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by

Mu Li

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**Professional Stadiums and the City:  
An Assessment of Twenty-First Century Urban Sports Facilities in the  
United States**

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United States**

**by**

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**Report**

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## **Dedication**

To my parents, my wife, my entire family, and friends.

To my past self, sport is more than a game.

## **Acknowledgements**

Firstly, I would like to express my sincere gratitude to my advisor Dr. Tolga Ozyurtcu for the continuous support of my Master study and related research, for his patience, motivation, and immense knowledge. His door was always open to me whenever I had problems and questions about my report. I could not have imagined having a better advisor and mentor for my Master study. Also, I would like to thank Dr. Thomas Hunt for the guidance through my two years' study in sports management program at the University of Texas at Austin. His expertise in sports policy and history inspired me to write this report. I could not have done this without them.

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Last but not least, I would thank my parents, my wife, my entire family and my friends for supporting and encouraging me to chase my dream in sports. I would not be here without any single one of them.

## **Abstract**

# **Professional Stadiums and the City: An Assessment of Twenty-First Century Urban Sports Facilities in the United States**

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The University of Texas at Austin, 2017

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This report explores significant developments and trends in the recent history of professional sports stadiums in the US. In particular, it explores the use of stadium construction as an urban development and investment strategy in the late twentieth and early twenty-first centuries. The report begins with an introductory literature review that traces the history of and debates surrounding the financing and construction of professional sports stadiums in urban spaces. Special attention is paid to public-private partnership models and the various approaches employed to subsidize or otherwise finance these stadiums. The various approaches to measuring economic and non-economic impacts and benefits of such stadiums are introduced, as are arguments for and

against stadiums as an urban development strategy. Building on the extant literature, the report offers three case studies of twenty-first century stadiums built using a variety of public-private funding models. The cases of Minneapolis, Arlington (Texas), and Orlando analyzed as exemplars of recent trends and issues with the stadium-centered approach to urban development. A fourth case study considers an upcoming project in Detroit which aims to resurrect the once-booming metropolis. The conclusion of the report ties together the lessons of these cases studies and offers directions for future research in related topics.

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## **Chapter 1 Introduction**

Over the past several decades, cities across the United States have started building sports stadiums as a strategy to revitalize their economies. It is claimed that sports franchises and stadiums can help spur local economic development, create jobs, and increase governmental revenues, as well as help enhance the city's image and status. These often grandiose claims are rebutted by critics who argue that the benefits of such projects far exceed costs and that positive gains are only realized by a handful of interest groups and businesses. While the public are often eager to have a major league franchise in their city's name, the monopoly nature of sports leagues limits the number of teams that can play. Cities who want a team usually provide substantial subsidies to build a new stadium and offer other benefits favorable to teams to lure them in, while cities with existing teams have to make efforts to provide equally generous amounts of subsidies to keep them. The fewer teams that exist, the more likely it is the government will offer substantial incentives to owners (Rosentraub, 1994). Thus, a large amount of government subsidies have been poured into stadium construction. Meanwhile, since Baade and Dye's empirical study in 1988, numerous scholars have used different approaches to measure how much the sport teams and their stadiums can do for the city. The consensus opinion was that the direct economic profits of sports stadiums were too small to significantly benefit a city's economy. However, some argued that the role of sports franchises and their stadiums went far beyond the direct economic impacts. Governments

were also gaining experience from the pioneers, trying to get the most benefits from their major league teams.

In the twenty-first century, a new round of stadium mania has heated up. With a boom in team revenues and skyrocketing construction costs compared to the previous era, the relationships between governments and teams have changed to a partnership model. Sports stadiums may not generate huge direct economic profits, but may be used as a catalyst to develop a city's economy; different patterns of stadium location have also been observed from their older comparisons.

The next chapter of this report is a literature review, offering a brief introduction to the history of cities' urban redevelopment efforts in the United States and how sports stadiums emerged as a major participant. In addition, the chapter also examines the amount of subsidies the government have provided to teams and examines what the scholars have learned about the impact of sports teams and stadiums on the local economy. The third chapter takes a closer look at the new trend in stadium strategies in the last ten years with the four case studies of Minneapolis, Arlington, Orlando, and Detroit. In the final chapter, this report concludes with a summary of the new trends in stadium strategy and also offers suggestions for future academic studies in related areas.

## **Chapter 2 Literature Review**

This chapter examines the reasons that sports stadiums became a primary focus of downtown redevelopment strategies in the US and how city governments deal with the issue of subsidizing stadiums, as well as considering the different kinds of measurements scholars use to gauge the success of these strategies.

### **Sports as a Downtown Redevelopment Strategy in the US**

The suburbanization of US cities can be dated back to the late nineteenth and early twentieth centuries (Norton Grubb, 1982; Mills & Price, 1984; Jackson, 1985). After World War II, the pace of suburbanization increased (Mills & Price, 1984); and according to Hobbs and Stoops (2002), the proportion of people choosing to live in a metropolitan area has significantly changed. In fact, while the proportion of people living in central cities remains steady—around 32% over the past 5 decades—the proportion of people living in suburbs has increased from 23% to 50% in 2000. This trend, with so many households moving from central cities to the suburbs, has led to the relocation of retail centers and businesses, and has further resulted in the shift of entertainment and cultural centers (Euchner, 1993).

In order to reverse the trends of suburbanization, many city governments have made various efforts to redevelop their city center's economy, constructing tourist and entertainment infrastructures such as museums, convention centers, historic districts and festival malls. These facilities have been built in city centers in hopes of assisting in the cities' revitalization (Judd, 2003).

Beginning in 1964, with San Francisco's Ghirardelli Square, festival marketplaces emerged as one of the approaches numerous cities attempted (Robertson, 1997), and became a leading redevelopment strategy during the 1970s and 1980s (Metzger, 2001). City governments hoped the unique shopping experience created by a festival marketplace would bring back the shoppers from suburban malls. Despite the efforts, and some successful examples like Ghirardelli Square and Boston's Faneuil Hall, most of these attempts have failed. Rosentraub (2010) identified the lessons learned from the falls of festival marketplaces, including the lack of convenience of access and parking lots, insufficient excitement generated by the marketplace, and the fact that the unique experience created by the market place did not convert into sufficient interest for people to move into the cities. Clearly, suburban residents still preferred to shop at the retail centers and malls near them, instead of going to city centers.

Sports events and other major live events offer leverage potential that cannot be paralleled; as Rosentraub (2010) illustrated, "the game played by the teams could not exist simultaneously in the suburbs and downtown area," a concept that also includes concerts and other live performances. City leaders believed the unique value created by an event venue would attract residents to move into their city. Keating (1997) also claims that despite the enormous costs to build sports stadiums and arenas, city leaders have come to consider these facilities as an essential signifier of "big league" status. In the following sections, this report will discuss the governments' subsidies and the measurement of investment return.

In the 1970s, the city of Indianapolis became the first in the nation to create a development plan with a sports focus (Rosentraub, 1999; Bast, 1998). The RCA Dome and Market Square Arena established the boundaries of the redevelopment area and provided a distinct focus for development (Rosentraub, 1999). The Indianapolis city government poured public funds into partnerships to keep the National Football League (NFL)'s Colts, the National Basketball Association (NBA)'s Pacers, as well as the headquarters of the National College Athletics Association, Pan American Games, men's college basketball championships, and more in their city (Bast, 1998). Meanwhile, in Cleveland, the city's redevelopment plan has involved several initiatives. In addition to the existing the Jacobs Field (now Progressive Field) and Gund Arena (now Quicken Loans Arena), a museum district including the Rock & Roll Hall of Fame and the Great Lakes Science Center was planned near the shores of Lake Erie. This area also included the Galleria Mall and other shopping and retail complexes and restaurants. These combined efforts were made in hopes of revitalizing the downtown Cleveland area by changing recreational patterns within the region (Austrian & Rosentraub, 1997; Keating, 1997). Subsequently, the sports redevelopment strategy was followed by cities across America, including Baltimore, St. Louis, Columbus and Nashville. By 1995, sports venues had become the main strategy that governments employed to rebuild their downtown areas as the heart of a region's tourism and recreational activities (Judd & Fainstein, 1999; Rosentraub, 1999). Baade and Matheson (2013) found that from 1990 to 2012, 89% of the stadiums from the five major North American sports leagues (NFL, NBA, Major League Baseball [MLB], National Hockey League [NHL], and Major

League Soccer [MLS] ) had a new stadium either built or significantly refurbished. These findings illustrate the trend of city governments' belief in redevelopment of downtowns with sports stadiums.

### **Subsidizing Sports Stadiums**

The history of subsidizing sports stadiums with public funding can be traced back to the 1920s. In 1923, the Los Angeles Coliseum was the first stadium built utilizing public subsidies, commissioned as a memorial to the city's World War I veterans (Alakshendra, 2016). However, until the early 1950s, nearly all sports stadiums were privately funded, with the exception of a few stadiums that were built for specific purposes, such as veteran memorials, or to lure the Olympics to the city (Siegfried & Zimbalist, 2000). In 1953, Milwaukee County Stadium became the first publicly funded stadium to attract a major league sports team from another city. This was the first time a government invested in the construction of a sports facility to bring economic benefit to the city (Alakshendra, 2016). Since then, the share of stadiums built using private funds started shrinking (Long, 2005). Dodgers Stadium in Los Angeles marked the start of the public-private partnership (P3) model; in this case the public sector contributed 25% of the construction cost of the stadium. The P3 model is widely used by stadiums today. Today, only a few stadiums are fully funded by government subsidies, including Tampa's Raymond James Stadium built in 1998, Memphis' FedEx Forum built in 2004, and Charlotte's Time Warner Cable Arena built in 2005. Long (2013) compiled an extensive data set on 225 stadiums built or renovated between 1876 and 2010 and the respective

funding mix of all stadiums. According to her statistics, the public contribution toward all stadiums' construction costs is near 60%, which amounts to around \$30 billion. The decade-by-decade trend of public funding for newly built sports facilities can be captured from the table developed by Siegfried and Zimbalist (2000). Table 2.1 presents their work in 2000, which includes the amount of expenditures on new sports facilities from 1910 to 1999. In the first decade of the twenty-first century, 51 new facilities opened across the country. Among those, 58% of the costs were publicly funded (Long, 2013).

Weiner (2004) concluded four traditional ways in which governments provide subsidies for stadiums: first, by publicly financing stadiums and stadium renovations; second, by offering favorable leases to clubs; third, by offering direct cash payments; and fourth, by using tax-exempt bonds to finance stadium construction. Most of this funding relies on taxes and rebates. Alakshendra (2016) concludes that these are the major resources of public funding, as shown in Table 2.2.

