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Examining the Evolution of Urban Multipurpose Facilities: Applying the Ideal-Type to the Facilities of the National Hockey League and National Basketball Association

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EXAMINING THE EVOLUTION OF URBAN MULTIPURPOSE
FACILITIES: APPLYING THE IDEAL-TYPE TO THE FACILITIES
OF THE NATIONAL HOCKEY LEAGUE AND NATIONAL
BASKETBALL ASSOCIATION

A Dissertation

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in

The Department of Kinesiology

by
Benjamin Downs
M.S., Mississippi State University, 2016
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This dissertation is dedicated to my daughter Stella Corinne. Thank you for being my source of inspiration and provider of levity throughout this process. I love you Birdie.
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ABSTRACT

The standardized versions of ice hockey and basketball emerged during the last quarter of the 19th century. In short order both ice hockey and basketball evolved from amateur, recreational activities to professional sport and entertainment businesses. This study analyzes, contextualizes, and discusses the layout of the urban multipurpose facilities that emerged to house both professional hockey and professional basketball, with particular attention paid to the facilities of the National Hockey League and National Basketball Association. The study uses the lens of modernization and the ideal-type heuristic device to extend Bale’s and Seifried’s facility evolution models. In addition to providing an account of the evolution of urban multipurpose facilities, this project also proposes future recommendations for managers of those facilities to consider.

This investigation concludes six stages of urban multipurpose facility evolution occurred over time. Stage One and Stage Two primarily appear prior to the 20th century and notably rely on naturally cold temperatures to create skating surfaces. Stage Three emerges as semi-permanent constructions that embraced artificial ice-making technology and increased spectator amenities. Stage Four represents an increased professionalization of both sport and society as facilities were built from steel and concrete to a size and scale not previously possible. Furthermore, Stage Four facilities were designed to be attractive locations for legitimate entertainment. Stage Five demonstrates an increasing desire of sport managers to satisfy the expectations of a service-oriented society by providing ample space for parking, unobstructed views, improved in-facility services such as concession stands, limited upper deck luxury suites, and television broadcasts in suburban facilities. Finally, Stage Six demonstrates the managerial recognition of the importance of commodifying space, particularly through lower bowl luxury suites, as well as including improved amenities for in-facility and remote customers.
This project suggests urban multipurpose facilities were purposefully designed to attract the public’s leisure and recreational dollars by embracing new technologies and practices in response to changing social and economic realities. Therefore, urban multipurpose facilities served, and continue to serve, as centers of entrepreneurial sport activity. Resultantly, sport facilities will likely continue to evolve in response to changing leisure and recreational expectations within society.
CHAPTER ONE
INTRODUCTION

Milwaukee’s Fiserv Forum opened its doors to the public on August 26, 2018, nearly two months before its primary tenant, the National Basketball Association’s (NBA) Milwaukee Bucks played their first regular season game in the facility. The spectacle surrounding the opening of the NBA’s newest arena included a ribbon-cutting ceremony featuring current Bucks star player Giannis Antetokounmpo and former player and six-time NBA most valuable player Kareem Abdul-Jabbar (Nelson, 2018b). Abdul-Jabbar won three of his most valuable player awards with the Bucks and earned 1971 NBA Finals most valuable player when he led the team to the NBA championship during the 1970-1971 season. Although the presence of current and former team stars likely attracted some citizens to the Fiserv Forum’s unveiling, the facility itself garnered the most attention as approximately 40,000 fans registered for tickets to tour the facility (Nelson, 2018c).

Built adjacent to the 30-year-old BMO Harris Bradley Center, the $524,000,000 Fiserv Forum emerged through a partnership between the Bucks owners (i.e., Jamie Dinan, Wes Edens, and Marc Lasry), and Milwaukee City, County, and Wisconsin State governments (Nelson, 2018a). As part of the financing agreement the Bucks owners agreed to contribute $150,000,000 for construction, while the team’s former owner Herb Kohl added $100,000,000 to build the facility (Ryan, 2015). In terms of public obligations, the Wisconsin Center District offered $203,000,000 in bond financing, while Milwaukee City contributed $47,000,000 to the project, the county committed to pay $4,000,000 annually, the state increased income taxes, and a new facility fee was added to event tickets (Kirchen, 2015).

Beyond serving as the home of the Milwaukee Bucks, Fiserv Forum emerged as part of a larger $750,000,000 revitalization and development project that features hotels, office space, and residential housing designed to transform an underdeveloped Milwaukee neighborhood (Nelson,
2018a). The facility appears to have brought some notoriety to Milwaukee. Within a week of opening, the Democratic National Committee (DNC) examined the Fiserv Forum, as well as Milwaukee as a potential location for the 2020 Democratic National Convention in an effort to select a site that demonstrated “diversity, resilience, and the ability to put on a really big show” (Glauber, 2018, p. 10A). In March 2019, the DNC chose Milwaukee as the event host, in part because of the newly opened Fiserv Forum (Glauber & Spicuzza, 2019).

The design, financing, construction, and opening of Fiserv Forum is the most recent example of urban multipurpose sport facility planning in the U.S. and Canada likely to receive scholarly attention as many other sport facilities have in the past. For example, Bale (1993), Seifried and Pastore (2009a; 2009b), Seifried (2010b), and Tutka (2016) explored the evolution of soccer, baseball, and American football facilities. Similarly, numerous scholars have examined the building of sport facilities with respect to economic benefits for communities (Baade & Dye, 1988; Noll & Zimbalist, 1997; Prophettor, 2016; Siegfried & Zimbalist, 2000). Despite evidence of little real economic impact and that citizens like having teams, but do not want to pay for facility construction, major, subsidized sport facility construction has continued to the present (Groothuis, Johnson, & Whitehead, 2004; Groothuis & Rotthoff, 2016).

Management scholars (e.g., Booth & Rowlinson, 2006; Clark & Rowlinson, 2004; Kippling, Wadwhani, & Bucheli, 2014; Rowlinson, Hassard, & Decker, 2014) and some sport management researchers (e.g., Amis & Silk, 2005; de Wilde & Seifried, 2012; de Wilde, Seifried, & Adelman, 2010; Seifried, 2010a, 2017; Seifried, Katz, & Tutka, 2017) previously encouraged the expansion of the field through the use of the historical method in part because it provides the practical utility of remediating current and future problems. Despite the encouragement of the broader management community and some sport management scholars to explore and embrace the historical method, it appears sport management has underutilized...
historical research methods (de Wilde & Seifried; de Wilde, Seifried, & Adelman; Seifried, 2010a, 2017). Nonetheless, one way sport scholars developed and expanded the historical method and applied history is through the use of the modernization as an organizing construct.

Previous sport research utilizing modernization theory is contextually limited to the evolution of sport practice (e.g., Adelman, 1986; Guttman, 1978; Howell, 2001), sport as a social control agent (e.g., Adair, 1993; Dyreson, 1987; Llewellyn, 2012; Lukuslu & Dincsahin, 2013; Sotomayor, 2015; Wang, 2015), and the construction of British soccer (Bale, 1993), American professional baseball and football (Seifried, 2010b; Seifried & Pastore, 2009a, 2009b), and American college football facilities (e.g., Seifried, 2016; Seifried, Faulkner, Baker, & Piker, 2016; Seifried & Tutka, 2016; Tutka, 2016). Interestingly, none of the extant modernization literature focuses on urban multipurpose facilities and its practical utility.

**Purpose**

The purpose of this dissertation is to develop a constructionist history utilizing modernization as a tool to understand past changes and future trends in the physical layout of NBA and National Hockey League (NHL) arenas. The modernization approach has been used in historical research, as well as other social sciences, to describe social and cultural changes that emerge as a response to economic development (Inglehart & Welzel, 2005; Thornton, 2005). Scholars in sport management and sport history have utilized modernization theory to make inferences about society and the sports industry (Howell, 1998). Modernization can be particularly useful in sport management and sport history in the United States (U.S.) context, in part because the construct presents society moving in identifiable stages (Black, 1966) and it demonstrates how capitalism influenced leisure activities and the creation of professional sports teams (Gruneau, 1988). Moreover, modernization scholars used the construct to speculate about “their future shapes, patterns, and constructions” (Seifried & Novicevic, 2017, p. 52). The
exploration of the shapes and patterns of facility construction are particularly useful when utilizing the ideal-type heuristic device.

This dissertation specifically examines professional basketball and hockey facilities from the late 19th century through the year 2018 and presents an ideal-type of arena development. Tutka and Seifried (2015) encouraged the use of the ideal-type heuristic device by historical sport management researchers because it allows scholars to develop a general construct and model through the observation of numerous cases within a given period (Rogers, 1969; Weber, 1948). Previously, sport scholars such as Bale (1993), Seifried (2010b), and Tutka (2016) have successfully implemented the historic ideal-type device when analyzing and describing the decades-long evolution of sport facility location, design, and construction.

The current project systematically analyzed and categorized source information utilizing the ideal-type heuristic device to promote inferential connections between the data (Tutka & Seifried, 2015). Therefore, the present study balances quantitative data with qualitative information. The synthesis of these data demonstrates that hockey and basketball facilities evolved from informal, improvised playing spaces to intentional commercial centers. Understanding and tracking the transition from improvised to intentional sport space is of particular practical importance to sport managers as appreciation for past and current facility design can inform future construction and/or renovation to assure those treatments incorporate contextually appropriate elements, such as modern numbers of luxury suites, restrooms, and concession points of sale (Seifried et al., 2016).

Given the relative lack of scholarship on the facilities of the NBA and NHL, as well as the demonstrated utility of ideal-type historic research within sport management, this study explores:

1. What factors stimulated changes in, and modifications to professional hockey (NHL) and basketball (NBA) facilities during the 20th and 21st centuries?
2. What is the unique ideal-type of the evolution of modern NHL and NBA facilities?

3. Based on the history of NHL and NBA facility construction, what reasonable suggestions can be made regarding future facility design trends?

**Limitations**

This dissertation, as a work of historic research, is subject to certain limitations. Seifried (2010a, 2017) indicated historic research is subject to temporal restrictions. In order to mitigate temporal restrictions, this dissertation relies on archival information, as well as electronically available digital sources. In instances when visits to review facilities and archival material were not practical, primary and secondary sources were obtained using resources available through the Louisiana State University Library. This limitation is relevant because access to digital resources varies between academic institutions (Guiliano, 2017). The dissertation is also limited by the language used by some resources. Specifically, the author was unable to read or appropriately contextualize the French-Canadian language, particularly in the cases of facilities constructed in the late 19th and early 20th centuries. As a result, when facilities constructed in French-speaking Canada were examined, the author relied exclusively on English language source material.

**Delimitations**

The combined histories of hockey and basketball are expansive. In order to produce an appropriately narrow historical study, the collective histories of professional hockey and professional basketball required delimitation. As mentioned previously, this project focused on the arenas of the NHL and NBA. However, the NHL and NBA were/are not the only professional basketball and hockey leagues in North America. Importantly, the NHL and NBA emerged from previously established professional sports leagues. The NHL was formed by former members of the National Hockey Association (NHA) in 1917. The NBA was formed in 1949 following the successful merger of two competing professional basketball leagues, the
Basketball Association of America (BAA) and the National Basketball League (NBL). Later in their existence, the NHL and NBA absorbed teams from competitor leagues such as the World Hockey Association (WHA) and American Basketball Association (ABA) in the late 1970s.

Specifically, the focus on facilities, was delimited by the examination of major professional hockey and basketball facilities. The identification of major professional leagues was derived from Seifried’s (2005) definition of major professional teams and leagues recognized after reaching a point of saturation from collected primary and secondary sources. This dissertation considers the hockey facilities of the NHL (1917-present), National Hockey Association (NHA) (1910-1917), the Pacific Coast Hockey Association (PCHA) (1911-1924), and WHA (1971-1979). Regarding basketball, the dissertation considers the NBA (1949-present), NBL (1937-1949), BAA (1946-1949), and the ABA (1967-1976).

Furthermore, this project does not include the facilities of professional hockey and basketball leagues in Canada and the U.S. that were not viewed as major professional leagues in primary and secondary sources. For example, regarding professional hockey, notable minor leagues, such as the American Hockey League (AHL), International Hockey League (IHL), East Coast Hockey League (ECHL), Southern Professional Hockey League (SPHL), International Professional Hockey League, Pacific Coast Hockey League (PCHL) and Pacific Hockey League were excluded, as were amateur club and junior level organizations. For basketball, minor professional basketball leagues, like the American Basketball League I (1925-1955), American Basketball League II (1961-1963), Continental Basketball Association, United States Basketball League, G-League, Women’s Pro Basketball League, and Women’s National Basketball Association (WNBA) were excluded. It should be mentioned that the present study acknowledges the WNBA has matured as a business property since its inception in 1996.
However, the WNBA court specifications are the same as the NBA, the NBA operated the WNBA, and initially, the WNBA utilized NBA facilities upon its inception.

Seifried (2005) indicated historically significant facilities that operated outside of major professional sport leagues are worthy of study and consideration in an examination of sport facility history. With this point in mind, significant facilities that predate the establishment of the NHL, NBA, NHA, PCHL, WHA, NBL, BAA, ABA, or member franchises and were used in other professional leagues will be included in the dissertation. For example, the Schenley Park Casino was built in 1895 and was the first facility to use artificial ice technology. However, the facility was destroyed by fire in 1896, eight years before the International Professional Hockey League was formed. As a result, other professional basketball and hockey league facilities are included occasionally when appropriate.

**Significance**

This project represents the first sport management-history treatment of the modernization of the facilities of the NHL and NBA. Previously, Shubert (2016) produced a detailed architectural-history accounting of hockey facilities in North America. Similarly, various scholars examined the history of specific facilities (e.g., Christianson, 2004; Field, 2002, 2007, 2008; Seifried & de Wilde, 2014) and urban areas (e.g., Trumpbour, 2007, Weiner, 2000). This dissertation utilizes modernization to explain the modifications made to facilities over time as a response to societal changes brought on by economic development (Inglehart & Welzel, 2005; Thornton, 2005). By examining the changes to NBA and NHL facilities over time, this project suggests that modernization is an appropriate rhetorical strategy to explain the transition process toward contemporary society. The affirmation of modernization as appropriate for sport management-history applications is significant, particularly as Linden (2016) acknowledged, sport history scholars have eschewed the theory for several decades despite Seifried and
Novicevic’s (2017) finding that management, business, economic, and labor scholars view the theory as appropriate.

