Changing Intra-Urban Location Patterns of Major League Sports Facilities*

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The boom in U.S. major league sporting venue construction has forced many cities to face issues related to the provision of such facilities, including the location choice. Recent data show that the suburbanization trend long assumed in the literature has been reversed, with a resurgence in downtown venues. This paper demonstrates the reversal and discusses the reasons behind this recent trend. These include a concomitant trend toward smaller market franchises, increasing corporate sponsorship, deliberate downtown revitalization strategies, and the advantages accruing to owners when different parts of an urban area compete for franchises. **Key Words: sports facilities, downtown revitalization.**

Introduction

There has been a proliferation of newly constructed major league sports facilities in the United States. This construction boom,

which began in the late 1980s and shows no signs of abating, can be attributed to league expansions, franchise relocations, and the real or perceived need for new facilities for existing franchises. The reasons for this construction

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boom differ from earlier decades and reflect pressure from team owners and leagues for higher revenues which, ostensibly, can be reaped only through improved facilities (Comer and Newsome 1996). Expansion franchises must also prove their worth to the leagues by offering the best venue possible. In the broadest sense, this demand for new sports facilities reflects the role that sports plays in our society. The outward manifestation of that role is this boom in new sports facilities and the willingness of cities to continue building or subsidizing them.

Inherent in the many decisions that these franchises and their cities face regarding new facilities is the location decision. At the macroscale, this decision is made by the leagues as they select franchise cities. At the microscale, the physical location of the sports venue within the urban area becomes a prime consideration. From the franchise and league perspective the location of a facility can affect attendance and revenues, while from the city's perspective the location can be an important factor in whether (and how much) economic growth is spurred by its construction and use (Baade and Dye 1988). In this sense, the location decision for professional sports facilities presents an intriguing geographical problem, from both an applied and a theoretical perspective. Practical factors to be considered in the macroscale location decision include population distribution, area buying power, size of television market, and location relative to other franchises (Comer and Newsome 1998). At the microscale, issues such as accessibility, ingress and egress, environmental impacts, and land availability and cost must be considered. These practical issues are related to general patterns of U.S. urbanization and have been greatly affected by urbanization's impact on competing uses for urban space (Riess 1989), an area of inquiry which forms the basis of much theoretical work in geography and other urban-related disciplines.

These ties to the urbanization process are reflected in intra-urban location patterns for professional sports facilities, the focus of this research. Specifically, there is recent evidence that an earlier trend toward suburban locations is reversing, and that downtown locations are becoming more attractive to teams and cities (Comer and Newsome 1996). This paper ex-

amines the extent and strength of that trend, as well as the reasons behind it and the ramifications for cities still facing sports facility construction issues. Most recent research in this area has focused on regional economic analyses of the benefits of stadium and arena construction (see, for example, Rosentraub et al. 1994; Baade 1996). However, many issues, including the location decision, have an essentially spatial bent, making a geographic perspective appropriate for analysis. The specific goals of this study are:

- to evaluate intra-urban location changes for major league sports facilities in recent years;
- to assess the strength of an apparent trend toward downtown locations; and
- to discuss the probable causes and consequences of the trend.

In the long run, answers to these questions will help us to better understand the role that sports and sports facilities play in American society and urban growth and economics.

Sports and U.S. Cities

There has been little research completed on the intra-urban location patterns of professional sports facilities. Rosentraub (1997a) suggests that knowledge of the impact of sports facilities on urban space is a particularly pressing need, given these facilities' potential for influencing the use of that space. Recent literature still reflects the acceptance of a suburbanization trend for sports facilities with a few exceptions. Danielson (1997, 126) describes "... the growing attraction of suburban locations for professional sports" and the Cavaliers' move into downtown Cleveland was described as "...a truly exceptional circumstance . . . " (Shropshire 1995, 37). As we will show, this circumstance is actually the norm during the 1990s. While some studies and coverage in the popular press may mention a move toward downtown locations, little geographic evidence or analysis of this potentially important development has been presented.

Obviously, the assumed suburbanization trend was not always the case. As professional sports developed after the turn of the century, and more permanent venues began to replace temporary or shared facilities, owners typically chose to build on "... the most accessible sites they could afford" (Riess 1989, 4). This implies that they preferred centrally located sites, even though these may have commanded higher location rents, a subject to which we return later. Arenas were, even then, more amenable to such locations than were stadia, since they required less land (Riess 1989; Danielson 1997), a topic also addressed later. The resulting pattern of sports facilities was one which shifted outward as competing land uses carved up available, centrally located urban space.

After World War II, the changing shape and structure of the urban area affected all types of sporting venues, but had an impact on professional sports franchise moves in particular. The suburbanization process resulted in the flight of businesses and residents away from the city center, resulting in decaying inner cities, while new markets were created through demographic shifts in the postwar years (Euchner 1993). The result of these combined impacts has been an increased likelihood of both interand intra-urban moves (Comer and Newsome 1996). The flight of sports teams to suburban locations was assumed to have particularly significant impact because of teams' visibility and importance for city status (Danielson 1997).