*Table 2.1 Expenditures on New Sports Facilities for Professional Teams by Decade*

Decade (No.Built)	Millions of Nominal Dollars	Millions of Constant 1997 Dollars	Public Share of Total Spending
1910-1919(7)			
Mean	\$0.46	\$7.65	
Total	\$3.22	\$53.53	0%
1920-1929(8)			
Mean	\$4.23	\$39.58	
Total	\$33.86	\$316.65	23.50%
1930-1939(6)			
Mean	\$1.90	\$19.06	
Total	\$11.45	\$114.39	34.50%
1940-1949(1)			
Mean	\$0.25	\$1.72	
Total	\$0.25	\$1.72	0%
1950-1959(7)			
Mean	\$3.84	\$22.65	
Total	\$26.87	\$158.51	100%
1960-1969(21) (Cont.)			
Mean	\$24.46	\$120.92	
Total	\$513.69	\$2,539.39	63.20%
1970-1979(25)			
Mean	\$70.65	\$215.76	
Total	\$1,766.15	\$5,394.10	94.60%
1980-89(14)			
Mean	\$103.25	\$143.77	
Total	\$1,445.50	\$2,012.73	78.60%
1990-98(32)			
Mean	\$200.16	\$211.73	
Total	\$6,405.10	\$6,775.21	55.30%

*Note:* From “The Economics of Sports Facilities and Their Communities” by John Siegfried and Andrew Zimbalist, 2000. *Journal of Economic Perspectives*, 14(3), p.96

*Table 2.2 Most Often Used Public Stadium Funding Sources*

Taxes	Other state/city/county/contribution
City sales tax	Grants
County sales tax	General contribution
Lodging tax	Sales of held property
Excise tax (alcohol, tobacco, gasoline, etc.)	Sales tax rebate
Car rental tax	Income tax rebate
Food/beverage tax	Operating subsidy
Property tax/TIF	Interest free loans
Income tax	Capital fund allocation
Utility tax	Infrastructure improvements
Lottery fund/gaming	Utility/transit allocation
Ticket/admission tax	
Parking tax	
Land contributions	
Public parking revenue	

Source: CBS Minnesota, NFL stadium funding information

*Note:* From “How are we funding professional sports stadiums? An overview” by Abhinav Alakshendra, 2016. *Managerial Finance*, 42(9), P.889.

Over time, funding resources shifted, and new creative funding schemes have emerged. Alakshendra (2016) provides an example of the funding technique used in the Dallas Cowboys’ new stadium:

Public funding of Cowboys Stadium is one of the recent examples of creative mix of tax and rebate to fund [a] private stadium. To raise \$444 million for Cowboys Stadium, the city of Arlington’s sales tax was raised by a half-cent along with

increase in admission tax, car rental taxes, parking tax, and hotel occupancy tax by 10, 5, 3.5, and 2 percent, respectively.

### **Impact Measurement**

The debate about the impact of sports stadiums and franchises focuses on whether the sports and their facilities draw enough benefits to the local society to justify the large subsidies paid by governments and the public. Public investment averaged 78% of the total cost of the 121 facilities in use during 2010 across Major League Baseball, Major League Soccer, National Basketball Association, National Football League, and National Hockey League. The average public commitment to a stadium project exceeds \$250 million (Long, 2013). Studies commissioned by government and franchises always claim that a new stadium would bring huge economic benefits to the host city, but some scholars have conducted empirical studies that cast doubt on the optimistic estimates (Baade & Dye, 1988; Baade, 1996; Baade & Dye, 1990; Rosentraub, Swindell, Przybylski, & Mullins, 1994; Noll & Zimbalist, 1997; Coates & Humphreys, 1999). Regardless, the measurement of the impact of stadiums and franchises should include not only the direct economic side of things, but also the intangible and non-pecuniary benefits generated from them. This section will examine the findings from scholars about the impact of stadiums and franchises to their host communities.

### **Direct Economic Impact**

There are extensive studies about the economic impact of sports stadiums and arenas, and most of them find no statistically significant positive relationship between a

sports facility and local economic development (Baade & Dye, 1988, 1990; Rosentraub et al., 1994; Noll & Zimbalist, 1997; Coates & Humphreys, 1999). In an empirical study conducted by Baade and Dye (1990), the metropolitan area income level of nine metropolitan areas was examined (Cincinnati, Denver, Detroit, Kansas City, New Orleans, Pittsburgh, San Diego, Seattle, and Tampa Bay). Including data collected from 1965 to 1983, after reviewing the regression result, they concluded that the impact of a stadium is insignificant, and they even suggested a possible negative impact on local development. With regard to a stadium's contribution to job creation and job value, studies also show that the presence of franchises and stadiums reduces the per capita income in a standard metropolitan statistical area (SMSA) (Coates & Humphreys, 1999), and that the decrease in income can also be found on the county level (Jasina & Rotthoff, 2008). Teams or stadiums do not seem to create jobs for a city (Baade, 1996). In fact, Baade and Dye (1988) state that stadiums are only directly associated with seasonal, unskilled, and low-wage jobs. After reviewing redevelopment strategies in Phoenix and Indianapolis, Rosentraub (2000) points out that a focus on sports will not lead to the attraction of high-paying jobs to the economy. There is also a study that shows that stadium announcements would have a negative impact on residential property values in surrounding areas (Dehring, Depken & Ward, 2007). However, in another empirical study conducted by Tu (2005), after examining the property value surrounding FedEx Field, it is argued that, contrary to concerns that a new stadium would adversely affect property value, the value of single-family homes surrounding FedEx Field actually increased. In his study, the result indicates that the closer the property is to FedEx Field,

the greater the price increase; he also estimates a total \$42 million increase in property value after the completion of FedEx Field. He offers three factors that may contribute to the increasing value: infrastructure improvements, increased employment opportunities, and a recreational outlet that local residents have long been hoping for. What causes the contradictory findings between the two studies may lie in the different contextual factors in the two researched areas.

Swindell and Rosentraub (1998) summarize the economic impact of sports teams and stadiums by stating that “sports teams and the facilities they use produce very limited economic benefits.” In an earlier study, Rosentraub et al. (1994) examined the impact of Indianapolis’ sports focus strategy, and found that the impact of all city sports would only account for about 1.1% of the Indianapolis economy, to which they respond, “a sports strategy, simply put, is too small to change economic patterns in a region.” Siegfried and Zimbalist (2006) suggest three possible reasons, other than the small impact of sports, which would explain why sports teams do not promote economic development: the substitution effect, leakage, and budgetary impact. Substitution effect means that the sports teams may only rearrange the spending in an urban area, but they may not add to it. This assumption is also mentioned by other scholars (Baade & Dye, 1988; Baade, 1996; Coates & Humphreys, 2000). For example, a family living in Houston who spend \$200 attending an Astros game at Minute Maid Park on a certain weekend may spend the same amount of money on other recreational activities if the Houston Astros and Minute Maid Park never existed. In another scenario, some fans who visit a city do not always visit solely because of the games. They may visit the city for other reasons, like visiting

friends or family, or engaging in other activities, and attending a game is just part of the plan; that is, if the team never existed, they might arrange other entertainment activities in the same city. Another reason offered was leakages. In this, they point out that the majority of added revenue generated by a sports team goes to the players, but in an early study, the results show that only 29% of NBA players live in the metropolitan area of their team during the off-season (Siegfried & Zimbalist, 2002). Thus, much of the earnings leak out of the host community and do not contribute to the local economy. The third reason falls on the large amount of subsidies spent by governments on stadiums, which is the budgetary impact. They state that the large budgetary burden placed on the government for infrastructure maintenance, debt service, and environmental remediation, will result in the need to cut other government services or increasing the tax rate, further resulting in slowing down the local economy. This finding is affirmed by Coates and Humphreys (1999, 2000). Noll and Zimbalist (1997) also suggest a compensating differential effect that could explain the income decrease, in which those residents of cities with professional sports teams might be willing to accept lower wages because of the intangible benefits generated by the team. This report will elaborate on the discussion of intangible benefits in latter sections. Coates and Humphreys (2000) contend that the presence of a team may also have a negative effect on productivity; that is, they argue that the workers in cities with professional teams may spend more work time discussing the games or similar activities than might workers in cities without sports teams, and this difference could lead to a lower income per capita.

Newsome and Comer (2000) conducted a study about the location pattern of major league sports venues, and found that after 1985, the trend of sports venue locations of four major league sports is moving toward downtown and city center locations. This trend suggests a new generation of stadiums. The trend has been illustrated by Spirou (2010), as “from 1998–2009, 15 new stadiums were built in the NFL at a cost nearing \$5 billion. Eleven of them were developed in downtown or urban areas and only four in suburban areas.” As shown in Table 2.3, more than half of NFL teams are playing in downtown or urban locations.

*Table 2.3 Urban/suburban Stadium Locations in the National Football League*

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**Downtown/Urban**

- ❖ Atlanta Falcons: Georgia Dome (1992)
- ❖ Baltimore Ravens: M & T Bank Stadium (1998)
- ❖ Carolina Panthers: Bank of America Stadium (1996)
- ❖ Chicago Bears: Soldier Field (2003)
- ❖ Cincinnati Bengals: Paul Brown Stadium (2000)
- ❖ Cleveland Browns: Cleveland Browns Stadium (1999)
- ❖ Denver Broncos: Invesco Field (2001)
- ❖ Detroit Lions: Ford Field (2002)
- ❖ Green Bay Packers: Lambeau Field (1957)
- ❖ Indianapolis Colts: Lucas Oil Stadium (2008)
- ❖ Jacksonville Jaguars: Jacksonville Municipal Stadium (1995)
- ❖ Minnesota Vikings: Metrodome (1982)
- ❖ New Orleans Saints: Superdome (1975)
- ❖ Pittsburgh Steelers: Heinz Field (2001)
- ❖ St. Louis Rams: Edward Jones Dome (1995)
- ❖ Seattle Seahawks: Quest Field (2002)
- ❖ Tampa Bay Buccaneers: Raymond James Stadium (1998)
- ❖ Tennessee Titans: LP Field (1999)

**Suburban**

- ❖ Arizona Cardinals: University of Phoenix Stadium (2006)
- ❖ Buffalo Bills: Ralph Wilson Stadium (1973)
- ❖ Dallas Cowboys: Texas Stadium (1971)
- ❖ Houston Texans: Reliant Stadium (2002)
- ❖ Kansas City Chiefs: Arrowhead Stadium (1968)
- ❖ Miami Dolphins: Pro Player Stadium (1987)
- ❖ New England Patriots: Gillette Stadium (1987)
- ❖ New York Giants/Jets: Giants Stadium (new stadium opened in 2010)
- ❖ Oakland Raiders: McAfee Coliseum (1966)
- ❖ Philadelphia Eagles: Lincoln Financial Field (2003)
- ❖ San Diego Chargers: Qualcomm Stadium (1967)
- ❖ San Francisco 49ers: Monster Park (1971)
- ❖ Washington Redskins: FedEx Field (1997)

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*Note:* From Cultural policy and the dynamics of stadium development, by Costas Spirou, 2010, *Sport in Society*, 13(10), p.1028.

