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Foundations of Publicly Subsidized Sport Stadiums: The Case of U.S. Bank Stadium

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Abstract

This study aims to address the common considerations concerning publicly subsidized sport stadiums. To provide an in-depth illustration into this process, a case study narrative of the Minnesota Vikings' journey to receiving a public subsidization totaling $498 million for the construction of the U.S. Bank Stadium is presented. As sport stadiums seemingly incorporate more luxurious amenities each year, it is not uncommon to see the price tag for a professional stadium to surpass a billion dollars. Given this colossal cost, it has become difficult for private investments to finance an entire stadium alone. Therefore, combining the private financing of a professional sport stadium with a public subsidization has become a prominent and debatably essential practice. However, acquiring public financial assistance is not straightforward, but rather a scrutinized and complex process requiring appropriate economic and social justification. Prior to calling U.S. Bank Stadium home in 2016, the Vikings played at the Metrodome in downtown Minneapolis for over 30 years. Due to the Metrodome lacking many desirable features, the Vikings began seeking the construction of a new stadium that would position the team and the Twin Cities of Minneapolis/St. Paul atop the NFL world. After undergoing a 15-year political dissension with the citizens of Minnesota and their legislature, the Vikings were finally granted their wish in 2012 with a commitment of $498 million in public subsidies to help pay for the $1.1 billion U.S. Bank Stadium. The Vikings and U.S. Bank Stadium case study depicts an in-depth examination into the foundations, justification, and business of financing a modern professional sport stadium.

Keywords: public subsidization, funding, sport stadium, NFL, Minnesota Vikings, U.S. Bank Stadium

Contents

Introduction

From 2007–2016, state and local governments spent an annual average of $153 billion on public infrastructure (USA Facts, 2021); these expenses commonly include financing for transportation (e.g., roads, air travel, and rail), education, health, and utility infrastructure. Generally, the public subsidization of infrastructure is rationalized as extensive construction costs make producing an adequate supply privately unprofitable (Winston, 2013). Nevertheless, government subsidies have become quite inclusive to a private and profitable sport industry whose four major professional sport leagues the National Football League (NFL), National Basketball Association (NBA), Major League Baseball (MLB), and National Hockey League (NHL) combined for just under $40 billion in revenues during their 2018-2019 seasons (Brown, 2019; Gough, 2020; Gough, 2021; Jones, 2021,). According to Georgia State University's Stadiatrack, 36 professional stadiums in the United States were either constructed or renovated at a total cost of $15 billion from 2007–2016. Public finances were responsible for over 50% of this total cost. That equates to an average public tab of over $200 million per project, with many public contributions frequently approaching and even surpassing half a billion dollars (Georgia State University [GSU], 2020).

In the last few decades, professional sports have experienced an extensive surge in demand for increased fan amenities. As a result, the price for a new stadium is reaching an all-time high. To give perspective, the most recent stadium constructed utilizing public funds is Las Vegas Raiders' new home, Allegiant Stadium, with a total cost of $1.8 billion (GSU, 2020.) While franchises possess alternative and more private means of funding these colossal price tags, they typically prefer turning to public funding for assistance. In fact, professional franchises will even leverage funds from the public through threats of relocation. Nonetheless, public funds are not simply bestowed to franchises as they almost always are accompanied by profound public and bureaucratic scrutiny demanding justification for their expenditures.

The public subsidization of a stadium is an extensive process involving many considerations. Although substantial research exists regarding most considerations of publicly funded stadiums, their extensive findings can be difficult to discern. Accordingly, the purpose of this study is to address the common considerations concerning publicly subsidized sport stadiums. To help illustrate this, a case study narrative following the events leading to the public financing of U.S. Bank Stadium in the metropolitan area of Minneapolis/St. Paul is presented. The information outlined in the literature review provides abstract knowledge and insight into this process.

Literature Review

Overview

The 1990's marked the start of a stadium revolution for the sporting industry. Up until 1989 the four major sporting leagues had spent a cumulative total of $672 million on the construction of a sport stadium; however, by 2009, this cumulative total had ballooned to over $30 billion (Reider, 2009). The cause of these rising costs can be attributed to the incorporation of lavish amenities such as luxury suites, restaurants, massive video boards, and intricate architecture into the construction designs of a new stadium (Carbot 2009; Shank & Lyberger, 2015). While these additional amenities provide further revenue streams, they also skyrocket a stadium's price tag (Carbot, 2009). As a result of this amenity arm's race, the sporting world witnessed its first billion-dollar stadium in 2009 when the Dallas Cowboy's AT&T Stadium was erected in Arlington, TX (Reider, 2009; Shank & Lyberger, 2015). While public funding is accountable for a significant portion of a stadium's financing, it is not the only available source of funding.

Private Financial Contributions

A collection of methods exists for sport franchises to establish capital funding for a new stadium. The most immediate source of private financing confides in franchise owner or corporate contributions. Additionally, the sale of stadium naming rights and personal seat licenses offer prevalent sources of financing for a sport stadium's construction (Baker, 2018).

In 2020 a sport complex totaling approximately $5 billion was completed with sports' newest treasure, SoFi Stadium, as its centerpiece. This new home of the Los Angeles Rams and Chargers was constructed with 100% of its expenses covered by private means (Peter, 2020). Billionaire businessman and owner of the Los Angeles Rams, Stan Kroenke, was willing to inherit the entirety of the debt created in covering the cost of his new stadium. T-Mobile Arena, the home of the NHL team Vegas Golden Knights, is a case exampling a form of corporate contributions wherein two private organizations, MGMResorts International and Anschutz Entertainment Group, partnered to fund the $375 million arena privately. Although many owners and corporations can contribute to a significant portion of a stadium's cost, given their rising price tags nowadays, most do not possess the finances to fund one entirely through their own contributions (Baker, 2018).

