

Economic Development Generated by Investment in Participation Sports

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Abstract

Academic studies are fairly consistent in finding no significant economic impact associated with the financing of sports stadiums. Instead, it is believed that these facilities simply shift existing spending from other avenues of entertainment towards sporting events, with no net increase in overall spending. In this paper, we present the estimated economic benefits associated with a different type of sporting facility, one designed for hosting participation sports events. Specifically, we look at a proposal to build a multipurpose sporting facility in Spokane Washington. Similar facilities have been built across the United States in the past five years, allowing us to project the impact that such a publicly funded facility would have on the tax base, with our estimates indicating a net increase of approximately \$1 million in annual tax receipts.

Keywords: Sports Facilities, Economic Impact, Public Subsidies

1. Introduction

Public subsidies given to private enterprises have been an often debated issue over the past decade following the banking “bailouts” of 2008. Yet, in other industries, supplying public resources to private companies is commonplace. For example, more than eighty percent of National Baseball Association (NBA), Major League Baseball (MLB), National Hockey League (NHL) and National Football League (NFL) teams have built or renovated the stadiums that they play in since 1990, with approximately seventy percent of the funding for these facilities coming from public financing (Siegfried and Zimbalist (2006)). While these funds tend to be local rather than federal, the efficacy of these programs has been well documented within the literature. That is, studies examining the impact of these publically subsidized facilities has consistently been unable to find any economic impact associated with these investments (e.g. Baim (1994); Rosentraub et al. (1994); Baade (1994); Noll and Zimbalist (1997); Walden (1997); Coates and Humphreys (1999, 2003)).

The common explanation within the literature for this result, or lack thereof, is that these facilities shift spending towards the sports franchise, its players and its owners, away from movie theaters, concerts, restaurants, and other forms of entertainment. While fans of any sports franchise are likely to believe that the existence of their team within the community causes significant economic development through increased tourism to the area, estimates indicate that only 5 to 20 percent of fans are from out of the immediate area (Noll and Zimbalist, 1997b and Crompton 1995).

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Given this small percentage of nonlocal fans, there is little new economic activity generated by the presence of a professional sports franchise, limiting the economic development associated with public subsidies to these enterprises.³

Given the lack of economic benefits associated with providing public subsidies for the purpose of building sports facilities used by professional teams, many have hypothesized that there could be other positive externalities associated with these investments (e.g. Johnson and Whitehead (2000); Johnson et al. (2001); Groothuis et al. (2004)). These positive externalities may include “local unity, fan loyalty, and civic pride” (Johnson et al. (2001)). While this literature clearly finds positive economic benefits, generally through contingent valuation surveys, it is equally clear in determining that the value of these benefits is seldom large enough to justify the level of public subsidies provided (e.g. Johnson et al. (2007a)).⁴

In this paper, we examine a different model for spending public money on sporting facilities. Specifically, we follow Cobb and Olberding (2007), Johnson et al. (2007b) and Coleman and Ramchandani (2010) in analyzing the economic impact associated with recreation/participation sports.⁵ In particular, we predict the tax ramification of a proposed sports complex in Spokane Washington, part of an increasing trend of spending public money on complexes geared towards hosting participation sporting events as opposed to the aforementioned facilities aimed at spectator sports. Our focus in this analysis is on the tax implications of this type of investment, as it is the tax payers who fund these facilities. However, estimates by Sports Facilities Advisory, LLC (2015) indicate that there are significant economic benefits to this proposed facility, benefits which they estimate to surpass the construction and operation costs of this facility.

The remainder of this paper is structured into three sections. Section 2 highlights the proposed Spokane Sports Plex along with a discussion of literature relevant to this project. Section 3 analyzes the predicted impact of the proposed project on the local tax base, while Section 4 offers concluding comments and discussion of the limitations of this research.

2. Background

2.1 Spokane’s Proposed Sports Plex

The proposed Spokane Sports Plex is a 92,760 square foot facility, with 67,000 square feet allocated to a flexible competition area that can be reconfigured to host a variety of indoor sporting events. Specifically, the Sports Plex will be able to house a 200-meter indoor hydraulic-banked track, up to seventeen volleyball courts, up to ten basketball courts, and up to twenty one wrestling mats with retractable seating for 2,000 spectators. In addition, the facility will feature a 1,000 seat ice arena.