Even after the suburbanization process became entrenched, there were still some new professional sports facilities built on downtown sites. These downtown venues were not typically located on prime, accessible, high rent (actual rents, rather than location rent) sites, but rather in areas targeted for urban renewal or in other economically depressed sites where land was available, cheaper, and the facilities were less likely to arouse local neighborhood opposition (Melaniphy 1996). The degree to which today's new downtown facilities share these characteristics varies. The new form of "traditional urban" sports venue described by Bess (1996) suggests an urban environment in which the facility is placed adjacent to a mix of residential, commercial, and public land uses, thereby enhancing the viability of the venue and the economic benefits derived from it. However, Bess argues that such facilities continue to be built on tracts of underutilized land. This lack of mixed land uses is not surprising, given the effects of suburbanization. The new urban facilities have been less likely to be able to locate in an urban residential neighborhood,

particularly in the smaller cities which are now gaining major league sports franchises.

Much of the literature, both academic and popular, regarding downtown sports venues has been related to these "traditional urban" or "retro" baseball stadia, which are usually seen as attempts to recreate the more intimate ballparks of yesteryear. Even with the nostalgia such ballparks invoke, at the heart of this movement is the desire to capture the greatest economic return for the owners and cities involved. Independently conducted economic analyses consistently find that new facilities seldom, if ever, pay their own way, let alone create real economic development (Baim 1994; Noll and Zimbalist 1997; Rosentraub 1997b). However, it has been suggested that downtown locations create more positive impacts than other locations (Melaniphy 1996). Santee (1996), for example, uses anecdotal evidence from Denver, Cleveland, and Baltimore to suggest that downtown baseball stadiums, in conjunction with other downtown revitalization efforts, do create an inflow of money, though he does not necessarily argue with critics who suggest no new money is put into the local economy. As he puts it, "[I]n the right location, a sports venue enhances the quality of life for local residents, but also contributes to the perception of success for a city" (Santee 1996, 34). In a more extreme view, Bess (1996) suggests that the new urban stadiums are built in the hopes of saving cities (economically and psychologically speaking) rather than simply making them better places. Either way, the assumption has become that these types of ballparks represent the state of the art in attracting fans to the game. It has been suggested, for example, that the Minnesota Twins are most likely to move to Charlotte if they are provided with their own "Coors Field" (Sorensen 1998), even as they continue negotiations for a new stadium or at least a new lease agreement with the Metrodome.

The necessity for considering the intraurban location issues discussed here arises, in part, from exactly this sort of competition for major league sports franchises. This competition occurs because the leagues are able to control the number of teams fielded, creating a "contrived scarcity" of franchises (Sullivan 1998, 55). The paucity of teams available relative to the number of cities that want them allows teams to threaten to move if their needs are not met at home. Charlotte's recent attempt to woo the Twins came after previous flirtations with the Milwaukee Brewers, and it appeared that the Montreal Expos were next on the dance card if the Twins deal were to fall through (Rhee 1998). The Florida Marlins have also recently threatened to move if they are not given a new stadium.

A franchise owner can not only play cities off against each other in this fashion, but can seek satisfaction from within the same metropolitan area, further strengthening his/her bargaining power (Euchner 1993). In that case, the owner need not worry about gaining fan support for the team in question, as the fanbase would not change. From the public perspective, "big league city" status can be conferred on cities even while the franchises and facilities themselves are located outside of the city proper, creating, as Euchner (1993) suggests, even more competition for the city among its constituent areas. The Dodgers' move to Los Angeles in 1957 epitomized the interplay between intraurban and inter-urban location strategies, as owner Walter O'Malley entered negotiations for a new ballfield in Brooklyn (Euchner 1993). The ultimate result of fragmented negotiations by New York was the loss of the team to Los Angeles, setting a new precedent for franchise relocations in the current era of professional sports.

These relocations have occurred at both the inter- and intra-urban level, with sports facilities moving between markets, but also following the general suburbanization trend of the era. With the exception of the current attention paid the retro ballparks (with most of the attention focused on design and scale, rather than location), this trend is still largely assumed within the literature. It is our intent to show that the previous suburbanization trend is indeed reversing and extends well beyond the domain of the retro ballparks of Major League Baseball. To that end, we have examined intra-urban location changes for the four major professional sports leagues in the U.S. since 1965.

Methods

Several steps were necessary to analyze major league intra-urban location changes. First, a classification scheme for intra-urban locations was developed. Next, teams were categorized based on that scheme, allowing us to examine recent location trends. Finally, chi-square analysis was used to determine the significance of the trends observed.

The first step, that of developing an appropriate classification scheme for intra-urban sports facility locations, represents an essential question of urban geography. For the purposes of this research, we used three categories of intra-urban locations:

- "downtown" locations were defined as being in the central business district (CBD) or within easy reach (walking distance) of same,
- "central city" locations were defined as those outside of the CBD, but still within the recognizable built-up portion of the city, and
- "suburban" locations were defined as those outside of the central city, but not necessarily outside of the city limits.

Once the categories were defined, the teams comprising the four major U.S. sports leagues, the National Football League (NFL), the National Basketball Association (NBA), the National Hockey League (NHL), and Major League Baseball (MLB), were assigned to the appropriate categories based on venue location within their respective cities. This task, even with a relatively simple, three-category classification scheme, was not always easy. The category assignments were based on the authors' knowledge of the venues and cities, aerial photographs of the facilities, and address listings. In some cases, facilities fell on the border between two categories. Most facilities, however, fit the classification scheme easily.