Finally, this dissertation is significant because it merges the writing approaches of the academic disciplines of sport management and history. Seifried (2017) echoed Decker (2013), Kippling et al., (2014), McDowell (2015), and Yates (2014) in suggesting historians consider modifying historical writing into a format more familiar to reviewers of management journals. In consideration of this point, the present study includes a literature review chapter, as well as a methodology chapter. The literature review and method section are uncommon in the written presentation of historical research but are more familiar to management scholars (Seifried). Overall, this dissertation answers the call of Seifried and stands as an example of how sport management scholars can adapt historical research into a familiar form for management scholars.

**Rationale for Subject Selection**

In this study, the development of Canadian and U.S. indoor hockey and basketball facilities is examined from 1852 to the present. The changing characteristics of hockey and basketball facilities were chosen because they serve as important locations of American sporting culture. Admittedly, baseball and football outpaced both hockey and basketball in popularity in U.S. markets for much of the 19th and 20th century (Seifried, 2005). Unlike the pastoral origins of baseball and football, organized hockey and basketball emerged as indoor sporting activities. Furthermore, hockey and the spaces it is played serve as important centers of cultural heritage, particularly in Canada (McKinley, 2006; Shubert, 2016). Hockey facilities are particularly interesting as a target of investigation because in order to be played on a consistent basis, the game required technological innovation via the creation of dedicated indoor playing spaces and artificial ice-making technology. Relatedly, the evolution of basketball and basketball facilities is equally worthy of study as the sport was intentionally designed to be played indoors within
existing structures (Baerwald, 1995; “Where Basketball was Invented,” n.d.; Rains & Carpenter, 2009).

The multipurpose nature of facilities that host major professional hockey and basketball make these facilities a logical target for sport management and facility management research because the facilities host a myriad of civic and entertainment events throughout the year. Both organized hockey and basketball also emerged in the last quarter of the 19th century and steadily grew in popularity so that the sports could be used as legitimate attractions by facility operators (Baerwald, 1995; Wong, 2005). Indeed, other entertainment attractions such as circuses and boxing matches were initially more profitable attractions and hockey and basketball helped fill open facility schedules (Koppett, 1999; Seifried & de Wilde, 2014). Over time hockey and basketball dominated media coverage of the facility and emerged as the primary tenants or primary co-tenants of these facilities.

The growth in popularity and viability of major professional hockey and basketball during the 20th century provides further justification for the study of their host facilities. The NHL expanded from a league of six teams in 1942 to 31 teams by 2018. Similarly, the NBA expanded from a league of eight teams in 1955 to 30 teams by 2018. Not only does the franchise expansion of the NHL and NBA demonstrate a growing market for sport entertainment, the franchise expansion necessitated the construction of modern facilities capable of hosting both sports. As a result, the study of multipurpose indoor sport facilities creates a better understanding of the general history of economic and demographic changes in the U.S. and Canada, the motivations and justifications for private and public entities to build facilities, and how sport organizations respond to the desires of their customers.
Summary

As noted above, the purpose of this project is to understand past changes and future trends in the physical layout of NHL and NBA arenas, beginning with significant 19th century facilities through those used as of 2018 by employing modernization theory as a rhetorical strategy to explain the transition process via the use of the ideal-type heuristic device. This was accomplished following the accumulation and analysis of primary and secondary sources related to the facilities of the NHL and NBA. Professional hockey, and later professional basketball facilities evolved from non-purpose-built facilities to intentional, specialized commercial facilities in less than one century. In substance, the facilities changed from outdoor recreation areas (e.g., frozen lakes and ponds) to temporary and later permanent wooden structures, and ultimately more permanent steel and reinforced concrete structures with spaces dedicated for technological advances, such as radio and television, as well as seating areas designed to attract various social classes of consumers (Shubert, 2016).

This project enhances understanding of sport facility and venue construction and modification while also suggesting modernization theory as appropriate for sport management and the historical treatment of sport management. This notion is important because modernization theory can be used within sport management to understand facility construction and design from the management perspective. Additionally, the historical method’s synthesis of qualitative and quantitative data and published sources benefits sport management by providing a more nuanced understanding of the social, political, and economic contextual realities that have influenced and likely could influence the size, location, and financing of major professional sport venues.
Project Outline

Seven chapters follow this Introduction. Overall, the ensuing chapters are designed to inform sport management practitioners, sport management scholars, and laypersons who may not fully appreciate the history of major professional hockey and basketball facility development, the broader developments of major professional league histories, as well as the economic and demographic histories of Canada and the U.S. The second chapter exists as a review of literature focused on NHL and NBA arena scholarship, as well as the scholarly examination of modernization theory. Concerning NHL and NBA arenas, the review explores works dedicated to facility histories, economic impact, and urban studies. Next, Chapter Two reviews how modernization theory has been utilized within the scholarly community, with specific attention given to the application of modernization by sport history and sport sociology scholars. Subsequently, Chapter Three outlines the methodology of the study. The dissertation follows Seifried’s (2010a; 2017) historical method in sport management. The methodology includes the following steps: (a) Selection of a narrowly defined topic; (b) Pursuit of primary and secondary sources; (c) Primary and secondary source criticism; (d) Analysis and interpretation of themes emanating from primary and secondary sources; and (e) Presenting the findings.

Chapter Four through Chapter Seven detail the ideal-type urban multipurpose facilities. As a historical study, each chapter follows the development of outdoor to indoor sport facilities in chronological order. Moreover, each chapter follows a similar format. First, an overview of the economic and population histories of Canada and the U.S. is discussed. Then, the impacts of those trends on consumer behaviors and sport business are noted. Once the broader societal and sport contexts are established the intentional sport management decisions related to the design of urban multipurpose sport facilities are presented.
Chapter Four discusses the evolution of hockey and basketball facilities during the 1800s through 1924, concluding before the construction of the Montreal Forum. Much of this chapter is dedicated to skating sport and the growth of amateur and professional hockey. The notion of weather dependence is prominent in this early history and three different stages of facility development, from naturally-occurring outdoor facilities (Stage One) to enclosed facilities with dedicated spectating areas that still relied on cold temperatures to naturally freeze the skating surface (Stage Two) are explained. Importantly, Stage Two facilities, like the 1862 construction of the Victoria Skating Rink, also introduce location and year-round use as an element of facility design. The Stage Three facility is described as facilities built beginning in 1890 like Madison Square Garden II and the Schenley Park Casino that increased in size and scope, with specific consideration given to paying customers, demonstrating an increased sophistication of the sport product, but also increased opportunities for leisure spending from consumers. Additionally, technological advances, such as artificial cooling became more accessible, allowing hockey contests to be played outside of the winter months. The chapter concludes with a discussion of the invention of basketball and the growth of the sport in the late 19th century.

Chapter Five discusses the fourth stage of facility development from 1924 to 1949. During this period iconic facilities such as the Montreal Forum, Maple Leaf Gardens, Boston Garden, Chicago Stadium, and Olympia Stadium were constructed. Stage Four facilities were made of concrete and constructed to a scale not previously possible. Further, these facilities were designed to attract wealthy clientele by incorporating greater amenities while beginning to consider remote consumers through the inclusion of radio broadcast technology. A major component of this chapter is the creation of the NHL as the preeminent professional hockey league in North America as well as the rivalry between the NBL and BAA that ultimately resulted in the creation of the NBA.
Chapter Six explores the Stage Five facilities built between 1950 and 1988. During this time period the NBA and NHL began franchise expansion efforts into previously untapped markets and publicly-funded facilities designed to meet the service expectations of a growing middle class emerged. The Stage Five facilities were located in or near suburban locations and catered to the automobile. Further, enhanced amenities such as improved concessions and restroom space were built. The Stage Five facility is also important because television and the projected role television broadcasts would have on the future prosperity of professional sport leagues manifested in facility design. Importantly, dedicated luxury seating space and the potential to recruit corporate wealth also manifested in facility construction and renovation. This period is notable because of the rise of legitimate competition from upstart professional basketball and hockey leagues (i.e., ABA and WHA) and their eventual mergers into the NBA and NHL.

Chapter Seven profiles the modern, Stage Six urban multipurpose facility. Stage Six of facility construction began in 1988 and with the introduction of lower bowl luxury suites at the Palace of Auburn Hills to attract corporate and upper class spending. Furthermore, increased information technology in the form of new multimedia and computer technology fundamentally changed the business operations of sport organizations. The changes described above contributed to increased size and cost of Stage Six facilities. The Stage Six facility included more points of sale and opportunities to attract consumer dollars separate from the sport contest. Additionally, change in the Stage Six facility to a public-private partnership financing model is discussed. A case examination of PPG Paints Arena is used to provide an example of how sport teams and governments interact when developing an arena. Of note, between 1990 and 2018 each team in the NBA and NHL either constructed a new facility or, as was the case with the New York Rangers and Knicks, underwent major renovations.
Chapter Eight of this dissertation summarizes the six-stage ideal-type of urban multipurpose facility construction. In addition to this summary, several propositions for future sport managers to consider related to facility design are suggested. Among these propositions are the suggestions that sport facilities will need to accommodate sports betting, further embrace wireless internet infrastructure, and create increased social spaces to be enjoyed by customers at various events. As part of the proposed facility design elements, potential expansion cities for the NHL or NBA are also identified. Finally, the Conclusion presents future directions for facility research.

**Definition of Terms**

**Stage One Facility (Weather-Dependent Play)**

Stage One facilities are identified as outdoor, temporary facilities. The first skating facilities were temporary in that they were limited to naturally freezing surfaces, such as lakes, rivers, and ponds in winter months and cold climates. Stage One facilities evolved to include limited support structures (e.g., benches and gazebos), as well as some amenities (e.g., concessions). Eventually, easily constructed and razed wooden-roof structures emerged to create year-round roller skating and ice skating pavilions.

**Stage Two Facility**

Stage Two facilities emerged in response to increased interest in, and access to, leisure activities. The enclosed facilities were purposefully built in wealthy neighborhoods and served year-round utility purposes, but relied on a natural freezing ice surface. Clearly defined spectating areas were established and games, particularly hockey, modified rules to fit the man-made special limitation.
**Stage Three Facility**

Stage Three facilities were the first privately-funded, large scale facilities built specifically for athletic competition and consumption. Stage Three facilities incorporated dedicated spectator stands, improved amenities and dressing rooms, and utilized artificial ice technology. Though capable of producing ice on a year-round basis, these purpose-built facilities were still constructed primarily out of wood and were thus susceptible to fires.

**Stage Four Facility (Permanent, Purpose-Built Facilities)**

Stage Four facilities, like Montreal Forum were designed by professional architects and constructed to a size and scale not previously possible because they were built using steel and concrete. The facilities accommodated significantly more fans than their predecessors and incorporated enhanced spectator amenities including more restrooms and HVAC systems, as well as technology to enhance the consumption experience of in-facility (e.g., scoreboards and timing clocks) and remote (e.g., radio broadcasting) spectators of sport and entertainment events.

**Stage Five Facility (Service-Oriented Facilities)**

Stage Five facilities emerged as largely public-funded structures that were built outside city limits with consideration for automobile and television technology that catered to middle class consumers. In addition to responding to new technology, these facilities were the first constructed with consideration for the compromises necessary to accommodate the playing surface size differences between the ice surface of the NHL and the smaller NBA basketball court.

**Stage Six Facility (Corporate-Consumer Facilities)**

Stage Six facilities were constructed between 1988 and 2018. These facilities are notable because of their large physical footprint and emphasis on the inclusion of luxury and club seating in the arena to maximize revenue. In addition to emphasizing corporate customers to maximize
profits, these facilities also enhanced the in-arena experience through the application of new scoreboard and videoboard technology, as well as expanded concourses, numerous restrooms, concession stands, and multiple internal profit centers (e.g., restaurants, team stores, bars).

**Renovation**

Tutka (2016) cited Seifried (2012) and Weeks and Grimmer (1995) in defining renovation as a decision to repair an existing facility to ensure its use in the future through one of four treatments. The renovation treatments considered for sport facilities include: (a) preservation; (b) reconstruction; (c) rehabilitation; and (d) restoration (Tutka). The U.S. Department of the Interior offers specific guidelines and considerations for organizations considering renovation of existing structures.

**Preservation**

Preservation is a renovation treatment whereby the interior of a structure is not substantively altered, rather, care is taken to maintain the structure in its current form through routine maintenance (Grimmer, 2017). Related to multipurpose indoor sport facilities, the decision to replace the ice surface in the Boston Garden would qualify as a preservation treatment according to the standard because the upgrade occurred to make sure the skating surface of the hockey rink would be consistent (McDonough, 1966).

**Reconstruction**

The reconstruction treatment recreates a portion of a structure using new construction to reflect its appearance at a given time in the structure’s existence (Grimmer, 2017). The Calgary Flames responding to the 2013 flooding of the Elbow River by replacing locker rooms and 2,500 seats, among other changes serves as a relevant example of facility reconstruction (Odland, 2014).
Rehabilitation

The rehabilitation treatment modifies an existing structure to harmonize its historic features with modern modifications and applications (Grimmer, 2017). The addition of 10 luxury suites to the upper deck of the 40-year-old Montreal Forum exists as a rehabilitation because the addition of the suites did not alter the character of the building (“Montreal Forum to Open,” 1968).

Restoration

The restoration treatment attempts to return a structure to an authentic historical state at a designated time by removing the temporally inappropriate features and replacing them, through the reconstruction treatment, with period appropriate items (Grimmer, 2017). Interestingly, the preservation of historically significant facilities did not occur as culturally significant arenas like Boston Garden were razed and replaced (Shubert, 2016).