Another commonly used private mean of financial assistance is selling the right to name a stadium. Naming rights are a particularly sought-after sponsorship opportunity due to the massive amounts of brand exposure it presents (Baker, 2018). The name associated with a sport stadium has become nearly as iconic as the stadium itself as its name serves as a symbol vested to the city and franchise. As result of this, acquiring a stadium's naming rights comes a lucrative cost (Carbot, 2009). Frequently, the naming rights of a stadium produce between $8–$12 million annually for the duration of a decade or more. Stadiums in larger markets, such as New York or

Los Angeles, may haul in over $20 million annually (Bien, 2013; Hudson & Saporta, n.d. as cited in Baker, 2018). The money generated from a stadium's naming rights provides a franchise with a substantial and steady revenue source to help cover a stadium's expense.

A Personal Seat License (PSL) offers further financial support in covering the intensifying expense of building a new stadium. PSL's are an agreement in that when purchased, it entitles the licensee the right to buy season tickets for a specific seat in the venue. The sale of a PSL is an excellent source of immediate capital (Baade & Matheson, 2011). As a PSL is often used to help finance a stadium, they also are referred to as a Stadium Builder's License, or SBL (Baumann & Matheson, 2017). To give an idea of the amount of revenue a PSL can generate, the Las Vegas Raiders' Allegiant Stadium generated an estimated $549 million (Smith, 2020).

For the four major sporting leagues in the last decade (2010–2020), private funding methods have helped cover around 57% of all stadiums' total costs of construction and renovation (GSU, 2020). Given the considerable amount remaining, a franchise generally looks in the direction of public aid to help bridge the financial gap. Frequently, this aid translates to state or local governments issuing and repaying the debt service of tax-free bonds.

The Role of Tax-Free Bonds

The premise behind issuing tax-free bonds is the tax-free returns they offer, which is a major incentive for investors (Gayer, Drukker, & Gold, 2016). Under the public purpose doctrine, tax-free bonds may finance capital projects and cover operational costs for qualifying private industries so long as they provide a significant public benefit. The public purpose doctrine applies to a sport stadium's financing under the determination that in addition to hosting a professional sports franchise, they benefit the public by offering space for concerts, festivals, and other public events (*Meyer v. City of Cleveland* as cited in Carbot, 2009). Corrective measures were attempted by the Federal Government to exclude sport stadiums as tax-free eligible; however, they ended up further incentivizing their use. So long as state and local governments are willing to repay 90% of a bond's debt service, they may remain tax-free (Gayer et al., 2016).

A 1998 study offers a unique insight into the role of tax-free bonds as it compares a stadium's financing to a marketplace, wherein each stakeholder plays a vital role. In this marketplace, state or local governments are the seller, the sport franchise is the buyer, the goods are tax incentives, and taxpayers are the supplier. Given the rising costs of stadium construction and renovation, sport franchises do not wish to incur the entire financial burden; thus, given the opportunity, they seek to maximize any possible assistance (Kalich, 1998). Cities and states desire to have a sport franchise located in their region due to the perceived benefits of creating jobs and spillover economic cash flows. Additionally, sport leagues govern the supply of franchises available. Provided this desire and governed supply, the demand for a franchise rises. In some cases, to further propel their demand, franchises will even threaten to relocate if not awarded public funding. In response to this heightened demand, cities and states become more willing to issue tax-free bonds and repay the debt service (Kalich, 1998; Siegfred & Zimbalist, 2000).

A general sales tax may be considered the most universally used source of revenue to repay a bonds' debt. However, cities and states may choose to divert the burden away from their local residents by levying taxes onto a niche market. Tax revenues generated by the lodging, tourism, and sin (e.g., tobacco, alcohol, or lottery) industries are the commonly targeted niche markets since only a fraction of the local population and outside visitors utilize these services (Carbot, 2009).

Sport Stadium Referendums & Political Persuasion

When encountered with a scenario involving the requests of public funds a referendum, or vote, is often held. As it pertains to sport stadiums the purpose of a referendum is to determine the public's approval for a proposed subsidization (Mondello & Kellison, 2016). Persuasions made by both stadium advocates and adversaries strongly influence the public's perception and commitment levels. However, pro-subsidy advocates seemingly possess a more significant influence than their adversaries (Hutchinson, Berg, & Kellison, 2018).

Hutchinson, Berg, & Kellison (2018) examined the role of powerful advocates in the process of publicly subsidizing stadiums and identified a prominent theme. When faced with insufficient public approval, rather than searching for alternatives, pro-subsidy advocates will commit substantial resources to gain necessary public approval or discover workarounds to bypass a referendum (Hutchinson et al., 2018). Before the city of Cincinnati contributed public funds to the construction of Paul Brown Stadium, the city faced public opposition. In the time leading up to the stadium's official referendum, a $1 million campaign was launched to increase stadium support. The referendum ultimately passed (Brown, 2003). For a similar scenario in Pittsburgh, a campaign was launched to help garner public support, yet the referendum still failed. However, the failing referendum did not halt the public subsidization of a new stadium in Pittsburgh. Loopholes and workarounds were discovered to bypass a referendum, thus allowing for public funds to be used (Hutchinson et al., 2018).