Two time periods were analyzed to most fully capture any intra-urban locational changes occurring during the most recent league relocation and expansion era. The first time period, 1965–1985, includes the first major facility construction boom in modern U.S. sports history, a boom attributed mainly to league expansions and mergers (Comer and Newsome 1996). It was during this era that a significant suburbanization trend developed, a trend still assumed to exist. The second time period included in the analysis was 1985–1997, though we have included in our discussion information about very recent or anticipated changes. Little construction activity occurred during the early

1980s, so this second time period reflects the beginning of an unprecedented sports facility construction boom associated not just with expansion, but increasingly, with franchise relocation at both an inter- and an intra-urban scale (Comer and Newsome 1996).

The final step in the process was to conduct chi-square tests to determine whether statistically significant differences exist among the intra-urban facility location patterns exhibited over the two time periods. We needed to determine, first, whether the original suburbanization trend was statistically significant, and second, whether the more recent construction boom reversed that trend. We conducted four chi-square analyses to aid in this determination. Specifically, we performed chi-square analyses of:

- current intra-urban location patterns by league;
- 2. changes in intra-urban locations for all sports (a composite) for the timeperiod 1965–1997;
- 3. changes in intra-urban locations for all sports for the time period 1965–1985; and
- changes in intra-urban locations for all sports for the time period 1985–1997.

A chi-square test compares an expected distribution of values to an observed distribution to determine the statistical significance of the observed distribution (or differences in category frequencies, in this case). The first analysis consists of a contingency analysis chi-square test to compare the four leagues' locational preferences. The other three analyses are simple chi-square tests in which expected categorical distributions were based on the observed distributions from the earlier time period. For example, to analyze changes between 1965 and 1997, the expected categorical distribution for 1997 was derived from the observed distribution for 1965 and then compared (using the chi-square statistic) to the actual 1997 distribution. The same method was used to predict the values for 1985 for the 1965–1985 comparison. and the expected values for the 1985-1997 comparison were derived from the 1985 observed distribution. In this fashion, we were able to determine the statistical significance of any observed changes in intra-urban locations for all sports in total. The results of the chisquare analyses will follow a more general discussion of the intra-urban location patterns of professional sports venues.

Results

Figures 1–4 illustrate the recent changes in intra-urban locations in the four major league sports. Figure 1 demonstrates the trend toward downtown locations for major league baseball stadia. Since 1985, only the Florida Marlins and the Texas Rangers have constructed suburban facilities. This inward trend in baseball stadium locations has garnered the most attention among the four leagues because of the retro ballfields such as Coors Field and Oriole Park at Camden Yards. Interestingly, most of the currently planned facilities will be in central city locations, indicating a continued retreat from suburban sites, though not necessarily to downtown sites.

The NBA (Fig. 2) and the NHL (Fig. 3) also demonstrate this inward trend, with the vast majority of newly constructed basketball and hockey arenas located downtown. Besides those arenas already constructed, there are currently plans for seven additional downtown NBA arenas (six of which are replacing existing downtown facilities) and discussions continue for a new downtown arena to replace the "obsolete" eleven-year-old Charlotte Coliseum, as is occurring with the equally old Miami arena. Most hockey arenas built since 1985 have been in downtown locations, and all but two of the intra-urban moves in the NBA and NHL have been to downtown or central city locations from other parts of the metropolitan area. The NHL's Florida Panthers and Ottawa Senators are the only teams to buck this trend, having moved to the suburbs.

For NFL teams that have moved since 1985, more teams moved outward than moved inward (Fig. 4). However, one of the "outward" moves occurred when the Browns left downtown Cleveland for central city Memorial Stadium in Baltimore, a temporary home during construction of the new downtown Ravens facility. As well, the Raiders' central city to suburb move came as a result of the franchise's re-(re?)-location to Oakland. With the 1999 completion of the Nashville downtown stadium and the Baltimore facility, there will be five outward moves, three inward moves, and a new central city stadium next to the Buc-

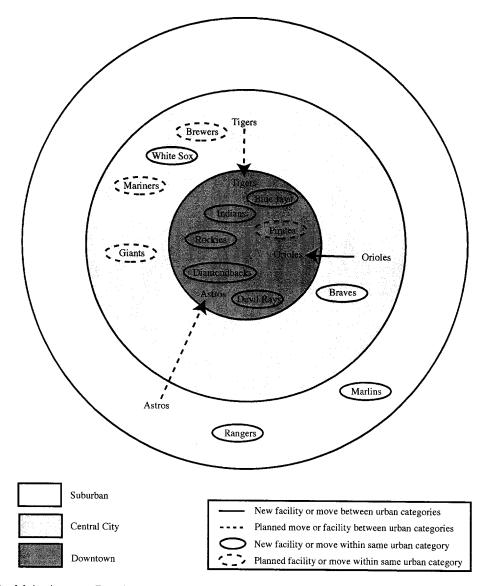


Figure 1: Major League Baseball intra-urban construction and/or moves since 1985.

caneers' old Tampa Stadium. Of the inward moves, all have been to downtown locations. Furthermore, both 1994 expansion teams, Jacksonville and Carolina, have downtown stadia and the 1999 franchise award to Cleveland (to replace the old Browns) will add another downtown stadium. Planned moves to downtown stadia for the Patriots and Lions (along with new stadia for the Steelers, Bengals, and Seahawks) will help the balance shift toward downtown locations in the NFL.

