



# OCCASIONAL PAPER

## **THE CARDINALS, A NEW BALLPARK, AND MAJOR LEAGUE BASEBALL: A ROAD MAP FOR SUCCESS**

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**Professor Rosentraub's paper was  
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### **Why do cities and states spend tax money for ballparks?**



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### **INTRODUCTION**

The St. Louis Cardinals recently announced their interest in having a new ballpark built for the team's use. When professional sports teams in North America indicate they need or want a new facility there is usually an expectation that tax dollars will be used to defray part of the cost of the project. Why do cities and states spend tax money for ballparks? Teams are considered valuable civic assets, and many elected officials also believe that sports franchises bolster local economies. As a result, most communities have been reluctant to say no to any team's request for fear that the franchise would simply move to other communities that seem all too eager to meet a team's demands (Kennedy and Rosentraub, 2000) and take with them the civic and economic benefits. With the Cardinals' announcement, the St. Louis metropolitan region has been added to the list of communities that have had to understand the needs of one of their most visible corporate citizens and determine what public support, if any, should be provided. Across the last decade, US and Canadian cities have spent more than \$15 billion to build the facilities used by professional sports teams (Cagan and deMause, 1998).

In terms of the economic importance of sports teams, research abounds describing their limited value and relatively small scale (Noll and Zimbalist, 1997). However, while the budget of the University of Missouri at St. Louis, for example, is actually larger than that of the St. Louis Cardinals,<sup>1</sup> there is little debate that the team is a critical civic asset. The value or importance of the Cardinals for the quality of life in St. Louis far exceeds the team's annual budget. Indeed, it is probably safe to assume that the recognition provided to St. Louis by the Cardinals exceeds the acclaim accorded the city by the presence of UMSL, Washington University, St. Louis University, or many other larger corporations. Does the Cardinals' value as a civic asset, in the absence of a significant economic influence, warrant the investment of public money in a new ballpark?

Many other communities think it does. The value of sports teams as civic assets, combined in some instances with an unrealistic expectation of the resulting economic development from a team's presence, has led Arlington, Atlanta, Chicago, Cleveland, Denver, Detroit, Houston, Phoenix, San Diego, and Seattle, to invest tax dollars in facilities. As St. Louis now prepares to discuss the appropriate level of public investment in a new ballpark, some of the lessons learned from the experiences of other communities can help avoid some of the dissention that has been generated in

<sup>1</sup> In fiscal year 1998 the University of Missouri at St. Louis had gross revenues in excess of \$128,924,000. It is believed this figure would eclipse the total revenues earned by the St. Louis Cardinals for the 2000 season. It would not be unrealistic to expect that the total revenues for the University in fiscal year 2000 would be in excess of \$135,000,000.

Our charge today is to establish a framework that helps to build a road for success. Success here is defined as the construction of a new ballpark that helps the Cardinals achieve their objectives of profitability and competitiveness while insuring that the public sector also receives the full value and benefit for any investment it makes in the project. My presentation today involves six points or issue areas to help build a positive environment for the needed community dialogue. My presentation will:

- (1) establish the reasons the Cardinals want a new ballpark;
- (2) provide a framework for discussing the use of public and private funds for the building of a ballpark;
- (3) establish a perspective on the financial status of the Cardinals and the revenues they will realize in a new ballpark;
- (4) identify the public benefits generated by the team as a basis for examining the appropriate role for the public sector in ballpark construction;
- (5) review the implications for the Cardinals from different financing options and changes in the economics of baseball; and
- (6) discuss the best location for a new ballpark.

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With this information before us, and the comments from the other members of the panel, the community will be able to evaluate the best strategy for reaching the goal of having a new ballpark and home for the St. Louis Cardinals.

#### **THE NEW ECONOMICS OF BASEBALL: WHY DO THE CARDINALS WANT A NEW BALLPARK?**

In terms of annual attendance, the St. Louis Cardinals are one of Major League Baseball's most successful franchises. A measure frequently used to determine the success of any business is the number of products sold per resident of a given market area. This measure of market strength is referred to as the "penetration rate." For baseball teams, the penetration rate refers to the tickets sold per capita. The St. Louis Cardinals have the highest penetration rate of any Major League Baseball (MLB) team. This means the Cardinals playing in their current ballpark sell more tickets, per capita, than any other MLB team.

Table 1 reports the regional population and attendance at MLB games, in millions of people, for each team for the 1998 and 1999 seasons. These are the data used to calculate the penetration rates for each team. The only MLB team to sell more than 1 ticket for each person in their region was the St. Louis Cardinals, and the team accomplished this feat in both 1998 and 1999.