A Sport Stadium's Justification

A commonly presented justification for the use of public funds towards a sport stadium is claiming them as an economic hub. As an economic hub, a stadium promotes increased tourism and consumer spending both within the stadium and for surrounding businesses. Furthermore, a new stadium creates thousands of jobs in relation to their construction and operation. These new jobs raise income levels and effectively provide local governments' further tax support and contribute to the creation of an economic multiplier of two or more. To put this into perspective, if $10 is spent at the stadium, this $10 will help pay a worker's wage and subsequently be re-spent at a local store within proximity to the stadium. However, many economists view these statements of a sports stadium's economic impact as flawed due to the concept of opportunity cost (Humphrey, 2006).

Opportunity cost refers to the notion of what consumers must give up when deciding where their money is spent. One can easily measure how much money is spent at a sport stadium, but it can be challenging to determine where a consumer would alternatively spend their money if not at a sport stadium. The concept of opportunity cost can also be applied to a government's subsidization of sport stadium and its creation of jobs. If a government makes the decision to spend $500 million on a new stadium, they are consequently giving up their opportunity to spend $500 million on other public infrastructure (Wolla, 2017). Furthermore, unemployment tends to be quite low for construction workers in metropolitan cities, so had a stadium not been built, these workers would likely find employment on a different project (Humphrey, 2006). In fact, the authors of the book, *Sports, Jobs, and Taxes* (1997) suggested that a sport stadium has an economic impact equivalent to a midsized department store and stated if all of Chicago's sport franchises were to vanish, the economic impact would be less than 1% (Noll & Zimbalist, 1997).

The work of Seifred & Clopton (2013) suggests a sport stadium can serve as a social anchor that supports the development and maintenance of a city's social capital and collective identity. A city's social capital refers to the quality of relationships among citizens. Sports are uncanny at achieving social interactions between strangers, which is otherwise known as bridging. Social bridging establishes a strong collective identity for a city or region (Seifred & Clopton, 2013). A prime example of the creation of social identity exists in the city of Indianapolis, Indiana. Struggling to expand, Indianapolis leaders aimed to revolutionize the city as an attractive commercial and residential destination. In 1974, Indianapolis earned approval to begin using millions of public dollars to construct sporting infrastructure. Soon Indianapolis became home to USA Swimming and Diving, the National College Athletic Association (NCAA) headquarters, the NFL Combine, and other professional, collegiate, and international sporting events. Their public investment paid off to the tune of thousands of new jobs, increased tourism, commercial development, and a flourishing reputation as one of sports' finest cities (Rosentraub, 2008; Rosentraub, Swindell, & Tsvetkova, 2008 as cited in Seifred & Clopton, 2013).

Methodologies

Case Study Selection

Opening in 2016, U.S. Bank Stadium is one of the most recently constructed stadiums in all professional sports. The recent completion of U.S. Bank Stadium will provide a modern relevancy. This new home of the Minnesota Vikings bore a total cost of nearly $1.1 billion, with $498 million provided by public subsidizations (Grumney, Thomas, & Boswell, 2016; Minnesota House Fiscal Analysis Department [MHFAD], 2012). U.S. Bank Stadium is located in Minneapolis, MN, but its implications carry beyond the city's limits. Minneapolis closely relates to the neighboring city of St. Paul, MN, and several surrounding counties. Therefore, this region will otherwise be referred to as the Twin Cities Metro. The Twin Cities Metro bears an extensive history that date backs to the early 1960's concerning professional sport franchises and publicly subsidizing stadiums.

According to the U.S. Census, it estimates the Twin Cities Metro had a total population of 3.1 million in 2018 (Metropolitan Council, 2019).

Data Source and Search Strategy

A collection of data retrieved online including web sources, news editorials, published reports, and legislative documents was utilized to develop an impartial and holistic narrative of U.S. Bank Stadium. To develop the common era of professional sports in the Twin Cities Metro, the data used to develop the study ranged from the early 1950's to 2021. Each resource contributed unique perspectives and information to the completion of the case and supplied a cross-examination of the facts presented.

Many claims and interpretations are made throughout this case study; therefore, it is important to address their reliability and validity, or the extent to which a source may be trusted. Most editorials possess an agenda tailored to satisfy a purpose they must fulfill, which may be cause for bias. Additionally, sources involving reports or numerical records may also contain biases. The recognition and acknowledgment of these biases will contribute to the study's credibility, impartiality, and holistic nature (Russel, 2007). To help rid this case study of any biases and to help ensure the reliability of the information presented, significant claims were cross-referenced with at least one, but in most cases multiple, sources. Furthermore, any bias thought to be present was omitted.

Case Study of U.S. Bank Stadium

From Metropolitan Stadium to the Metrodome

During the 1950's, leaders of the Twin Cities Metro felt their region was suited to gain a professional sporting franchise (Cullum, 1953). With this aspiration at the forefront, the

Metropolitan Sports Area Commission, MSAC, was created in 1954. In 1956, construction was completed on a privately financed $4.5 million stadium in Bloomington, MN known as Metropolitan Stadium (Minnesota Legislative Reference Library [MLRL], 2020). In 1960, the Twin Cities received a relocated MLB franchise from Washington D.C. and an expansion franchise from the NFL (Cullum, 1960; Johnson, 1960). These newly founded teams would be known as the Minnesota Twins and Vikings, respectively. The Twins and Vikings played their inaugural seasons in 1961, sharing Metropolitan Stadium as their home field (MLRL, 2020).

Already by the 1970's, the Twins and Vikings began voicing concerns over Metropolitan Stadium's inadequate seating capacity, age, and exposure to the weather (Early, 1975; MLRL, 2020). Talks for a new domed stadium commenced, but nothing came to fruition until 1977 when the Minnesota Sports Facilities Commission, MSFC, was created. The current MSAC disbanded, and their employees transferred to the MSFC (MLRL, 2020). Then in 1982, the 100% publicly funded Hubert H. Humphrey Metrodome was constructed at the cost of $55 million (Cameron, 2019; Weiner, 2001). The Twins and Vikings, along with the football team for the University of Minnesota, played their first games in the Metrodome that same year (Cameron, 2019; MLRL, 2020). After standing for nearly 30 years, Metropolitan Stadium was demolished in 1985 (MLRL, 2020).