This portion of the discussion demonstrates the major role that franchise relocations have played in intra-urban patterns of NFL venues in particular. Of the new facilities constructed or planned during the time period, only two have been purely a result of expansion. An additional five moves will be the result of franchise relocations. Of the remaining three teams that built new facilities between 1985 and 1997, at least one (Washington) occurred under intense intra-metropolitan competition. The importance of these moves for the cities involved cannot be overstated, as the result is millions of dollars spent attracting or retaining NFL teams in a relatively footloose era of franchise loyalty.

While Figures 1–4 depict recent intra-urban location changes for new and relocating teams, the resulting location patterns must be set in the broader context of all teams and facilities. Table 1 shows the 1997 intra-urban location

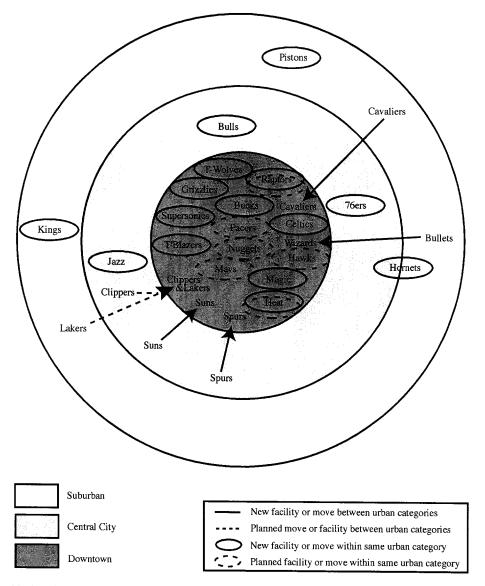


Figure 2: National Basketball Association intra-urban construction and/or moves since 1985.

patterns for all teams in each of the four major league sports, regardless of whether they had new facilities. Of the 113 major league sports teams, just over half (51.3%) were in downtown facilities. Twenty-nine (25.7%) of the teams were playing in suburban facilities by 1997. Central city locations trailed, though not by much, with 26 teams (23% of the total). The majority of downtown venues were NBA and NHL arenas, with 18 and 17, respectively, 12 of which are currently shared by cities' NBA and NHL teams. Interestingly, the NFL follows with 14 downtown stadia. This is interesting for two reasons. First, football stadia require the largest facilities of the four sports (seating anywhere from 65,000 to 75,000 spectators) and have the greatest space requirements. Second, most of the literature which recognizes the resurgence of downtown venues at all focuses on the retro ballfields of MLB, with relatively little notice of other sporting venues.

The bottom portion of Table 1 shows the intra-league location patterns clearly. Major League Baseball still had a strong central city presence, with 12 (42.9% of MLB total) baseball stadia located there. Recent construction and plans have reinforced this pattern, with one recently completed and three more planned replacement facilities for central city locations. Two (for the Houston Astros and Pittsburgh Pirates) are slated for downtown. The NFL

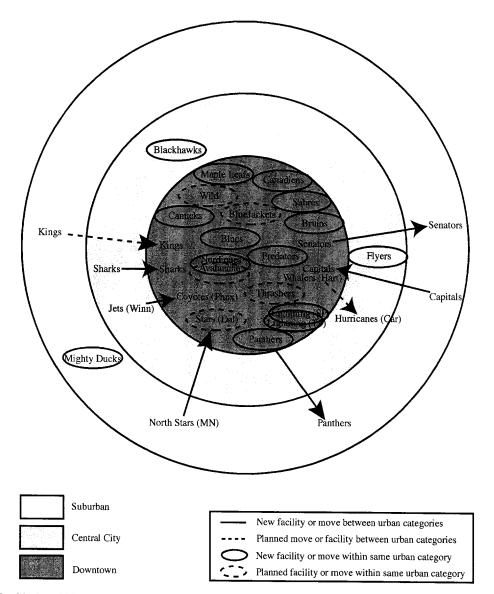


Figure 3: National Hockey League intra-urban construction and/or moves since 1985.

shows a preference for downtown locations (with almost 47% of NFL stadia located downtown by 1997), but with a strong suburban presence, having 12 (40% of NFL total) suburban stadia. The NBA and NHL show downtown preferences with 62.1% and 65.4% of their respective arenas in downtown locations at the time.

The chi-square analysis of intra-urban locations found that the 1997 inter-league differences were statistically significant at nearly the 98% confidence level (Table 2). In other words, the leagues' facility location patterns differed significantly. What is less clear, however, is whether the leagues *changed* their location patterns, as suggested by Figures 1–4, in compar-

ison to the continued assumption of facility suburbanization.

A time series approach to analyzing modern era sports facility location choices provided additional insight into changes occurring within the four major league sports. Table 3 shows the intra-urban location changes for the two time periods under consideration, 1965–1985 and 1985–1997. In the NFL, the earlier suburbanization trend is clearly evident. By 1997, there was a slight downtown dominance (with 14, or 47% of facilities) and a continued suburban presence. The big loser over the 32-year time span was the central city, with only four facilities remaining by 1997.