Penetration indices are another statistic calculated from these data. These indices provide an easy comparison between the success of any one team in the sale of tickets in its region with the success of all other teams or the average level of success for all MLB teams. The Cardinals with penetration indices of 222 (1998) and 234 (1999) had penetration rates that were more than twice the level of the average for all of MLB's teams.

With penetration rates and indices of this level it is hardly surprising that the team is attracting in more than 3 million fans to their games. In 1998, 3,195,921 fans attended games, and last season the Cardinals attracted 3,225,334 fans. This year, despite Mark McGwire's injuries, if current attendance levels continue through the end of the season, the Cardinals will sell 3,367,169 tickets. Attendance levels and penetration rates of this magnitude raise at least two questions. *First*, "Do the Cardinals really need a new ballpark?" *Second*, if the team is so popular are they able to pay all of the costs associated with the building and of a new ballpark?"

With regard to the first question, "Do the Cardinals needs a new ballpark", when almost 3.4 million fans attend games it seems almost foolish to suggest that team cannot remain financially viable without a new ballpark. Yet, relative to the sources of income available to other teams, and in the absence of an appropriate revenue sharing program, the owners of

**Table 1: Attendance Levels and Penetration Rates: MLB Teams in 1998 and 1999**

Team	Regional Population	Attendance		Penetration			
		1998	1999	Rate 1998	Index 1998	Rate	Index 1999
	(in millions)						
Anaheim Angels	7.8	2.52	2.25	0.32	68.7	0.29	0.63
Arizona	4.4	3.6	3.02	0.82	174.1	0.69	1.49
Atlanta Braves	4.7	3.36	3.29	0.71	152.1	0.7	1.52
Baltimore Orioles	7.8	3.69	3.43	0.47	100.7	0.44	95.6
Boston Red Sox	7.3	2.31	2.45	0.32	67.3	0.34	73
Chicago Cubs	4.5	2.62	2.81	0.58	123.9	0.62	135.7
Chicago White Sox	4.5	1.39	1.34	0.31	65.7	0.3	64.7
Cincinnati Reds	2.2	1.79	2.06	0.81	173.1	0.94	203.6
Cleveland Indians	3.9	3.47	3.47	0.89	189.3	0.89	193.4
Colorado Rockies	4	3.79	3.48	0.95	201.6	0.87	189.1
Detroit Tigers	6	1.41	2.03	0.24	50	0.34	73.6
Florida Marlins	3.8	1.75	1.37	0.46	98	0.36	78.4
Houston Astros	4.8	2.45	2.71	0.51	108.6	0.56	122.7
Kansas City Royals	3.3	1.49	1.5	0.45	96.1	0.45	98.8
Los Angeles Dodgers	7.8	3.09	3.1	0.4	84.3	0.4	86.4
Milwaukee Brewers	2.2	1.81	1.7	0.82	175	0.77	168
Minnesota Twins	3.9	1.17	1.2	0.3	63.8	0.31	66.9
Montreal Expos	3.2	0.91	0.77	0.28	60.5	0.24	52.3
New York Mets	9.6	2.29	2.73	0.24	50.8	0.28	61.8
New York Yankees	9.6	2.95	3.29	0.31	65.4	0.34	74.5
Oakland Athletics	3.3	1.23	1.43	0.37	79.3	0.43	94.2
Philadelphia Phillies	7.7	1.72	1.83	0.22	47.5	0.24	51.7
Pittsburgh Pirates	2.9	1.56	1.64	0.54	114.5	0.57	122.9
San Diego Padres	2.9	2.56	2.52	0.88	187.8	0.87	188.9
San Francisco Giants	3.3	1.93	2.08	0.58	124.4	0.63	137
Seattle Mariners	4.1	2.64	2.92	0.64	137	0.71	154.8
St. Louis Cardinals	3	3.2	3.24	1.07	227	1.08	234.8
Tampa Bay Devil Rays	3.6	2.51	1.75	0.7	148.3	0.49	105.7
Texas Rangers	5.4	2.93	2.77	0.54	115.4	0.51	111.5
Toronto Blue Jays	4.3	2.45	2.16	0.57	121.2	0.5	109.2

The economics of MLB have changed just as the competitive environment for all businesses has been radically altered across the past two decades. Relative to the position of the Cardinals' ownership, if the revenue streams available to other teams are not available, the team will not earn sufficient money to both attract and retain the players needed to field a championship team and generate the profits earned by the owners of other teams.