Fast forward to 1997, and the Metrodome was beginning to become prematurely outdated at a mere 15-year life. By this time, the Minnesota Twins had already begun to voice their concerns by stating the Metrodome was economically obsolete and an insufficient venue for baseball (Berg, 1995; Weiner, 1997). In favor of the Twins' efforts, leaders of the Vikings began voicing similar concerns over the Metrodome's lack of amenities (Weiner, 1997). Given a clause in their lease the Twins could escape the Metrodome due to economic loss, but the Vikings were under strict lease with the MSFC through the 2011 NFL season (Noll & Zimbalist, 1997).

The Stadium Saga Begins

In 1998, Red McCombs, a businessman from San Antonio, purchased the Vikings for $206 million (Millea, 1998; MLRL, 2020). As one of his first actions as owner, McCombs stated the Vikings need a new stadium (MLRL, 2020). In the 1990's alone, 19 NFL franchises had already received public funding to refurbish their current stadium or construct a new one altogether. These NFL stadiums included luxurious amenities such as restaurants, suites, and club seats (Weiner, 1999). The Vikings currently ranked near the bottom in NFL stadium revenue. Without a new stadium, the Vikings revenue would continue to decline, making it difficult to remain economically competitive with other NFL teams (Munsey & Suppes, 2013; Weiner, 1999).

In the wake of this demand, the MSFC released plans to refurbish the Metrodome. The plan was to build the Twins a new stadium, while the Vikings received a renovated Metrodome. A proposal for a $160 million Metrodome renovation that would add luxury boxes and club seating emerged. With no interest in a refurbished Metrodome, the Vikings rejected and counteracted this proposal by stating they wished to build a $400 million stadium financed with a $300 million public subsidy (MLRL, 2020; Munsey & Suppes, 2013). To the Vikings dismay, Minnesota citizens and legislators were unwilling to provide public funding. In fact, a poll by the Star Tribune overwhelmingly found that two-thirds of respondents strongly opposed the idea of using public funds to help the Twins or Vikings build a stadium. McCombs and the Vikings were becoming fearful of the financial repercussions they may face if not given a new stadium in the next five years (Munsey & Suppes, 2013). Soon after, the University of Minnesota joined the

Vikings and Twins in stating they too required a new stadium. The University's lease at the Metrodome was currently set to end in 2011 (Olson, 2001).

To appease the needs of the Vikings, Twins, and University of Minnesota, Minnesota Governor Jesse Ventura organized a task force to listen to their needs and develop a report for the 2002 legislative session (MLRL, 2020). In just over a year, Ventura's task force heard testimonies by members of the Vikings, Twins, the University of Minnesota, and pro-subsidy Minnesota residents and legislators. These testimonies regarded the three sports teams as public assets which provide jobs, social interaction, tourism, and community pride (Stadium Task Force, 2001a, 2001b, 2001c). While nothing in terms of a new stadium ever resulted from this task force, the MSFC was able to slightly improve the Vikings' financial situation by waiving their annual rent (Metropolitan Sports Facility Commission [MSFC], 2002).

In 2003, the state of Minnesota received a new Governor, Tim Pawlenty. In his initial attempt to address the stadium issues, Governor Pawlenty organized a 20-person stadium screening committee to advise and compose a proposal of possible stadium finance structures involving public support for the 2004 legislature (MLRL, 2020). The committee's official proposal recommended the Twins and Vikings both receive a new stadium with public assistance, while the University of Minnesota explore possible private funding options. The committee's proposal formally acknowledged the Vikings' stadium desires (Stadium Screening Committee, 2004; Weiner, 2004).

Despite the minor progress made over the past few years, the Vikings' owner Red McCombs became impatient. In 2005, McCombs sold the team to New Jersey's Zygmunt "Zygi" Wilf for $600 million. As their new owner, Wilf promised to keep the Vikings in Minnesota and continue pursuing a new stadium (Bailey, 2005; Williams, 2005). At this time, the most favorable proposal at the table for a new publicly subsidized Vikings' stadium was a $600 million indoor venue located in Blaine, MN (MLRL, 2020).

Victory for the Twins and the University of Minnesota

Fast forward to 2006 and the Twins and University of Minnesota both struck deals to build publicly subsidized stadiums. The University's TCF Bank Stadium was set to open in 2009, and the Twins' new ballpark, Target Field, in 2010 (Kaszuba, 2006). Target Field, located in downtown Minneapolis boar a total cost of approximately $545 million, with $392 million covered by a 0.15% Hennepin County sales tax increase and the rest in contributions from the Twins' organization (Munsey & Suppes, 2014 & Schill, Templin, & Berg, 2006). On the other hand, TCF Bank Stadium, located on the St. Paul campus and at with final cost of $288.5 million, is funded through a 25-year annual payment of $10.25 million from Minnesota's general fund along with donations, naming right revenues, and student fees (Kaszuba, 2006; Schill et al., 2006; University of Minnesota Athletics, 2021).