Location changes in MLB have been less

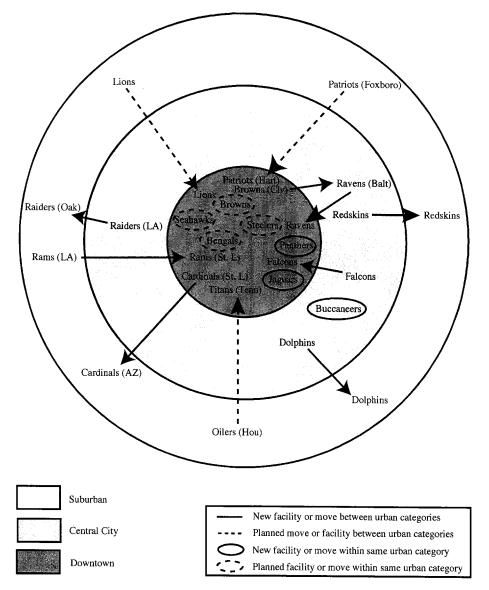


Figure 4: National Football League intra-urban construction and/or moves since 1985.

dramatic, even though this is the sport most often mentioned in popular press accounts of downtown stadium construction. Since 1965, downtown and suburban MLB venues have increased somewhat in percentage terms (Table 3), leaving the central city to represent a smaller percentage of the total MLB facilities

in 1997, though with the same number of facilities (12) as in 1965.

The NBA and NHL show the most striking contrasts in intra-urban location patterns over the two time periods. In 1965, neither league had suburban facilities and the majority of the NBA and NHL arenas were in downtown loca-

Table 1 Intra-Urban Locations by Sport, 1997

	Observed Counts					Percentages				
	NFL	MLB	NBA	NHL	Total	NFL	MLB	NBA	NHL	
Downtown	14	9	18	17	58	46.7	32.1	62.1	65.4	
Central city	4	12	6	4	26	13.3	42.9	20.7	15.4	
Suburban	12	7	5	5	29	40.0	25.0	17.2	19.2	
Total	30	28	29	26	113	100.0	100.0	100.0	100.0	

Table 2 Chi-Square Results: Intra-Urban League Comparison, 1997

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	NFL	MLB	NBA	NHL	Total	
Downtown	15.4	14.4	14.9	13.3	58.0	
Central city	6.9	6.4	6.7	6.0	26.0	
Suburban	7.7	7.2	7.4	6.7	29.0	
Total	30.0	28.0	29.0	26.0	113.0	

Chi-Square: 14.16; p-value: 0.0280.

tions. These were small leagues in 1965, and they grew significantly over the next two decades due to expansions and mergers with competing leagues. Many of these new franchises had suburban facilities (Table 3). While the NBA and NHL built eight and five suburban arenas, respectively, they also built six basketball arenas and ten hockey arenas in nonsuburban locations. Downtown locations still characterized the majority of NBA and NHL arenas in 1985, though representing a much reduced majority. By 1997, there was a downtown resurgence in NBA and NHL arenas, with substantial increases in both the number and percentages of such facilities.

In comparing the major league sports over the two time periods, the suburbanization trend of the first time period was evident in all sports, though less so in baseball. For the second time period (1985–1997), a reversal of this trend is also evident, particularly in the NBA and NHL and, surprisingly, in the NFL, a league with space requirements which would seem to preclude downtown locations. The central city, in contrast, has failed to see growth in any of the leagues' facilities.

Table 4 shows the changing patterns. Between 1965 and 1985, downtown locations declined as a percentage of the all sport total, but rebounded by 1997 to over half of all facilities. Central city facilities, after a numerical (but not proportional) increase by 1985, declined to 23%

Table 4 Changing Intra-Urban Locations for All Sports, 1965–1997

	1965 (%)	1985 (%)	1997 (%)
Downtown	24 (42)	38 (39)	58 (51)
Central cty	28 (49)	31 (32)	26 (23)
Suburban	5 (09)	29 (30)	29 (26)
Total	57	98	113

of the total major league venues in 1997. Suburban facilities increased dramatically between 1965 and 1985, both numerically and proportionally, but have declined slightly as a percentage since 1985. This decline is less dramatic than suggested by the inter-sports comparison, in part because the overall figures still reflect the early 1980's peak in suburban construction.

Chi-square results indicate that these changing location patterns are statistically significant (Table 5). The suburbanization trend assumed (though not quantified) in the literature was statistically significant over the 1965–1985 time period, as shown by the much higher observed number of suburban facilities in 1985 than was suggested by the 1965 distribution. More important for this research, the more recent downtown revival, which is not reflected in the literature, is also statistically significant at the 98% confidence level. In fact, 14 more downtown facilities were in use in 1997 than would be expected, given the 1985 distribution.