MLB teams earn their revenue from the sale of tickets, in-stadium revenues (luxury seating, concessions, advertising, etc.), and local media contracts. Each team also receives an equal share of MLB's national media contracts from the broadcast of regular season games, the playoffs, the league championship series, and World Series games. Each team also shares in the revenues earned by MLB Properties from the sale of souvenirs. The most critical change in this mix of activities across the past decade has been revenue from local media contracts and ballpark-related revenues. For example, one team, the New York Yankees, earns more than \$55 million from its local media contracts, and the earnings of several other teams that play in markets larger than St. Louis dwarfs the \$10 million in local media income earned by the Cardinals (Costas, 2000).<sup>2</sup>

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## **The financial situation confronting the Cardinals, while not nearly as robust as that of the Indians, is not as poor as that faced by other teams.**

This is not the only revenue differential faced by the Cardinals. Several teams playing in new facilities earn in excess of \$20 million from ballpark-related revenues (luxury seating, concessions, advertising, etc.), and virtually none of this money is shared with other teams. As a result, a league of "haves" and "have nots" has been produced, and those teams that have extra revenues that they do not share with other teams gives them an extraordinary advantage in attracting and retaining the best players. The availability of these additional revenues is the difference between making the playoffs with a profitable team or just wistfully waiting for next year in an effort to still earn some return on an owner's investment.

Complete economic breakdowns of the revenues from every source for each team are not available. However, information that is available can be used to identify the challenges confronting the Cardinals. In 1997, the ownership of the Cleveland Indians requested permission to sell shares of stock in their team. To receive approval the team had to file detailed financial documents with the US Security Exchange Commission. These documents, certified by accountants, provided a detailed view of the team's financial operations.

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In 1997 the Indians' earned \$134,165,000, paid their players \$66,125,000, and earned profits of more than \$8 million (Rosentraub, 1998). An overview of the income earned by the Indians and their expenditures is presented in Table 2. The team also earned \$17.4 million from the sale of luxury seating, advertising, and the naming rights deal. The local broadcast of Indians games produced more than \$17 million for the team (see Table 2).

The financial situation confronting the Cardinals, while not nearly as robust as that of the Indians, is not as poor as that faced by other teams. While it is likely that the Cardinals could lease as many suites as the Indians (122), the Cardinals have but 68. The Indians also have more than 2,000 club seats, while the Cardinals have but 948 "Diamond Box Seats" and 281 "field boxes." Jacobs Field in Cleveland also offers the Indians other revenue flows from luxury restaurants and other retail venues. As the economics of baseball continues to change, the Cardinals' ownership will be in a less advantageous position than the owners of teams that play in more modern ballparks.

<sup>2</sup> While Bob Costas has reported that the Cardinals earned \$15 million from the broadcast of games by local media stations, team officials claim the income earned was actually \$10 million. In projection the team's future income possibilities, \$12 million was forecast as the potential future revenue from local media. However, community leaders are cautioned that these figures could increase given the region's interest in the team.

**Table 2: The Revenues Needed To Finance A Successful MLB Team: The 1997 Cleveland Indians**

Revenue Source	Income In 1997	Percentage of Total Income
<b>Ticket Sales</b>	\$49,279,000	36.7
<b>Luxury Seating</b>	8,704,000	6.5
<b>Local Media</b>	17,014,000	12.7
<b>Concessions</b>	14,095,000	10.5
<b>Merchandise</b>	17,449,000	13.0
<b>MLB Shared Revenue</b>	15,505,000	11.6
<b>Naming Rights, Ads</b>	8,754,000	6.5
<b>Miscellaneous</b>	3,365,000	2.5
<b>TOTAL</b>	\$134,165,000	100
Expenditure Category	1997 Expense	Percentage of Total Expenses
<b>Salaries</b>	\$66,125,000	52.6
<b>Minor Leagues</b>	11,146,000	8.9
<b>Merchandise Sold</b>	12,982,000	10.3
<b>Stadium Operations</b>	10,965,000	8.7
<b>MLB Shared Revenue</b>	4,938,000	3.9
<b>Advertising</b>	3,854,000	3.1
<b>Signing Bonuses</b>	3,630,000	2.9
<b>Depreciation</b>	1,629,000	1.3
<b>TOTAL</b>	\$125,561,000	100.
<b>PROFIT</b>	\$8,604,000	

While the Cardinals can earn an important level of revenues from the existing ballpark, the need for expanded revenue flows is also underscored by an analysis of the demographics of the St. Louis market. The St. Louis market is not as robust as several others that are home to MLB teams. As a result, the team needs to be sure it can maximize *both* the number of revenue sources in the ballpark and the revenue earned from each of these sources. Before focusing on the revenue that could be earned in a new facility it is necessary to understand the demography of the St. Louis market and the missed revenue opportunities in the existing ballpark.

