development would have emerged in other parts of these cities in the absence of a sports arena. Nevertheless, these case studies indicate that economic growth in the surrounding area is compatible with arena development. Municipal authorities and community business leaders have been able to collaborate on urban renewal around a professional sports facility.

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<sup>31</sup> "Bricktown Strategic Plan." The City of Oklahoma City Planning Department (n.d.): n. pag. OKC.com. Feb. 2012. Web.

<sup>32</sup> Newmark Grubb, Oklahoma City Market Overview

<sup>33</sup> Lackmeyer, Steve. "Bricktown Has New Destination for Recreation." The Oklahoman. NewsOK.com, 17 Aug. 2015. Web. 14 Sept. 2015.

<sup>34</sup> Welcome to Bricktown.

<sup>35</sup> Ibid.



Several questions arise about Milwaukee's capacity to imitate these successful cases.

**Location** - How connected will the new district be to the rest of downtown? And how accessible will it be to the rest of the City?

**Character** - Will the neighborhood have any kind of identity or character that would make it unique? What kind of establishments will move in? Will there be a Starbucks on every corner or will there be local coffee roasters?

**Team** - Will the Bucks be a successful team? Will they continue to grow in popularity and stature? Will their fandom expand? These factors can affect how people think of the new stadium and their desire to attend games or be in the arena district.

The preliminary dealings between the City and Bucks, as detailed in the Project Plan for TID 84 are encouraging. As part of the agreement between the City of Milwaukee and the Milwaukee Bucks, the team is responsible for additional development in the area surrounding the arena. Repayment of an \$8.0 million dollar loan by the Bucks to the Tax Improvement District would be repaid only if incremental property taxes are available, which provide significant incentive for investment by the Bucks. In the blocks bounded by West Juneau Avenue, North 6th Street, West Highland Avenue and North 4th Street, the Bucks have proposed:

- up to "220,000 square feet of office space,
- 250,000 square feet of retail space,
- a 300-room hotel,
- 650 apartment units,
- 72 student housing units and associated parking," and
- The 60,000-square foot "Live Block," which would include retail and entertainment.

To prepare for these developments, the City of Milwaukee will carry out the requisite infrastructure improvements in the district, such as refurbishing basic utilities and resurfacing streets.

This plan is in line with the development detailed in the case studies. In particular, HVS predicts that the Live Block will be an additional demand generator for the





area, providing the area with the attractions that could draw residents and visitors to spend time there.

The Milwaukee Bucks have incentive to make real estate investment that generates property tax revenues to repay its \$8 million loan to the TID. The City of Milwaukee has committed to related public infrastructure investment. If positive economic and credit market conditions continue through the investment period, the desired urban revitalization is likely to occur. Additional development, beyond phase one will be necessary to achieve the same level of development that occurred in Cleveland, Oklahoma City and Columbus. These historically significant neighborhoods added lodging, office, and retail spaces. Bricktown and Columbus Commons also developed unique retail establishments and public leisure spaces that have lasting appeal to local residents.

The Greater Bucks Arena promises to revitalize a blighted area of downtown Milwaukee. The case studies presented here demonstrate that arena development is compatible with investment in adjacent entertainment, retail, hospitality, and residential land uses. While the arena is unlikely to be the sole cause of adjacent development, it can be viewed as one important element of range of potential investments in an urban entertainment district.



## 5. Public Participation in Arena Financing

In order to assess the City of Milwaukee’s level of involvement in the Bucks Arena Project, HVS compared the Milwaukee Bucks Arena Plan to the costs, financing plans, and lease deals for other NBA arenas. Key findings suggest that the total construction cost of \$500 million for the new Bucks Arena fits the recent trend of larger investments in all-inclusive sports arenas. HVS also found that the public contribution to the Bucks Arena of 50% of the capital cost is relatively low, when compared to recent arena developments with similar market sizes. However ongoing financial commitment to the project could materially alter the share of public participation in the project.

After initial construction, the new Bucks Arena will be owned by the Wisconsin Center District (“WCD”) and operated by the Milwaukee Bucks. While a lease agreement has not been negotiated as of the publication of this report, the authorizing legislations (“Act 60”) and a non-binding term sheet between the City of Milwaukee and the Milwaukee Bucks, indicate that all ongoing Bucks Arena operating and capital costs will be the responsibility of the Milwaukee Bucks for the 30-year duration of the lease. HVS gathered information on the terms of lease agreements for all other NBA arenas that are publicly owned and privately operated and compared them to the general terms anticipated for the Milwaukee Bucks lease.

### Comparable NBA Arena Financing

HVS examined trends in NBA arena construction costs and the percent of financing from public funds. There are twenty-nine arenas currently operating, and plans for three new arenas are in progress. Arenas in development include the Sacramento Kings’ Golden 1 Center (scheduled to open 2016), the Golden State Warriors’ Golden State Arena (scheduled to open 2018), and the Bucks Arena.