Santo (2005) followed the methodology of the study by Baade and Dye (1990), and conducted a study to examine the effect of downtown stadiums in this new generation. He used the data collected from the stadiums built or renovated within the time period from 1984 and 2001. As he explained, it is worthy to reassess the economic impact of stadiums because in the new generation, stadiums are located in a downtown and designed to serve as a downtown redevelopment catalyst with tourist appeal, which is in contrast to the previous generation, in which stadiums were mostly located near interstate exchanges for faster exit after the game. In his study, he examined the economic impact of 19 metropolitan statistical areas (MSAs) that either gained or lost an NFL or MLB team, or that have a new or renovated NFL or MLB stadium. The results indicate that there is a significant positive correlation between new stadiums and income. Nelson (2001) also conducted an empirical study using the data of 25 MSAs with major league stadiums from 1969 to 1994 and found that “locating major league teams in suburban areas is not likely to improve economic conditions of the metropolitan area, but locating teams in the central city and, more specifically, in the downtown may.” The authors of these two studies also suggest that the stadiums located in downtown are more likely to generate ancillary spending before and after the game, like having a nice meal, doing some shopping, and visiting other local attractions. The partnership between the city of San Diego and the San Diego Padres may best illustrate the success of a downtown redevelopment strategy in this era. Cantor and Rosentraub (2012) conducted a study to scrutinize the effect of San Diego’s Ballpark District after its eighth year in existence. In this partnership, the public sector invested \$296 million, while the San

Diego Padres invested \$187.1 million in the construction, and another \$487 million in developing the surrounding neighborhood. The goal for the public sector was to attract and retain young and highly educated residents, and create a demographically diverse and economically integrated neighborhood. As a result, they state:

The community at this time appears to be economically and socially integrated, and prices are stable having survived the worst of the recession with price changes that were less volatile than those in other parts of the county. While the success of any public/private partnership depends on the parameters used to evaluate it, looking at economic integration, the stability of home prices, and the attraction of educated people to a city's center, the Ballpark District should be considered a success.

As Rosentraub (2006) concluded, the success of the San Diego redevelopment indicates that when private sector investments or commitments are guaranteed, the public sector could receive the benefits it had anticipated.

### **Intangible Benefits**

The discussion about the benefits brought by sports stadiums and franchises is not only relevant on an economic level, but also with regard to intangible benefits. Rosentraub (1996) states, "Cities establish identities through teams and with their facilities." The intangible benefits of sports facilities and franchises are also recognized by other scholars (Crompton, 2004; Groothuis & Rotthoff, 2016; Hamilton & Kahn, 1998; Rappaport & Wilkerson, 2001; Swindell & Rosentraub, 1998; Wassmer, Ong, &

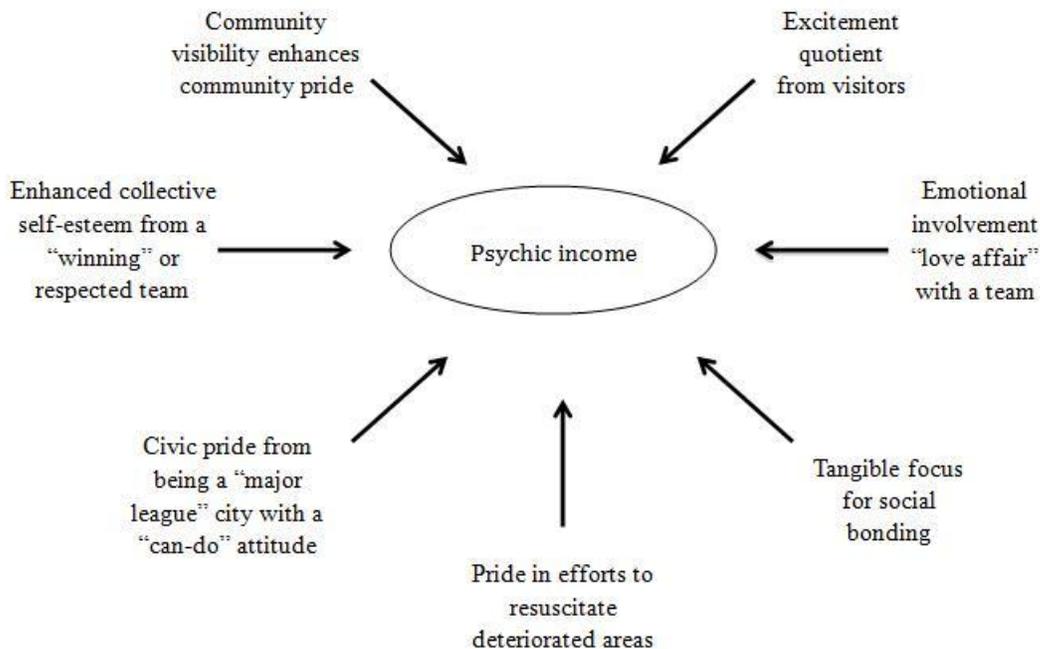
Propheter, 2016). Zimmerman (1997) states that one of the benefits for citizens is simply derived from living in a “big league” town, and these benefits have the potential to be large in the aggregate because no citizen can be excluded from them. Coates (2007) discusses the benefits from living in such a “big league” town, or a “world-class” city. One benefit is that a world-class city would attract businesses that want new or expanded office locations. The second benefit of world-class status is the increasing national or international television exposure. The third benefit is that people value sports amenities the same way they value clean air or good public schools, which would increase the willingness of people to move into the city, hence increasing property values. However, as he argues, there is little evidence to support these assumptions.

Howard and Crompton (1995) found that the presence of professional sports can nurture a sense of civic pride among residents. Swindell and Rosentraub (1998) contend that the citizens of Indianapolis felt that professional football, basketball and auto racing brought more national attention to the city than concerts and cultural events. Crompton (2004) calls this kind of civic pride and national recognition “psychic income.” In his article, he describes psychic income as “the emotional and psychological benefit residents perceive they receive, even though they do not physically attend the sports event, and are not involved in organizing them.” Residents of the community with a major league sports team may follow their team and talk about their local team with friends even though they never attend a game. This is different from the example in which a well-known company; for example, Google, opens a new regional office in the city. With Google moving into the city, government officials and business leaders may be excited, but the residents do

not necessarily get excited because most likely the economic benefits brought in by the company have little to do with them. However, if a sports team comes to the city, lots of citizens will identify the team as their “home team” and follow them, which will generate a certain degree of emotional attachment to the team.

Crompton (2004) further conducted a psychic income paradigm, as shown in Figure 2.1. According to his paradigm, several factors contribute to citizens’ psychic income. As he explains, “the increased community visibility may be a source of pride to residents who derive satisfaction from their community’s name being widely disseminated across the nation.” In a similar vein, residents who live in the same community would consider that they are living in a “major league” or “first tier” city. Other factors contribute to psychic income, including emotional involvement, excitement quotient from visitors, enhanced collective self-esteem from a winning team, and tangible focus for social bonding. Some people see the investment in sports stadiums as an effort to resuscitate a deteriorated area. Rappaport and Wilkerson (2001) also call on the need to acknowledge the improvement in quality of life brought about by the presence of a local sports team.

Figure 2.1 The Psychic Income Paradigm



Note: Reprint from “Beyond Economic Impact: An Alternative Rationale for the Public Subsidy of Major League Sports Facilities” by John Crompton, 2004. *Journal of Sports Management*, 2004, 18, p.56.

In terms of measuring the intangible benefits, scholars usually use the contingent valuation method (CVM) to measure the value of consumer surplus associated with sports teams and stadiums. CVM is a survey-based approach that could estimate the level of subsidy that individuals would be willing to pay to support a new sports stadium or sports franchise. Johnson, Grootuis and Whitehead (2001) conducted a survey about the Pittsburgh Penguins with CVM. In their study, they found that 72% of respondents identified themselves as Penguins fans, and more than half of the respondents indicated they would be willing to pay for hockey-related public goods rather than lose them, but the aggregate value of willingness to pay for this benefit only ranges from about \$23.5

million to \$66 million, which is not nearly enough to cover the cost of building a new \$200 million arena. Other studies show similar results. Fenn and Crooker (2003) estimated that a willingness by Minneapolis residents to pay for the Minnesota Vikings equals about \$114 million, as compared with a required public subsidy to the Vikings of \$473 million. For the Jacksonville Jaguars, Johnson, Mondello and Whitehead (2007) estimated that the willingness by Jacksonville residents to pay for the stadium is \$55 million, compared to a \$167 million actual public subsidy. Santo (2007) examined the willingness of Portland citizens to support a new baseball team, and the result of their offerings is estimated at \$74 million, while the projected subsidy was estimated to be \$235 million. As Owen (2006) concludes, the “aggregate willingness-to-pay values are not enough to cover the costs of sports facilities.” However, some scholars have questioned the reliability of such a method, because there is a concern that hypothetical questions produce hypothetical answers (Fisher, McClelland & Schulze, 1998). Owen (2006) also suggests that the willingness of an individual to pay for the professional teams in the city is highly conditional on that individual’s interest in sports and in attending sports events. In his study about the willingness by residents in Minneapolis to pay for the Minnesota Twins, nearly 60% of respondents gave the response of zero dollars.

In one study about the intangible benefits that the Orioles bring to citizens of the city of Baltimore, Hamilton and Kahn (1997) make an interesting comparison between the cost of subsidizing the Orioles and the disutility of a rainy day. They state that the cost of a subsidy to Camden Yards Ballpark is approximately \$14.70 per Baltimore

SMSA household per year; meanwhile, the disutility of an extra rainy day is about \$72 per household per year. Therefore, if the citizens of Baltimore were faced with a choice of one additional rainy day per year or losing the Orioles to another city, it seems like Baltimore citizens would prefer to accept one more rainy day every year. From this result, it seems like Baltimore citizens get a substantial net surplus from the intangible benefits of having the Orioles in town.

### **Chapter 3 Examining Recent Cases In US Stadium Construction**

The trend of the stadium boom has shown no sign of declining in the last 10 years. From 2007 to 2016, fourteen new stadiums and arenas were built in the four major leagues across the United States (NFL, NBA, MLB, and NHL). On average, at least one new stadium opened every season. Table 3.1 shows the newly built stadiums in the last 10 years.

Among the new sports facilities, NFL and MLB have the most new stadiums with five each, NBA has three, and NHL has two new arenas. Regarding the choice of location, urban sites account for more than half with eight, which is consistent with the findings regarding stadium location patterns by Newsome and Comer (2000). However, no new franchises have been added to leagues in this ten-year span, and there were no stadiums built due to franchise relocation.

There are also eight new stadiums either under construction or under proposal. One difference from the trend of the last ten years is that there will be one new expansion team (Las Vegas Golden Knights of the NHL), and two stadiums involving franchise relocation (the San Diego Chargers and the St.Louis Rams to Los Angeles, and the Oakland Raiders to Las Vegas). Table 3.2 shows the future stadiums among the four leagues.