Table 3 compares the 25 markets for professional baseball in terms of four different demographic characteristics. The market available to the St. Louis Cardinals is neither as large nor as wealthy as the markets enjoyed by the Yankees, Mets, Dodgers, Angels, Cubs, White Sox, Red Sox, Orioles, Phillies, Indians, Astros, and Tigers. While the people of St. Louis provide the team with substantial support, the smaller concentrations of wealthier fans and large businesses means the Cardinals have a more difficult time earning the revenue needed to be among the most profitable franchises with a competitive team. For example, the St. Louis region is home to 301 firms with more than 500 employees. These are the corporations are most likely to purchase luxury seating and pay the fees for these seats charged by teams in the largest markets. The New York market, however, has 1,507 businesses with at least 500 employees and the Boston, Chicago, and Los Angeles markets have at least twice as many firms of this size as does the St. Louis market. As a result, it is easy to understand why the team's owners want to be sure their ballpark has a myriad of revenue sources. The St. Louis market has 14,432 households with incomes in excess of \$150,000, but 19 other markets with MLB teams have a larger number of wealthy households. Areas with larger concentrations of wealthier households and large firms, given a similar interest in baseball, can and do charge more money for tickets and luxury seating disadvantaging teams in smaller markets and with fewer revenue sources (see Table 3). As a result, the team is seeking a new ballpark that has more opportunities for it to expand the team's income.

**Table 3: Selected Characteristics of Markets With Major League Baseball Teams**

Team	Regional Population	% Households With Disposable Incomes Above \$75,000	Number of Households With Incomes of \$150,000 or More	Number of Firms With 500 or More Employees
An. Angels/LA Dodgers	15,600,000	11.7	89,637	1,042
Atlanta Braves	4,400,000	11.6	24,701	342
AZ Diamondbacks	4,400,000	7.6	15,900	295
Baltimore Orioles	7,800,000	17.3	56,275	663
Boston Red Sox	7,300,000	15.2	44,094	610
Chicago Cubs/White Sox	8,800,000	16.9	71,715	892
Cincinnati Reds <sup>1</sup>	9,400,000	10.5	40,142	792
Cleveland Indians	5,900,000	14.3	25,480	449
Colorado Rockies	3,800,000	10.2	16,854	242
Detroit Tigers	6,000,000	14.7	27,025	455
Florida Marlins	3,700,000	11.2	25,736	269
Houston Astros	4,600,000	15.9	35,269	396
Kansas City Royals	3,300,000	10.4	9,547	213
Milwaukee Brewers	2,200,000	10.2	8,819	190
Minnesota Twins	3,900,000	10.8	17,710	364
New York Mets/Yankees	19,800,000	18.5	205,845	1,507
Oakland As/SF Giants	6,500,000	19.4	56,571	649
Philadelphia Phillies	7,700,000	15.7	55,161	540
Pittsburgh Pirates	2,900,000	10.7	15,273	239
San Diego Padres	2,700,000	10.6	12,834	204
St. Louis Cardinals	3,000,000	11.4	14,432	301
Tampa Bay Devil Rays	3,500,000	8.6	17,560	170
Texas Rangers	5,100,000	14.8	38,033	474

### **LIMITATIONS IN THE EXISTING BALLPARK**

Before focusing on the revenue that could be earned in a new ballpark it is valuable to understand the limitations in the current facility. Busch Stadium, built in 1966, has been remodeled, and currently has 68 suites and 1,129 box seats reconfigured to match the amenities of club seats in the newer ballparks. While the team owns the stadium, it does not offer the same level of amenities as newer ballparks and some contend that its design is not as “baseball friendly” as the newer venues in the major leagues.

While a consideration of the relative quality of the stadium as a site for baseball is beyond the scope of our discussion today, it is useful to compare the luxury seating options in the current facility with those at newer ballparks. This comparison helps to identify some of the issues raised by the team’s owners when they claim the team requires a new ballpark to remain economically competitive with other clubs.