Following the Twins' and the University of Minnesota's journeys closing with two new stadiums, the political focus shifted towards the Vikings' current stadium proposal in Blaine, MN, whose costs were now exceeding $1 billion. Given these rising costs, the MSFC embarked on an investigation of the 20-acre downtown Minneapolis site, on which the Metrodome currently sat, to be another possible stadium location. Their investigation concluded this downtown site to be the most logical and cost-effective location for a new Vikings stadium as it sits between two major freeways, has access to the light rail, and is near other vital amenities such as hotels and restaurants. On the heels of this investigation, discussions over the Blaine stadium location ceased (MLRL, 2020; Moyer, 2006). Despite now having a favorable location, the Vikings entered a political stalemate from 2007–2008 in which no significant progress was made (MLRL, 2020).

The Vikings' Final Lap

By 2009, the Vikings had been pursuing a new stadium with little progress for more than a decade. No longer were they simply near the bottom in NFL stadium revenues, but now dead last at a reported annual revenue of $30 million less than any other team in the NFC North Division (Munsey & Suppes, 2013). Amid the continuous failing stadium discussions, rumors had begun to surface regarding a possible Vikings relocation to Los Angeles. Although, at this time, the Vikings owner Zygi Wilf stated he did not intend to relocate the team (Blount, 2009).

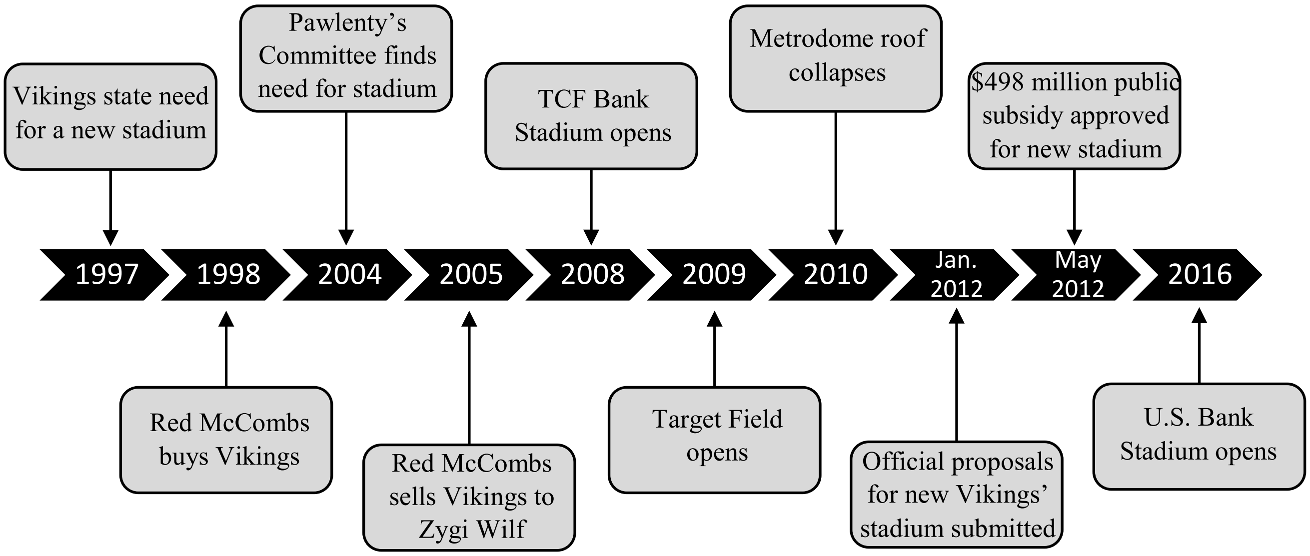
With the Vikings lease end fast approaching, the MSFC and Minnesota State Legislature were beginning to fret the future of the Vikings in Minnesota. In an attempt to buy time, the Vikings were presented a 2-year lease extension which would keep them at the Metrodome through the 2013 season. If not signed, it was threatened that the Vikings may have to resume paying their annual rent, which had been waived back in 2002 (Krawczynski, 2009; MSFC, 2002). In exasperation, the Vikings declined the offer and said they had zero intentions of renewing a lease at the Metrodome (Campbell, 2009; MLRL, 2020; Munsey & Suppes, 2013). In a 2010 statement released by the franchise, the Vikings expressed that resolving their stadium issues is crucial to the long-term success of the franchise in Minnesota and declared a stadium solution must be finalized (Minnesota Vikings, 2010).

Disastrously, in December of 2010, the Metrodome's roof collapsed due to heavy snowfall. As a result of this collapse, the Vikings were forced to play the remainder of their season at the University of Minnesota's newly constructed TCF Bank Stadium. Before the 2011–2012 season, the Metrodome received a new roof with costs covered through insurance. The roof's collapse sparked new life into the Vikings' pursuit to rid themselves of the Metrodome (Munsey & Suppes, 2013; Peters & Young, 2020). Throughout 2011, debates over possible funding sources and proposals for a stadium on the favored Downtown East site, along with a handful of other sites, commenced. In January of 2012, a total of ten proposals were submitted to the Minnesota State Legislature, with the Downtown East site being one (MLRL, 2020).

Finally, after a 15-year battle, in May of 2012, the Minnesota Legislature formally passed a bill, referred to as Chapter 299, granting public financing to the Vikings for a new football stadium located on the Downtown East site. The passing of Chapter 299 also authorized the formation of a new Minnesota Sports Facilities Authority, MSFA, to own and oversee the new stadium. The new Authority subsequently abolished the 50-year-old MSFC and assumed all of their assets (MHFAD, 2012; MLRL, 2020). Given the public ownership, the MSFA would be exempt from paying any building, material, or property taxes (MHFAD, 2012).