*Table 3.1 New Stadiums and Arenas for Four Major Leagues in U.S from 2007 to 2016*

<b>Stadium</b>	<b>City</b>	<b>Tenants</b>	<b>Built</b>	<b>Location</b>
Lucas Oil Stadium	Indianapolis, Indiana	Indiana Colts	2008	Urban
National Park	Washington, D.C	Washington Nationals	2008	Urban
AT&T Stadium	Arlington, Texas	Dallas Cowboys	2009	Suburb
Citi Field	Queens, New York	New York Mets	2009	Suburb
Yankees Stadium	Bronx, New York	New York Yankees	2009	Suburb
Amway Center	Orlando, Florida	Orlando Magic	2010	Urban
MetLife Stadium	East Rutherford, New Jersey	New York Giants, New York Jets	2010	Suburb
PPG Paints Arena	Pittsburgh, Pennsylvania	Pittsburgh Penguins	2010	Urban
Target Field	Minneapolis, Minnesota	Minnesota Twins	2010	Urban
Barclays Center	Brooklyn, New York	Brooklyn Nets, New York Islanders	2012	Urban
Marlins Park	Miami, Florida	Miami Marlins	2012	Suburb
Levi's Stadium	Santa Clara, California	San Francisco 49ers	2014	Suburb
Golden 1 Center	Sacramento, California	Sacramento Kings	2016	Urban
U.S Bank Stadium	Minneapolis, Minnesota	Minnesota Vikings	2016	Urban

*Table 3.2 Future Stadiums among the Four Major Leagues in U.S*

<b>Stadium</b>	<b>City</b>	<b>Tenants</b>	<b>Opening</b>	<b>Location</b>
Little Caesars Arena	Detroit, Michigan	Detroit Pistons, Detroit Red Wings	2017	Urban
Mercedes-Benz Stadium	Atlanta, Georgia	Atlanta Falcons	2017	Urban
T-Mobile Arena	Paradise, Nevada	Las Vegas Golden Knights	2017	Urban
SunTrust Park	Cumberland, Georgia	Atlanta Braves	2017	Suburb
Los Angeles Stadium at Hollywood Park	Los Angeles, California	Los Angeles Rams, Los Angeles Chargers	2018	Suburb
Chase Center	San Francisco, California	Golden State Warriors	2019	Urban
Las Vegas Stadium	Paradise, Nevada	Oakland Raiders	2020	Suburb
New Rangers Ballpark	Arlington, Texas	Texas Rangers	2020	Suburb

This chapter examines the trend among the new stadiums using three case studies: newly built stadiums in Minneapolis, Arlington, and Orlando. It examines how the government funds the stadiums as well as the strategies for developing the cities' economies through the sports teams and their facilities, and also examines if the sports stadium strategies have generated enough benefits to the local communities. Finally, this chapter also examines how a future arena in downtown could change the fate of Detroit.

## Minneapolis

The search for a new baseball ballpark for the Minnesota Twins began in 1995, when they concluded that their current home, the Metrodome, did not bring in sufficient profit for the team. The former owner, Carl Pohlad, almost sold the Twins to North Carolina businessman Don Beaver in 1997, but the potential move to the Piedmont Triad area was aborted due to the defeat of a referendum for a stadium in North Carolina. During the next 10 years, the Twins made several attempts to build a new ballpark, but none of the proposals were passed by the Minnesota Legislature. During the 2002 to 2004 seasons, despite the three consecutive American League Central Division titles, the Twins' local revenues (gate receipts, concessions, suite rentals, advertising and publications, and parking) were among the lowest in the league. Table 3.3 illustrates the unevenness between the win-loss record and revenue rankings.

*Table 3.3 The Win-Loss Record/Rankings and Local Revenue Rankings*

	2002	2003	2004
Win/Loss Record	94-67	60-72	92-70
AL Central Division Finish	1st	1st	1st
<b>Local Revenue Sources:</b>			
Gate Receipts	25th	25th	25th
In-Park Concessions	22nd	24th	26th
Advertising and Publications	26th	27th	26th
Parking Revenue	26th	28th	27th
Stadium Suite Rentals	30th	27th	30th

*Note:* Retrieved from Minnesota State Legislature.

<https://www.leg.state.mn.us/webcontent/lrl/issues/BaseballStadium/TwinsBallparkSummary.pdf>

In 2006, The Minnesota Legislature finally approved legislation to fund a new Minnesota Twins ballpark. Twins spokesman Kevin Smith said the intention was to escape from their present spot in "the corner of a football field" and to ensure that the Twins remain a Minnesota franchise for years to come (Mannix, 2009). The Legislature approved the bill on May 21, 2006, and Minnesota Governor Tim Pawlenty signed the bill into law five days later. A public body, the Minnesota Ballpark Authority (MBA), was created by the 2006 Legislature to oversee the construction and operation of the new ballpark. Under terms of the 2006 legislation, the original budget of this Public Private Partnership for the new ballpark was \$480 million. The public contribution was \$350 million: \$90 million for infrastructure and \$260 million for ballpark construction costs. The public contribution was financed with Hennepin County issued bonds. The bonds were repaid from a county-wide 0.15% general sales tax authorized in the legislation. Under the original agreement, the Minnesota Twins contribution was \$130 million for ballpark construction costs plus any ballpark cost overruns or enhancements. Table 3.4 shows the original budget.

After the legislation was adopted, the Twins contributed an additional \$19.5 million for non-land infrastructure expenses and near \$45.5 million for additional ballpark enhancements. That brought the Twins' total contribution to \$195 million for construction. Another \$10 million was contributed from other sources, which included the Target Corporation, the MBA, and the Minnesota Department of Transportation (MNDOT). The amended ballpark budget totals \$555 million, as shown in Table 3.5 ("Minnesota Ballpark Authority", n.d.).

*Table 3.4 Original Budget of Target Field*

<b>Use</b>		<b>Source</b>	
Infrastructure	\$90 million	Hennepin County	\$90 million
Ballpark	\$390 million	Hennepin County	\$260 million
		Minnesota Twins	\$130 million
<b>Total Budget</b>	<b>\$480 million</b>		<b>\$480 million</b>

*Note:* Retrieved from Minnesota Ballpark Authority.  
<http://ballparkauthority.com/about/target-field-budget/>

*Table 3.5 Amended Budget of Target Field Project*

<b>Use</b>		<b>Source</b>	
Infrastructure	\$120 million	Hennepin County	\$90 million
		Minnesota Twins	\$20 million
		Target Corp	\$4.5 million
		MNDOT	\$3.5 million
		MBA	\$2 million
Ballpark	\$435 million	Hennepin County	\$260 million
		Minnesota Twins	\$175 million
<b>Total Budget</b>	<b>\$555 million</b>		<b>\$555 million</b>

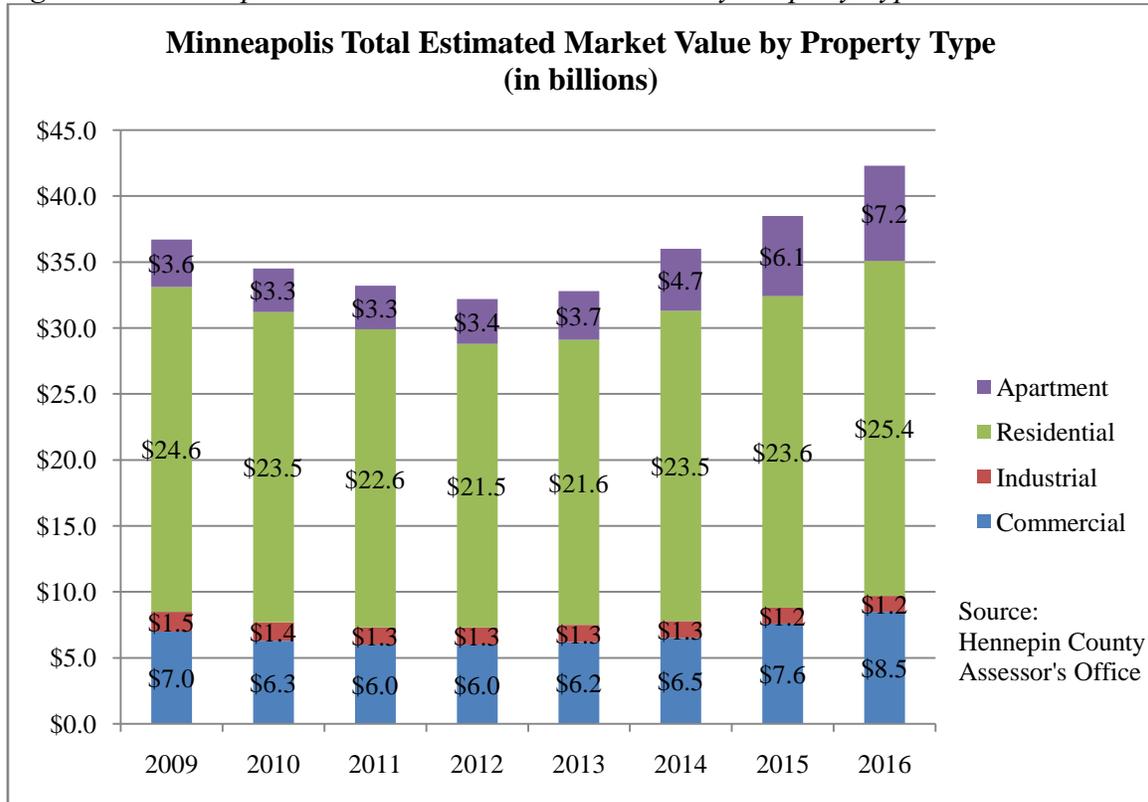
*Note:* Retrieved from Minnesota Ballpark Authority.  
<http://ballparkauthority.com/about/target-field-budget/>

Target Field was located in the Historic Warehouse District/North Loop area, adjacent to the Target Center, home venue of the NBA Minnesota Timberwolves. The

area is home to dozens of bars, restaurants, nightclubs, and other entertainment venues. Members of the local business community hoped the ballpark would help energize downtown economically in a way that the Metrodome never really did. A study after the inaugural year of the Target Field indicated that the millions of fans visiting it produced state and local sales tax money far ahead of what was generated in the Metrodome's final season. The total sales tax amounted to \$18.6 million, and the study argued that the Target Field generated nearly \$170 million in economic activity (Kaszuba, 2012). Other developments followed the opening of the Target Field: in just 15 months after the ballpark's opening, \$36 million in new construction permits were issued within five blocks of it and occupancy in downtown Minneapolis hotels around the stadium was up 19.4 percent during the first six months after opening and the use of the light rail to attend games is up nearly seven percent (Santee, 2012). An article in 2013 showed that five apartment complexes, including the 185-unit Dock Street Apartments, were under construction in the North Loop area near the Target Field (Gilyard, 2013). These are part of a larger development that will include offices, more residential buildings, and retails. In addition, United Properties, owned by the Pohlad family, invested \$40 million for the renovation of the Ford Center, which is across the street from the Target Field. The investment was a success: the 1912 built Ford Center, one of the earliest Ford plants, was 99.5% leased after the renovation (Moore, 2012). The development in apartments and offices is captured in the Comprehensive Annual Financial Report released by City of Minneapolis. Figure 3.1 shows the estimated market value property type in the city of Minneapolis through year 2016. The growth of apartments and commercial properties

after 2012 is notable. The value of the apartments increased from \$3.3 billion in 2010 to \$7.2 billion in 2016, an 118% growth; the value of commercial property also had a \$2.2 billion increase with a 35% growth rate.