Major Renovations

Lastly, Seifried (2005) and Tutka (2016) differentiated between routine maintenance and major renovations. Routine maintenance includes daily or annual tasks to preserve a facility, such as painting and HVAC repair (Seifried). Major renovations, however, result in substantive upgrades to a facility’s infrastructure and original design elements (“Energy Efficiency,” 2010; Tutka). Importantly, Seifried further differentiated routine maintenance from a major renovation by noting major renovations occur when “hundreds of thousands or millions of dollars are used to substantially alter the physical layout of a building” (p. 24). For example, Oracle Arena underwent a 14-month, $102,000,000 renovation in 1997 that increased the facility’s capacity and added 72 luxury suites (“Warriors to Debut,” 1997).
CHAPTER TWO
REVIEW OF LITERATURE

By the close of the 19th century, amateur basketball and to a greater degree amateur hockey developed an increased following (Howell, 2001; Kuska, 2004; Shubert, 2016). However, the games were developed under vastly different circumstances. For instance, the invention of the game of basketball is unique among other favorite winter athletics practiced in North America such as hockey because its creator, James Naismith, and foundation date (i.e., 1891) are well known. Hockey has a less-distinguishable date of invention. The date most often cited for the first hockey game is 1875 (Shubert). Howell and McKinley (2006) suggested that versions of hockey had been played as early as 1807 by Europeans (i.e., Hurley) and First Nation groups (i.e., Oochamkunukt), while residents of Halifax, Nova Scotia created a list of rules by 1873. Nonetheless, Howell, McKinley, and Shubert agree that a club hockey game played by McGill University students in Montreal, QC on March 3, 1875 is the first known and formally accounted version of the game being played.

Amateur and later professional hockey proliferated in the U.S. and Canada during the first two decades of the 20th century. The first recognized professional hockey league, the International Professional Hockey League, was founded in Pittsburgh, PA during 1904. Other incarnations of professional hockey formed over the next decade, including the Eastern Canadian Hockey League (1906), National Hockey Association (1909), and Pacific Coast Hockey League (1912). The National Hockey League (NHL) formed in 1917 with a membership of four teams (i.e., Montreal Canadiens, Montreal Wanderers, Ottawa Senators, and Toronto Arenas). Over the course of the next decade the league experienced franchise expansions and contractions until stabilizing with a six-franchise membership in 1942 that would last until 1967 (Howell, 2001).

Professional basketball in North America emerged out of the amateur basketball circuits of mostly mid-Atlantic and Northeastern U.S. cities. The first owner-managers of professional
basketball teams typically owned facilities capable of hosting hockey games and sought to incorporate basketball into event schedules to maximize event profits (Kuska, 2004; Staffo, 1998). Interestingly, this condition produced crossover ownership of both professional hockey and basketball teams by facility owners (Staffo; Surdam, 2012). Professional basketball played in non-hockey facilities typically occurred in dance halls and armories hosting local or regional basketball tournaments (Staffo). Staffo suggested:

The impetus behind these early leagues was that businessmen who owned and operated large sport buildings (including the Arena Managers Association of America) wanted to attract crowds to those facilities when they were not booked for hockey games, boxing bouts and other events (p. 10).

The most prominent precursors to the modern National Basketball Association (NBA) were the National Basketball League (1937) and Basketball Association of America (1946). Both Staffo (1998) and Surdam (2012) noted that while Basketball Association of America teams were located in major cities with larger potential gate receipts, the more established National Basketball League employed more prominent players. Following three seasons of competition, the leagues merged in 1949, forming the 17-team NBA, which would see its membership drop to nine teams over the next decade as the league was considered a “traveling circus” (Prophetter, 2016, p. 443).

Between 1960 and 2005 the NBA and NHL grew from nine to 30 teams and six to 30 teams respectively, while gradually playing in more publicly financed facilities (Komisarchik & Fenn, 2015; Prophetter, 2016). In 2017, the introduction of a new NHL franchise, the Vegas Golden Knights, brought the NHL franchise total to 31 teams. The growth experienced by these major North American professional sports leagues contributed to unprecedented new facility construction, particularly since 1990 (Prophetter, Siegfried & Zimbalist, 2000). In addition to league expansion, the maturation of the NBA and NHL also embraced franchise relocation into untapped markets and previously unimagined locations (e.g., Phoenix, AZ, Tampa, FL, San Jose,
CA, Dallas, TX, Miami, FL), further necessitating the construction or modification of existing facilities to accommodate the sporting and commercial needs of multiple stakeholders.

Komisarchik and Fenn (2015) highlighted the visible increase in arena construction for both NHL and NBA franchises from 1995 to 2015. Furthermore, the authors found “over $1.86 billion was designated for dual use NHL/NBA arenas, $1.6 billion for NBA only arenas and approximately $1.42 billion on venues for NHL use- amounting to a total of roughly $17.96 billion in real dollars” (p. 9). Additionally, Komisarchik and Fenn presented the average capacity of NHL arenas in 1950 was 13,350 while NBA arenas sat at 10,000. During the period of their study, NBA arenas average capacity shrunk from 19,562 to 19,159 while NHL arenas increased slightly from 18,244 to 18,381. Thus, even considering cost inflation, average costs rose collectively for NBA and NHL arenas from before 1995.

Not surprisingly, the growth of major professional sport in North America has drawn interest from academicians interested in understanding the social, political, economic, and financial implications of professional sport for both individuals and society. The sport facility exists as the most concrete (pun intended… after 1920) and conspicuous manifestation of the growth of professional sport in North America and has been the target of various forms of scholarly research. For example, Shubert (2016) suggested that sport facility studies are primarily the target of sport historians, urban studies scholars, and cultural anthropologists. Political and economic scholars have also contributed substantively to the body of sport-facility knowledge and the implications of facility construction for citizens and communities alike (Lubrano, 2005; Thornley, 2002). Noticeable in these analyses is the paucity of an interdisciplinary sport management-history consideration regarding the evolution of professional hockey and basketball facilities as a product of modernization and contributor to modernization.
Given the growth of professional hockey and basketball in North America, the existing body of literature focused on the implications for developing facilities for those leagues, and the noticeable lack of scholarly attention or recognition of basketball and hockey facility evolution, an opportunity is present for sport management scholars to study NBA and NHL facilities. Before undertaking such an exercise, a scholarly review of the extant literature on NBA and NHL facilities is necessary. The current review presents literature on the three most common topic areas of interest related to NBA and NHL facility evolution: (a) Sport Facility History; (b) Political-Economic Impact Studies; and (c) Urban Studies. These topic areas provide a wholistic representation of the types of research treatments given to major professional hockey and basketball facilities, as well as mixed methodologies that have typically been embraced by sport management and other scholars.

**Basketball and Hockey Facility History**

Sport facility histories help demonstrate the unique circumstances related to facility development and construction at specific points in history, as well as changes that have occurred over time. The typical approach to this topic, as lamented by Shubert (2016), is either the specific analysis of one facility, one city, or a small geographic grouping of cities’ facilities. While this is certainly the result of temporal and practical limitations, the result is a less developed, and less cohesive understanding of the collective history of hockey and basketball facilities. An additional source of facility information is demonstrated in general comprehensive team and league histories. Within this section, sport facility history is presented from broad to increasingly more narrow scopes of study. After examining sport and league histories, the review surveys geographic groupings of facilities, and ultimately concludes with works dedicated to specific teams and facilities.
Sport and League Histories

Shubert (2016) produced the most significant and comprehensive historical accounting of hockey facilities in the United States and Canada. An architectural historian by trade, the author traced the evolution of hockey and skating facilities from the open air, natural surface spaces of Canada, the U.S., and the United Kingdom. Shubert presented the architectural changes to the facilities as occurring over six stages within four phases of development. Shubert also incorporated elements of cultural history, specifically the rise of rock and roll music and capitalism to conclude a troublesome state of hockey facilities resulted from the perversion of American (i.e., U.S.) capitalism. Although the final quarter of his book is more cultural than facility discussion, Shubert provided interesting information on how facilities changed over time to accommodate the needs of managers and customers.

In his dissertation work, Lubrano (2005) also compared design elements of arenas built before and after 1992. By synthesizing information gleaned from architects and industry professionals, Lubrano produced a detailed accounting of the financial implications of facility design, construction, and pricing. The author sought to determine, in part, whether new facilities benefitted or harmed the average fan viewing experience, concluding that the average fan benefits from new facility construction. Within, Lubrano provided the following table that generally differentiated pre-1992 and post-1992 arenas:

Table 2.1. Conventional vs. Modern Arena Design Differences

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sight lines</td>
<td>Obstructed</td>
<td>Unobstructed</td>
</tr>
<tr>
<td>Seating Tier</td>
<td>Three to Four</td>
<td>Two</td>
</tr>
<tr>
<td>Luxury Suites</td>
<td>None to Limited</td>
<td>Extensive</td>
</tr>
</tbody>
</table>

(Table 2.1 Continued)
<table>
<thead>
<tr>
<th></th>
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<th></th>
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</thead>
<tbody>
<tr>
<td>Premium Club Seating</td>
<td>None to Limited</td>
<td>Extensive</td>
</tr>
<tr>
<td>Exterior/Interior Finishes</td>
<td>Basic</td>
<td>High-end</td>
</tr>
<tr>
<td>Clubs/Restaurants</td>
<td>Not included</td>
<td>Included</td>
</tr>
<tr>
<td>Concessions</td>
<td>Generic</td>
<td>Food Court/Branded Vendors</td>
</tr>
<tr>
<td>Souvenirs</td>
<td>Generic</td>
<td>Team store</td>
</tr>
<tr>
<td>Seating</td>
<td>Narrow/Plastic</td>
<td>Wide/Upholstered/Cup holders</td>
</tr>
<tr>
<td>Concourses</td>
<td>Narrow</td>
<td>Wide</td>
</tr>
<tr>
<td>Restrooms</td>
<td>Minimal #</td>
<td>Expanded (especially for women) Marble/Tile</td>
</tr>
<tr>
<td>Flooring</td>
<td>Concrete/Vinyl</td>
<td></td>
</tr>
<tr>
<td>Audio/Visual</td>
<td>Basic</td>
<td>High-end</td>
</tr>
</tbody>
</table>

*Note. This table is from (Lubrano, 2005, p. 46).*

Of practical use to those interested in facility histories, Shubert (2001) also described specific facilities that can be identified as watershed hockey arenas. For instance, Shubert argued Montreal’s Westmount Arena, built in 1898, was a watershed facility because it demonstrated a shift from participation to spectatorship. The 1920-1931 period appeared as another important era of arena construction focused on consumers. As an example, “in addition to fire-proof construction and the nearly universal installation of artificial ice, audiences now basked in the comforts of heating, air conditioning, more washrooms and food concessions, padded seats, restaurants, and bars” (Shubert, p. 1). Furthermore, the author identified the improvements of arenas during the 1920s could be associated with facility designers as some arenas emerged through the work of theatre architects like Thomas Lamb (New York) and Charles Howard Crane (Detroit). Later, transformation of professional sport arenas changed over time to be overwhelmingly commercial for the “mobile, affluent, and thrill-seeking consumer” (Shubert, p. 1). Support for this assumption is strong as Van Lopik (1952), president of the International
Association of Auditorium Managers, suggested “municipal arenas [rinks], in most cases, were built and are being built to serve community needs and not necessarily to make profits” (p. 62).

Shubert (2016) defined the hockey arena as a facility built for the expressed purpose of consumption related to presenting and watching hockey. In Canada, the Montreal Forum and Maple Leaf Gardens were hockey arenas. In the U.S., Chicago Stadium, Detroit’s Olympia Stadium, and Boston Garden could be classified as classic hockey arenas. This is in contrast to Shubert (2001) who characterized early hockey rinks (i.e., not arenas) as designed for participation and not spectating. Thus, the interiors of ice rinks were poorly lit, featured a “dense smoky atmosphere” and soft, often “snow-covered ice surfaces that typically prevailed by games end, to say nothing of the limited views and lack of protection from flying pucks and bodies” (p. 1).

Beyond five of the NHL “Original Six” facilities Shubert (2016) identified as hockey arenas, the author suggested only three other facilities constructed in the 20th century could be designated as hockey arenas. Three U.S. West Coast facilities constructed in the 1960s (e.g., Los Angeles’s Great Western Forum, Oakland-Alameda County Coliseum Arena and Portland’s Veteran’s Memorial Coliseum) represented unique architectural characteristics, like concave roofs, exposed steel exteriors, and as is the case in Oakland and Portland, glass shells that offer views in and out of the arena less attached to their local civic history (Shubert, 2016). Related to the latter point, more recent facilities, such as that constructed in Vancouver (i.e., GM Place), were similarly criticized for their “placelessness or sameness” in that the commercial aspects of the facility were like that offered in other locations (Shubert, 1998, p. 52). More specifically, Shubert (1998) criticized the new hockey arenas built across North America during the 1980s and 1990s, characterizing them as homogenized because of various entrepreneurial expectations that prompted similar features such as office building aesthetics and fast food ambiance. Other
criticisms concerned television. For instance, Shubert (2001) suggested the addition of television greatly impacted sport facilities by making the live attendee “the equivalent of studio guests; at worst, they are background, mere television props” (p. 1).

Beyond Shubert’s (2001, 2016) study of professional hockey arenas, attempts at comprehensive understanding of the multipurpose sport facility are scant. However, works focused on the development of professional hockey and basketball leagues do provide some detail of the business realities facing the leagues, as well as descriptions of some of the facilities wherein the sports are showcased. Reasonably extensive examinations of the histories of the NBA (e.g., Koppett, 1999; Peterson, 1990; Surdam, 2012) and NHL (e.g., Bass, 2011; McKinley, 2006) better contextualize the evolutions of the often-improvised facilities used by teams. As examples, Surdam pointed out that a leaking roof in Syracuse, NY resulted in a warped hardwood floor that made dribbling difficult, while Bass recalled the departure of the Montreal Wanderers franchise from the NHL in 1918 because their wooden arena caught fire.

Beyond the general histories of the leagues and sports, the evolution of hockey and basketball was discussed within marginalized communities such as the French Canadiens (Ransom, 2014) and African Americans (Kuska, 2004). For instance, Kuska profiled the evolution of early 20th century basketball in the black communities on the East Coast of the United States. As a contextualizing note, Mid-Atlantic and Northeastern black citizens operated in separate sporting societies from their white peers. That being expressed, Kuska’s retelling of the early black experience with basketball demonstrates the overall importance of histories of the sport and leagues to gaining insights into the changes in facilities. The most important black figure in the proliferation of basketball at the beginning of the 1900s was Edwin Bancroft Henderson. Henderson was instrumental in establishing the Interscholastic Athletic Association, out of which grew the first dominant amateur and collegiate black basketball teams in
Washington, D.C. that played their contests in segregated secondary schools due to lack of access to YMCA facilities and public parks.