Discussion

These results support our contention that downtown locations are becoming more prevalent, but the findings must be placed in context. In the broadest sense, sports represent an important facet of our society, and urbanization has been crucial in reflecting and defining its place (Riess 1989). The implication of the findings presented here are potentially important because, while strictly geographic in the cur-

Table 3 Changing Intra-Urban Locations by League, 1965-1997

	NFL			MLB			NBA			NHL		
	1965 (%)	1985 (%)	1 997 (%)	1965 (%)	1985 (%)	1997 (%)	1965 (%)	1985 (%)	1997 (%)	1965 (%)	1985 (%)	1997 (%)
Downtown	7 (32)	10 (36)	14 (47)	5 (25)	7 (27)	9 (32)	7 (78)	9 (39)	18 (62)	5 (83)	12 (57)	17 (65)
Central city	13 (59)	8 (29)	4 (13)	12 (60)	13 (50)	12 (43)	2 (22)	6 (26)	6 (21)	1 (17)	4 (19)	4 (15)
Suburban	2 (09)	10 (36)	12 (40)	3 (15)	6 (23)	7 (25)	0 (0)	8 (35)	5 (17)	0 (0)	5 (24)	5 (19)
Total	22	28	30	20	26	28	9	23	29	6	21	26

Table 5 Chi-Square Results: Changing Locations for All Sports, 1965-1997*

	1965–1985				1985-1997		1965-1997			
	1985 exp.	1985 obs.	Chi-Sq.	1997 exp.	1997 obs.	Chi-Sq.	1997 exp.	1997 obs.	Chi-Sq.	
Downtown	41	38	0.258	44	58	4.591	48	58	2.282	
Central city	48	31	6.103	36	26	2.657	55	26	15.687	
Suburban	9	29	48.427	33	29	.589	10	29	36.757	
SUM p-value	98	98	54.788 .0000	113	113	7.837 .0199	113	113	54.726 .0000	

^{*} Expected values are rounded for comparison

rent context, sports' "place" has sociological, economic, and physical dimensions for American cities. For example, even in the era of permanent seat licenses and corporate sponsorship, there are no strictly privately financed facilities anymore. Ericsson Stadium, home to the Carolina Panthers, was the first new stadium to be financed through permanent seat licenses, which create upfront funds from the fanbase to be used toward stadium financing. Even with this novel approach, local and state sources contributed nearly \$60 million toward land purchases and infrastructure improvements (Danielson 1997), demonstrating that even privately financed projects require significant public investment. Furthermore, the viability of these expensive new facilities may be affected by their locations within the metropolitan area. The Tampa Bay Devil Rays have expressed disappointment with attendance figures at the newly renovated Tropicana Field in St. Petersburg. While there are many reasons for the lower than projected attendance figures, a location more central to the entire Tampa Bay area would likely help. Finding the right location for these facilities may prove paramount to their long term viability.

Having shown that a trend toward downtown locations indeed exists, it is possible to examine the probable reasons behind that trend. While a detailed analysis is beyond the scope of the current research, several plausible explanations are apparent. The most obvious of these is the use of major league sports facilities as centerpieces for urban revitalization schemes. Bachelor (1998) suggests that sports venues have become "solution sets" for urban development strategists, much as large manufacturing facilities were during the 1980s. As U.S. cities respond to urban sprawl and declining inner cities, many are seeking to create specific focal points for reinvigorated downtowns.

It is not clear whether such facilities can have a significant impact on downtown development, but even those who question their tangible benefits for redevelopment suggest that the intangible benefits from such projects may be enough to satisfy the public (see, for example, Rosentraub 1996). It is assumed that downtown venues have more positive overall impacts than those in other urban locations (Melaniphy 1996), but some are less accepting of such an assumption. For example, early studies of neighborhood (localized) impacts of sports facilities suggested little impact beyond increased public awareness of a given site. Further, impacts were usually related to other, concomitant development or infrastructure projects (Riess 1998). This fits the current thinking that sports facilities have the greatest downtown/neighborhood development potential when they are part of a broader revitalization strategy.

Indianapolis' plan to use sports venues to anchor downtown development is often considered the model of such an approach. The RCA Dome and Market Square Arena established the physical boundaries of the intended redevelopment area and provided distinct foci for development (Rosentraub 1997b). Cleveland, in comparison, is trying a multi-use approach to urban revitalization, though with a less unified central plan than in Indianapolis. There, the Gateway Project (Jacobs Field and Gund Arena) are tied to an overall redevelopment effort encompassing new retail, restaurants, and a museum district that includes the Rock and Roll Hall of Fame and Museum (Austrian and Rosentraub 1997). The museum and other entertainment initiatives were planned separately. Detroit's new stadia for the Tigers (MLB) and the Lions (NFL) are developing in tandem with an adjacent entertainment district which centers around the Fox Theater, also owned

by Tigers and Red Wings (NHL) owner Mike Ilitch, along with a proposed casino district (Bachelor 1998). An interesting aspect of this is that two distinct stadia are being constructed right next to each other, in comparison to the "state of the art," suburban, multi-use facilities of the 1970s.

Hartford, Connecticut also attempted to tie downtown redevelopment to a new stadium for the New England Patriots. In an effort to invigorate the central city, the city and state agreed to build a downtown stadium for the Patriots in Hartford, before the NFL even approved the move. The Patriots accepted Hartford's offer and made plans to leave suburban Foxboro, Massachusetts (Ohlemacher and Urbinas 1999), but reneged on the deal two days before the final commitment deadline. Hartford's proposed riverfront development, Adriaen's Landing, was to have included not only the \$374 million dollar stadium, but also a convention center, hotel, and retail shops (Puleo and Keating 1998). Previously, Boston had proposed "the Megaplex," a combined sports and convention center development, both to bring the Patriots into Boston from the suburbs and to promote Boston as a "sports town" and convention destination. The Megaplex fell through due to a lack of agreement on intraurban location, mixed results from economic impact analyses, and concerns over the feasibility of combining these two types of public facilities (Rich 1998). Subsequent attempts to provide a new stand-alone stadium in Boston proved difficult and, although the Patriots will not move to Hartford, they are still in search of a new home back in Foxboro.