The estimated costs of this facility are \$26 to \$41 million, with a further \$1 to \$1.5million in annual operating costs (Sports Facilities Advisory, LLC (2015)). As shown in Table 1, this facility is expected to generate significant new tourism to Spokane, as it is a unique facility, one of only a few in the country capable of hosting large tournaments and competitions, geared towards participation sports rather than spectator sports.

³ Related to the literature on the public financing of sports stadiums, is a strand of literature focused on the economic impact of public funding to attract mega events such as the Olympics, World Cup and Super Bowl. It would seem reasonable to assume that these events would have positive economic impacts, unlike the stadium financing literature discussed above, as these events are designed to attract out-of-town tourists. Indeed, there are many studies that do find this positive impact of these mega events (e.g. Jones (2001) and Lee and Taylor (2005)). However, Porter et al. (1999) finds no statistically significant change in sales or hotel occupancy for the Super Bowl, while Baade and Matheson (2004) find that hosting the World Cup is associated with billions of dollars of losses to the host country when considering the significant costs associated with hosting such an event. Indeed, in examining large, though not mega, events, Gratton, Dobson and Shibli (2000) note that it is very difficult to predict ahead of time the benefits of staging such large events.

⁴ Interestingly, this result holds across several “levels” of sports, with Johnson and Whitehead (2000) obtaining this result in looking at facilities built for a college sports team and a minor league baseball team, while Johnson et al. (2001) finds this result in looking at a professional hockey stadium in the Midwest.

⁵ Note that this approach has similarities to Wilson (2006) who examines the impact of small scale swimming events on local communities.

Recognizing the significant public investment necessary to fund this project, the Spokane Sports Commission invited us to evaluate the tax revenues that could be expected from the increased tourism generated by this facility. In particular, funding for this facility would be generated through a county bond measure voted on by the citizenry. Should this bond pass, there would then be a subsequent increase local property taxes, so while the media, academics and politicians all may focus on the net benefits of the project, individual voters may care more about investments in other public projects (i.e. roads, parks, etc.), making the expected tax revenues generated by this facility, through tourism to the region, an important part of marketing this bond measure. Since these participation sports facilities are so unique, and a relatively recent trend in sports infrastructure investment, the literature on their impact is essentially nonexistent, although the public funding of these facilities causes there to be some similarities to the literature on the public funding of stadiums used for spectator sports as described above. However, while the proposed Spokane Sports Plex and traditional spectator sports facilities share the same funding source, the achilles heel of the facilities build for spectator sports is their inability to draw in out-of-town tourists, something that the proposed facility avoids by its very nature, as hosting large participation sporting events guarantees that the participants and their families will need to travel to the events in question.

2.2 Lessons from Similar Projects

Not only are there few facilities capable of competing with the proposed Spokane Sports Plex, but information regarding the impact of these facilities is difficult to obtain, either because the facility is too new, or because it is privately held and measurable data is not available. As such, we focus on the comparable facilities where useful comparisons/information is available. However, the one piece of data that is readily available from all similar facilities is their calendar of upcoming events, and based on this information, it is clear that these facilities bring in a significant number of participants and other visitors to the local community, are in high demand, and is awarded large tournaments very quickly after opening operations.

Field house USA in Frisco Texas is part of a larger Sports Village USA. The field house component of this complex is 144,000 square feet, capable of operating 11 full-size basketball courts. Since opening, Field house USA has hosted 166 events and 17,963 teams, creating a total self-reported economic impact of \$92,279,086, with the yearly impact of this facility over the past four years shown in Table 2 below. It is worth noting that the figures shown in Table 2 are consistent with the previously discussed projected number of events of the Spokane Sports Plex.

Perhaps more similar to the proposed Spokane Sports Plex is the Birmingham Crossplex, a facility with 75,000 square feet of competition floor space. This facility has been chosen to hold the National Senior Games, and is a finalist for the World Games. In addition, it has already hosted the NCAA Division II National Track & Field Championship, NCAA Qualifying Events, and Collegiate Invitational's along with a host of other events. In total, the estimated economic impact of this facility was \$35 million for 2013 alone. In estimating this impact, the formula used by Birmingham assumed \$195 in daily spending combined with a 1.75 economic multiplier, which is similar to our assumptions in the next section.