The Vikings finished their 2012 and 2013 seasons at the Metrodome, playing their final game on December 29, 2013 (Nelson, 2013). The Metrodome was later demolished in early 2014 to make way for their new stadium. Over the 2014 and 2015 seasons, the Vikings played at TCF Bank Stadium on the University of Minnesota's campus. In compensation, TCF Bank Stadium received $6.6 million in capital improvements and the University was paid approximately $3 million for each season played on their campus (MLRL, 2020; Ross, 2013). In just over two years of construction, the officially named $1.1 billion U.S. Bank Stadium, otherwise dubbed as "The Peoples' Stadium", opened on July 22, 2016 (MLRL, 2020; Olson, 2016) (Figure 1).

Figure 1: Timeline of Important Milestones Leading to the Opening of U.S. Bank Stadium



Vikings' Stadium Cost Breakdown

The initial cost projection for the Vikings' new stadium was $975 million; however, due to future improvements, this total grew to a rounded $1.1 billion. In total, $498 million of the stadium would be publicly subsidized through a combination of city and state finances. The remaining over half-billion dollars would be provided by the Vikings via private means (MHFAD, 2012 & Grumney et al., 2016). Additionally, the Vikings must pay an annual rent of $8.5 million to the MSFA (Platt, 2016) (Table 1).

Table 1: Breakdown of U.S. Bank Stadium Funding (TVM 2012–2016)

Public Costs	
State of Minnesota	$348 million
City of Minneapolis	$150 million
Total Public Cost:	$498 million
Private Costs	
NFL loan	$200 million
SBL revenues	$125 million
Stadium naming rights deal	$220 million
Stadium cost over-runs	≈ $20 million
Total Private Cost:	$545 million
Total Cost:	**≈ $1.1 billion**

Of the pledged $498 million in public subsidies, the city of Minneapolis is responsible for $150 million and the state of Minnesota for $348 million (MHFAD, 2012). In 2014, to generate money for their capital expenditure, the State issued appropriation bonds totaling $462 million, with $392 million being tax-exempt (State of Minnesota [SOM], 2014). The remaining $36 million (of the $498 million total) in public financing was paid in a one-time upfront transaction. The bonds were issued to the public in denominations of $1,000, with maturity dates ranging from 2015 to 2043, and at an average interest rate of 4.27%. The 30-year debt service associated with these bonds is paid through annual appropriations from the State's general fund for both the state of Minnesota and city of Minneapolis' contributions (Nelson, 2014; SOM, 2014).

According to a document written by the MFHAD (2012), the State's $348 million contribution is backed with revenues generated from an expansion of charitable gambling including bingo, paddle wheels, and electronic/paper pull-tabs in bars and restaurants. In addition to paying back the State's contribution to U.S. Bank Stadium, 0.5% of all expanded gambling revenues are appropriated to the National Council on Problem Gambling and an annual $2.7 million given to the city of St. Paul to assist in the operating/capital expenses of new or existing sports facilities.

The city of Minneapolis's source of funding to pay for their $150 million contribution comes from an array of existing local sales, liquor, lodging, and restaurant taxes initially levied in 1986 to cover their Convention Center's debt service. These taxes were originally set to end in 2020, but the passing of Chapter 299 extended them through 2046 and in 2021 will divert their revenues to cover the City's contribution to U.S. Bank Stadium. As these tax revenues must first repay bonds for the Minneapolis Convention Center through 2020, the state of Minnesota agreed to cover Minneapolis' stadium expense from 2014–2020 and later recapture their money spent on behalf of the City starting in 2021 through the year 2046. Additionally, Chapter 299 authorized a stadium operations/capital payments reserve that is funded by these Minneapolis tax revenues. Annual allocations of $7.5 million were placed in this reserve fund starting in 2014. (MFHAD, 2012).

The Vikings funded the remaining over half-billion dollars of the $1.1 billion U.S. Bank Stadium through a variety of private means. Most of the immediate funds for construction were raised through a $200 million NFL loan and another $250 million private loan, with the rest coming from an undisclosed source (Carlson & Ostrow, 2014).

The NFL's $200 million loan can be broken into three different sums where $100 million plans to be repaid using their share of visiting game ticket revenues, $50 million using general team revenues, and the last $50 million not having to be repaid if the team agreed to generate further revenues by selling stadium builder's licenses, or SBL's (Carlson & Ostrow, 2014; Schafer, 2015).

On the directive of the $50 million incentive from the NFL, the Vikings issued SBL's for 75% of their new stadiums' approximate 70,000 seat capacity. With the average SBL selling for about $2,500, the Vikings generated around $125 million for the construction of their stadium (BMTN Staff, 2014; Muret, 2014). In September of 2014, the Vikings reportedly sold the stadium's name to U.S. Bank for a contracted $220 million over 25 years, creating an annual revenue source of about $8.8 million (Tomasson, 2015). The remaining $20 million (although this amount is relatively undisclosed) in over-run costs for stadium construction were paid for in conjunction by the Vikings and MSFA (Baker, 2016).

Minnesota's Public Perception of the U.S. Bank Stadium Deal

The public subsidization of U.S. Bank Stadium secured the future of the Vikings in Minnesota and provided further tax revenue opportunities through the creation of jobs, selling of goods, and a promise of future downtown development. Moreover, after replacing the Metrodome, Minnesota would now have a state-of-the-art venue to host multiple local events and attract mega-events such as the Super Bowl, which would stir immense economic activity (Lanning, Rosen, & Rybak, 2014; Johnson, 2012). However, many Minnesotans still had a mix of emotions regarding their subsidization of U.S. Bank Stadium.