Even those cities that have escaped the worst consequences of inner city decline may wish to create a more vibrant downtown environment. Although Nashville has well-known downtown entertainment districts, the Predators' new hockey arena and Titans' football stadium are expected to shore up the riverside areas adjacent to and across from downtown. In Charlotte, commercial districts adjacent to Ericsson Stadium have experienced new investment and downtown residential neighborhoods have seen rising sales and price structure, though this has not been definitively tied to the stadium's presence. The desire to create further synergy between urban neighborhoods, commercial areas, and entertainment districts has kept the

door open for discussion of a downtown NBA arena for the Hornets. Beyond the obvious desire for urban development, it is often the downtown that gives community identity to U.S. cities, further increasing the desire to create a focal point, particularly in these smaller cities seeking to attain big league status. Hartford, for example, sees its stadium as a way to establish an identity "... out of the shadow of Boston and New York" (Associated Press 1998).

The resurgence in downtown locations can also be explained by understanding who is involved in, and benefits from, the location decision. Shropshire states that "[a]part from the owner and the league, the sports franchise business involves fellow owners, the athletes, the competing cities, politicians, and the fans (who primarily are voting, tax-paying residents of the involved cities)" (1995, 8). Not explicitly included in this group are those most likely to benefit from big league city status: corporate "fans," the very group that may also be most likely to benefit from downtown locations. Each involved group watches out for its own best interests (Shropshire 1995) and it would be no different for corporate sponsors. As the costs of facility construction rise, corporate support, if not outright sponsorship, takes on added significance. The benefits to locally prominent corporations of gaining a major league sports franchise include increased visibility of the company overall and increased awareness of that company's importance within the local economy. Just as cities may achieve big league status by having a franchise, the major players in the local economy can also gain exposure. For those cities whose governing regime could be considered a "corporate regime" (one which promotes the local corporate agenda), public policy would likely reflect corporate wishes, related to issues like downtown development and concessions to sports teams (Pelissero et al. 1991). These may be the same cities most likely to provide corporate tax breaks and other incentives. Corporate sponsors are also the major users of the new luxury seating in these venues and, assuming they have downtown interests, they would prefer more conveniently located downtown facilities (Rosentraub 1997b).

These corporations likely have another economic interest in downtown sports venues: that of enhancing the value of their own landhold-

ings by encouraging the redevelopment of underutilized downtown land. Location rent theory, à la von Thünen and Ricardo, assumes that land closer to the city center (or marketplace) has higher value than that farther away. Extending the logic that potential users trade off transport costs versus rent costs (resulting in theoretically logical land use patterns), part of the value of centrally located land comes from relative scarcity. While rent gap theory (Smith 1979) has been proposed as an explanation for gentrification of underutilized areas (such as are likely to be targeted for stadium construction), it has drawn criticism as an incomplete explanation of redevelopment. Rent gap theory suggests that the difference between "actual" and "potential" rent (reflected in blighted, underused tracts of land surrounding the CBD) will eventually drive revitalization of that low (actual) value CBD-fringe land. However, potential location rent can be seen as somewhat intrinsic and driven by the theoretical highest and best use, implying (as suggested by Bourassa 1993) that the difference between potential and actual rent has little to do with redevelopment.

Furthermore, the rent gap is suggested as a reason behind residential gentrification. Thrall (1991) attempted to model land values for the commercial sector and suggests that producers located closer to the downtown (which he has more generally termed the "port") are less land extensive and more labor and capital intensive than those farther away, further raising the question of whether these large public facilities indeed represent the highest and best use for theoretically valuable downtown land. These theoretical issues aside, there is little doubt that the sheer size of sports venues and concomitant land improvements fills the "development gap" (the outward manifestation of the "rent gap," if it exists), making downtown land more scarce. Therefore, if centrally located, but underutilized land is used for large sports facilities. downtown businesses would see the value of their landholdings increase, both from added investment and land improvements and as a result of increased land scarcity.

In light of the above, it makes sense for locally significant corporations to advocate downtown facilities and enhance their own position within the local land market. NationsBank (Bank of America), for example, was a major

factor in attracting the Panthers NFL franchise, which plays in a downtown stadium. They also have expressed support for a new, downtown arena for the NBA Hornets, and have been instrumental in other civic projects in downtown Charlotte, the location of their own headquarters and related real estate holdings. NationsBank's association with the Panthers is akin to (downtown headquartered) First Union's marketing partnership with the Hornets (Reed and Bonnell, 1998), who continue to seek a downtown facility. In Indianapolis, the Lilly Foundation, a philanthropic arm of the Eli Lilly pharmaceuticals firm (whose headquarters is located on the southern edge of downtown), contributed \$25 million to help launch construction of the downtown RCA Dome (Danielson 1997).