**Table 4: Suite and Club Seat Income At Busch Stadium and Other Selected Ballparks**

Suite Income Estimates For The 2000 Season	Number	Average Price	Revenue Potential With Sales Of		
			100 Percent	90 Percent	80 Percent
Az. Diamondbacks	68	110,000	7,480,000	6,732,000	5,984,000
Atlanta Braves	54	162,500	8,775,000	7,897,500	7,020,000
Baltimore Orioles	72	125,000	9,000,000	8,100,000	7,200,000
Cleveland Indians	122	60,000a	11,005,824	9,905,242	8,804,659
Colorado Rockies	52	90,000	8,365,824	7,529,242	6,692,659
Detroit Tigers	102	120,000	12,240,000	11,016,000	9,792,000
Houston Astros	63	87,500	5,512,500	4,961,250	4,410,000
San Francisco Giants	67	85,000	5,695,000	5,125,500	4,556,000
Seattle Mariners	69	100,000	6,900,000	6,210,000	5,520,000
Texas Rangers	129	62,500	8,062,500	7,256,250	6,450,000
St. Louis Cardinals	68	79,059	5,376,000	4,838,400	4,300,800
New York Yankees	19	225,000	4,275,000	3,847,500	3,420,000
New York Mets	46	175,000	8,050,000	7,245,000	6,440,000
Boston Red Sox	40	85,000	3,400,000	3,060,000	2,720,000
Club Seat Income Estimates For The 2000 Season					
Atlanta Braves	5,561	2,349	13,062,789	11,756,510	10,450,231
Baltimore Orioles	5,086	2,647	13,460,099	12,114,089	10,768,079
Cleveland Indians	2,064	4,001	8,258,064	7,432,258	6,606,451
Colorado Rockies	4,400	2,511	11,048,400	9,943,560	8,838,720
Detroit Tigers	3,000	5,000	15,000,000	13,500,000	12,000,000
Houston Astros	5,000	2,100	10,500,000	9,450,000	8,400,000
San Francisco Giants	5,300	2,750	14,575,000	13,117,500	11,660,000
Seattle Mariners	4,400	2,850	12,540,000	11,286,000	10,032,000
Texas Rangers	5,386	2,150	11,579,900	10,421,910	9,263,920
St. Louis Cardinals	1,129	5,140	5,802,840	5,222,556	4,642,272
New York Yankees	8,000	4,212	33,696,000	30,326,400	26,956,800
New York Mets	3,885	3,645	14,160,825	12,744,743	11,328,660
Boston Red Sox	606	6,500	3,939,000	3,545,100	3,151,200

<sup>2</sup> Game tickets not included in the price of the suites; the ticket prices have been included in the revenue estimates.

Tables 4 and 5 provide an estimate of the luxury seat income teams with new ballparks and some of the teams in the largest markets can earn compared with the revenue potential for the St. Louis Cardinals in Busch Stadium. Projections are provided for sale of 100, 90, and 80 percent of all luxury seating; the number and average price of all luxury seats is also provided. Table 4 separates income from both suite and club seats; Table 5 then reports total income from luxury seats.

Those teams listed above the Cardinals each play in new ballparks, and each of these teams has the potential to earn more money from luxury seating than can the Cardinals. The new facility built for the Detroit Tigers offers the potential to generate more than twice the luxury seat income available from Busch Stadium. While the Tigers, at this time, are not successful enough to earn this much revenue, that potential, if realized would make it more difficult for the Cardinals to be both competitive and financially successful. The Cleveland Indians, who are immensely popular, earn at least \$8 million more each year from their luxury seating than the Cardinals can earn at Busch Stadium and the Houston Astros have the potential to earn \$5 million more than the Cardinals from this single revenue source each season in their new ballpark. The teams listed below the Cardinals do not play in new facilities, but because of their popularity and the size and wealth of their local markets these franchises can realize substantial income from the sale of their luxury suites. The Yankees earn more than three times what the Cardinals can earn and the Mets can earn twice as much as can the Cardinals. If those teams eventually play in new facilities, they would have the opportunity to earn even more money (see Tables 3, 4, and 5).

Total Luxury Seat Income For the 2000 Season	Revenue Potential With Sales Of		
	100 Percent	90 Percent	80 Percent
Arizona Diamondbacks	13,186,250	11,867,625	10,549,000
Atlanta Braves	21,837,789	19,654,010	17,470,231
Baltimore Orioles	22,460,099	20,214,089	17,968,079
Cleveland Indians	19,263,888	17,337,499	15,411,110
Colorado Rockies	19,414,224	17,472,802	15,531,379
Detroit Tigers	27,240,000	24,516,000	21,792,000
Houston Astros	16,012,500	14,411,250	12,810,000
San Francisco Giants	20,270,000	18,243,000	16,216,000
Seattle Mariners	19,440,000	17,496,000	15,552,000
Texas Rangers	19,642,400	17,678,160	15,713,920
St. Louis Cardinals	11,178,840	10,060,956	8,943,072
New York Yankees	37,971,000	34,173,900	30,376,800
New York Mets	22,210,825	19,989,743	17,768,660
Boston Red Sox	7,339,000	6,605,100	5,871,200

**Table 5: Total Luxury Seating Income from Busch Stadium and Other Select Ballparks**

### **HOW MUCH MONEY CAN THE TEAM EARN IN A NEW BALLPARK?**

Illustrating what can be earned in a new ballpark should be done relative to what a team needs to be profitable and to compete for a championship. In other words, a new ballpark must produce sufficient revenues to permit owners to earn a fair return on their investment and still have sufficient revenues to field a competitive team. If a facility produces more than the revenue needed for a competitive team and a fair return on an owners' investment, then it would be possible for a team to divert these extra resources to pay for the new ballpark.