HVS compared the total cost of construction for each arena. Where information was available, HVS included land and infrastructure costs in the total cost of arena construction. HVS procured data on arena construction costs from the National Sports Law Institute of Marquette University<sup>1</sup> and various news sources. With the exception of Madison Square Garden, all currently operating NBA arenas were constructed after 1987. Due to its early construction date and multiple renovations, HVS considered New York City’s Madison Square Garden an outlier and excluded it from the analysis.

<sup>1</sup> National Sports Law Institute of Marquette University<sup>1</sup> Law School’s *Sports Facility Reports, Volume 15 (2014)*



The following figure shows the average arena cost in 2015 dollars separated into four periods.

**FIGURE 5-1**

Period	Average Total Cost (\$million 2015)
Before 1995	\$167.0
1995-1999	\$323.9
2000-2003	\$305.3
After 2003	\$521.7

Source: National Sports Law Institute

The average total cost of constructing an NBA arena has increased significantly. The average construction cost for an NBA arena built after the year 2000 is about \$437 million, and all arenas built after 2005 have cost over \$450 million. The estimated total cost for the Arena Project of \$500 million puts Milwaukee in line with the costs for other new arena developments.

This increase in construction costs is primarily due to fundamental changes in arena design. Since the 1980s, owners of professional sports franchises have pursued “facility designs that capture a greater share of game- or event-day spending.”<sup>2</sup> The result is new arenas must feature more amenities, such as luxury suites, dining options, retail, and fan entertainment than ever before. The need for technology infrastructure in arenas has grown dramatically as demand for information technology changes and has grown at a geometric pace. Many arenas also capture non-game day spending through publicly accessible restaurant and retail outlets. Although these improvements require more up front capital expenditures, they allow the arena to capture more consumer spending within its walls.

A trend in the shift of arena development from suburban to downtown locations has also placed upward pressure on capital costs. Sports facilities located in a city’s downtown area incur higher land costs and typically require structured parking, which is more expensive than surface parking in suburban locations. Parking makes up approximately one-tenth of the estimated \$500 million cost of the Bucks arena.

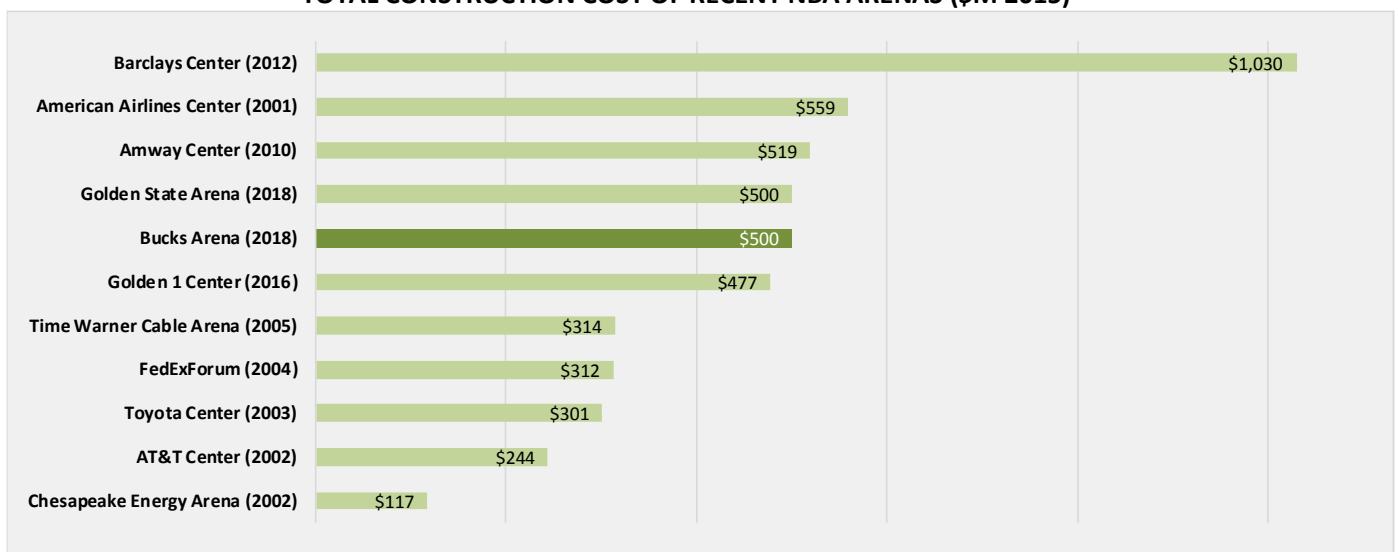
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<sup>2</sup> Mark S. Rosentraub and David Swindell, “Doing Better: Sports, Economic Impact Analysis, and Schools of Public Policy and Administration,” *Journal of Public Affairs Education* 15, no. 2 (Spring, 2009): 219-242, accessed September 14, 2015.