Figure 3.1 Minneapolis Total Estimated Market Value by Property Type



Note: Retrieved from City of Minneapolis.

<http://www.ci.minneapolis.mn.us/www/groups/public/@finance/documents/webcontent/wcmsp-182660.pdf>

Public transit is also under construction; in 2013, Hennepin County Board announced a sweeping plan to add a park, jumbo display screen, retail stores, and a public plaza to the \$79.3 million rail hub. Twins President Dave St.Peter said, “The new hub, to be called Target Field Station, will be Minnesota’s version of New York City’s Grand Central Terminal when it opens next year.” In this deal, the Twins and United Properties

paid \$3.7 million to the county for the cost of the project; the project was not only tightly connected to the home games of Minnesota Twins, but also helped the North Loop Neighborhood to connect with its roots. As Hennepin County Commissioner Peter McLaughlin said, “The addition of Target Field extended downtown Minneapolis west past Interstate 394. And this project,” he continued, “will extend the urban core even farther.” (Olson, 2014)

These combined efforts are certainly working well for the development of the local economy. One positive result is that the debt of Target Field could be paid off a decade early. According to Smith (2017), the excess revenue from the ballpark sales tax, plus lower interest rates, has helped the county save money. The early payoff on the debt would mean an early end of the 0.15% sales tax which is used for covering the payment on the ballpark, and this would save 3 cents on every \$20 spent for taxpayers. The success of Target Field also attracted future development; United Properties is planning a new mixed-use entertainment venue on the north side of the ballpark. United Properties will submit plans to the city by the second quarter of the year and hopes to break ground in 2017 (Norfleet, 2017). The infrastructure improvement, the new railway transit hub, the new luxury apartments, retails and offices, and of course the arrival of Twins baseball games also marks the improvement in the quality of life of the North Loop area residents; however, as many scholars have argued, these intangible benefits are hard to measure.

## **Arlington**

In April 2001, the Dallas Cowboys announced that they were interested in building a new publicly subsidized stadium to replace the old Texas Stadium. Built in 1972, the original Texas Stadium lacked many of the modern revenue generating tools of new stadiums, such as modern luxury suites and a retractable roof. The Dallas Cowboys have been known as America's Team; their popularity and the success in the 1990s made the team a very valuable asset for the local region. Once the announcement was made, team owner Jerry Jones received initial proposals from a number of cities in the Dallas-Fort Worth Metroplex, including Irving, Grapevine, Arlington, Grand Prairie, and Dallas. Because of the small size of population and tax base, the original home city Irving could not afford to finance the new stadium, as was the case with the other similarly sized cities. In March 2004, Fair Park at downtown Dallas emerged as the leading proposal to land the Dallas Cowboys; however, the city of Dallas was already committed to building the \$410 million American Airlines Arena (home of the Dallas Mavericks and Dallas Stars) with tax dollars and it was impossible to raise enough funds to build another stadium. The proposal was then abandoned. On July 17, 2004, the mayor of Arlington announced that he had been in negotiations with the team about the potential of building a new stadium in Arlington. Arlington has a population around 360,000, which is the third largest city in north Texas, and it was the home to another major league team, the Texas Rangers of MLB. In 2001, the city had reduced its local tax rate by one half of 1% because of the early debt pay off of the baseball stadium. Therefore, the city was able to raise funds for the new stadium (Dehring et al., 2007). In November of 2004, residents in

Arlington, Texas, passed a referendum to authorize the city to provide \$325 million public money for planning, acquisition, construction, and financing the Cowboys Stadium with 55% voting in favor. The funding source consisted of a 0.5% sales tax increase, a 2% hotel occupation tax increase, and a 5% rental-car tax increment. The total original budget was \$650 million; Jerry Jones would cover the rest of the funding and the overruns. The final figure increased as the Cowboys added more signs, furniture, ribbon boards, and fixtures to the stadium; the actual cost of the stadium went up to nearly \$1.2 billion. The amount and proportion of public and private sector funding is shown in Table 3.6

*Table 3.6 Original Budget and Actual Cost of AT&T Stadium (in millions)*

	Original Budget		Actual Cost	
Public sector	\$325	50%	\$444	37%
Private sector	\$325	50%	\$750	63%
<b>Total</b>	<b>\$650</b>		<b>\$1,194</b>	

*Note:* Retrieved from <https://cbsminnesota.files.wordpress.com/2011/12/nfl-funding-summary-12-2-11.pdf>

The construction of the stadium was completed in 2009. Proponents predicted that the new stadium would add to the Globe Life Park in Arlington, the Texas Rangers' home ballpark, to build an entertainment focused industry that would attract people to visit and live in Arlington. The cost-benefit study commissioned by Arlington city officials reported that Arlington stands to add \$238 million a year to its economy and \$416 million a year to Tarrant County.

Dehring et al. (2007) conducted a study about the impact of stadium announcements on residential property values in the Dallas-Fort Worth Metroplex. In the

study, they investigated the impact of five separate stadium announcements, two of which concern Dallas and three of which concern Arlington. The announcement date and description are shown in Table 3.7.

*Table 3.7 Dallas Cowboys Stadium Announcements Date Description*

---

Announcement 1	April 30, 2004	Proposal to build a stadium at Fair Park in downtown Dallas. The proposed stadium would replace the aging Cotton Bowl, and the public contribution to construction costs would be financed by a half cent sales tax throughout Dallas County. Ultimately, the city of Dallas would not contribute to this additional tax because of contractual obligations to retire its debt for the American Airlines Arena
Announcement 2	June 6, 2004	The Fair Park proposal officially abandoned.
Announcement 3	July 7, 2004	Arlington’s mayor announces that he has been in secret negotiations with the team about building a new publicly subsidized stadium near the existing baseball stadium in Arlington.
Announcement 4	August 17, 2004	Arlington’s city council approves a stadium ballot initiative for the November 2004 general election. The ballot initiative asks voters to approve up to \$325 million toward land acquisition and construction costs for a new stadium located near the existing baseball stadium in Arlington. The ballot initiative also includes a one-half cent sales tax in Arlington as well as additional hotel and car rental taxes.
Announcement 5	November 3, 2004	Arlington voters approve ballot initiative on November 3, 2004, and the additional taxes are instituted on April 1, 2005.

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*Note:* From “The Impact of Stadium Announcements on Residential Property Values: Evidence From a Natural Experiments in Dallas-Fort Worth” by Dehring, Depken & Ward (2007), *Contemporary Economic Policy*, 25(4), p.632.

They found out that the initial announcement that the Cowboys might relocate to Fair Park corresponded with an increase in property values in Dallas City, but the values

of properties returned to the status quo ante when the Fair Park proposal was abandoned. However, the results from the Arlington sample suggest that the aggregated expected city amenity effect and local sales tax burden associated with the proposal to build a publicly subsidized stadium for the Dallas Cowboys in Arlington, Texas, reduced residential property values. However, the numbers from the City of Arlington Comprehensive Annual Financial Report (2016) suggest that, since 2012, the real property value of the City of Arlington has steadily increased, as shown in Figure 3.2.

*Figure 3.2 Estimated Actual Real Property Value of City of Arlington from 2008 to 2016*



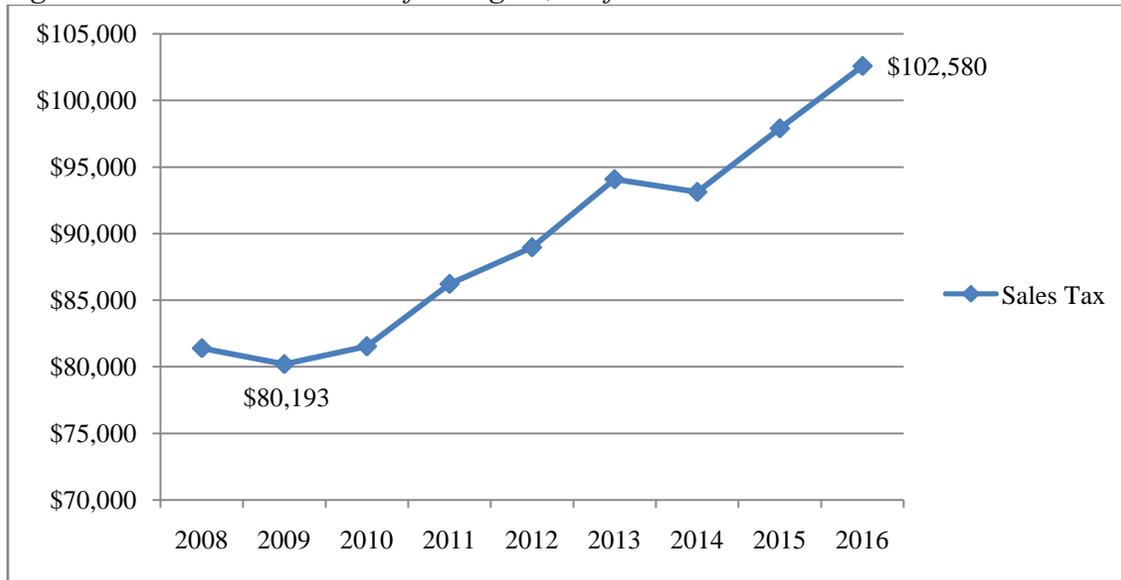
*Note:* Retrieved from City of Arlington.

<http://www.arlington-tx.gov/finance/wp-content/uploads/sites/24/2014/06/2016-Comprehensive-Annual-Financial-Report-YE-9-30-16.pdf>

Since the AT&T Stadium opened in 2009, the sales tax revenue of the City of Arlington has also seen a steady increase, as shown in Figure 3.2; these are good indicators of the direct economic impact of the AT&T Stadium to the local economy. It is reported that because of the higher-than-expected tax revenue, the city is paying down its

debt on the AT&T Stadium faster than planned, which is seven years ahead of schedule (Schrock, 2015).

Figure 3.3 Sales Tax Revenue of Arlington, TX from 2008 to 2016



Note: Retrieved from City of Arlington.