While it is easy to understand why the owners of the Cardinals want a new ballpark, the issue of what they can afford to spend for the ballpark rests on an analysis of the revenue that can be earned and the team's costs for fielding a championship team. To help facilitate our discussion today, Table 6 was created to illustrate the potential revenue streams from a new ballpark in St. Louis and the gross revenues the team could earn. Several difference scenarios are presented for a ballpark that would open for the 2004 season. Outcomes for average ticket prices of \$22, \$25, and \$27.50 are presented. The average ticket price to a Cardinal game for the 2000 season is \$16.53 ranging from a high of \$32.50 to a low of \$7. Teams that move into new facilities have typically increased prices by amounts that suggest an average price of \$22, \$25, or \$27.50 are neither unreasonable nor unexpected.

The revenues projected in Table 6 are based on the construction of a new ballpark with 100 luxury suites and between 3,500 and 5,000 club seats.<sup>3</sup> It was also expected that attendance at the new facility would average 3,250,000 paid admissions per season. Given the recent attendance levels in the current ballpark this is not an unreasonable expectation. Fewer fans would mean a decline in total revenue, but if all luxury seats were sold, the decline in revenues would not be proportional; differences from 3,250,000-attendance level would only be multiplied by the average ticket price. If a facility with more than 100 suites and 5,000 club seats were built, it is also possible that the team would earn more revenue than is projected in Table 6. Revenues from all other streams in the new ballpark were estimated by using data made public by other teams. The anticipated income from media sources was projected based on published accounts (including Costas, 2000) and the team's representation of earnings in 2000.

As illustrated in Table 6, the total revenue earned by the Cardinals in a new ballpark could range from \$173.5 million to \$191.3 million. This could quickly elevate the team into the highest echelons of revenue-rich teams. It is likely that the team would earn \$57 million more than they currently realize at the existing ballpark.

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**However, the residents of St. Louis need to pay careful attention to the negotiations between MLB and the Players' Association.**

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Table 6 also includes the anticipated costs for operating the St. Louis Cardinals. It was assumed that the cost to field a competitive team in terms of player salaries might increase to \$85 million.<sup>4</sup> If indeed player costs rose to that level, the team would have remaining revenues ranging from \$28 million to \$45.8 million. This would provide a substantial cushion against rising player salaries. Further, if one assumes that the estimated costs for any element in Table 6 are too low, the available revenue would be less.

However, the residents of St. Louis need to pay careful attention to the negotiations between MLB and the Players' Association. Some of the major issues to be addressed across the next 24 months will include the total amount of money to be paid to players, and the possibility of caps on the total amount any one team can spend. As a result, it may require less than \$85 million to field a competitive team in 2004. It is difficult to project what the outcomes will be from the forthcoming negotiations, but the variety of possible outcomes including changes in revenue sharing between large and small market teams could have a dramatic impact on the fortunes of the Cardinals and the revenue available to pay for a new ballpark

(Rosentraub, 2000).

<sup>3</sup> Team officials have indicated that a proposed new ballpark would have far fewer suites. Demand for baseball in the St. Louis market could support the 100 suites projected here. The community must realize that fewer suites would lead to the team earning less money. If it is indeed possible to sell more suites, then those revenues could provide more options relative to the financing of the new ballpark.

<sup>4</sup> Player salaries have been rising at a rate that if projected forward could mean that more than \$85 million would be needed to field a competitive team. Yet, the forthcoming negotiations between players and owners will address the problem of total team payrolls making it impossible to predict if the current rate of payroll increases will continue. In addition, fielding a competitive or championship team does not mean spending more than any other team. To be competitive, however, a team has to have the ability to be among the five or six highest payrolls.

**Table 6: Potential Revenue Levels and Estimated Expenses in A New St. Louis Ballpark**

Revenues and Costs	Projected Levels in 2004	Attendance of 3,250,000	Projected Levels in 2004	Attendance of 3,250,000	Projected Levels in 2004	Attendance of 3,250,000
Team Revenues						
Ticket Sales	\$22 per ticket	\$57,285,400	\$25 per ticket	\$61,765,000	\$27.50 per ticket	\$65,030,000
Luxury Suites	100 @ \$150,000	15,000,000	100 @ \$150,000	15,000,000	100 @ \$150,000	15,000,000
Club Seats	3500, \$50/Game	14,175,000	4000, \$60/Game	19,440,000	5000, \$60/Game	24,300,000
Local Media		12,000,000		12,000,000		12,000,000
Concession, Catering		17,500,000		17,500,000		17,500,000
Merchandise		19,500,000		19,500,000		19,500,000
MLB Central Fund		20,500,000		20,500,000		20,500,000
Other		5,000,000		5,000,000		5,000,000
Naming, Advertising		12,500,000		12,500,000		12,500,000
SUBTOTAL		173,460,400		183,205,000		191,330,000
Annual Costs						
Player Salaries		85,500,000		85,500,000		85,500,000
Minor Leagues		12,000,000		12,000,000		12,000,000
Cost of Merchandise		14,000,000		14,000,000		14,000,000
Stadium Operations		11,000,000		11,000,000		11,000,000
MLB Central Fund		3,000,000		3,000,000		3,000,000
Team Administration		12,000,000		12,000,000		12,000,000
Advertising		3,000,000		3,000,000		3,000,000
Signing Bonuses		5,000,000		5,000,000		5,000,000
SUBTOTAL		145,500,000		145,500,000		145,500,000
AVAILABLE REVENUE		27,960,400		37,705,000		45,830,000