Kuska (2004) further presented the diffusion of basketball within the black communities along the Eastern Seaboard led first to serious amateur club contests and eventually professionalization of athletes as New York City, NY came to represent the pinnacle of black basketball. Black and white entrepreneurs, such as Harlem Renaissance Casino owner William Roach and promoter Jess McMahon used basketball to fill up otherwise open event schedules to the total of three or four games per week, ultimately establishing the preeminent black basketball team in the U.S., the Harlem Renaissance Five (Harlem Rens) (Kuska). Though originally playing the game in a converted ball room, the Rens also barnstormed across the country seeking profits and eventually won the 1939 National Basketball League championship. This occurred shortly before the 1942-1943 Chicago Studebaker Flyers were the first professional sport team to be integrated (Staffo, 1998).

Now defunct, but competitive leagues similarly offer insights into the business of professional hockey and basketball and how facilities were utilized. Pluto (1990) and Willes (2004) provided informative and entertaining accounts of the business realities facing the American Basketball Association (ABA) and World Hockey Association (WHA) respectively. From the hockey context, Willes demonstrated the problems the upstart hockey league’s players and managers experienced in attempting to utilize older facilities in decaying urban neighborhoods, as well as issues related to facilities embracing suburban locales. In Houston, TX, the Houston Aeros franchise played its home games at the Sam Houston Coliseum, a facility retrofitted for ice hockey in 1946. Within, the Sam Houston Coliseum featured chicken wire as the see-through barrier above the wooden boundary.
Willes (2004) further described facility disfunction, noting the Edmonton Oilers originally played in the Edmonton Gardens, a livestock pavilion that supported player benches several feet above the ice surface, making substitution difficult. The case of the Cleveland Crusaders franchise illuminates additional problems regarding the location of some facilities. The franchise played its games in the Cleveland Arena, and later the Richfield Coliseum. Willes indicated the deteriorating neighborhood around the arena and increased crime rates made attending games, as a fan or employee, unsafe. The move to the rural Richfield Coliseum was also problematic as necessary infrastructure to accommodate fan needs were not in place (e.g., the facility was only accessible via a two-lane road and had no direct highway access).

City Surveys

Historical surveys of sport facility use within in a specific location provide greater detail than the general histories of sports and leagues. A relevant distinction within this subcategory of facility history is that the characteristics of the sports are not the object of the study, the more delimited focus of the project affords greater attention to the facilities. As an example, Trumpbour (2007) and Weiner (2000) produced works that evaluate how facility financing deals were arranged, while Elzey & Wiggins (2015), Foulds (2005), and Swanson & Wiggins (2016), presented the evolution of sport within Washington, D.C., Boston, and Philadelphia. Of these works, only Weiner evaluated the facilities of a city outside of the Mid-Atlantic or Northeast U.S.

Trumpbour (2007) described the cases of new facility development, in Boston, Cincinnati, New York, and Pittsburgh. The primary targets of Trumpbour’s work focused on understanding the circumstances that resulted in legislatures voting to support professional football and baseball franchises in constructing new facilities and subsequent guarantees of those franchises in their metropolitan areas for the foreseeable future. The common thread between
these cities concerned the identification of some segments of the population with the teams as culturally important and of the various franchises’ awareness of that fact. Another shared belief suggested that the presence of a major league team elevated the status of a city to leverage municipalities or even state governments to arrange facility financing partnerships favorable to the teams. Weiner (2000) presented the process of a city (i.e., Minneapolis-St. Paul, MN) acquiring, losing, and striving to keep major professional sports teams. Beyond the various machinations of Minnesota politicians and franchise owners to influence construction, Weiner presented the problems of updating some, but not all facilities for teams in a city. Minnesota serves as an interesting case in that one metropolitan area ultimately built multi-purpose facilities for a primary basketball tenant (i.e., Target Center) and a primary hockey tenant (i.e., Xcel Energy Center) following the departure of one team (i.e., North Stars) to pursue a more lucrative offer in a non-traditional hockey city (i.e., Dallas, TX).

The notion that the presence of a major league franchise is important to the esteem of a city is more clearly gleaned from the sports histories of specific cities. Elzey and Wiggins (2015) profile of Washington, D.C. sports and Swanson and Wiggins (2016) telling of Philadelphia sports history position the facilities within these cities’ sport culture. In the case of Washington, D.C., the professional sport facilities reflected a city known for gridlock. Specifically, it was demonstrated that competing federal, state, and municipal government interests complicated the management of D.C. sport facilities (Elzey & Wiggins). An important contribution to understanding multipurpose facilities that Elzey and Wiggins trace, covered the evolution of arenas over time, from Riverside Stadium (pre-1940), to Uline Arena (1941-1973), to the concave-roofed Capital Centre with increased emphasis on luxury seating (1974-1997), and finally the return to downtown D.C. in the MCI Center (now Capital One Arena) with $1 million luxury suites (1998-present). Swanson and Wiggins followed a similar accounting of how
facilities evolved over time in Philadelphia but with attention paid to quirkier and more iconic facilities, like The Palestra. Foulds’s (2005) treatment of Boston sports arenas is more straightforward, providing clear examples of dates of operation, ownership, primary tenants, and relevant facility statistics, such as capacity and floor size of multipurpose arenas like Boston Arena, Boston Garden, and Fleetcenter/TD Garden.

**Specific Facilities**

Works dedicated to specific facilities and teams afford scholars the opportunity to engage the specific contextual circumstances that influenced construction decisions. These sources range from serious scholarly works to team yearbooks directed at fans and youth populations. While few, if any, scholarly books examine a sole facility, academic journal articles in social science journals do consider the cases of specific facilities. For example, Field (2002, 2007, 2008) explored multiple aspects of Maple Leaf Gardens, the facility constructed in 1931 to house the Toronto Maple Leafs hockey team. Field showcased the intentional decisions Conn Smythe, the legendary hockey owner, made to attract and accommodate on-site and remote fans by embracing new technologies and catering to female populations. Elsewhere, Shubert (1998) characterized arenas like Montreal’s Forum as a spiritual place or landmark for cities because “family histories, stood as a symbol of the national spirit, and functioned as a microcosm of the larger society outside… a place where myths are played out in weekly rituals” (p. 50). However, *Montreal Gazette* writer Michael Farber challenged the notion that the Forum was a special building since its renovation devastated the character of the original building, specifically citing the Forum II was “as distinguished architecturally as an M Store” (Gunderson, 2004, p. 77). Other articles also address the actions of facility managers, such as Tex Rickard’s displays of marketing prowess and business acumen in arranging for the construction of Madison Square Garden III (Seifried & de Wilde, 2014). Less important facilities are also addressed by
historians, as is the case with Christianson’s (2004) discussion of Washington D.C.’s 6,000-seat Uline Arena, as well as the facility uses of less prominent and failed or defunct franchises (Fisher, 1993; Rhee & Wong, 2018).

Team histories can also provide valuable information on the facilities and business of basketball and hockey. Brewitt (1975) presented the role television executives played in NHL expansion by insisting the placement of a franchise in the expanding media market of Oakland, CA in 1967. Beyond external business influences, the popular fan histories do contain important facts regarding facility costs and construction. For example, Detroit’s Olympia Stadium contained 74,880 feet of coolant piping to artificially create the ice surface (Greenland, 1997). Popular histories also capture fan reaction to facilities, which is particularly important in understanding how fan nations reacted to the dismantling of long-established facilities like Boston Garden in favor of the more commercially viable Fleet Center/TD Garden (McFarlane, 1999).

Several other works also focused on innovations associated with particular arenas in specific cities. For instance, Shubert (2016) highlighted the decision by facility managers in the late 19th century to switch from gas lamps to newly invented electric lights, resulting in an average 14-degree Fahrenheit decrease in interior temperature. Elsewhere, Shubert (2001, 2016) discussed the conversion of facilities from wood to steel and concrete (i.e., fireproofing) and the additions of air conditioning, artificial ice, washrooms, concession stands, and restaurants/bars as important features offered by the Toronto Maple Leafs. Further innovations offered at Maple Leaf Gardens included advanced surround sound systems and game clocks to help increase the spectacle/drama.

Describing modern arenas, Shubert (2001) argued they were built to promote consumption (i.e., exchange of money for products and services) through additional points of
sale, boutique restaurants, team shops, food courts, and luxury boxes and/or club seating.

According to HOK architect Rick Martin, “twice the number of restrooms called for in the code” are built “to make sure that spectators lose no time to non-shopping activities” (Shubert, p. 2). Furthermore, concessions were built within viewing or easy travel distance to all seating areas to prompt initial or evoke continued spending. Other features of modern facilities include steep seating to improve television camera angles for both remote spectators and live attendees who increasingly look toward large video boards to watch hockey and basketball events. Expectedly, these additions have increased the size and cost of facilities. For instance, HOK architect Chris Carver suggested arenas built during the 1960s offered concourses of 400,000 square feet while those built in the 1990s typically ranged from 650,000 to 700,000 square feet (Shubert).

Lastly, Komisarchik and Fenn (2015) also provided important information about changes to NHL and NBA arenas regarding luxury suite and club seating as important innovations to acknowledge. For instance, with respect to club seating, NBA arenas saw an increase from 1,515 before 1995 to 2,487 through 2010. Meanwhile, the average number of NHL club seats increased from 1,891 before 1995 to 2,578 through 2010. Regarding luxury suites, the number fell across the NBA from 96 before 1995 to 77 through 2010. NHL arenas similarly experienced a decrease. Specifically, the average number of luxury suites for NHL arenas decreased from 110 to 86 after 1995 but notably, like NBA arenas, the square footage of this space was increased comparing pre and post-1995 facilities.

**Political-Economic Impact Studies**

The unanimity with which scholars repudiate the positive economic benefits (e.g., per capita income, jobs, sales) of professional sport facilities overall is also noteworthy. Within the context of sport facility construction, economic impact studies seek to determine the economic benefits sports facilities bring to municipalities. Economic impact studies routinely focus on
three topics as justification for the neutral to negative impact of sport facility construction: (a) Substitution Effect; (b) Leakage; and (c) Government budget shortfalls (Siegfried & Zimbalist, 2000; Swindell & Rosentraub, 1998). Siegfried and Zimbalist explained the substitution effect as the finite net spending allotment of individuals and groups within a specific area. Additionally, leakage, or the multiplier effect, is how often or for how long sport teams and employees spend money in the local area. Finally, budget shortfalls suggest little or no tax revenue is generated by the facilities. Combining these three concepts generally results in net losses for cities building new facilities for teams (Siegfried & Zimbalist). In addition to these results, Prophetter (2016) examined the impact of NBA arenas on per capita income and did not find them to be statistically significant using the traditional model of stadium economic development. Still, despite these findings, Johnson, Whitehead, Mason, and Walker (2012) found the willingness to pay for downtown arenas and found preferences for arenas to be built in urban locations because downtowns are more “lively and prosperous” and more likely to support positive public goods such as civic pride, psychic income, and community identity (p. 207).

Expectedly, several studies investigated the impact of professional franchises and facilities on the economics of municipalities. This interest is not surprising given the volume of new, publicly-financed facilities built since 1990. Baade & Dye (1988) and Noll and Zimbalist’s (1997) edited work are often cited in the literature for their contribution in this area and general findings that new stadiums or arenas do not significantly increase incomes in their markets or positively impact the economy. Importantly, the composite works within Noll and Zimbalist’s text do not suggest that facilities are not profitable for teams, and indicated teams make calculated decisions, such as concessions offerings in an attempt to increase profitability.

One factor that may be overestimated, or less well understood in contracted economic impact studies is the honeymoon effect. The honeymoon effect measures expected attendance at
a facility as it ages (Zygmont & Leadley, 2005). The honeymoon effect assumes that attendance will increase immediately after the opening of a new facility, but that attendance levels and ticket sales will eventually plateau or decline over time (Coates & Humphreys, 2005; Zygmont & Leadley). It is worth noting an important distinction between facility capacity for NHL and NBA events regarding the different space requirements between hockey and basketball and how it impacts seating capacity and configuration (Lubrano, 2005). The standard NHL rink is 200 feet long by 85 feet wide, while the NBA court measures only 94 feet long x 50 feet wide. As a result, a facility hosting both an NHL and NBA franchise would be expected to have a greater capacity for the latter events over the former.

Coates and Humphreys (2005), as well as Leadley and Zygmont (2005), investigated the honeymoon effect in contemporary NBA facilities. Coates and Humphreys found that NBA teams could expect equivalent of greater than 18,000 tickets sold per season over a period of eight seasons in a new facility. Additionally, the strength of the honeymoon effect peaks between the fourth and fifth season of existence. Leadley and Zygmont (2005) similarly found in their investigation of the honeymoon effect in NBA facilities that attendance increases as high as 20% can be expected for a period of four years with attendance figures leveling off after 10 years. Leadley and Zygmont (2006) continued their examination of honeymoon effect on NHL attendance. Their results were similar to those of their NBA study. NHL attendance figures overall approached a 20% increase in the first four years. Interestingly, the length of the honeymoon effect increases to eight years for facilities constructed after 1994 (Leadley & Zygmont, 2006).

Economic impact studies and the investigations of the honeymoon effect are seen as important and informing, particularly for their value in potentially crafting facility financing schemas (Coates & Humphreys, 2005; Leadley & Zygmont, 2005, 2006). Facility funding, at
least in the U.S., evolved throughout the 20th century as the result of federal tax legislation. Williams and Seifried (2013) outlined the three legislative changes to the U.S. tax code and how the changes affect facility financing. Most recently, the Tax Reform Act of 1986 altered the impact of the Revenue Expenditure and Control Act of 1968 (RECA). Previously, RECA extended tax exemptions from the Revenue Act of 1913 to bonds for sports facilities where at least 25% of their services were used by a private tenant and at least 25% of the revenues from the facility were used to service debt. The Tax Reform Act of 1986 ended the sport exemption and restricted bond interest exemptions to public facilities with no more than 10% nongovernment use, resulting in the contemporary debt financing arrangement between governments and private sports teams.

During the latter part of the 20th century professional sport franchises became increasingly adept at leveraging their history and ability to relocate as a way to negotiate advantageous agreements with their host cities to secure new facilities. Fisher (1993) acknowledged that team owners’ loyalty was to profits, not necessarily cities. For this reason, and the volatility of the early years of the NBA and NHL, relocation became accepted practice. Nonetheless, as leagues stabilized in size by the end of the 20th century, teams within cities became increasingly important symbols of those municipalities and states (Danielson, 1997). Danielson and Shubert (1998) suggested that teams have capitalized on their symbolic status by strategically threatening to move, not only enhancing their status position, but that of their leagues as well. Johnson, Groothius, and Whitehead (2001) and Prophetter (2016) demonstrated that teams do provide limited public goods to cities, however, those benefits do not appear to justify large-scale public financing projects given their relatively low return on investment.