First and foremost, a city of Minneapolis charter passed in 1978 forbid any public funds exceeding $10 million be used towards financing a professional sports facility unless approved through a public referendum, and yet, $150 million was approved without one. Many Minnesotans, particularly Minneapolis residents, felt the deal was unfair due to this bypassing of a referendum (Scheff, 2014). No matter how unfair it may seem, this Minneapolis charter was not violated due to a legal interpretation. Since the Minneapolis hospitality taxes being used to subsidize the stadium was passed and levied in 1986, no new taxes were actually imposed. Furthermore, because the revenue from these taxes were directly claimed and appropriated by the state of Minnesota, the money was never in possession of the City and considered not theirs. Had a referendum been required, the fate of the Vikings' new stadium may have been different. According to a Star Tribune poll, a majority of Minnesotans (and Minneapolis citizens) still opposed a public subsidization, despite the Vikings' urgency and rumors of the team's possible relocation to Los Angeles (Greenberg, 2017).

Additionally, the legislature's deal with the Vikings involved confusing information which could be misunderstood. For instance, Minneapolis' $150 million contribution to the stadium's cost is relatively straightforward; however, their $7.5 million per year allocations to the stadium's reserve fund is overlooked. Over the 30 years Minneapolis is expected to pay for the stadium, their contribution is actually $375 million for the construction and operation of U.S. Bank Stadium. After inflation and interest, this contribution is closer to $631 million. These major allocations of public resources harm the future of Minneapolis because there will be fewer annual appropriations for essential government services, including education, transportation, and government-assisted programs (Carlson & Ostrow, 2014).

U.S. Bank Stadium's Economic Impact

Along with being the site of a new billion-dollar stadium, Downtown East Minneapolis offers easy access to the light rail and a variety of other popular entertainment options, and yet, this site had been unable to attract investment, and as a result, possessed a multitude of undeveloped real estate (Moore, Roper, & Meryhew, 2013; Ryan Companies, 2021). Shortly following the announcement of U.S. Bank Stadium, plans emerged to revitalize a 5-block area around the stadium in Downtown East Minneapolis with the additions of two 17 story office buildings, a renovated Millwright Building, a 200-unit apartment complex, a Radisson Hotel, 26,000 square feet of retail space, four skyways connected to the stadium, a parking ramp, and a public green space known as 'the Commons.' This $588 million development project was completed in 2016. In total, only $84 million in public financing helped to fund the construction of the skyways, parking ramp, and green space. The remaining $504 million was privately funded (Ryan Companies, 2021). In addition to this $588 million project, numerous other privately financed developments accompanied the construction of U.S. Bank Stadium. In all, Downtown East Minneapolis received over $1 billion in investments.

Since its announcement in 2012, an abundance of economic activity has been reported in connection to U.S. Bank Stadium. With its construction beginning in 2014, more than 300 Minnesota based firms and 8,000 jobs were involved in completing U.S. Bank Stadium. Moreover, around $1 billion in construction costs stayed within the state of Minnesota. Over the two years, an average of 1,500 people worked on the stadium per day (Flores, 2021). Succeeding its inauguration in 2016, U.S. Bank Stadium has welcomed an average of 1.6 million visitors per year to its more than 600 annual events (Minnesota Sports Facility Authority [MSFA], 2019). Furthermore, to this day, the stadium has successfully attracted mega-events such as the Super Bowl, NCAA Men's Final Four, and the Summer X-Games twice. These three events alone combined for an estimated $700 million economic impact on the Twin Cities Metro (Flores, 2021).

Discussion

Many key points presented themselves throughout the case study, with the three most important being: (1) The progression of sport stadiums (2) The government, public, and social influences which surround stadium proceedings (3) The financial and economic implications of U.S. Bank Stadium.

Progression of Sport Stadiums

When the Vikings first came to the Twin Cities in 1961, they played their home games at Metropolitan Stadium, a venue with none of the luxurious amenities seen today. Eventually, in 1982, the team progressed to the Metrodome, which offered a handful of attractive suites, video boards, and club seating during its early days. However, as time progressed, the Metrodome quickly became outdated compared to the array of flashy new sport stadiums built during the late

1990's and early 2000's. Then in 2016, the construction of U.S. Bank Stadium delivered modern relevancy back to the Vikings and Twin Cities Metro (Figure 2).

Figure 2: The progression of the Minnesota Vikings' Sport Stadiums over the Years

Metropolitan Stadium (1956-1985)  Metropolitan Stadium, 2020	**Tenants:** Minnesota Vikings & Minnesota Twins **Location:** Bloomington, MN [8] **Cost to Construct:** $8.5 million (1956) **Funding Sources:** 0% public, 100% private [11] **Football Capacity:** 48,446 [5] **Stadium summary/Fan Amenities:** Open-air stadium; cantilevered grandstands; bleachers; standing room viewing; one scoreboard; concession stands; no concourse; grass field [658].
H.H.H. Metrodome (1982-2014)  Munsey & Suppes, 2013	**Tenants:** Minnesota Vikings, Minnesota Twins, University of Minnesota[6] **Location:** Minneapolis, MN (Downtown East) **Cost to Construct:** $55 million (1982) **Funding Sources:** 100% public, 0% private [111] **Football Capacity:** 64,035 [2] **Stadium Summary/Fan Amenities:** 900,000 ft^2; Teflon coated fiberglass roof; armchair seats; over 110 luxury boxes; 22 ft wide concourse; 2 video boards approximately 646 ft^2 in size; concessions and food/beverage vendors [2347].
U.S. Bank Stadium (2016-Present)  Ryan Companies, 2021	**Tenants:** Minnesota Vikings **Location:** Minneapolis, MN (Downtown East) [10] **Cost to Construct:** $1.1 Billion (2016) [310] **Funding sources:** 48% public, 52% private **Football Capacity:** 66,200 [10] **Stadium Summary/Fan Amenities:** 1.75 million ft^2; transparent roof; 5 hydraulic doors; over 130 luxury boxes; 9 clubs/bars; an 8,160 ft^2 video board & 4,400 ft^2 video board; open concourse; merchandise stores/kiosks; approximately 38 food/beverage options at 59 locations; public Wi-Fi; Legacy Ship with 2,000 ft^2 video board sail; skyways. [39]