The following figure shows the total construction costs of the 10 most recently built NBA arenas. The estimated cost of the Bucks Arena is included for comparison.

**FIGURE 5-2**  
**TOTAL CONSTRUCTION COST OF RECENT NBA ARENAS (\$M 2015)**



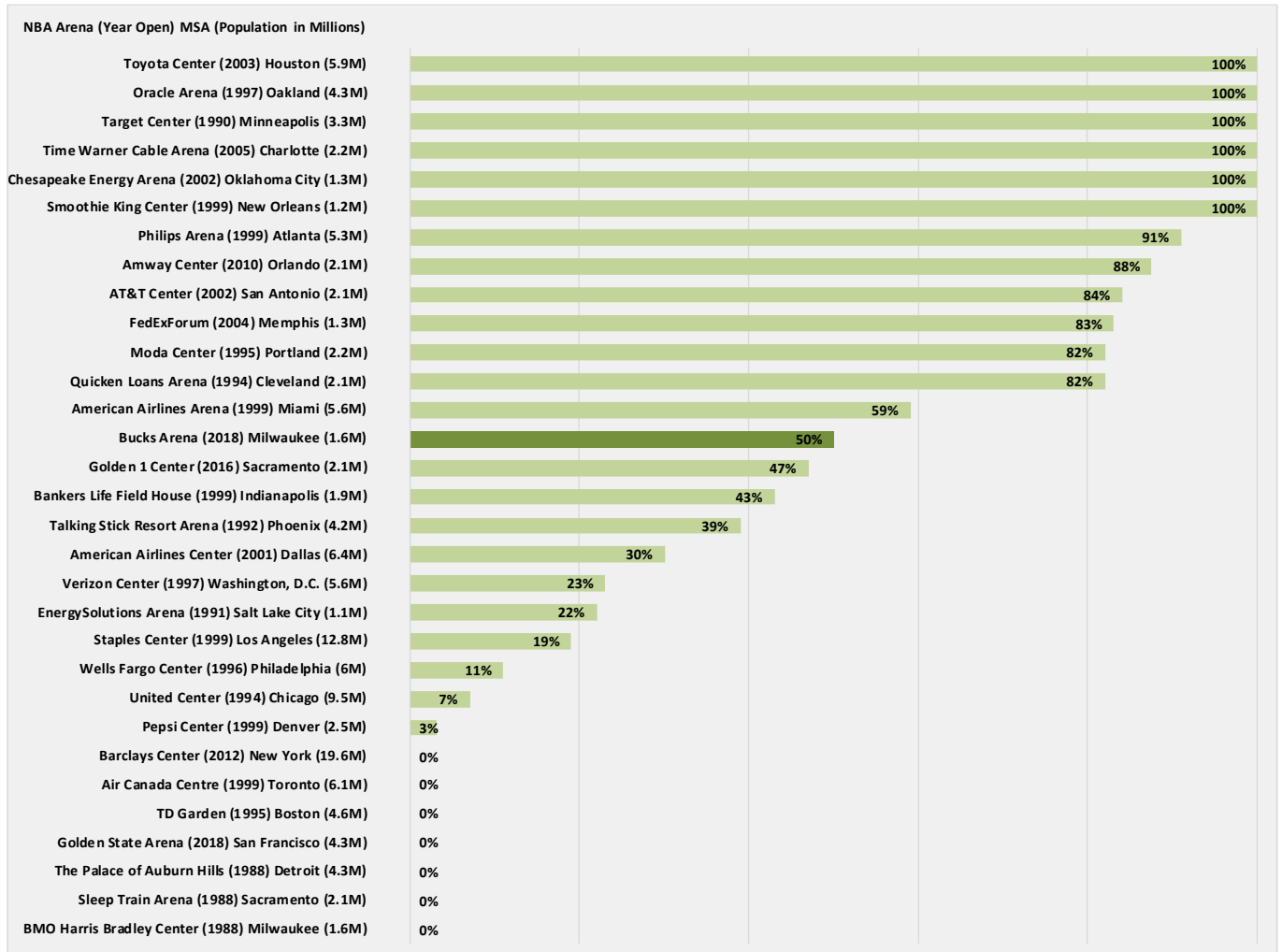
Source: NSLI, restated by HVS

**Public Share of Arena Funding**

Currently operating NBA arenas represent a wide variety of funding arrangements between the host city and private funders. The figure below illustrates the portion of construction costs for each arena that is supported by public funds. The population of each arena’s surrounding Metropolitan Statistical Area is included as an approximation of market size.