<http://www.arlington-tx.gov/finance/wp-content/uploads/sites/24/2014/06/2016-Comprehensive-Annual-Financial-Report-YE-9-30-16.pdf>

Besides the direct economic impact of the arrival of the AT&T Stadium, AT&T Stadium has also brought a renewed sense of identity to the City of Arlington; together with the Texas Rangers' Globe Life Park, the City of Arlington is now an entertainment destination not only for local sports teams but also for other events. Since it opened in 2009, the AT&T Stadium has hosted Super Bowl XLV, WrestleMania 32, an NBA All-Star Game, College Football National Championship Game, and annual Cotton Bowl Football Classics. These sports events have made Arlington a player on the national stage. As Cadwallader and Osborne (2016) described:

While some NFL stadiums only host eight to 10 games a year, the roofed AT&T Stadium keeps busy year-round. It hosted or is scheduled to host 495 non-NFL events in 2015 and 2016, including 56 high school football games, eight college football games, nine concerts and 139 corporate events, according to the Cowboys.

One of the major drawbacks in the following years for the development of the area has been the lack of retail development. The AT&T Stadium is surrounded by a large area of parking lots, and is adjacent to another big sports stadium, the Globe Life Ballpark at Arlington. The layout of the sports complex has limited the opportunity to generate ancillary spending from visitors. However, the City of Arlington is aiming to build an entertainment center in the area. In 2015, Texas Rangers announced the building of a 200,000-square-foot entertainment space “Texas Live!” in the area (Mosier, 2015). In the following year, it was announced that the Rangers and the City of Arlington have reached an agreement for a new ballpark to be opened in 2020 (Sullivan, 2016). These future developments reflect the positive outcome that the AT&T Stadium and the City of Arlington’s entertainment strategy have brought to the area. For further development, however, the City of Arlington should consider integrating residents and retail development into their development plan.

### **Orlando**

The City of Orlando has long been known as an entertainment destination. With a nickname of “The Theme Park Capital of the World,” the city is most famous for theme

parks like Walt Disney World in its southwestern area; however, until the late 1990s, the downtown of Orlando was relatively small compared to other cities of a similar size. Meanwhile, the owner of Orlando Magic had been pressing the City of Orlando for a new arena for many years. The Orlando Magic had previously played at the Amway Arena, which was built in 1989; by 2006 it was the seventh oldest facility in the NBA and not as technologically advanced as most other NBA facilities. In 2006, Orlando and Orange County officials announced a deal to build a new arena in downtown Orlando. The project was part of the city's Downtown Master Plan, along with a Performance Arts Center, and the renovation of the Citrus Bowl. The goal of the Master Plan was to increase the quality of life for Orlando and Central Florida; to strengthen economic development opportunities for the region; and support the continued revitalization of Downtown Florida (City of Florida, 2007).

The total cost of the Amway Center was \$480 million. In this deal, the Orlando Magic contributed \$50 million upfront cash for construction, and the government provided the rest of the funds with a Tourist Development Tax, covenant bonds, state sales tax revenue bonds, proceeds from other developments, and investment earnings; \$380 million of the cost was for construction, with an additional \$100 million for land and infrastructure. The Orlando Magic would collect all Magic event revenue, including suite sales; the City of Orlando would collect 100% of revenues for all non-Magic events held at Amway Center, including concessions, merchandise, ticket sales, and parking revenues. The funding source and use detail is shown in Table 3.8.

*Table 3.8 The Funding Sources and Uses of Amway Center (in millions)*

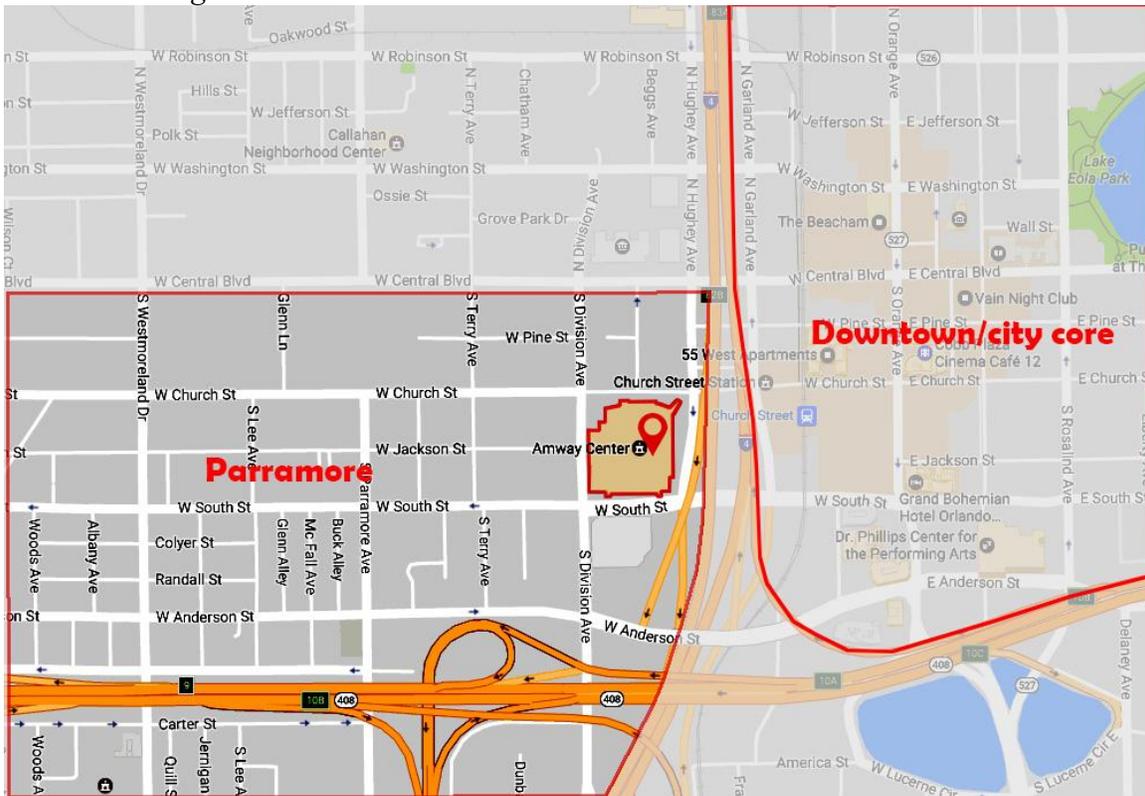
<b>Sources</b>	<b>Uses</b>	
Orlando Magic	\$50	Construction \$380
Tourist Development Tax	\$270	Land Acquisition \$40
Covenant Bonds	\$49	Infrastructure \$60
State Sales Tax	\$31	
Proceeds from redevelopment	\$62	
Investment Earning	\$18	
<b>Total</b>	<b>\$480</b>	<b>\$480</b>

*Note:* Retrieved from City of Orlando.

<http://www.cityoforlando.net/obfs/wp-content/uploads/sites/23/2014/03/cafr2008.pdf>

The location of the Amway Center is to the west of Interstate 4 Highway, and the north of State Road 408. The two expressways set the physical boundaries between neighborhoods. Since I-4 was built, development has been uneven for the two sides of the road. In order to develop the west of I-4, a number of public investments have been made since the 1970s, which include The Orlando Police Department, the Federal Courthouse, and the State Office Building. The city also invested in renovating the Tinker Field and the Citrus Bowl and built the Amway Arena in 1989; all the efforts were aimed at developing the west I-4 region (City of Orlando, 2006). As shown in Figure 3.4, the Amway Center sits in the Parramore neighborhood, which is an underdeveloped area west of I-4 and the city core.

Figure 3.4 Illustrative Map of Orlando; Location of Amway center, area of city core and Parramore neighborhood



Note: Retrieved from <http://maps.google.com>

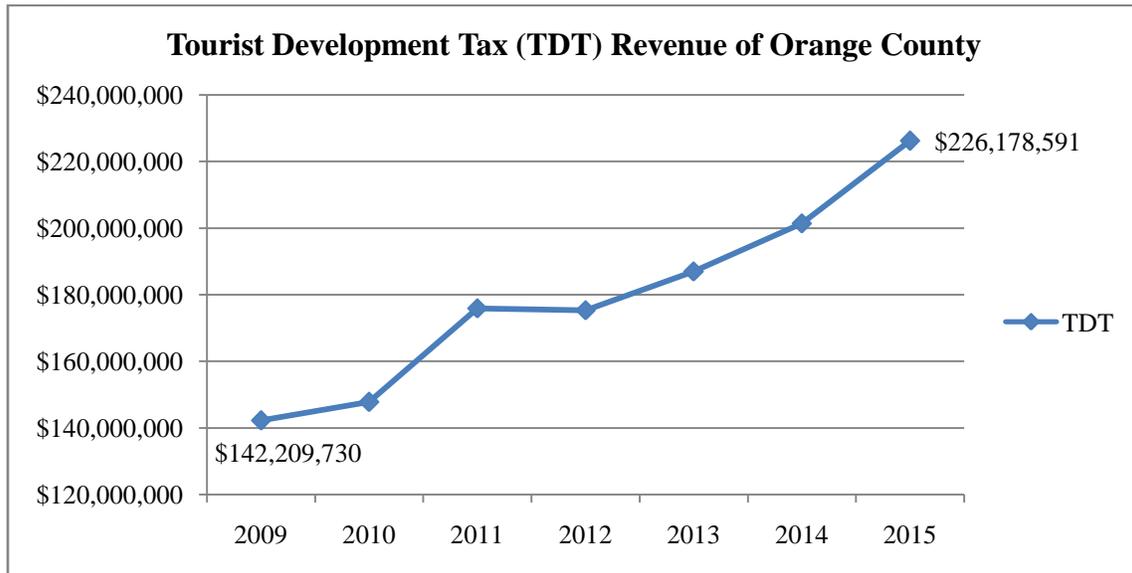
The short-term plan of the Amway Center was focused on the development of the surrounding public infrastructure, including parking facilities, transit expansions, and streetscape improvement. The long-term plan included the development of retail, hotels, and restaurants around the Amway Center, as well as developing the existing Parramore Village residential area further, growing it into a larger downtown community; another long-term goal was to build the Amway Center area into a downtown attraction. The Master Plan was projected to generate \$9.9 billion of benefits to the community (City of Orlando, 2007). The operations of the Amway Center were estimated to generate

approximately \$298.1 million in annual total output and would create 2,900 full and part-time jobs (City of Orlando, 2006).