Cameron, 2016[1]; Dome History [2]; Grumney et al., 2016[3]; Kaszuba, 2007[4]; Metropolitan Stadium, n.d[5]; Prescott; 2001[6]; Rand, 2001[7]; Reichard, 2010[8]; U.S. Bank Stadium, 2021[9]; US Bank Stadium, 2020[10]; Weiner, 2001[11]

Government, Public, and Social Influences

As depicted in the case study, intense public and political scrutiny followed the Vikings from their initial attempt to garner public support for a new stadium in 1997 through U.S. Bank Stadium's completion in 2016. Furthermore, it could be debated that the Vikings would never have secured public funding for their stadium if it were not for a political workaround. Many teams journey towards the subsidization of a sports stadium involves indecision, divided public support, and various government influences. For example, the Cincinnati Bengals and Pittsburgh Steelers also faced bleak public support but were able to attain a subsidization due to political loopholes and coalition campaigning (Hutchinson et al., 2018). However, some teams do not always succeed in gaining political or public support. Before relocating to Las Vegas in 2020, the Raiders sought a new stadium in Oakland, but due to political indecision and unacceptable stadium solutions, the team left for a city that did offered public support (Musa, 2020).

An interesting dynamic to point out in this case study is the Vikings' relationship and competition with the other sport teams located in the Twin Cities Metro. Accompanying the Vikings' efforts were the Minnesota Twins and University of Minnesota. These aligned efforts were both favorable and troublesome. Favorably, the aligned interests of the Vikings, Twins, and University of Minnesota made for a prominent issue in the eyes of political and public leaders. However, on the flip side, it was clear Minnesota citizens were hardly willing to publicly subsidize one stadium, let alone three. In a balancing act, the Minnesota Legislature essentially prioritized each team in order of their Metrodome lease's possible ending dates: Twins (1998), University of Minnesota (2011), and Vikings (2012) (Olson, 2001; Suppes & Munsey, 2013; & Weiner, 1997). As a result, many efforts of the Minnesota Legislature were indecisive and arguably involved stalling tactics, thus causing frustration for the impatient Vikings.

Financial and Economic Implications of U.S. Bank Stadium

The breakdown of a stadium's financing generally involves a mixture of public and private financial means. This case study of U.S. Bank Stadium presented multiple examples of the different funding options available. The private means of funding available to the Vikings included the selling of stadium builder's licenses and stadium naming rights. Furthermore, the NFL granted the team a $50 million contribution they do not have to repay as an incentive to sell their SBL's. These three private sources alone were responsible for financing approximately $345 million, leaving the Vikings' ownership with approximately $150-$200 million to fund. The public financing options used in the funding of U.S. Bank Stadium involved the issuance of bonds backed by revenues generated from niche market hospitality taxes and charitable gambling. The reliance on these niche market revenues helps divert the burden away from Minnesota/Twin City Metro residents and on to tourists and the fraction of the public who utilize gambling services.

The economic impact of U.S. Bank Stadium presented in the case study represents a variety of positive repercussions for the Twin Cities Metro. The 8,000 jobs and over $1 billion in construction costs undoubtedly supplied significant additional income and sales tax revenues for the State and Twin Cities Metro. Furthermore, reports state U.S. Bank Stadium hosts nearly 600 events each year. This is significant because when an event is hosted at U.S. Bank Stadium it increases tourism and foot traffic to the area, thus injecting cash flows into surrounding businesses.

Nevertheless, some economists state the impacts of sporting events are overrated and fail to account for opportunity cost or displaced tourism. For example, when the Vikings host a home game, it could be assumed that traveling fans will consume various amenities of the Twin Cities Metro including, hotels, bars, and restaurants. On the other hand, these same amenities may still have been utilized by other travelers or tourists in town for different reasons had U.S. Bank Stadium not been constructed.

Despite these accusations by economists, U.S. Bank Stadium has attracted a handful of mega-events, with Super Bowl LII recently accounting for the most significant economic impact. An estimated 125,000 visitors, 95% from out of state, came to the Twin Cities Metro for the

Super Bowl festivities, resulting in a total of a $400 million economic impact and $32 million in further tax revenues; even after accounting for an estimated loss of $80 million in displaced tourism the Super Bowl may have caused (McGill, & Gray, 2018).

Even though a sport stadium's true economic footprint can be difficult to discern, it is hard to deny that without U.S. Bank Stadium the Twin Cities Metro most likely would not have been able to host Super Bowl LII, the Final Four, the Summer X-Games, or other possible future mega-events. Additionally, the presence of U.S. Bank Stadium could be labeled as the prime catalyst to the mainly privately financed Downtown East development (Hartman, 2018).

Conclusion

As sport stadiums evolve and continually add fan amenities, their costs are now reaching all-time highs. Consequently, the public subsidization of a professional sport stadium has become a common and debatably essential practice as a franchise is either unwilling or unable to fund them exclusively through private means. Given that the public funds involved in financing a professional sport stadium require a significant contribution (generally from tax revenues), this issue has fallen under immense scrutiny. Throughout this case study's narrative, the Vikings and other stakeholders encountered several obstacles along their journey towards the development of U.S. Bank Stadium, thus providing foundational insights into the political action, public influences, and financial considerations of publicly subsidizing a professional sport stadium. The key takeaways from this reading allow for the formation of an informed opinion and may be applied across all professional sports.

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