**FIGURE 5-3  
PUBLIC SHARE OF CAPITAL COSTS**



Source: NSLI, restated by HVS

Public contributions to arena construction have also increased over time. Average public contribution after the year 2000 is 63%, compared to 37% before 2000.

The public share of arena capital costs varies by market size.<sup>3</sup> The following table illustrates a correlation between the level of subsidy and market size.

<sup>3</sup> Judith Long, *Public/Private Partnerships for Major League Sports Facilities*, New York: Routledge, 2013.



**FIGURE 5-4  
PUBLIC SHARE OF CAPITAL COSTS  
BY MARKET SIZE**

Market Size	Average % Public Funding
Greater than 10 million	15%
Between 10 and 4 million	43%
Between 4 and 2 million	51%
Less than 2 million	76%

Source: NSLI, restated by HVS

Of the ten arenas built since 2000, three arenas served market sizes in the same quartile as Milwaukee: Amway Center (Orlando), FedEx Forum (Memphis), and Chesapeake Energy Arena (Oklahoma City). The host cities share of capital costs were 88%, 83%, and 100%, respectively. These arena developments occurred in second tier cities with populations well below the average of NBA cities.

The relationship between market size and the level of subsidy can be explained as a response to scarcity<sup>4</sup>. The NBA and other major league organization have effective monopoly power because they create scarcity by controlling how many basketball teams are in the league. Smaller markets are at a disadvantage when competing to attract and maintain a limited number of NBA teams.<sup>5</sup> Therefore, mid-tier cities must compete more aggressively by contributing a higher percentage of overall arena funding.

With the Arena Project’s current proposal of a 50/50 split between public and private funds, the public sector would contribute a low portion of the funds relative to other small markets.

**Comparable NBA Arena  
Lease Agreements**

HVS investigated comparable venues that have lease agreements similar to the one considered by the WCD and the Milwaukee Bucks. The Authorizing Legislation [Section 75 229.461(c)] states that under a 30-year arena lease, the Milwaukee Bucks would assume all responsibility for operations, receive all arena revenue and incur all operating and capital maintenance expenses. Consequently, the WCD would be insulated from operating risk. At worst, the arena lease agreement would have a neutral impact on WCD financial operations. The Authorizing Legislation also anticipates a “Non-Relocation Agreement” that provides liquidated damages if

<sup>4</sup> Ibid.

<sup>5</sup> Ibid.



the team violates the agreement and relocates within the term of the lease. The specific terms of the lease are to be negotiated.

The table on the next page outlines the terms of comparable NBA arena lease agreements. Of twenty-nine operating NBA arenas, eleven arenas are publicly owned and team operated. The list excludes two operating arenas (Philips Arena and Target Center) due to lack of information and includes the Golden 1 Center in Sacramento, which has a finalized agreement but is not yet operational. The table indicates how major revenues and expenses are distributed between the team and the city.

**FIGURE 5-5  
OPERATING AGREEMENTS FOR PUBLIC OWNED, TEAM OPERATED VENUES**

Arena Name - NBA Team	Team Contribution to Original Development	Rent	Game Day Concessions	Game Day Parking	Suites/Clubs	Naming Rights	Advertising	Other Event Revenue	Operating Expenses / Net Income
American Airlines Arena - Miami Heat	\$213million (full construction costs)	40% of total profit after \$14 million	40% of total profit after \$14 million	40% of total profit after \$14 million	40% of total profit after \$14 million	40% of total profit after \$14 million	40% of total profit after \$14 million	40% of total profit after \$14 million	\$6.5 million annual operating subsidy from Miami-Dade county
American Airlines Center - Dallas Mavericks	\$295 million (70% of total cost)	\$3.4 million per year to city	100% shared between two teams	100% shared between two teams	100% shared between two teams	100% shared between two teams	100% shared between two teams	100% shared between two teams	Responsibility for all costs of operations and maintenance split between two teams
AT&T Center - San Antonio Spurs	\$28.5 million	\$1.3 million per year	100% to team	100% to team	100% to team	100% to team	100% to team	100% to team	Team responsible for all operating expenses, City gets 20% of NOI over \$4.75 million
Bankers Life Fieldhouse - Indiana Pacers	None	None	100% to team	100% to team	100% to team	100% to team	100% to team	100% to team	Under new agreement, CIB to subsidize Pacers' operation
FedEx Forum - Memphis Grizzlies	\$42.5 million (17% of total cost)	\$20,000 per game	100% to team	100% to team	100% to team	100% to team	100% to team	Revenue from \$1.15/per seat fee to City	Team responsible for all operating expenses.
Golden 1 Center* - Sacramento Kings	\$254 million (53% of total cost)	\$6.5 million per year (plus 3% annual increases)	100% to team	100% to team	100% to team	100% to team	100% to team	City retains revenues directly attributable to events held by the City	Team responsible for all operating expenses
Quicken Loans Arena - Cleveland Cavaliers	None	Only if attendance is above 1.85 million	100% to team	Team keeps first \$1.5 mil then 67% to GEDC	27.5% of suites and 48% of Club seats to GEDC	100% to team	100% to team	100% to team	Team responsible for all operating expenses
Talking Stick Resort Arena - Phoenix Suns	Private debt funded portion of \$90 million	None	90% to team	100% to City	60% to team	Pledged to debt	60% to team	Split with City	Team pays insurance and utilities
Time Warner Cable Arena - Charlotte Bobcats	Repay \$23.2 million over 10 years at 2%	None	City retained rights to concessions	100% to team	100% to team	undisclosed	100% to team	100% to team	Team responsible for all operating expenses
Toyota Center - Houston Rockets	None	\$8.5 million per year	100% to team	100% to team	100% to team	5% to City	100% to team	100% to team	Team responsible for all operating expenses