The Amway Center was opened in 2010. As well as the home to the NBA's Orlando Magic, the venue was also the home to the American Football League team Orlando Predators from 2011 to 2016, and the Orlando Solar Bears of the East Coast Hockey League. The Amway Center also hosted numerous sports and entertainment events, including the 2012 NBA All-star Game and NCAA Basketball Tournament from 2014 to 2017. It was reported that just six months after opening, more than 20 new businesses had opened in the surrounding area ("Pumping Energy into Downtown", n.d). However, since 2010, despite more than 2500 apartment/residential units being built or planned in the downtown area (City of Orlando, 2013, 2014, 2015, 2016); none were built near the Amway Center, west of I-4. In 2015, according to city-data.com, the median household income of Parramore was \$17,955, which was much lower than the Orlando median household income at \$44,804. The economic development for the local area was not impressive on paper. On the county level, the increase in the Tourist Development Tax of Orange County since the completion of the Amway Center in 2010 can be clearly observed in Figure 3.5; the Orange County also set a new all-time record for the US travel industry in 2014 with more than 62 million people visiting the region in a year (Wooten & Spiegel, 2015). But it was hard to find conclusive evidence of how many of these tourists contributed by visiting the Amway Center. It would be easy to argue that the Orange County region is also home to various famous theme parks, such as Walt Disney World, which is visited by tens of thousands of visitors every day

(Reikofski, 2015). It is hard to identify the contribution of the Amway Center and all the venues in the Master Plan to tourism.

Figure 3.5 Tourist Development Tax (TDT) Revenue of Orange County from 2009 to 2015



Note: Retrieved From

[http://www.occompt.com/download/Comprehensive%20Annual%20Financial%20Reports/CAFR\\_2015.pdf](http://www.occompt.com/download/Comprehensive%20Annual%20Financial%20Reports/CAFR_2015.pdf)

The City of Orlando is still looking to develop the area through sports venues. In 2013, Orange County Mayor Teresa Jacobs and Orlando Mayor Buddy Dyer reached an agreement on a deal to provide financial support for a variety of Orlando projects including a soccer stadium for the new MLS team Orlando City SC (Kennedy, 2013). However, the stadium was eventually private funded by the owner of the team (Tenorio, 2015). The Orlando City Stadium was opened in February 2017. A study suggested the new stadium would generate new revenues of \$1.2 billion over the next 30 years. The Orlando City Stadium, which is only a quarter mile west of the Amway Center, may create a new sports village for the local area. The city officials might be wise to put the

two sports venues into a full developmental plan, involving new retail centers and apartment/residential plans, to create more vigorous economic activities for the area.

### **Detroit**

The city of Detroit has gone through a major economic and demographic decline in recent decades. Deindustrialization caused a series of problems for the city, including urban decay, population decline, financial crisis, and many social issues such as a high unemployment and crime rate. As a matter of fact, the city has lost over 60% of its population since 1950; the decline of its population over the decades is shown in Table 3.9.

*Table 3.9 Population Change of Detroit over Decades*

<b>Year</b>	<b>Population</b>	<b>Change</b>
1950	1,849,568	---
1960	1,670,144	-9.7%
1970	1,514,063	-9.3%
1980	1,203,368	-20.5%
1990	1,027,974	-14.6%
2000	951,270	-7.5%
2010	713,777	-25.0%

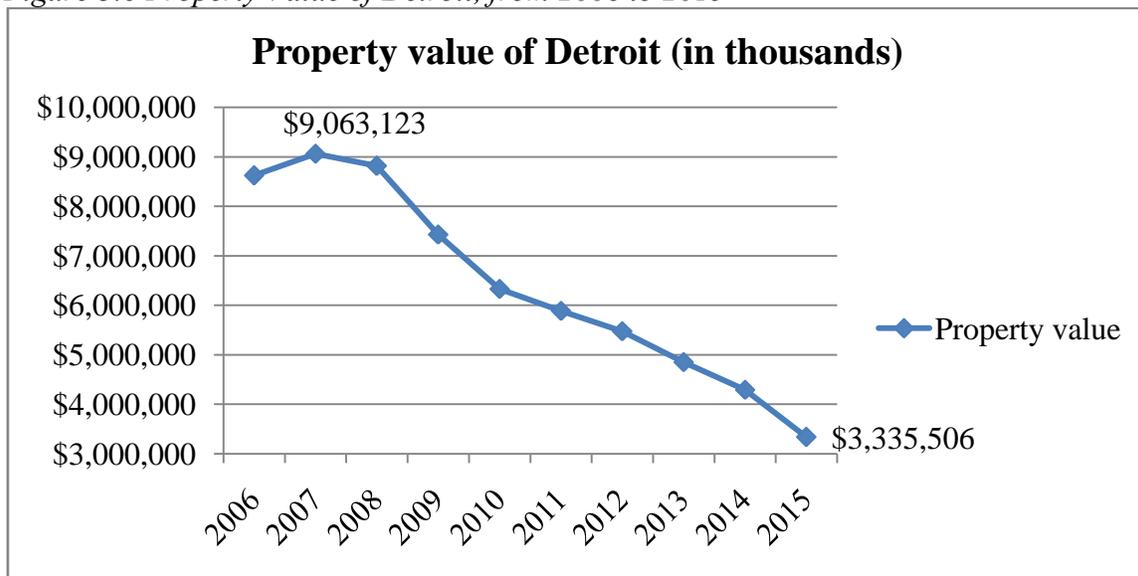
*Note: Source: United States Census Bureau.*

The loss of population and businesses resulted in many abandoned houses and vacant offices, caused not only by the loss in taxes revenue, but also the decrease in property value. The city government had to take on a huge debt to maintain the operation, which eventually lead to city bankruptcy in 2013. It is the largest municipal bankruptcy

filing in US history by debt, estimated at \$18–20 billion (Davey & Walsh, 2013). The city also has a bad reputation in terms of the crime and unemployment rate. In 2011, the city’s average unemployment rate was as high as 24.4% (City of Detroit, 2012). Forbes ranked Detroit as the “most dangerous city in the US” in 2012 (Fisher, 2012).

In recent years, city officials have made various efforts to save and revitalize the city, including overhauling the city’s infrastructure, renovating the old downtown buildings, and the redevelopment of blighted Detroit residential areas. The government hopes to create a safe, walkable environment to bring back businesses and residents to town. Despite the efforts, the property value of Detroit has still slumped in recent years, as shown in Figure 3.6.

Figure 3.6 Property Value of Detroit, from 2006 to 2015



Note: Retrieved from City of Detroit  
[http://www.detroitmi.gov/Portals/0/docs/finance/cafr/City of Detroit 2015 CAFR Updated Print Version 6-24-2016\\_2.pdf](http://www.detroitmi.gov/Portals/0/docs/finance/cafr/City_of_Detroit_2015_CAFR_Updated_Print_Version_6-24-2016_2.pdf)

The unemployment rate has also dropped in recent years. However, the numbers were still high compared to other Rust Belt cities. Table 3.10 shows Detroit's unemployment rate in comparison with them.

*Table 3.10 Unemployment Rate in Selected Rust Belt Cities*

	<b>Detroit</b>	<b>St. Louis</b>	<b>Cincinnati</b>	<b>Cleveland</b>	<b>Pittsburgh</b>
2011	24.4%	7.8%	7.5%	10.0%	6.6%
2012	18.3%	7.4%	7.8%	8.5%	7.7%
2013	18.6%	7.2%	7.4%	9.3%	6.7%
2014	16.4%	5.7%	5.6%	7.8%	4.6%
2015	13.1%	5.0%	4.6%	5.2%	4.3%

*Note: Source: Comprehensive Annual Financial Report from city of Detroit, St. Louis, Cincinnati, Cleveland, Pittsburgh*

In 2014, Olympia Development announced a three-year development plan for a project called District Detroit. The centerpiece of the plan is the construction of the Little Caesars Arena, which will be the home venue of the Detroit Red Wings of the NHL and the Detroit Pistons of the NBA beginning in the 2017/18 season. The initial budget for building the arena and ancillary development was \$650 million, with \$285 million in public funding. The public funding will be backed by property taxes already raised by the Downtown Development Authority and no extra general fund taxes being spent on the area. However, the cost eventually rose to \$733 million (Aguilar, 2016). The cost of the whole district, including retail, residential housing, offices, and hotels, has reached \$1.2 billion (Gallagher and Reindl, 2016). The goal of this 50-block sports and entertainment

district is to connect downtown Detroit with Midtown to create a contiguous walkable, livable experience. As Steve Marquardt, vice president of Olympia Development of Michigan said,

The District Detroit will be a vibrant, world-class sports and entertainment destination, and it will also bring significant new retail, residential and office spaces to the heart of Detroit. We're focusing on creating a uniquely Detroit experience featuring a mix of local and national entrepreneurs, chefs, restaurants and retail concepts ("Olympia Development Launches Retail", 2016).

The impact study shows that the project will create more than 8,300 construction and construction related jobs, and 1,100 permanent jobs. The study also estimates that The District Detroit will bring \$210 million a year for Detroit, and will have a \$1.8 billion total impact on the state of Michigan. As Mark S. Rosentarub, Professor at the University of Michigan says, "We are not only talking about jobs, but about attracting new residents and businesses to Detroit that will contribute to a much-needed tax base and revenue stream flowing into the city." ("New District Will Help Transform", 2014).

The move-in of the Detroit Red Wings and the Detroit Pistons to Little Caesars Arena, together with the MLB Detroit Tigers at Comerica Park and the NFL franchise Detroit Lions at Ford Field, will create a unique sports community in downtown Detroit (The illustrative map of The District Detroit is shown in Figure 3.7). This will mark the first time since 1974 that all four major sports teams have played in the city limits of Detroit. It will be a unique asset for the city, because among all the cities in the US, only thirteen of them have at least one team from each of the four major leagues in their

metropolitan area. Detroit will be the only city with all four teams playing in city downtown adjacent to each other. The three facilities will host at least 171 home games per year of the 4 teams (41 NBA games, 41 NHL games, 81 MLB games, and 8 NFL games), which means, on average, there will be almost one game on every alternate day to every three days in The District Detroit area. The combination will be an ace for the local economy. As is shown in Figure 3.7, the five neighborhoods of The District Detroit plan are centered on the sports facilities.

*Figure 3.7 The Illustrative Map of District Detroit Areas*



*Note:* Retrieved from <http://www.districtdetroit.com/>

The venues and games are sure to attract numerous visitors and spectators to The District Detroit area on game days and create lots of ancillary spending on foods,

shopping, and other entertainment activities. Thus, the quality and quantity of retail and other entertainment developments surrounding the stadiums are vital; retailers should not only be part of the ancillary spending of the sports events, they should also build their own identity. In this way, instead of coming to the area solely for a game and having a short stay at retailers or bars, people may combine attending a sports event with a whole weekend family plan with shopping and having a good meal. Another key element to Detroit’s comeback effort is whether The District Detroit could attract residents to live in the area. The historical crime rate of Detroit has been the highest amongst all US cities, although the number has fallen in recent years, it was still among the highest in the US. The high crime rate was one of the reasons people fled from Detroit to other cities. With the higher volume of people coming to the area daily for retail, games, and jobs, and the higher governmental budget on security, the city’s crime rate may fall further in the future. Thus, it could optimistically be true that the problem of crime will not be part of Detroit’s reputation anymore. (For Detroit’s violent crime incidents, please see Table 3.11).