The claims of sport teams and their stakeholders that teams do provide some worthy intangible goods (Danielson, 1997; Swindell & Rosentraub, 1998; Trumpbour, 2007) is
dismissed by Siegfried and Zimbalist (2000) and Prophettor (2016) to some degree by indicating there is no meaningful evidence that arenas, even as part of a larger development plan, will result in any meaningful changes for neighborhoods or cities. The authors are equally critical of the idea of sports franchises and events elevating the status of a city, again as they found no meaningful evidence that tourism, for example, improved because of a sports franchise or facility. Alternatively, Prophettor noted it is the city that produces the economic development of arenas and not vice versa. With respect to benefits, several scholars discussed a rationale to accept social and/or psychological outcomes related to civic pride and psychic income (Crompton, 2004; Groothuis, Johnson, & Whitehead, 2004; Groothuis & Rotthoff, 2016; Johnson et al., 2001; Lubrano, 2005; Sanderson, 1999; Schwester, 2007; Seifried & Clopton, 2013), revitalization of dilapidated areas, and improved land usage were also recognized as intangible outcomes (Lubrano; Seifried & Clopton; Swindell & Rosentraub, 1998).

As mentioned previously, Johnson et al. (2012) found that support for downtown stadium construction was preferred by citizens because those facilities produced psychic income. Psychic income, or the perceived psychological benefits residents gain from having a team in their city has become an increasingly popular concept when teams and stakeholders seek to garner support for new facility financing (Crompton, 2004). Several scholars have indicated that while teams may not provide tangible economic benefits to the city, the citizens value the team’s presence. Johnson et al. (2001) found that residents of Pittsburgh viewed the presence of the NHL Penguins as beneficial. Schwester (2007) found that residents in Baltimore and Cleveland believed their new baseball stadia benefitted and enhanced the reputations of the cities. Additionally, Seifried and Clopton (2013) noted that sport facilities can serve as social anchors that help to create community identity. However, and importantly, Groothuis et al. (2004) and Groothuis and Rotthoff (2016) found that while citizens believe they receive benefits from the
presence of major sports teams and hosting mega events, they generally do not support public funding of facilities.

Finally, little scholarly work acknowledges that professional sports teams are not necessarily under the obligation to benefit their communities economically (Seifried, 2005). Furthermore, while the construction of new facilities may not offer any benefits to the totality of the city population, that the facilities are constructed, and landscapes altered is, nonetheless, important for the understanding of how sport and sport facilities alter society. Within the following section, the migratory patterns of facility construction are considered, as well as potential consequences of supplementary projects, such as infrastructure improvements, to the daily lives of citizens near the sport facilities.

**Urban Studies**

An examination of the history of professional sports facilities designed for baseball and football produces a clear pattern of construction that began in cities, moved to the suburbs, and returned to the city limits during the 20th century (Seifried & Pastore, 2009a, 2009b). In their study of the modernization of Major League Baseball and National Football League facilities, Seifried & Pastore (2009a) indicated that the first permanent baseball facilities were constructed on less expensive land at the edge of cities. As cities expanded during the 20th century, neighborhoods grew around the stadia, making them fixtures, and in some cases, physical embodiments of the neighborhood (i.e., jewel boxes). As suburbanization corresponded with increased economic prosperity in the 1950s and 1960s, teams followed their wealthier consumers and the baby-booming population increase to suburban locations typified by large parking lots and increased emphasis on technological advances, like television broadcast accommodations (Seifried & Pastore, 2009b). By the 1990s, teams seeking to produce more revenues from luxury amenities that the multi-purpose “cookie-cutter” ballparks and stadiums were unable to produce,
returned to the city in new single-purpose facilities (Seifried & Pastore, 2009b). As an example, Lubrano (2005) identified the lack of luxury suites (n=12) and club seats (n=0) as a major reason the Charlotte Hornets lost $15-20 million in the late 1990s in the Charlotte Coliseum.

Thornley (2002) suggested that as part of the return to cities, professional franchises make decisions to inhabit one of three urban settings, the city center, the city limits, or gentrifying neighborhoods. Within this modeling, the city center refers to the once-thriving downtown of major cities. For Thornley, the idea of positioning a stadium in this location is meant to rejuvenate the city’s economic core. The city limits approach is more in line with Seifried and Pastore’s (2009b) suburbanization model, where the franchise is seeking more affluent fans, likely on less expensive land. The gentrification model is typically utilized by teams seeking to remain within their specific neighborhood, but who require a new facility. This third model is particularly useful in understanding the construction of replacement multipurpose professional hockey and basketball arenas. For example, the replacement facilities of the “Original Six” franchises (e.g., United Center, TD Garden, Madison Square Garden IV, Joe Louis Arena, Scotiabank Arena, Bell Centre) remained within the city.

The location of new facilities and their relationship to economic impact is less well understood. Traditionally, land away from the city center was pursued because it is less expensive. However, Chapin (2000) reviewed the extant literature on facility geography, revealing the construction trend of returning the facility to the city is, on the surface, counter intuitive to the established behavior of seeking inexpensive land. Choosing to locate the facility in the city requires greater resources to acquire land. Additionally, there is limited accessibility to parking for upper and upper middle class suburban fans. Therefore, locational incentives (e.g., tax abatements, low interest loans, job training, and infrastructure improvements) have been offered to help “influence the locational decisions of firms” (Swindell & Rosentraub, 1998, p. 37).
Chapin explained this paradigm shift as a result of the pursuit of corporate purchases of luxury seating, the desire to maximize the utility of the sport facility space (e.g., offices for non-sport businesses), and desire to keep the venue accessible to the populations providing the public subsidies.

Sport franchises, particularly those within the NHL and NBA have a more recent history of relocating in pursuit of profit. Regardless of sport, the pattern of behavior demonstrated by team ownership has been to make locational choices with consideration given to the financial health of the team (Bélanger, 2000). As the economic situations in cities have changed, teams pursued more fiscally advantageous facility sites capable of producing incredible spectacles (Bélanger). This profit-seeking behavior resulted in a shift in facility placement, where teams now desire to acquire more expensive in-city land in order to gain greater access to lucrative corporate luxury seat purchases. Bélanger’s description of the Montreal Canadiens move from the Montreal Forum to the Molson Centre illustrates this point well. For instance, according to Bélanger “the forum no longer measured up as a prime vehicle for capital accumulation: no room for added luxury boxes; too uncomfortable for new upmarket spectators; too expensive to renovate for enhanced media hook-ups and new digital media formats” (p. 390). Such shifts, though profitable and beneficial for the teams, have resulted in negative consequences for city residents, especially concerning waste and energy usage.

As previously discussed, the overall positive economic impact of facilities is not significant. However, Nadeau and O’Reilly (2006) found that though economic impact of facilities is minimal, when the facility is located in the city, it is more beneficial to the local economy than if it were situated at the city edge. Despite Nadeau and O’Reilly’s finding of limited downtown economic benefit, scholars also suggested that sport facilities have a negative influence on their communities. The concern over facility impact on property values has received
scholarly attention. In the literature, no negative relationship exists between property values and distance from an NFL facility (i.e., FedEx Field) (Tu, 2005).

Humphreys and Nowak (2017) found that when Seattle and Charlotte lost their NBA franchises the property values of homes near the arenas increased. This finding suggests that the multipurpose facility may not be a negative for its immediate neighborhood, but the presence of a major sport franchise is, which may have significant ramifications for tax incremental financing models of construction (Humphreys & Nowak). Cebula, Austin, Wildener, and Belton (1997) further demonstrated potential waste of public money with their finding that public transportation lines that service NBA arenas are not used for most of the season. They theorize that this is because the midweek nature of many NBA games makes public transportation to games complicated. This is problematic as money spent to create mass-transit access to facilities may be a waste of resources.

Sustainability issues have been brought to the forefront as another issue for those interested in urban studies (Bonafe, Convey, & Goulding, 2014; Mallen & Chard, 2012). For instance, Bonafe et al. promoted programs designed to support sustainable living through identifying tax incentives sport facility owners can utilize if they implement activities to reduce waste and energy usage. Changing lighting from metal halide fixtures to light-emitting diode (LED) as well as the use of daylight harvesting glass walls exist as some examples on how a facility can improve energy efficiency (Bonafe et al.). Regarding heating, ventilation, and air conditioning (HVAC), Bonafe et al. suggested more arenas could utilize “energy recovery ventilation, geothermal and thermal storage, to greatly reduce energy usage and potentially qualify for a large EPAct HVAC tax deduction” (p. 20.) Elsewhere, Ciletti, Lanasa, Ramos, Luchs, and Lou (2010) similarly recognized waste as a problem connected in the buyers mind about sport facilities by specifically citing garbage, water usage, and chemicals (e.g., asbestos,
fertilizers, and pesticides) as harmful agents. Furthermore, like Bonafe et al., Ciletti et al. argued the incorporation of business practices that were environmentally friendly could provide benefits to the bottom line by reducing operating costs and waste production.

Ciletti et al. (2010) proposed such efforts by sport facility owners are attractive because they potentially communicate to current and prospective “ecosumers” that they embrace sustainability (p. 65). Such changes may also assist a building in securing status as a Leadership in Energy and Environmental Design (LEED) certified building/program (Mallen & Chard, 2012). Interestingly, Mallen and Chard identified only “a few Canadian sport facilities have achieved the LEED certification for building construction” (p. 232). McCullough and Kellison (2016) also discussed sport facility consumption patterns but at the local consumer level. For instance, McCullough and Kellison highlighted the utility of “recycling programs, community focused events, and basic fan engagement activities” as opportunities to improve facility sustainability. McCullough and Kellison also specifically connected the nostalgia of pond hockey to climate change narratives to prompt spectator participation. In essence, the authors acknowledged the leverage that a sense of place (SOP) could provide sport organizations to evoke specific desired (revenue saving) behaviors out of attendees.

Besides sustainability, Frater (2012) studied the conservation of Canadian hockey arenas in an effort to help save those facilities from irreparable harm (e.g., loss of heritage). Frater presented seven reasons ice hockey arenas are being abandoned or demolished (p. 19). Those reasons include:

1. Lack of awareness of cultural value that heritage arenas possess;
2. Newer arenas perceived to be better;
3. Lack of a general policy concerning the conservation of Canadian hockey arenas;
4. Older arenas are poorer in revenue generation (i.e., lack of private boxes, less seating, amenities, perceived vision of less comfort);
5. Decrease in the participation of youth enrollment in hockey (high fees);
6. Budgetary constraints (how many arenas to finance);
7. Arenas are turning away from single use to multiple use
Frater suggested hockey arenas in Canada may realize cultural significance because of their aesthetic, historic, scientific, and social value. Thus, Frater presented eight recommendations for heritage conservation regarding arenas.

1. Formation of a “Heritage Arena Conservation Network”
2. Creation of a 'Network of Heritage Arenas'
3. Initiation of a 'Friends of Heritage Arenas' foundation
4. Definition of 'Criteria for Heritage Arena Status'
5. Establishment of 'Best-Standards and Practices Guidelines'
6. Execution of a 'Management and Action Plan'
7. Implementation of an 'Awareness, Education, and Promotion Plan'
8. Passing of a 'Heritage Arena Protection Act'

**Facility Conclusion**

This review of literature examined various ways in which scholars and sport enthusiasts considered major professional multi-purpose sport facilities in North America. While scholars approached the study of professional hockey and basketball arenas utilizing different methodologies, there is little understanding of the facilities themselves. Though Shubert (2016) put forward a comprehensive account of hockey facilities, the architectural focus of the work limited its applicability in some instances as the author was bound to consider utility and functionality. Moreover, reviews of leagues also present functional problems, such as Surdam’s (2012) description of leaking roofs and warped floors in Syracuse, NY. The histories of franchises, facilities, and cities often focus too frequently on the circumstances (e.g., political-economy factors) that led to construction or descriptions of the facility outside the context of what was happening in the U.S. and Canada. Furthermore, the apparent agreement of the scholarly community on the lack of benefits brought by these facilities to their host cities, though informative, does little to address the purpose of the facility, but the flaws in public-private financing arrangements.
Overall, the extant literature on the evolution of sport facilities provides commentary on, and criticism of, the management of sport teams. Cook and Glickman (2008) noted that an understanding of U.S. history requires an understanding of consumerism and capitalism. Professional sport organizations are profit-seeking entities. As such, it appears appropriate to examine the evolution of major professional hockey and basketball arenas from the perspective of capitalist sport managers. Modernization theory attempts to describe societal changes brought about by individual and cultural responses to economic development (Inglehart & Welzel, 2005; Thornton, 2005). Furthermore, Houlihan and Green (2009) emphasized the importance of improved consumer services to cater to various classes of consumers. Therefore, the evolution of professional hockey and basketball facilities warrants a critical examination from the sport management perspective through the lens of modernization.

Modernization in Sport History and Sport Sociology Journals

The explanatory capabilities of modernization theory have been applied in academic circles for more than two centuries. As a theoretical and organizing construct, modernization researchers traditionally used historical and economic data to describe the evolution of societal and organizational changes brought about by individual agency, structural factors, and cultural responses to economic development across a wide variety of contexts (Inglehart & Welzel, 2005; Thornton, 2005). So (1990) noted that the foundation of modernization theory can traced to the scholarly desire to explain and understand the Western world following the political and economic changes brought about by the French Revolution and Industrial Revolution respectively. For more than 100 years scholars such as Adam Smith, Henry Maine, and Ferdinand Tonnies utilized modernization theory to understand how communities and countries changed over time (Inglehart & Baker, 2000; Inglehart & Welzel; Seifried & Novicevic, 2017). Beginning in the 20th century, modernization theory evolved as scholars like Max Weber, Louis
Wirth, and Talcott Parsons contemplated the changing realities in the U.S., highlighted by religious freedom (Weber, 2011), increased urbanization (Wirth, 1938), and interpersonal relationships (Parsons, 1951). In addition to explaining the evolution of change by societies and organizations, modernization scholars also used the construct “to predict their future shapes, patterns, and constructions” (Seifried & Novicevic, 2017, p. 52).