\*Golden 1 Center not yet in operation

Sources: News publications and contracts published on local government websites





## Costs and Benefits of Public Participation

Most lease agreements assign the majority of operating revenues and expenses to the team. Many teams pay an annual sum to the municipal sponsor, which helps finance the bonds initially issued to help fund the construction of the arena.

In most cases with combined public and private financing, private financiers are responsible for any cost overruns beyond what the city has agreed to pay. Ongoing costs to the city sometimes include a small contribution to a “capital improvement fund” for small repairs to the facility. However, the city’s financial obligations are usually minimal after the initial construction of the arena.

From 1990 to 2005, 65 new major league sports facilities opened. Since 2000, the public share of capital investment has ranged from 58% to 63%.<sup>6</sup> Many academic articles have investigated the cause of this increasing share of public funding for sports facilities.

The consensus view in the academic literature is that parties involved in the development of sports facilities consistently overestimate their impact on local economies. Sports venue feasibility and economic impact studies have been criticized for ignoring opportunity costs, disregarding the substitutability of local spending<sup>7</sup>, or treating funds raised through taxes as new spending<sup>8</sup>. While jobs benefits are widely touted, new jobs associated with sports venues are typically “part-time, low paid and low skilled”<sup>9</sup> with little effect on a city’s “real per capita income.”<sup>10</sup> While there is some supporting evidence that property values close to a sports facilities may benefit from new developments, these effects decrease rapidly as “distance from the facilities increases”<sup>11</sup>. When sports arenas are

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<sup>6</sup> Zimbalist, A., and J. G. Long. “Facility Finance: Measurement, Trends, and Analysis.” *International Journal of Sport Finance*, 1, 2006, 201–11.

<sup>7</sup> Coates, D., & Humphreys, B. (2003). Professional sports facilities, franchises, and urban economic development. *Public Finance and Management*, 3(3), 335-337

<sup>8</sup> Rosentraub, M. S., & Swindell, D. (2009). Doing better: sports, economic impact analysis, and schools of public policy and administration. *Journal of Public Administration Education*, 15, 219e242.

<sup>9</sup> S. Trendafilova, S.N. Waller, R.B. Daniell, and J. McClendon, “Motor City” rebound? Sport as a catalyst to reviving downtown Detroit: A case study,” *City, Culture and Society*, vol. 3, pp. 181- 187, 2012.

<sup>10</sup> Baade, R. A. (1994). Stadiums, professional sports, and economic development: Assessing the reality. *Heartland Policy Study*, 62.

<sup>11</sup> Feng, X. and Humphreys, B. (2008) “Assessing the Economic Impact of Sports Facilities

on Residential Property Values: A Spatial Hedonic Approach,” *International Association of Sports Economists, Working Paper 08-12.*



constructed along with the multi-use developments aimed at urban renewal that have also become popular, these benefits are often more accurately called economic redistribution, rather than development.<sup>12</sup>

Considering the lack of significant economic impact, other factors must influence a city's decision to help fund an NBA arena. Some academics posit that local economic elites and team owners use their influence in the media to propagate overly optimistic economic projections and deceive voters. However beguiling this rationale may seem, it fails to explain why sports subsidies continue to occur in the all too common circumstances where thorough public discussion of sports facility development occurs and opposing views regarding impacts are fully vetted.

## Social Benefits

Sports can be considered a “socially-consumed commodity”<sup>13</sup> and sports venues are an essential component in the delivery of that commodity. In a similar vein, some view sports facilities and the public subsidies that fund them through the lens of “social anchor theory.”<sup>14</sup> That is, the presence of a sports team carries a great deal of social significance. Teams engender social cohesiveness and civic pride even for those who only take a passive interest in sports.<sup>15</sup> Whole sections of daily newspapers, nightly newscasts, and the wide range of other media devoted to sports attest to its social importance. A stadium or a ballpark has value not just as a space for sports to occur but also as fodder for social capital to be shared and built upon.