3. Results

As mentioned previously, facilities such as the proposed Spokane Sports Plex are uncommon. This means that it is difficult to determine the exact amount of visitors that this facility will bring into Spokane since there are few case studies to use for this information. However, this also implies that there is likely to be great demand for this facility, as it does not have many competing facilities, especially in the Western United States.

Without case studies to rely on, we generate all of our tax impacts using the Spokane Sports Commission's estimates of the number of visitors based on the number of events which they believe can realistically be booked each year, shown previously in Table 1. These numbers seem reasonable given the previously described demand for similar facilities, and the range of values allows the reader to see the impact of changes in the number of visitors/events on the overall tax revenue generated.

To determine the tax revenue generated by these visitors, we first start with the lodging industry. Spokane County currently has a sales tax rate of 8.7%, with additional taxes for lodging. Table 3 shows these relevant tax rates for Spokane, along with a decomposition of where the tax revenues are allocated. Given that the majority of these taxes are percentages rather than set amounts, we calculate the average hotel room rate based on the capacity and rack-rate of all hotels located within 5 miles of the proposed facility, as shown in Table 4.

In addition to lodging expenses, visitors will also spend money on parking, food, transportation, entertainment, and general retail spending. For these purchases, the special hotel taxes shown in Table 3 do not apply. To capture the level of non-lodging spending, we use the \$61 per diem rate for Spokane set by the U.S. General Services Administration. This figure is their estimated cost of food and incidentals, and is specific to Spokane. If we combine this per diem rate with the average hotel rate, that would yield daily spending of \$177.57. However, this figure still does not account for spending on entertainment, retail or other expenditures outside of room and board.

More comprehensive measures of spending are those reported by Dean Bunyan Associates (2012) for the Spokane Regional Convention & Visitors Bureau, indicating that visitors to Spokane who stayed the night averaged \$202 in spending (all inclusive) and Destination Analysts, Inc. (2011), which found average spending of \$216.50. Because we are interested in the tax ramifications of total spending on visitors drawn to Spokane by the proposed Sports Plex facility, we use the average of these last two estimates, to arrive at a figure of \$209.25, similar to the aforementioned findings for the Birmingham Crosslet. Backing the average price of a hotel room, \$117, out of this number, the estimated, non-lodging, visitor spending is \$92.25. This is approximately \$30 over the per diem rate reported above, but we feel that this number is more realistic of actual visitor spending for travelers to Spokane brought here by events held at the Sports Plex, as they will be more likely to spend money on entertainment and retail shopping than business travelers.

Using this figure for visitor spending, along with the Spokane Sports Commission's estimate of visitors to Spokane, we arrive at the tax implications of the facility reported in Table 5. Combining these numbers with the estimated tax ramifications from hotel spending, it is estimated that the taxes generated by the proposed Spokane Sports Plex are great than \$1 million, with high and low estimates presented in Table 6. In addition, it is worth noting that much of Washington State's portion of this tax revenue ends up back in Spokane as funding for schools and other state funded public goods. This implies that there is a significant increase to the tax revenue base of Spokane that can reasonably be expected due to increased visitation to Spokane as a result of events held at the SportsPlex facility.

4. Conclusion

The proposed Spokane Regional SportsPlex is an 180,000 square foot multi-purpose sports venue. The facility is capable of being reconfigured to host indoor track, soccer, volleyball, basketball, wrestling and other indoor sporting events. In addition, there will be retractable seating for spectators. However, the true economic impact of the facility is projected to be the increased visitation to Spokane rather than any revenues earned through ticket sales or entry fees.

The Spokane Sports Commission currently projects that the proposed SportsPlex facility would cost an estimated \$35 million to build, with additional yearly operation/maintenance costs of approximately \$1.4 million dollars. In return, the Sports Commission estimates that this facility will attract an average of 25,500 additional visitors to Spokane every year, with these visitors occupying approximately 46,000 room nights in Spokane area hotels. Depending on the assumed daily spending of these visitors and the multiplier used, this would then equate to between \$13 and \$33 million in annual economic impact for Spokane.

Finally, while the facility would be funded and run as a public facility, the additional spending and visitation to Spokane will lead to significant increases in tax revenue available to state and local entities. In particular, we estimate that with the Spokane Sports Commission's projected increases in visitation to Spokane, there will be between \$1 and \$1.75 million in new tax revenues generated annually.