The predictive component of modernization theory grew in importance following World War II as the U.S. government sought to develop policy decisions in order to assert its influence in a rebuilding Europe and emerging Third World by financially supporting academic research of the modernizing process in developing nations of Africa, the Far East, and the Middle East (Billet, 1993; So, 1990). As a result of this support, modernization scholarship expanded throughout the 1950s and 1960s. Eventually, modernization theory drew criticism from the academic community in part because it used the U.S. of the 1950s and 1960s as the archetype of modernity (Gilman, 2003). Interestingly, Suda (1981) indicated that while modernization critics chided its practitioners for their emphasis on the U.S., neither critics nor practitioners had examined recent modernization as a process in the U.S. Although scholarly application of modernization theory diminished during the 1960s and 1970s, the thawing of the Cold War led to a resurgence in modernization scholarship (Gilman).

The purpose of this review is to assess the ways sport-based history and sociology scholars used modernization as a rhetorical strategy to explain the transition process toward contemporary society (See Table 2.2). Interestingly, minimal reviews of modernization assessed or recognized the contribution of sport scholars despite their prominence in using the construct and the significant debate it has generated, not only in the sport-based scholarly communities (e.g., Adelman, 1981, 1983, 1993; Chool-Kim, 2002; Dyreson, 1989; Guttman, 1978, 1991; Henry, Amara, Al-Tauqi, & Lee 2005; Linden, 2016; Tyrell, 1987) but generally amongst
scholars in sociology and history (Knobl, 2003; Seifried & Novicevic, 2017). This present literature review will largely focus on the use of the modernization construct through studying leading sport-based history and sociology journal articles, as well as scholarly books published in the 20th and 21st centuries. Within, the current research aims to identify and uncover different conceptualizations propagated by these scholars and not just report the outcomes of the transition process (i.e., modernity). However, regarding the outcomes (e.g., individualism, industrialization, urbanization), the current review uses these developments to understand the concept of modernization and to create an index capable of helping efforts to measure the construct for future researchers to consider.

Data, in the form of academic publications, were identified via keyword search of modernization/modernisation in various academic databases such as: SportDiscus, Project Muse, Business Source Complete, Academic Search Complete, JSTOR, LA84 Foundation, and Human Kinetics. Additional search engines provided by individual sport history, sociology, and sport management journals delivered an additional set of articles to consider. This search process produced over 40 published articles from 1981 to 2018 in a variety of outlets primarily within sport history and sport sociology. It should be noted sport management journals such as the Journal of Sport Management, Sport Management Review, European Sport Management Quarterly, and the International Journal of Sport Management were also searched but these publications offered no papers utilizing modernization theory.
Table 2.2. Sample of Modernization in 20\textsuperscript{th} and 21\textsuperscript{st} Century Sport-based Sociology and History Journals

<table>
<thead>
<tr>
<th>Year</th>
<th>Author(s)</th>
<th>Journal</th>
<th>Contribution/Highlights</th>
</tr>
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<tbody>
<tr>
<td>2018</td>
<td>Johnson &amp; Ali</td>
<td>Sociology of Sport Journal</td>
<td>Describes ecological modernization and the National Hockey League as recognized leader in professional sport</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Discusses ecological modernization and partnerships between sport organizations, government, and non-government organizations</td>
</tr>
<tr>
<td>2018</td>
<td>Millington, et al.</td>
<td>Sociology of Sport Journal</td>
<td>Discusses ecological modernization and partnerships between sport organizations, government, and non-government organizations</td>
</tr>
<tr>
<td>2018</td>
<td>Kim &amp; Chung</td>
<td>Sociology of Sport Journal</td>
<td>Contrasts ecological modernization with ecological Marxism in capitalism vs environmentalism debate</td>
</tr>
<tr>
<td>2018</td>
<td>McLeod, et al.</td>
<td>Sociology of Sport Journal</td>
<td>Considers ecological modernization and the potential expectations people may have of their governments if mega events can be used to achieve environmental objectives.</td>
</tr>
<tr>
<td>2017</td>
<td>Popa</td>
<td>International Journal of the History of Sport</td>
<td>Discusses adoption of Western-style education in Romania and use of sport to prepare men for military engagement; describes evolution of organized sport, specifically soccer.</td>
</tr>
<tr>
<td>2017</td>
<td>Vertinsky</td>
<td>Journal of Sport History</td>
<td>Summary of responses to Guttman’s works. Offers critique of modernization and constructionist history</td>
</tr>
<tr>
<td>2016</td>
<td>Linden</td>
<td>Journal of Sport History</td>
<td>Presents modernization as being popular approach to sport history through 1980s, but falling out of favor by 1990s</td>
</tr>
<tr>
<td>2016</td>
<td>Sheinin</td>
<td>International Journal of the History of Sport</td>
<td>Discusses use of mega events as modernizing agent in developing Colombia; Presents difficulty of promoting equality and modern architecture to achieve political goals.</td>
</tr>
<tr>
<td>2016</td>
<td>Tacon &amp; Walters</td>
<td>International Journal of Sport Policy</td>
<td>Describes the neo-liberal approach to sport governance which includes an increased emphasis on results and controls, such as auditing.</td>
</tr>
<tr>
<td>2016</td>
<td>Lindsey &amp; Bacon</td>
<td>International Journal of Sport Policy</td>
<td>Describes the English sport focus, beginning at the end of the 20th century on using effective programs through examination of evidence</td>
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<tr>
<th>Year</th>
<th>Author(s)</th>
<th>Journal</th>
<th>Contribution/Highlights</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>Seifried &amp; Tutka</td>
<td><em>Sport History Review</em></td>
<td>Illustrates how Southern Methodist University adapted and switched facilities to provide elite, professionalized atmosphere</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>East Asia modernized by creating sporting associations, events, and infrastructure; adopting western sport ideals of strength; diffusion of health and fitness to West</td>
</tr>
<tr>
<td>2015</td>
<td>Wang</td>
<td><em>International Journal of the History of Sport</em></td>
<td>Sport can be used as a modernizing agent or a vehicle to view modernization; Western institutions and education can introduce formal sport; Government creates recreation access in rural areas</td>
</tr>
<tr>
<td>2015</td>
<td>Sotomayor</td>
<td><em>Journal of Sport History</em></td>
<td>Discusses problematic nature of ludic diffusion and how cultures modified Western sport</td>
</tr>
<tr>
<td>2015</td>
<td>Reid &amp; Reid</td>
<td><em>Journal of Sport History</em></td>
<td>Sport is increasingly part of modern English governance; emphasis on results and control measures. Modernization as adoption of Western (European Soccer) sport business practices and accounting; government regulation of sport</td>
</tr>
<tr>
<td>2014</td>
<td>Adams</td>
<td><em>International Review for the Sociology of Sport</em></td>
<td>Technology altered the exercise patterns of indigenous populations; improved infrastructure increased connectivity; social Darwinism shunned after WWII</td>
</tr>
<tr>
<td>2013</td>
<td>Pedersen</td>
<td><em>International Journal of the History of Sport</em></td>
<td>Adopting Western-style education to help create a modern military; physical education for health; German sport influence</td>
</tr>
<tr>
<td>2013</td>
<td>Lukuslu &amp; Dincsahin</td>
<td><em>International Journal of the History of Sport</em></td>
<td>Establishment of club system and facility construction in affluent areas; increased spontaneous play in lower class neighborhoods; government regulation and creation of public sport place</td>
</tr>
<tr>
<td>2012</td>
<td>Pujadas</td>
<td><em>International Journal of the History of Sport</em></td>
<td></td>
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(Table 2.2 Continued)
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<tr>
<th>Year</th>
<th>Author(s)</th>
<th>Journal</th>
<th>Contribution/Highlights</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>Llewellyn</td>
<td><em>International Journal of the History of Sport</em></td>
<td>Modernization through the hiring of professional coaches for British track athletes; erosion of social view of pure amateurism</td>
</tr>
<tr>
<td>2010</td>
<td>Seifried</td>
<td><em>Sport History Review</em></td>
<td>Uses ideal-type to present the changes to sport facilities, locations, technologies, and revenue maximization</td>
</tr>
<tr>
<td>2010</td>
<td>van Bottenburg</td>
<td><em>Journal of Sport History</em></td>
<td>Describes modernization as norm in sport history studies, but it came to be criticized. In US, modernization may be best approach</td>
</tr>
<tr>
<td>2009a;</td>
<td>Seifried &amp; Pastore</td>
<td><em>Sport History Review</em></td>
<td>Works consider the evolution of professional baseball and football facilities through modernization lens and focuses on profit maximizing, commodification of space, and embracing new technology</td>
</tr>
<tr>
<td>2009b</td>
<td></td>
<td></td>
<td>Reflexive modernization or second modernity; increased emphasis on risk management as modern world is, or is perceived to be, more dangerous</td>
</tr>
<tr>
<td>2009</td>
<td>Giulianotti</td>
<td><em>Sociology of Sport Journal</em></td>
<td>Reviews how fans respond (negatively) to increased corporate ownership in British soccer</td>
</tr>
<tr>
<td>2007</td>
<td>Brown</td>
<td><em>Soccer &amp; Society</em></td>
<td>Rise of neo-liberalism at end of 20th century; focus on control measures and expectations; centralized planning with decentralized implementation</td>
</tr>
<tr>
<td>2006</td>
<td>Green &amp; Houlihan</td>
<td><em>Sociology of Sport Journal</em></td>
<td>Modernization as one of four types of comparative analyses of sport policy; large numbers of cases can be included; does not explain why cases occur; issues with context</td>
</tr>
<tr>
<td>2005</td>
<td>Henry et al.</td>
<td><em>Journal of Sport Management</em></td>
<td>Compares sport history studies between cultures; discusses modernization as an approach to sport history, but not the only approach</td>
</tr>
<tr>
<td>2002</td>
<td>Chool-Kim</td>
<td><em>International Sport Studies</em></td>
<td>Offers criticism of modernization and reliance on dichotomous relationships</td>
</tr>
<tr>
<td>2001</td>
<td>Brownell</td>
<td><em>Sport History Review</em></td>
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<td>Year</td>
<td>Author(s)</td>
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<td>1997</td>
<td>Dyreson</td>
<td>Journal of Sport History</td>
<td>Critique of dichotomous view of activities of men and women. Chinese leadership desire to modernize (Westernize) in 1980s; creation of sport marketplace, health programs, embracing technology to manufacture sporting goods</td>
</tr>
<tr>
<td>1997</td>
<td>Hong</td>
<td>Journal of Sport Management</td>
<td>Describes the transition from folk versions of soccer and rugby to the modern version; sport has divisions; develops morals; focus on winning</td>
</tr>
<tr>
<td>1993</td>
<td>Adair</td>
<td>Canadian Journal of History of Sport</td>
<td>Response to critique of modernization as Americanization; modernization has contextual application and understanding in sport; traditional can have modern elements; not inevitable or all inclusive</td>
</tr>
<tr>
<td>1991</td>
<td>Guttman</td>
<td>Sociology of Sport Journal</td>
<td>Describes the conflict between political use of sport to change society for the better and the rise of consumer culture which led to interest in professional sport practices</td>
</tr>
<tr>
<td>1989</td>
<td>Dyreson</td>
<td>Journal of Sport History</td>
<td>Criticism of modernization; applying social theory to sport is a worthy approach; explanation of data and application of theory must be consistent. Chinese decision to embrace modernization (Westernization); social and economic modernization; increased emphasis on individual achievement and leisure activities</td>
</tr>
<tr>
<td>1987</td>
<td>Tyrell</td>
<td>Sporting Traditions</td>
<td>Promotes modernization in study of sport history; sport is a part of cultural changes to create order, especially in cities</td>
</tr>
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<td>1987</td>
<td>Hoberman</td>
<td>Sociology of Sport Journal</td>
<td>Presents modernization in sport as ideal type heuristic device with premodern and modern harness racing; Six characteristics of modern sport: Organization, Rules, Competition, Role Differentiation, Public Information, Statistics and Records</td>
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<td>1983</td>
<td>Adelman</td>
<td>Journal of Sport History</td>
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<td>1981</td>
<td>Adelman</td>
<td>Journal of Sport History</td>
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Overall, the present work not only identifies how sport scholars contributed to modernization theory, but recommends how sport scholars, particularly sport management scholars, can further expand the field through the use of modernization as an organizing construct. However, before proceeding, a brief history of modernization is provided. Furthermore, in recognition of scholarly debate regarding the utility of modernization, this review organized separate sections acknowledging support and criticism of modernization. Later, the application of modernization within sport-based research with a particular focus on sport history and sport sociology is discussed.

**Historical Support for Modernization**

The origins of modernization theory are situated within the writings of the aforementioned social, political and economic theorists who proposed:

> traditional society could be characterised as simple and stable, rural and communal, and ritualistic. In contrast, modern society, which was viewed as dynamic and innovative, adaptive to changing industrial advances (e.g., job specialisation and technology) and economic changes was individual-centred, and governed by secular laws or procedures. (Seifried & Novicevic, 2017, p. 55)

The shared conception of modernization, within the early scholarly period, demonstrated significant agreement that society and organizational behavior evolved in a linear manner where traditional societies and organizational ways of doing “cannot resist becoming modern” (Seifried & Novicevic, p. 55). However, individual agency, cultural and religious factors, and geographical barriers were noted as capable of affecting the rate of advancement (Adelman, 1993; Gilman, 2003; Inglehart & Baker, 2000).

Seifried and Novicevic (2017) identified Adam Smith as a critical forefather of modernization theory. Smith’s (n.d.) treatise on the evolution of labor in response to market demands marked the beginning of the capitalist system. Further, Smith’s description of the evolution of national economies established an important descriptive tenant of modernization.
theory, the comparison between the modern and the premodern, which the author described as the “civilized” and “savage” nation (p. 2). For Smith, the modern nation is composed of inhabitants of towns and the country who exchange raw materials and finished products for capital to the benefit of the persons who labor in the process of converting raw materials to finished products. The premodern nation exists only in the country and is incapable of participating in this type of exchange because “human institutions had never thwarted those natural inclinations of man” (Smith, p. 171). In other words, premodern communities have not developed the technology to improve agricultural production to a level that allows individual citizens to consider engaging in activities beyond the subsistence level.