Other investments in social and entertainment infrastructure (e.g. a movie theater or park), are not perfect substitutes because they do not foster the same amount of devotion and community identity as local sports teams. While sports venues may not pass the test of a strict cost/benefit analysis, unquantifiable social benefit may provide the strongest rationale for public investment.

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<sup>12</sup> John Siegfried and Andrew Zimbalist, “The Economics of Sports Facilities and Their Communities,” *The Journal of Economic Perspectives*, Volume 14 no. 3 (Summer, 2000): 95-114, [http://www.csus.edu/indiv/h/howellj/econ145\\_s2009/Assignments/SportsStadiumFunding.pdf](http://www.csus.edu/indiv/h/howellj/econ145_s2009/Assignments/SportsStadiumFunding.pdf).

<sup>13</sup> Allen R. Sanderson, *In Defense of New Sports Stadiums, Ballparks and Arenas*, Marquette. *Sports Law Review*, Volume 10 Issue 2 (2000).

<sup>14</sup> Seifried, C.S., & Clopton, A.W. (2013). An alternative view of public subsidy and sport facilities through social anchor theory. *City, Culture, and Society*, 4, 49-55.

<sup>15</sup> Seifried, C. (2010b). Cold war melodrama: The story of the 1980 United States Men's Olympic hockey team. Manuscript accepted for publication in *Olympika. The International Journal of Olympic Studies*, 19, 111–138.



**Intangible Benefits to City Image**

Having a noticeable sport franchise can enhance a city’s “image and identity.” Well-known sports teams provide valuable advertising for cities by increasing television coverage and name recognition. Although they may be difficult to quantify, having a major league franchise can increase reputation which may lead to other benefits for a city.

**Second Tier Cities in a Prisoner’s Dilemma**

Even if one posits significant social and intangible benefits for sports venues, the question remains as to why governments acquiesce to team demands for public subsidies. After all, social and intangible benefits could be captured just the same by arenas that are developed without public subsidies as has occurred in major metropolitan markets.

We suggest that second tier cities like Milwaukee find themselves in a prisoner’s dilemma as described in standard game theory. In prisoner’s dilemma, two completely rational actors might not cooperate, even if it appears that it is in their best interests to do so. The figure below illustrates this dilemma in the context of competition for sports teams among cities.

**FIGURE 5-6  
SUBSIDY DECISIONS AS A PRISONERS DILEMMA**

		CITY A	
		DEFECT (provide subsidy)	COOPERATE (withhold subsidy)
CITY B	DEFECT (provide subsidy)	City A or B gets team and pays subsidy	City B gets team and pays subsidy
	COOPERATE (withhold subsidy)	City A gets team and pays subsidy	City A or B gets team and pays <u>no</u> subsidy

Cooperation by both cities seeking the team, which in this example is withholding subsidies, would allow one of the two competitors to win the team without paying subsidies. But the incentive to defect (offer subsidies) is stronger than the



incentive to cooperate because offering subsidies would produce the assured outcome of obtaining the team. Withholding subsidies would assure the loss of the team if the other city offers subsidies. With both cities more incentivized to defect than to cooperate, the equilibrium outcome (shown in light grey above) is less than optimal because neither city is assured of obtaining the team and the winning city must pay subsidies.

A key component of a prisoner's dilemma is that the players cannot collude and only presume what actions the other player will take. Cities cannot collude because the threat of team relocation is non-specific and the identity of the competitive city is usually unknown. Milwaukee currently faces this situation. Even if the identity of a competitive city is known, the ability of two competing cities to agree to withhold subsidies is constrained by the prospect that a third city will enter the competition. Without regulations that prohibit cities from offering subsidies, cities have little choice but to offer them if they desire to reap the social and intangible benefits of hosting a major league sports franchise.

Some regulations have been proposed but never enacted. In 1996, the late senator Daniel Patrick Moynihan introduced legislation that would prevent states, cities, and counties from issuing tax-exempt bonds to finance professional sports facilities. President Obama's current budget proposal contains a similar prohibition on the use of tax-exempt financing for sports venues. Such legislation would remove the primary source of available public incentives and force public entities to use more costly taxable debt. Consequently, these rules would raise the cost of public involvement and may have the effect of reducing the level of subsidy offered to sport venues.

### Assessment of the Public Share

The proposed public-private partnership for the development of the Bucks Arena has been characterized as a 50/50 deal in which each side pays for half of the capital costs. While each party has agreed to contribute \$250 million to the capital costs of the Bucks Arena, a number of other variables not included in the estimate of capital costs could affect the share of public investment. Further, the 50/50 split of costs does not consider the 30-year life cycle of the Bucks Arena lease, which will involve ongoing public participation.