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Table 1: Estimated the Number of Events and Athletes Brought to Spokane Annually by Proposed Facility

Event Type	Number of Events (low)	Number of Events (high)	Ave. Visitors per Year (low)	Ave. Visitors per Year (high)	Ave. Nights per Year (low)	Ave. Room Nights per Year (high)
NGB	10	17	15,000	25,500	20,000	34,000
Collegiate League	4	8	3,000	6,000	6,000	12,000
	8	12	600	900	200	300
Total	22	37	18,900	32,100	26,200	46,300

* NGB stands for National Governing Body. This includes events put on by AAU Basketball, USA Volleyball, USA Track & Field and other national organizations.

Table 2: Economic Impact of Fieldhouse USA in Frisco, Texas

Year	Events Hosted	Number of Athletes	Estimated Economic Impact
2011	38	30,934	\$17,810,676
2012	31	28,460	\$17,612,400
2013	33	31,392	\$19,509,945
2014	29	29,608	\$17,161,885

Source: "FieldhouseUSA provides MAJOR Economic Impact for the City of Frisco and Surrounding Area!" (Press release). Frisco, Texas: Fieldhouse USA. November 7, 2014. Retrieved from: <http://www.fieldhouseusa.com/news/16/2014-economic-impact> on February 5, 2014.

Table 3: Relevant Tax Rates for Spokane County

Sales Tax	\$0.087
State Portion	\$0.065
City of Spokane Portion	\$0.0085
Spokane County Portion	\$0.0015
PTBA – STA Portion	\$0.0060
Criminal Justice Portion	\$0.0010
Public Safety Portion	\$0.0010
Juvenile/Jail Portion	\$0.0010
Emergency Communications	\$0.0010
Mental Health	\$0.0010
Public Facilities	\$0.0010
Special Hotel/Motel Tax	\$0.033
Tourism Promotion Area Lodging Charge	\$0.50 - \$2.00

Table 4: Spokane Hotel Rack Rates and Capacity

Hotel Name	Rack Rate	Number of Rooms
Best Western Plus City Center	\$115	81
Comfort Inn	\$79	105
Courtyard Spokane	\$135	137
Davenport Hotel and Towers	\$155	611
Days Inn Spokane	\$55	89
Doubletree Convention Center	\$109	375
Fairfield Inn & Suites	\$139	75
The Grand Hotel	\$139	716
Holiday Inn Express	\$108	119
Hotel Luso	\$139	48
Hotel Ruby	\$66	87
Oxford Suites	\$122	125
Quality Inn	\$75	150
Red Lion Hotel Spokane	\$92	400
Red Lion River Inn	\$71	245
The Spokane Club	\$104	37
Weighted Average Rate	\$116.57	

Table 5: Estimated Annual Tax Revenues Generated, by Source

Event Type	Hotel Revenue Low	Tax Hotel Revenue High	Spending (non-lodging) Low	Spending (non-lodging) High	Tax Revenue (non-lodging) Low	Tax Revenue (non-lodging) High
NGB	\$320,800	\$545,360	\$5,535,000	\$9,409,500	\$481,545	\$818,627
Collegiate	\$96,240	\$192,480	\$1,107,000	\$2,214,000	\$96,309	\$192,618
League	\$3,208	\$4,812	\$221,400	\$332,100	\$19,262	\$28,893
Total	\$420,248	\$742,652	\$6,863,400	\$11,955,600	\$597,116	\$1,040,138

* NGB stands for National Governing Body.

Table 6: Estimated Annual Tax Revenues Generated, by Tax

	Tax Revenue Low	Tax Revenue High
Tax Revenue Generated	\$1,017,364	\$1,782,789
Sales Tax	\$863,806	\$1,511,425
State Portion	\$645,372	\$1,129,226
City of Spokane Portion	\$84,395	\$147,668
Spokane County Portion	\$14,893	\$26,059
PTBA – STA Portion	\$59,572	\$104,237
Criminal Justice Portion	\$9,928	\$17,373
Public Safety Portion	\$9,928	\$17,373
Juvenile/Jail Portion	\$9,928	\$17,373
Emergency Communications	\$9,928	\$17,373
Mental Health	\$9,928	\$17,373
Public Facilities	\$9,928	\$17,373
Special Hotel/Motel Tax	\$101,158	\$178,764
Tourism Promotion Area Lodging Charge	\$52,400	\$92,600