The ability to pursue interests over obligations further distinguishes the modern society from the premodern and the city from the country. Following technological advances in production and labor, the modern state emerges, highlighted by individual pursuits of interests beyond communal survival, such as education and the arts, as well as the establishment of common defense for the state (Smith, n.d.). This shift in focus toward individuality and contemporary society manifested in political upheaval and revolution in the Western world during the late 18th century and was explored by Maine (1861) and Tonnies (1957). Maine differentiated the modern from the premodern by expressing that modern states have rational, standardized laws and bodies that govern behavior. More importantly, the modern citizen sees value and need for such governing bodies as important to the overall health of the society. The desire to promote the needs of the society over the needs of smaller communities was expanded by Tonnies’ concepts of gesellschaft and gemeinschaft. Gesellschaft connotes the modern society, where less emphasis is intentionally placed on interpersonal relationships in favor of adherence to societal laws and conventions, while gemeinschaft represents premodern characteristics such as shared community values and general lack of individual choice.
So (1990) described the first 100 years of modernization theory as “evolutionary” (p. 19). Citing Comte, So identified the first stage of modernization as evolutionary because scholars like Smith, Maine, and Tonnies described modernizing changes as occurring in a positive, unidirectional manner over time. This view of societal change held that all societies will undergo and benefit from modernization, but at varying rates. The evolutionary theory of modernization was complemented by the functionalist theory of modernization. Espoused by scholars such as Max Weber, Louis Wirth, and Talcott Parsons, the functionalist theory of modernization identified specific bodies within a society that serve to maintain the vitality of the society.

Parsons (1950) identified four components of society that maintain its vitality: (a) The economy assists society by adapting to conditions imposed by the environment; (b) The government sets and organizes objectives in order to attain goals; (c) Religious and legal institutions serve to integrate resources and developing subsystems to improve cohesion; and (d) Education to develop values. The functionalist theory of modernization emerged at the beginning of the 20th century as the U.S. emerged as a global economic power.

Weber (2011) expressed how the Protestant Reformation fundamentally altered Western society and set the stage for unprecedented economic expansion throughout the 19th and early 20th century. Weber delimited his examination stating “… that Western Europe and American capitalism of the last few centuries constitutes our concern rather than the ‘capitalism’ that has appeared in China, India, Babylon, the ancient world, and the Middle Ages” (p. 79). The author identified that towns and later cities adopted Reformation ideologies. Within his analysis, the author noted that increased levels of Protestant piousness in a nation correlated to higher levels of economic prosperity. For Weber, in the U.S. religiosity undergirded the daily lives of citizens so that individuals were ostensibly free to practice the religion of their choice, while also being aware that social interactions and access to economic mobility hinged on opportunities afforded
by espousing certain characteristics of Christianity or at least purporting to do so. In this way, religion served Parsons’ (1950) function of informing societal conventions and laws, thereby standardizing behavior inside and outside of the workplace.

Weber’s (2011) accounting of religion and individual assimilation into expected secular norms informed by Protestantism manifested in urban areas. Previously, Smith (n.d.) identified the town and city as the most modern example of society. Wirth (1938) explored the modern U.S. where the “shift from a rural to a predominantly urban society… has been accompanied by profound changes in virtually every phase of social life” (p. 2). For Wirth, the city is not so much a physical space, as it is a concentration of industrial, commercial, recreational, and welfare institutions. Therefore, the modern urban space is defined by the presence of markers of urbanism. Furthermore, Wirth noted urban dwellers serve specialized roles within the community because urbanites are “dependent upon more people for the satisfactions of their life-needs than are rural people…” (p. 12). Further, Wirth viewed utility as the driving force of urban relationships, which resulted in individual, rather than group acceptance and mobility based upon merit, leading to greater tolerance.

Much of the functionalist modern world can be viewed as relationship driven. Parsons (1951) differentiated the premodern society from the modern society via “pattern-alternatives of role definition” (p. 66). Parsons identified five pattern variables of role definition: (a) The Gratification-Discipline Dilemma; (b) The Private vs. Collective Interest Dilemma; (c) The Choice Between Types of Value-Orientiation Standard; (d) The Choice between Modalities of the Social Subject; and (e) The Definition of Scope of Interest in the Object. Within the five pattern variables, the premodern society is focused on personal relationships (i.e., Affectivity) concerned with the needs of a small, familiar group (i.e., Collectivity Orientation) that associates exclusively with the small group (i.e., Particularism) values familial status (i.e., Ascription), and
are completely invested in the development and success of the group (i.e., Diffuseness). Parsons juxtaposed the premodern pattern alternatives with those of the modern society. Modern society is permeated by impersonal relationships (i.e., Affective Neutrality) where persons are focused on their individuality (i.e., Self-Orientation) to the point that bureaucracy and rule standardization is needed (i.e., Universalism) because identity and family reputation is disregarded (i.e., Achievement) since each individual is valued for their specific roles (i.e., Specificity).

As social scholars began to gain a more nuanced understanding of modernization and its role in the evolution of the West, particularly in the U.S., global events contributed to a greater expansion of the theory. Modernization theory flourished amid post-World War II U.S. prosperity. For instance, following World War II and what would become a decades-long process of decolonization, academicians looked to create an understanding of the processes through which newly independent countries would become viable, democratic members of the global community of nations (Adelman, 1993; Seifried & Novicevic, 2017; So, 1990). For example, Rostow (1990) presented capitalism and democracy, not socialism, as the truest expression of modernity. Importantly, modernization scholars like Lerner (1958) who endeavored to understand how the Middle East would modernize and Rostow expressed the existence of clearly defined stages through which societies would enter and exit as they moved from traditional to modern.

Although scholars of the mid-20th century presented modernization as a step-by-step process, those same scholars, for political and financial reasons eschewed the theoretical writings of communist thinkers (Adelman, 1993). Foundational socialist works such as Marx’s (1996) *The Communist Manifesto* and *Das Kapital* (1998) that presented capitalism as a penultimate stage of modernization tended to be ignored (Booth, 2001). This is not surprising as the primary
global adversary of the U.S. beginning in 1946 was the communist Soviet Union. According to Adelman, this approach emphasized the attempts to use modernization as a predictor of socio-economic change in newly independent nations, rather than an analysis of the characteristics of those societies. While pro-Western scholars tended to ignore the Marxist class of socio-political thought, historical works of modernization at this time appeared to caution democratic governments to be proactive in responding to the needs of their citizens while seeking to promote individual agency and freedom. This point is best illustrated by Black (1966) and Wiebe (1967).

Specifically, the de-emphasis of pre-modern societal characteristics created a situation where comparisons between different nations or groups could be made concurrently. Adhering to the stage model of modernization, Black (1966) called for comparisons between global societies, noting that modernization occurred only after societal pressures forced leaders to respond to the demands of their constituents. Wiebe (1967) expanded upon this point, noting that governments and governing bodies expanded and emerged to meet increased expectations of the newly created, educated middle class of workers. This view of responsible, responsive leadership would eventually be turned on its head, as critical historical interpretation of modernization history challenged the beneficiaries and purpose of government systems.

While not explicitly covered here, the 20th century applications of modernization by historians is rooted in the works of social scientists from the previous two centuries. Historical modernization became a lens through which Western society was analyzed in order to predict the evolution of newly independent, traditional, colonial societies. Ultimately, the identification of the characteristics of Western society and attempts to find parallels in less developed societies created an opportunity to criticize modernization theory and motives of leadership. However, this was not before historians used the construct to “help resolve major questions focused on
organizational structure, bureaucracy, and authority to understand consequences that emerged” (Seifried & Novicevic, 2017, p. 57).

**Historical Criticism of Modernization**

As an academic theory, modernization is not without its critics. While the use of modernization as a theoretical and predictive tool experienced a period of scholarly acceptance in the 1950s and into the 1960s, the emergence of the non-aligned movement and delayed prosperity following decolonization resulted in a theoretical paradigm shift away from modernization theory toward more socio-cultural paradigms. Beginning in the 1970s, history scholars began to criticize the pro-Western capitalist modernization approach and instead “favored reviews of external happenings and their influence on communities over the internal workings of organizations and institutions” (Seifried & Novicevic, 2017, p. 57). Adelman (1993) suggested this trend emerged following the realization by leftist scholars that the positive bureaucratization identified by Black (1966) and Wiebe (1967) only benefited the West. In other words, modernization was viewed as promoting Western lifestyles and organizational values in the developing world (i.e., neocolonialism) and assumed to be reductive and deterministic (Eisenstadt, 1977).

Tipps (1973) and Wilentz (1982) also charged that modernization lacked an adequate historical perspective and context. Likewise, Rodgers (1977) cautioned against too eagerly accepting the linear and potentially reductive results of modernist interpretations, a view shared by Henretta (1977) and Grew (1977). Grew further cautioned against trusting the predictive powers of modernization theory because of its reductive nature. In other words, the scholars mentioned above questioned the apparent rejection of individual human agency as part of the theory. Though these concerns were briefly mentioned here, the collective volume and weight of the criticism of modernization all but eliminated its use within the scholarly community.
Scholarly criticism notwithstanding, modernization theory has been deemed appropriate within assessments of U.S. history (Stearns, 1980). Furthermore, So (1990) criticized the continued criticism of modernization after the early 1970s because critics continually raised the above concerns, despite the ongoing adaptation of modernization theory by its practitioners. Interestingly, sport scholarship, like many other disciplines, largely eschewed modernization theory for much of the later 20th century. However, by the beginning of the 21st century sport scholars rediscovered and asserted modernization’s utility.

**Modernization and Sport History**

Sport scholarship using modernization originated in the late 1970s. For instance, Dickinson (1975) reviewed modernization theory with an eye towards its application in sport, particularly emphasizing its predictive value. Yet, although not expressly a work of modernization, Allen Guttman’s *From Ritual to Record* (1978) presented the first and most-cited effort to use the construct to explain the transformation of sport from its pre-modern to modern states (Adelman, 1993; Booth, 2001). Shortly after its publication, Richard Gruneau’s (1983) *Class, Sports and Social Development* criticized Guttman’s application of Marxism by challenging the pro-Western interpretation of modernization. However, Gruneau (1988) later indicated that modernization may be an appropriate tool for sport scholarship because relevant Marxist applications of modernization demonstrate the ways capitalist processes allowed the “dominant class” to influence leisure activities, including the creation of sport clubs and professional teams (p. 23).

Melvin Adelman (1981, 1986) also published scholarly books or articles utilizing the lens of modernization, frequently citing Guttman (1978). As a precursor to his own highly cited work entitled *A Sporting Time*, Adelman (1981) argued that harness racing in New York City emerged as the first modern sport in the U.S. Adelman’s accounting of the rise and formalization of
harness racing employed an ideal-type approach to modernization where harness racing existed in one of two broadly identifiable types, pre-modern and modern. In order to appropriately differentiate between the two ideal-types, Adelman presented six characteristics that determine pre-modern sport from modern sport: (a) Organization focused on the establishment of formal sporting organizations and governing bodies; (b) Rules are written and standardized by the organizing bodies; (c) Competition is carried out under the general purview of the governing bodies, rather than simple local competition; (d) Role differentiation was identifiable via the rise of professionalization in coaching and playing positions with clear demarcations between sport and spectators; (e) Public information is recorded in periodicals and trade journals; and (f) Statistics and records are recorded and maintained to compare from year-to-year.

For Adelman (1981), harness racing, more than any other sport, satisfied each of these criteria. Importantly, Adelman acknowledged that modernization exists on a continuum and that there is no endpoint on that continuum. That is, at a certain point in time a sport will achieve modernity whereby its form at that moment of modernity “shares more in common with its future than its pre-modern past” (Adelman, p. 7). Harness racing entered into the modernizing process as early as the mid-1820s with the establishment of formal racing associations and the creation of sport-specific track facilities. In 1983, Adelman continued to promote modernization in sport via his assessment of the nature of sport history scholarship since the founding of the North American Society of Sport History in 1972. In evaluating the state of the field and considering future directions for sport history scholarship, Adelman (1983) noted that sport history in the late 1970s and early 1980s shifted toward social control through sport, with a particular focus on the antebellum and Progressive U.S. periods.

The view of social controls and the eventual rise of social and cultural history, for Adelman (1983), is contrasted by modernization. At the core of Adelman’s support for the
modernization paradigm is that it focuses on the formalization and standardization of sport as intentional, rather than accidental. The author supported this point of view because the use of modernization to study sport allows scholars to understand sport as the broader society is modernizing, while also considering the changes to sport specifically.

Adelman’s (1986) *A Sporting Time* is also notable because he suggested that the synergy between internal sport developments and external societal changes caused sport to mature as a business activity. Within this point, Adelman articulated that the modernization of sport featured characteristics like record-keeping, standardization, competition, and bureaucracy among other descriptors often associated with capitalism. Adelman also provided the example of the importance of the urban center in the examination of modernization. For Adelman, the city was the center of modern life and the creation of sport specific places demonstrated mastering the physical landscape, as well as creating a civic identity. This latter point is critical to the understanding of facility construction because the sporting behavior of new residents is valuable for sport scholars to study (Adelman, 1987) and team owners often work with civic leaders and boosters to create and select favorable facility construction and financing deals (Adelman, 1988).

Still, the rise of social and cultural history in the 1970s and 1980s resulted in diminished modernization history publication in sport history journals; however, despite the paucity, it was still useful as a tool for understanding sport history (Linden, 2016). For instance, Dyreson (1989) enlisted Adelman’s (1986) study in his explication of the failure of the U.S. Progressive movement to use sport as a cultural assimilation tool. Rather than become an Americanizing agent, major organized sport became a commodity for the emerging consumer culture of the 1920s. For Dyreson, society, rather than viewing sport as an entrée to appropriate citizenship behavior, became enthralled with sport and the rising popularity of sport created a consumer-fan
culture. As a result, sport, though still capable and used as a socializing agent increasingly became a profit-seeking industry.

The decision of social and political leaders to use sport as an assimilation or modernization instrument is neither uncommon or limited to the U.S. Adair (1993) examined the modernization of sport and use of sport to modernize groups by examining the use of violence in British soccer and rugby beginning in the late 1800s. Similar to Dyreson (1989), Adair presented the goals of both reformers and capitalists through sport. Reformers saw sport as a means of creating better citizenry whereby sport in schools could be used to demonstrate the importance of “health and fitness, and it instilled discipline in boys and an appreciation of rules and fair conduct” (Adair, 1993, p. 54). The ability of sport to alter behavior is directly related to the modernization of the sports because the formalization of play within the school system resulted in the imposition of Adelman’s (1983) modernizing characteristics. The capitalist impact on both sports can be seen in the desire to both attract fans and win championships, and vice versa. Regarding violence, players, under supervision of coaches, employed constrained and strategic violence within formal rules. Overall, the view that Britain may be falling behind in terms of international influence also spurred athletic modernization.