HVS has identified 17 revenue and expense items that will increase or decrease the public share of financial commitment to the project. We have quantified the impacts of five of these variables, but the value of the other twelve cannot be accurately estimated at this time. Seven of these anticipated revenues or expenses would increase the public financial commitment to the project, while nine of them would decrease the public share. Direction of one impact is unknown.



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The figure below summarizes these impacts on the public share of participation in the Greater Bucks Arena project.

**FIGURE 5-7  
POENTIAL IMPACT ON THE PUBLIC SHARE OF FINANCING**

Revenue or Expense Item	Increase - Decrease	Estimated Amount	Comment
<b>City</b>			
City contribution to infrastructure	↑	\$4.1m to \$4.6m	City commitment to infrastructure development within TID 84
City contribution of land	↑	Unknown	4th and Highland and Park East Parcels
City contribution of existing parking structure at 4th and Highland	↑	Unknown	Bucks are to replace this asset at their expense but they will benefit from the contribution of the land
Net parking revenue to City	↓	\$12.4m	Estimated Net Present Value of \$12.4 million
Municipal service costs	↑	Unknown	Unknown amounts of police, fire and sanitation services to the Arena Project.
Foregone property taxes	↑	Unknown	Assessment on development which could occur in the absence of the project
<b>County</b>			
County contribution of land	↑	Unknown	Prior attempts to sell the land to developers have been unsuccessful. The future value of the land is unknown.
Site preparation cost on County Site	↓	Unknown	Bucks to absorb costs of removing piles, which is not part of Arena costs
<b>State</b>			
Ticket surcharge to State	↓	\$7.7m	Present value of \$500 thousand of annual surcharge revenues for 30 years
Bradley Center Funding from Wisconsin Building Commission	↑	\$10m	\$10 million State commitment for ongoing maintenance
<b>WCD</b>			
Potential lease rents and/or services charges to WCD	↓	Unknown	The lease has not been negotiated.
Ticket surcharge to WCD	↓	\$23.1m	Present value of \$1.5 million of annual surcharge revenues for 30 years.
<b>Milwaukee Bucks</b>			
Project cost overruns	↓	Unknown	Unknown amounts. Sole responsibility of the Bucks
Demolition of Bradley Center and Associated Parking	↓	Unknown	Responsibility of the Bucks costs unknown
Maintenance of Public Plaza	↓	Unknown	Bucks responsibility
Remaining Debt on Bradley Center	→	Unknown	Documents unclear about responsibly for repayment of existing debt.



### **City Participation**

This City will benefit from a steady stream of parking revenues over the life of the project. HVS analyzed the proposed parking deal in which it would receive half of all net parking revenues from the new parking structure. This analysis considered the eventual loss of revenues from the existing parking deck, which would be demolished. We estimated the net present value of the resulting revenue streams to the City at \$12.4 million. All other impacts on the City would be negative and increase its participation in the project. These include a \$4.1 to \$4.6 million contribution to infrastructure development in TID 84, the contribution of land, municipal service costs and foregone property taxes. The impact of foregone property taxes is particularly difficult to estimate. Currently much of the site is publicly owned and not generating any property tax revenue. But if the Bucks Arena project is not built, other property tax generating projects could occur on the site at some future date. Assessing the value of property taxes for a hypothetical and counterfactual situation is not possible.

### **Impact on the County**

The County is contributing vacant land to the development. Its prior attempt to sell the land through RFP processes did not generate any offers to purchase the land for more than a nominal price. None-the-less the land has some value, the appraisal of which is beyond the scope of this study. Offsetting this land contribution is the commitment of the Milwaukee Bucks to prepare the site for development by removing piles that remain from its former use.

### **State Participation**

The State stands to gain from cash flows from Ticket Surcharge revenue of approximately \$500 thousand per year. We estimate the present value of this cash flow at \$7.7 million. On the negative side of the ledger, the Wisconsin Building Commission has committed \$10 million for the ongoing maintenance of the Bradley center to keep it operating during construction of the new arena.

### **Impact on the WCD**

Unlike many other NBA lease agreements, the proposed terms of the lease agreement with the Milwaukee Bucks insulates the WCD from additional capital and operating costs. The Bucks would assume all responsibility for capital costs overruns and take all operating risk. The lease agreement could generate some rents or service charges paid to the WCD but the terms of the lease are unknown at this time.

Like the State, the WCD would benefit from the receipt of an estimated \$1.5 million in Ticket Surcharge revenues. We have estimated the present value of 30-years of revenues at \$23.1 million.