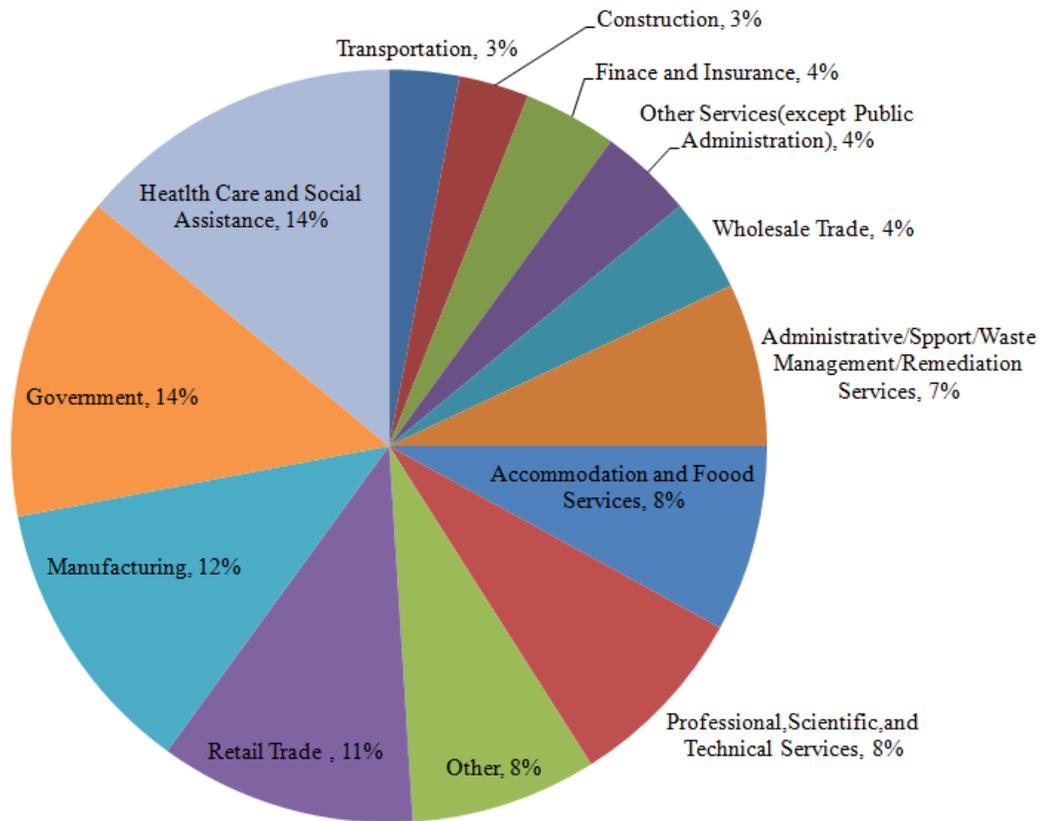
*Table 3.11 Number of Violent Crime Incidents in Detroit*

<b>Year</b>	<b>Incidents</b>	<b>Rate per 100,000</b>
2012	15,011	2122.9
2013	14,504	2072.3
2014	13,616	1988.6
2015	11,846	1759.6

*Note: Source: Federal Bureau of Investigation*

The last key element to success is whether they can attract businesses to fill offices. The city has made efforts to shift their major industry away from manufacturing. As shown in figure 3.8, in 2014, manufacturing only accounted for 12% of the city’s employment. It is important that the city can find a new identity in the twenty-first century. If the transformation is successful and young talent decides to reside in the area, then we may see a new nickname being given to it to replace “Motor City”.

*Figure 3.8 Employment by industry of Detroit, 2014*



*Note: Reprint from: Detroit Regional Chamber, State of the Region, 2014.*

There is a strong possibility that, with numerous visitors in town and more residents moving in, along with the transformation of the industries, the tax revenues and

property values will be increased and other development and investment will come to Detroit in the future. District Detroit may well become the key to Detroit's comeback story.

## Chapter 4 Conclusion

After three decades of building sports stadiums with the claim that they could promote the local economy, cities now have a more clear idea of how to make this happen. Because the sport offering itself is generally too small to make an impact on a city's economy (Rosentraub et al., 1994; Siegfried & Zimbalist, 2006), building a stadium alone could not generate the expected profit for the city. It is therefore important to find the correct way to employ stadium construction as a catalyst to spur development. The lessons of the case studies analyzed in the previous chapter offer some insights for teams and municipalities hoping to pursue a stadium construction venture in the twenty-first century.

In the case of Minneapolis, the partnership between governments and team ownership has worked well; the Twins not only took around 35% of the total construction cost, but also invested more to develop surrounding areas to facilitate the redevelopment of the North Loop area, and significantly more offices and apartments have been built since the open of Target Field. The continuous commitment of the Pohlad family to the surrounding area's development means the future of the project looks promising. The clear lesson for government officials in other cities is that the level of involvement of private partners is vital for the success of area development and economic profits. Similar conclusions can also be found in the case of city of San Diego (Cantor & Rosentraub, 2012).

In Arlington, the government was looking to establish the city's identity with the arrival of the Dallas Cowboys. Together with the existing Texas Rangers (MLB), the city of Arlington is building a reputation as the premier sports-entertainment city in Texas. The arrival of Dallas Cowboys and AT&T Stadium did not only bring economic profit for the city, but also created a level of intangible benefits that is hard to match with comparable levels of investment. Because of the Dallas Cowboys and Texas Rangers, and with the aggressive efforts to host a portfolio of diverse sports and entertainment events, the city of Arlington is now on the map as a major league city and national travel destination. However, because of the lack of surrounding retail development, it is hard to keep fans and tourists for longer stays and incentivize more spending. Additionally, when the city is not hosting games or events, the attractiveness of the area drops dramatically, and relatively few visitors travel to the area. With the groundbreaking of the new "Texas Live!" attraction, the footprint of the sports complex will be further expanded. It is time for the government to further exploit the benefits from their major league assets, by attracting more investment to build around the sports stadium complexes and make the area a more dynamic economic environment, potentially materializing greater intangible benefits. The city of Arlington sets a good example to other suburban cities of a similar size that aim to develop through an investment in major league stadiums, and followers are on the way, like Cumberland, GA, who just landed the Atlanta Braves with newly built SunTrust Park. If success can also be found in Cumberland, it is foreseeable that in the future there will be more suburban cities to follow the blueprint of Arlington.

In Orlando, the Amway Center was a part of the city's master plan with a convention center and the renovation of the Citrus Bowl to balance the unevenness in economic development between the two sides of the highway; however, the lack of ancillary developments such as residential areas and offices hindered progress. In the case of Orlando, despite the city's various efforts to revive the area west of I-4, progress was slower than expected. It may be concluded that simply building attractions and government buildings is not enough to break the physical boundary set by highways. Orlando is not the only city with such trouble in urban developments and city governments with similar situations need to think deeper for better developmental plans. Similar to Minneapolis, if the city could secure more investment from private partners in building surrounding area to attract visitors to the area for other activities, the development would likely be more successful. In this decade, urban site stadiums are prevailing; sports facilities are no longer only for sports events and sports fans, they are becoming city landmarks and representing civic pride. Thus, what governments can ultimately learn from this example is that it is important to have a complete developmental plan before building and solid private partners to share the costs for the development of the surrounding area. Infrastructure, retail, restaurants and bars, apartments, and offices should be all included in a portfolio to go alongside the sports stadium.

Finally, there are many areas that future studies could explore. The first is the case of Las Vegas. Numerous scholars have argued about the intangible benefits that new sports franchises and stadiums bring to a city (Hamilton & Kahn, 1997; Rosentraub &

Swindell, 2005; Howard & Crompton, 1995; Owen, 2006; Crompton, 2004). It is important to note that, since 2000, despite a few relocation cases among major leagues, not a single team has moved to a city that has never had a major league franchise before. Thus, there are few studies concerning the economic impact on a city acquiring its first major league sports franchise, especially in the twenty-first century. With the NHL expansion team Las Vegas Golden Knights and the relocation of the NFL team Las Vegas Raiders, Las Vegas will have their first two major league franchises in the city's history. Las Vegas bears the nickname of "the entertainment capital of the world"; it is intriguing to see what these two new sports franchises and new world-class sports facilities can add to the city's entertainment scene. The city and its residents have long been hoping to have their first major league franchise, so important questions include what the two teams will bring to the city's identity and if they will change the quality of people's lives in Las Vegas. Furthermore, it remains to be seen if they will attract more people to reside in the metropolitan area, or if they will eventually attract businesses from other industries to locate in Las Vegas to push the transformation of the city's economy.

The impact of the rise of Major League Soccer is another development that requires further investigation. Soccer is the world's number one sport, though not in the United States. However, the MLS has developed quickly over the past few years. Since 2010, there have been eight expansion teams, six of them in the United States, and there will be one more expansion team to play in 2018; among the seven new teams, five of them are either currently playing or will play in a soccer specific stadium. This fast expansion and the development of soccer specific stadiums may well reflect the

increasing popularity of soccer in the United States. It is worth studying whether soccer will bring different groups of fans and different sports cultures to the local community. Furthermore, it will be interesting to see what ancillary developments are best suited for the surrounding area of soccer specific stadiums.

*Table 4.1 Expanded MLS teams from 2010*

<b>Team</b>	<b>Venue</b>	<b>First year</b>	<b>Soccer Specific Stadium?</b>
Philadelphia Union	Talen Energy Stadium	2010	Yes
Portland Timbers	Providence Park	2011	No
Orlando City SC	Orlando City Stadium	2015	Yes
New York City FC	Yankees Stadium	2015	No, plan to move to
Minnesota United FC	TCF Bank Stadium	2017	No, plan to move to
Atlanta United FC	Bobby Dodd Stadium	2017	No
Los Angeles FC	Banc of California Stadium	2018	Yes

A third future area of study could focus on the relationship between the surge in major leagues' TV contract revenue and the opulence of the new stadiums. In 2014, the NBA announced a nine-year TV contract with ESPN and Turner Broadcasting for \$24 billion, which is nearly three times as much as the previous deal (Prada, 2014). Similarly, the new television deal between MLB and multiple broadcasters is worth \$12.4 billion, which is more than double the previous deal (Settimi, 2012). The huge increase in television revenues will increase the teams' funding for stadium construction, resulting in enhancing the stadium opulence and utilizing more advanced technologies in stadiums. The increasing revenue may also lead to an increase in the frequency of teams building a

new stadium. Evidence for this can be found with the Texas Rangers: the Rangers opened their current home venue the Globe Life Park in Arlington in 1994; it took only 22 years for them to announce a new ballpark to be built in 2016. Future studies can examine how this revenue boost might change the sports society and stadium construction, and eventually how these enhancements in stadiums will affect local economic development.

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