**THE PUBLIC AND PRIVATE BENEFITS GENERATED BY BASEBALL TEAMS**

Sports can be considered similar to other businesses in that a service (entertainment) is provided for consumers in exchange for a fee collected through the sale of tickets or advertising for the broadcast of games. However, there are at least two benefits produced by baseball teams such as the St. Louis Cardinals that makes the enterprise of sports unlike other businesses. The first of these benefits is the enjoyment fans and residents receive from simply having a team present and following its fortunes. There may well be many residents of the St. Louis region who do not follow the team's progress, but thousands that may not attend games do enjoy the exploits of the team and its leading players. These fans may also relish in the conversations with family members and friends regarding what the team should or should not do. These benefits are some of the externalities that sports teams generate and these outcomes are quite evident when a team wins. Last year, of course, St. Louis's fans also enjoyed the externality benefits produced by the Rams when they won the Super Bowl.

The second benefit or positive externality generated by sports comes from the identity provided or established for a city by its teams. The social significance of sports, and the importance people place on it, is not limited to St. Louis or the 1990s. For more than three thousand years sports has been a defining characteristic of societies as geographically disperse as Mexico and Central America, ancient Egypt, Greece, and Rome, and the Ottoman Empire. Sports have been, and remain a constant and defining element of human civilization across more than 4,000 years of recorded history (Rosentraub, 1997). Sporting activities have attracted crowds and defined key political and social events and institutions since the Olympics began in ancient Greece and long-before European culture was part of the history of the Western Hemisphere. This set of benefits or externalities is considerably larger than the direct or indirect economic impact from a single team's budget.

Analysts have debated who should be charged or pay to insure that these benefits exist for a city. At the heart of the discussion of the public sector’s responsibility for building a new ballpark for the Cardinals is the question of what is the most equitable and appropriate way of collecting a fee for the positive externalities produced by the team.

Irani (1997) and Swindell and Rosentraub (1998) using different techniques found that the individuals or residents of a region that place the highest value on the positive externalities generated by teams are those people who attend games. This is not to suggest that those who do not attend games receive no benefits. However, the outcomes from this research would clearly suggest that the *vast* majority of the costs associated with building a new ballpark should be borne by those that attend games or follow a team’s fortunes through the media. This does not mean that this large group should sustain all of the costs, but it does follow that financing programs for new facilities that have the public sector paying for more than a small proportion of the costs of the facility will lead to inequities. Further, if the public sector provides funding that exceeds the proportion of benefits generated that are externalities, the excess subsidy will translate into large economic returns to the owners. The most recent examples of this involved the sales of the Cleveland Indians and Texas Rangers after their communities had provided substantial contributions for the building of new ballparks. One of the former owners of the Texas Rangers had invested but \$600,000 in the team and received a return of more than \$14 million (profit) on this investment (Rosentraub, 1999).

**THE COSTS OF A NEW BALLPARK AND APPROPRIATE SHARES FOR THE PRIVATE AND PUBLIC SHARES**

With this information as a backdrop, it is now possible to turn to the issue of the cost of a facility and the appropriate shares that could be sustained by the public and private sectors. For our purposes today it will be anticipated that a new ballpark could be built for \$400 million including the cost of land. The value of the land and its preparation for building will be assumed to be \$50 million including any minor infrastructure changes required. The downtown area is already able to provide adequate service to permit more than 50,000 people to attend a sporting event and enter and leave the area in a timely fashion.

If \$350 million is the anticipated construction cost for a new ballpark the annual cost will be a function of the terms of the financing tools used. Table 7 provides an analysis of a variety of terms for bonds that could be sold to finance a ballpark. Depending on the length of the bonds (20 to 30 years) and the interest rate (7 to 10 percent) the annual costs to pay for the construction of the ballpark range from \$28.2 million to \$41.1 million (see Table 7). How much of these costs could the Cardinals sustain and still (1) earn a sufficient profit or return on their investment and (2) have sufficient revenues to field a competitive team?