### **Milwaukee Bucks**

The financial commitment of the Milwaukee Bucks (and reduction in the public share of costs) has potential to increase for the following reasons:



- Potential costs overruns on the Bucks Arena project are the sole responsibility of the Milwaukee Bucks.
- The cost of demolition of the Bradley Center and associated parking will be borne by the Bucks, but as of this writing, no firm cost estimate is available. The cost of demolition will depend on the amount of remediation required for the removal of hazardous materials.
- The Milwaukee Bucks will assume ongoing responsibility for the maintenance of the Public Plaza.

Finally, a 2014 audit shows that the Bradley Center has approximately \$17 million in outstanding debt. The authorizing legislation, existing use agreements, and terms sheets available to us do not indicate who would be responsible for repayment of the Bradley Center debt upon transfer of its ownership.

## Conclusion

HVS compared the Arena Plan to the costs, financing plans, and lease deals for other NBA arenas. Key findings suggest that the total construction cost for the new Bucks Arena fits the recent trend of larger investments in all-inclusive sports arenas. HVS also found that the City of Milwaukee's contribution to total costs is relatively low, when compared to other recent arena developments in market of similar size. However, ongoing financial commitments to the project could materially alter the share of public participation in the project. This report highlights a number of factors that could increase or decrease the level of public expenditures on the Arena Project in the current development stage and over the 30-year life of the project.

In the absence of public subsidies to support a new Bucks Arena, Milwaukee is likely to lose the team. The NBA has effective monopoly power over the supply of teams and Milwaukee is in competition with other second tier cities that would like to obtain a franchise. Direct measurable impacts on the Milwaukee economy are relatively small and these impacts represent a transfer of income from the larger metropolitan areas and the State as a whole. Rather the decision to participate in the financing of the project should include consideration of the social and intangible benefits, which are not quantifiable, but none-the-less the significant. These should be the primary reasons for public support of arena development.





## 6. Statement of Assumptions and Limiting Conditions

1. This report is to be used in whole and not in part.
2. No responsibility is assumed for matters of a legal nature.
3. All information, estimates, and opinions obtained from parties not employed by HVS are assumed to be true and correct. We can assume no liability resulting from misinformation.
4. We are not required to give testimony or attendance in court by reason of this analysis without previous arrangements, and only when our standard per diem fees and travel costs are paid prior to the appearance.
5. If the reader is making a fiduciary or individual investment decision and has any questions concerning the material presented in this report, it is recommended that the reader contact us.
6. We take no responsibility for any events or circumstances that take place subsequent to the date of this report.
7. Many of the figures presented in this report were generated using sophisticated computer models that make calculations based on numbers carried out to three or more decimal places. In the interest of simplicity, most numbers have been rounded and may be subject to small rounding errors.
8. It is agreed that our liability to the client is limited to the amount of the fee paid as liquidated damages. Our responsibility is limited to the client, and use of this report by third parties shall be solely at the risk of the client and/or third parties. The use of this report is also subject to the terms and conditions set forth in our engagement letter with the client.
9. This report was prepared by HVS Convention, Sports & Entertainment Facilities Consulting, a division of HVS. All opinions, recommendations, and conclusions expressed during the course of this assignment are rendered by the staff of these two organizations, as employees, rather than as individuals.
10. HVS, is not a municipal advisor and HVS is not subject to the fiduciary duty set forth in section 15B(c)(1) of the Act (15 U.S.C. 78o-4(c)(1)) with respect to the municipal financial product or issuance of municipal securities. The reader is advised that any actual issuance of debt would be done under the advice of bond counsel and financial advisors. The financial



advisor would provide advice concerning the specific structure, timing, expected interest cost, and risk associated with any government loan or bond issue. Potential investors should not rely on representations made in this report with respect to the issuance of municipal debt.

11. This report is set forth as a financial review; this is not an appraisal report.



## 7. Certification

We, the undersigned, hereby certify:

1. that the statements of fact presented in this report are true and correct to the best of our knowledge and belief;
1. that the reported analyses, opinions, and conclusions presented in this report are limited only by the assumptions and limiting conditions set forth, and are our personal, impartial, and unbiased professional analyses, opinions, and conclusions;
2. that Brian Harris, Catherine Sarrett, and Thomas Hazinski personally conducted the analysis and reviewed the findings;
3. that we have no personal interest or bias with respect to the subject matter of this report or the parties involved;
4. that this report sets forth all of the limiting conditions (imposed by the terms of this assignment) affecting the analyses, opinions, and conclusions presented herein;
5. that the fee paid for the preparation of this report is not contingent upon our conclusions, or the occurrence of a subsequent event directly related to the intended use of this report;
6. that our engagement in this assignment was not contingent upon developing or reporting predetermined results; and
7. that no one other than those listed above and the undersigned prepared the analyses, conclusions, and opinions concerning the real estate that are set forth in this market study.

Thomas Hazinski  
Managing Director

Brian Harris  
Director

Catherine Sarrett  
Project Manager