The most obvious examples of corporate influence for downtown locations come directly from corporate team owners. In Cleveland, pressure for the Indians' new downtown baseball stadium came, in large part, from new owners who already had significant downtown real estate investments, and who continued to buy properties in the downtown area (Cagan and deMause 1998) in apparent anticipation of the stadium and its impact on local development and land values. Likewise, Mike Ilitch, owner of the Detroit Tigers, has been instrumental in the push for the new downtown stadium. Ilitch also owns the Red Wings hockey franchise and has other extensive downtown investments, including the Fox Theater, another redevelopment focal point (Bachelor 1998). Ted Turner, owner of the Atlanta Braves and part of the NBA Hawks' and NHL Thrashers' corporate ownership groups (Turner Broadcasting System and Time Warner), also has other significant downtown investments, most notably the CNN Center building. The Thrashers and Hawks will soon be playing in Phillips Arena, adjacent to CNN Center.

It makes sense that those owners (and other corporate sponsors) with significant downtown investments are most concerned with developing downtown venues. This type of land development strategy on the part of either ownership groups or other major corporate sponsors helps explain the trend toward downtown locations. What is less clear at this time is the degree to which this represents general civic boosterism or deliberate corporate strategy.

The extent to which specific corporations' landholdings can be correlated with their support for, and sponsorship of, downtown facilities forms the basis of another line of our current research.

Another reason for the downtown revival derives from the more cynical idea that the push for downtown facilities merely represents the team owners' drive for increased revenues. Many new facilities and even some intra-metropolitan franchise relocations are the result of owners' ability to play one area off against the other to increase revenues in an era of free agency and skyrocketing costs. This can be a particularly useful strategy if the franchise can remain within the same market and draw from the same fanbase. The Detroit Lions' move to the suburbs and impending return to downtown Detroit reflects, in part, this desire to get new, more profitable facilities. The Patriots' decision to move to Hartford, after looking into the possibility of a new suburban stadium or a move into Boston, is a larger scale example of the same process. The regional name of the team provides them with a potentially larger local market and, hopefully, assures the team a continued following in the region. This type of intra-metropolitan competition is particularly likely to occur in larger urban areas, where more options for competing suburban locations exist within the metro area (Danielson 1997), such as was the case with the Washington Redskins' move to Raljon, Maryland in 1997. Given these types of examples, the inward intra-urban location trend may simply represent the pendulum swinging between suburban and urban locations in the search for new facilities.

Finally, this trend toward downtown facilities also likely relates to another trend within the four major league sports: a movement toward smaller markets overall. The most recent period of expansions and relocations has favored smaller cities, as larger urban areas have become saturated with major league sports teams (Comer and Newsome 1998). It is apparent that the leagues have decided that they can market their product in "lower order places" such as Jacksonville, Charlotte, Nashville, Raleigh, and St. Petersburg, particularly if there is a strong regional market. This is essentially creating a new U.S. urban hierarchy in relation to major league sports, which affects intra-

urban location patterns as well. The sports facility suburbanization trend of the 1960s and 1970s resulted, in part, from perceived problems with downtown locations, including the reluctance of wealthier suburbanites to enter blighted inner cities for recreational purposes. This has been cited most recently with the Florida Marlins' move to suburbia (Danielson 1997). However, these agglomeration diseconomies of large urban areas (congestion, crime, blight, and an overall negative perception) are less likely to exist, or be perceived to exist, in smaller markets. Furthermore, smaller cities' downtowns are centrally located to the broader regional fanbase, yet more easily reached than in larger urban areas. Of the new and planned facilities in all of the major league sports, all of the smaller market teams are locating in downtown or central city facilities, implying that there are ties between the two trends. Developing those ties more fully represents another focal point of our broader research agenda.

Conclusions and Future Research Directions

The results of our analysis are conclusive regarding the trend toward downtown sports venues for the four major league U.S. sports. We have shown that such a trend, contrary to a continued assumption of suburbanization, does exist and is statistically significant. This trend marks a reversal of the dominant suburbanization trend of the 1960s and 1970s, the first major era of sports facility construction. Furthermore, we have shown that there are significant differences between the leagues in their location patterns, with the downtown resurgence being led by the National Basketball Association and National Hockey League, and a surprisingly strong showing by the National Football League. Major League Baseball, though more commonly identified with the trend due to inflated press reports regarding the retro ballparks, has been less downtown-oriented than the other leagues.

What is less conclusive is the reason or reasons behind this downtown renaissance, though we offer several explanations to account for the trend. These explanations include the rather cynical possibility that this is a trend intended merely to capitalize upon intra-metropolitan competition for teams and to increase owner

revenues. Other factors include practical reasons related to a concomitant trend toward smaller markets, which can influence both the perceived impacts and the attractiveness of a downtown facility, as well as the need to *create* a focal point for a city's big league status. Furthermore, urban revitalization strategies and corporate sponsorship (formal or informal) likely play a part in the resurgent downtown sports presence.

Future research efforts will include developing a clearer understanding of the relationships between this sports facility location trend and corporate influence, smaller market franchise awards and the concomitant need for regional marketing approaches, and the new urban hierarchy in U.S. major league sports. In addition, it is important to more fully understand the practical locational advantages of downtown and central city facilities at the microscale, particularly in the face of the assumed advantage that suburban locations have in land availability and cost. As the current era of sports facility construction shows no signs of abating, these are issues that many U.S. cities either are currently facing or may be facing in the near future.

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