**Table 7: Annual Financing Costs For A \$350 Million Ballpark (excludes the costs for land and minor infrastructure)**

Interest Rate			
	20 Years	25 Years	30 Years
7 Percent	\$33,038,000	\$33,034,000	\$28,205,000
8 Percent	35,648,000	32,788,000	31,090,000
9 Percent	38,341,000	35,632,000	34,068,000
10 Percent	41,111,000	38,559,000	37,128,000

The data in Table 6 indicates that if the cost and revenue targets are met the Cardinals will have between \$27

The final adjustment to the cost side of the Cardinals' operations must include an anticipated amount for a return on the funds invested by the team's owners. Public records indicate the current owners paid \$150 million for the team, the existing ballpark, and the associated parking garages. The team subsequently sold the parking garages for \$91 million reducing the cost of the investment to \$59 million (for the team and the ballpark). If this were considered the entire amount at risk (and that is a generous interpretation since the ballpark and the land have considerable value), \$6 million of profit would provide a comfortable rate of return in excess of more than 10 percent (since the actual investment at risk is less far less than \$59 million).

Subtracting this amount from available revenues would mean the team could afford to pay not less than \$12 million each year towards the cost of a new ballpark and perhaps as much as \$29.8 million. However, we must remember that there are at least five sets of critical factors that must be considered relative to the amount of money the team has available to pay for a new ballpark.

*First*, if future negotiations establish a cap for team payrolls similar to those that now exist in the National Football League and National Basketball Association, it may be reasonable to expect that a competitive team could cost \$75 million. If that were the case, then the team would have between \$22 million and \$39.8 million to pay for the costs of construction.

*Second*, MLB is examining a variety of plans to share revenues between large and small market teams. St. Louis is one of the smaller markets and any new plan could increase the team's share of central revenue pool. If the team received an additional \$10 million or \$20 million from MLB's central funds, these revenues should appropriately be dedicated to offset the costs of a new ballpark. Any agreement for a new ballpark must include a provision for the application of these funds to the cost of constructing a new ballpark. The logic behind this recommendation rests on MLB's interest in providing funds to improve the competitiveness of smaller market teams. New facilities are the best way to keep teams competitive; hence any additional revenues from MLB should offset the costs of a new ballpark.

*Third*, when teams play in new facilities the value of a franchise increases. If the team's value increased by \$50 million or more because of the revenue generated for a team from a new ballpark, these funds should also be considered source to defray the costs of the ballpark. If the public sector invested in a ballpark it would be appropriate for them to receive a portion of the extra value of the team.

*Fourth*, increasing ticket prices by one or two dollars, and the fees for luxury seating by 5 percent from what is proposed in Table 6 would generate an additional \$15 million and this too could be used to offset the costs of new ballpark.

*Fifth*, changes in revenues from advertising, naming rights, or other sources could dramatically increase the money available to pay for a new ballpark. These changes need to be evaluated before public investments are made.

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Successful resolution of ballpark discussion involves informed dialogue between citizens and the public sector, between the corporate community and the public sector, and between the public sector and the team.

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## **LOCATION, LOCATION, LOCATION**

Where should a new ballpark be built? Both the Cardinals and the public sector have a decided interest in locating a new ballpark in downtown St. Louis. From the team's perspective, those franchises who have been most successful in selling all of their luxury seats (suites and club seats) are those with downtown facilities. The primary market for these seats are the service corporations whose downtown locations are still prevalent even outside of the Northeastern and North Central sections of the country. Downtown locations also tend to have the transportation linkages that make it easier to permit fans to come to games and then leave the area in a timely fashion.

From the public sector's perspective, downtown locations also appear to have the best likelihood of generating some ancillary development. Downtown ballparks have the potential to be better integrated into retail activities, although the available evidence suggests that without substantial private sector commitments, little new development will occur as the result of the presence of a new sports facility (Noll and Zimbalist, 1997; Euchner, 1999; Rosentraub, 1999).

## ST. LOUIS' NEXT STEPS

Successful resolution of ballpark discussion involves informed dialogue between citizens and the public sector, between the corporate community and the public sector, and between the public sector and the team. If the public sector is going to be asked to provide a level of support, then taxpayers need to understand how a team earns money and the funds available to both pay players and return a profit to the team's owners. The additional revenues that might materialize in the future also need to be considered and be part of any plan for a new ballpark to insure that the interests of the public sector are protected. The potential increase in the value of a team, and increased funds from revenue sharing, need to part of the dialogue to insure that excess profits are not realized at the public's expense.

Our goal today is not to develop a plan for the new ballpark, but to build a road towards a successful resolution of this public policy debate. To that end, I hope the information provided here helps taxpayers and team officials recognize the benefits generated and the responsibilities assumed by sports franchises in their role as civic assets. If that goal was accomplished, then St. Louis has started down the road to the successful resolution of this issue.

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**LIVABLE communities don't just HAPPEN.  
They are CREATED by the PEOPLE who LIVE in them.**