Sport scholars further attempted to describe modernization and modernizing efforts to maintain leadership positions and promote state building via sport. For example, Llewellyn (2012) explained the fear of declining position as an athletic leader in the world prior to World War I led British officials to hire professional coaching staffs for track and field athletes to maintain their standing. Additionally, Lukuslu and Dincsahin (2013) presented the Turkish decision to implement Western-style physical education and military training as an approach to maintain its standing in world affairs. Similarly, Sotomayor (2015) and Wang (2015) detailed the decisions politicians made to modernize their polities and their use of sport to help achieve those
ends. These changes included improved education, infrastructure, and technology to enhance contact and global standing in Puerto Rico and East Asia (i.e., Philippines, Japan, and China) respectively. Further, Sheinin (2016) in a discussion of Cali, Colombia’s hosting of the sixth Pan American games, described how a city which had seen increased urban sprawl and class division sought to host a mega sporting event to improve infrastructure and showcase modern architecture inspired by Buckminster Fuller. Moreover, Popa (2017) also explained the modernization of Romanian society through the incorporation of Western-style physical education and later the creation of a centralized soccer structure with leadership and control in Bucharest, but with more prominent teams in the periphery of the country.

**Sport Facility History and Modernization**

One research area where modernization and sport history scholarship prominently align is through the examination of sport facility construction. Sport facility construction and sport facility usage evolved along with the sport industry and society. For instance, sport geographer John Bale provided a modernizing history of English soccer facilities within the English urban landscape. Bale’s (1993) *Sport, Space, and the City* outlined a four-stage facility development process that occurred in response to the modernization of English society. In addition to the evolution from improvised, temporary play spaces to large stadiums, Bale identified that previously unavailable free time brought on by economic growth led to an emphasis on health and activity. As sport leisure grew along with city populations, specific spaces and eventually teams emerged representing unique neighborhoods so that stadia and teams were in many ways cultural symbols or icons for the varied class and ethnic neighborhoods of England’s growing industrial cities while also incorporating technological advances to improve the in-stadium experience through the late 1970s.
Much of the more recent scholarly literature incorporating sport management, facility history, and modernization focused on the evolution of professional baseball and professional football facilities in the U.S. (e.g., Seifried & Pastore, 2009a, 2009b, 2010; Seifried, 2010b) with additional examinations on college football stadia (e.g., Pfleegor & Seifried, in press; Seifried, 2016; Seifried & Tutka, 2016). Notably, influenced by Bale’s (1993) work on English soccer facilities and cities, Seifried and Pastore (2010) traced the origins of contemporary U.S. professional football and baseball facilities from the improvised and loosely defined playing fields of the American Northeast in the mid-1800s. During this early period of largely disorganized play, lacking standardization in the rules of play best identified pre-modern sport. For example, the authors identified the contemporaneous existence of New York and Massachusetts-style baseball. Although both types of baseball were considered legitimate types of the sport, they featured different field configurations, roster numbers, and physical limitations. Ultimately, the New York version of the game evolved into the modern representation of the game in part because of organizers’ ability to modify the game to fit within diminishing city green space. The more clearly defined playing surfaces of baseball and football, coupled with growing interest in leisure activities, eventually led to the construction of semi-permanent sport facilities.

The historical chronology of professional baseball and football facilities continued through Seifried and Pastore’s (2009a) modernizing description of facility evolution. The authors focused on technological improvements during the 20th century that allowed permanent sport facilities to be built to a size and scale not possible in the 19th century. As technological advances occurred, shorter workdays and higher wages allowed for the maturation and growth of sport fan nations (2009a). The authors identified the development of steel reinforced concrete as the critical technological advancement that led to the construction of permanent facilities. Newly
developed building technology allowed facility owners to construct lasting, cost effective stadia. Unlike the temporary and semi-permanent wooden structures of the 19th century, the new concrete facilities were less susceptible to fire damage (Seifried & Pastore, 2010). Beyond improved durability, the new construction technology also allowed facilities to be designed and constructed on a scale larger than previously possible to capitalize on emerging fan interest (Ingrassia 2012; Schmidt, 2007).

Echoing Bale (1993), this early 20th century facility construction and design was limited by the growing urban environment surrounding these new facilities. The first permanent football and baseball facilities were built according to neighborhood architecture patterns and fit within the restraining street grids drawn to “keep the city healthy and intimate” (Seifried & Pastore, 2009a, p. 171). This caused the still entrepreneurial middle-class ownership to carefully consider neighborhood, real estate costs, and facility accessibility before breaking ground. Ultimately, these factors not only resulted in facilities unique to their sports and cities, but as representations of the neighborhoods in which they were built (Seifried & Pastore).

Seifried and Pastore (2009b) continued their profile of facility evolution from the mid-1900s toward the end of the century. After the initial construction of permanent facilities in cities, continued modifications and service improvements were made to capitalize on growing consumer class interest in baseball and football. Ultimately teams, and increasingly city and state governments, erected utilitarian stadiums designed to house both baseball and football. Notably, these mid-century facilities were built to accommodate in-stadium and at-home fans and generally moved away from city centers toward suburban locations in pursuit wealthier fans (Seifried & Pastore). As a result, the mid-century cookie-cutter style facilities reflected needs of consumers over sport performance.
Internally, the cookie cutter facilities made accommodations for a growing television fan base while also providing more in-facility amenities for fans in attendance. As an example, where early century stadia gradually incorporated radio broadcast technology into press boxes (Seifried & Pastore, 2009a), the increased acceptance and preference for television broadcasts led the cookie cutter facility design to emphasize the television broadcast through construction of multiple television camera locations, improved lighting, and use of artificial turf (Seifried & Pastore, 2009b). In-stadium fans were welcomed by more restrooms, concessions stands, and wider concourses to improve the in-facility experience and capture more revenue (Seifried & Pastore, 2009b). Externally, the utility of the facility design could be directly attributed to the mid-century modernist architectural trend (Seifried & Pastore, 2009b). Essentially, each facility was indistinguishable from its counterparts in other locations and incorporated massive parking lots to account for suburban America’s increased use and reliance on the automobile as the primary means of transportation to the stadium (Seifried & Pastore, 2009b).

Following nearly 40 years of largely suburban sport facility use, baseball and football facility construction returned to the urban center. After more than two decades of retro-modern construction, Seifried (2010b) incorporated Weber’s ideal-type approach to modernization to predict future trends in facility construction. For the author, facilities will continue to increase luxury seating in an attempt to maximize profits while improving technology access to promote better broadcasts and fan experiences. Furthermore, the community location and funding strategies used may make it practicable and preferred to maximize in-facility space for local businesses and offices (Seifried).

In a manner similar to Bale (1993) and Seifried and Pastore (2009a; 2009b; 2010), Pujadas (2012) provided an example of the changes to professional facility location in response to changes to the urban realities in a continental European city. Pujadas traced the evolution of
Sport clubs and facilities in Barcelona, Spain. Sporting practice and facility construction in Barcelona tended to follow the migration of affluent Barcelonans and the influence of British sport structure. As the city began to expand and increase its population the wealthier class gradually left the previously confined city center while sport clubs provided opportunities for amateur sport to be engaged in by those citizens. Continued urban expansion by the beginning of the 20th century resulted in new facility construction on the outskirts of the city as the wealthy population continued to pursue less-crowded and healthier green space. Furthermore, improvised play in lower class neighborhoods was curtailed by the city government, necessitating creation of public play space.

Overall, these collective works suggest professional football and baseball facilities evolved throughout the 20th century. The first permanent facilities emerged within city neighborhoods, were confined by existing street grids, and were built to reflect the architecture of the area. Importantly, the use of steel reinforced concrete allowed those facilities to be constructed more safely and to a larger scale than previously possible with wood, thereby allowing facility/team owners to capitalize on the desires of fans to spend money. As affluent fan bases moved from cities to suburbs, owners with the assistance of public funding built larger structures outside the city geared toward enhancing sport consumer experiences. Eventually, large scale amenity and nostalgia driven facilities returned to urban areas at the end of the century.

More recently, the emphasis on college football stadium modernization, unlike the construction of professional football structures, utilizes the amenities associated with the facility as a means of demonstrating modernity (Doyle, 1994) and to create social anchors (Seifried & Clopton, 2013) that attract future student and alumni dollars (Downs & Seifried, in press; Pfleegor & Seifried, in press; Seifried, 2016; Seifried & Tutka, 2016). The use of college football
and the college football stadium as a symbol of a region is perhaps most notable in the American South. For instance, Doyle (1994) and Borucki (2003) indicated the important role that college football had on establishing regional pride and rejecting views of the South as antiquated or pre-modern. According to Doyle, Progressive-minded politicians and citizens sought to capitalize on the growing popularity of the sport to not only elicit positive associations with the region, but to bring infrastructure improvements and change as well. The desire to establish college football success and by extension the modernity of the South followed an increased emphasis on the sport and facilities from economically, academically, and socially elite Northern universities often at the expense of university academic missions (Ingrassia, 2012; Schmidt, 2007; Smith, 1988).

The modernization of college football stadia in the South followed a similar pattern throughout the region. Initially, small, private universities (e.g., Tulane University, Southern Methodist University) established themselves as dominant football programs within their states. Eventually, the larger flagship universities within states began to build and modify facilities to capture student and alumni dollars. Seifried (2016) and Seifried, Faulkner, Baker, and Piker (2016) described how Louisiana State University and the University of Arkansas built and continued to modify their facilities to not only appeal to fans, but also demonstrate the team, university, and state were not lagging behind their conference and regional peers. Unlike large public institutions, Seifried and Tutka (2016) demonstrated how a small private university, specifically Southern Methodist University, although initially dominant in regional college football adapted its facility use to include larger, off-campus stadia to provide a sense of elitism and professionalism not possible on the small campus. Interestingly, Seifried and Tutka noted that small private schools were not immune from the encroachment of overzealous fans eager to establish football and institutional dominance in the region, demonstrating that economic
conditions, particularly of wealthy fans and boosters dictated or undermined much of the university academic and administrative policy.

At the university level, it can be suggested that permanent on-campus facilities became the manifestation of university, student, alumni, and political desires to establish athletic credibility and superiority over athletic rivals. Furthermore, much of the university facility expansion involved systematic expansion to accommodate and project enrollment and alumni growth. As a result, many permanent on-campus facilities evolved as the campus evolved and often took a prominent place on campus. The growth of college enrollments also signaled a shift in educational expectations from society. Where it was once a place of privilege, student commitment to education over industry during the Great Depression and social programs like the GI Bill swelled college campus populations, which led to a better educated, and higher earning alumni base willing to spend money to demonstrate their university as the most modern.

**Criticism of Modernization in Sport History**

As discussed above, the general lack of publications utilizing modernization is related to the general discontent with which the field viewed modernization. The most overt example of this discontent can be viewed in some scholarly sport history publications that offered criticism of modernization. Within the sport context, scholars have generally criticized modernization for its dichotomous view of sport (i.e., pre-modern and modern), perceived presentation of unidirectional diffusion, and ignorance of social structures (Vertinsky, 2017).

Tyrell (1987) presented a critique of Adelman’s (1986) modernization history of professional sport in New York City. Though Tyrell does credit Adelman for expanding historical methods by employing various techniques, including incorporating social science approaches and quantitative methodology into sport history, Tyrell’s concern is with the “slippery problem” of modernization’s treatment of social and economic change, as well as
attitude and organization change (p. 93). Specifically, the seeming emphasis on wholesale
change directed by social elites and upper-class preferences is viewed as a critical flaw of the
theory because it does not afford specific consideration of the experiences of the lower classes
and their particular preferences or desires. Tyrell highlighted this by noting the persistence of
pre-modern sports beyond 1870, suggesting that New York City could not have been a modern
city because not all constituent parts were modern at that time.

Just as Tyrell (1987) viewed modernization as too reliant upon the preferences of the
elites, Dyreson (1997) criticized modernization because “the modernization paradigm for sport
obeys the reality of everyday life for pre-industrial, agrarian societies” (p. 269). As previously
noted, modernization focuses on urban areas (Adelman, 1983), not rural areas. Through her
discussion of sport and leisure activities in Mexican Texas in the 1820s and 1830s, Dyreson
expanded on this criticism by focusing on the lack of emphasis on the female sporting
experience, arguing that modernization presents modern sport developing as a male activity,
where female physical activity was seen as leisure. Furthermore, the author cited Struna’s (1996)
criticism of modernization theory’s assumption that work and play can be clearly divided, just as
pre-modern and modern sport can be identified. Ultimately, Dyreson’s accounting of sport and
leisure in Texas presents both concepts as community-based physical activities, such as dances,
as being one appropriate representation of sport in rural North America, while other sport
emerged during work, rather than apart from it.

Dyreson’s (1997) criticism is similarly echoed by Brownell (2001) who further assessed
modernization via Guttman’s (1978) view of rituals and the process toward record keeping.
Brownell, speaking from the perspective of an Asia scholar, noted that modernization does not
fairly consider non-Western societies and cultures, rather, modernization only considers the West
as modern and worthy of study. Furthermore, for Brownell, modernization theory makes
assumptions about the pre-modern and non-Western societies without taking the time to appropriately study those groups. This view is not uncommon and can be viewed as an extension of the modernization-hegemony debate (Reid & Reid, 2015). Rather than the view of modernization as a process of the traditional moving toward modernity, hegemony presupposes a domination of one people over another, based on power. Within this point, Reid and Reid considered how modern sport diffused through pre-modern societies, noting that the diffusion was not unidirectional and the pre-modern adopters of modern sport often appropriated sport to fit their culture or potentially establish favorable political positions. Again, this view allows for the perspective of the traditional to be considered.

**Modernization and Sport Sociology**

Brownell (2001) suggested that contemporary (i.e., modern) societies are the purview of sociologists while traditional societies are studied by anthropologists. Given its roots in social sciences and sociology, it is not surprising that sport sociologists have also endeavored to consider modernization as a means of understanding the contemporary world. Sport sociology and sport policy journals have presented the experiences of newly modern societies, as well as how modern societies continue to evolve. Given the focus on newly modern societies and the evolution of modern peoples, the study of sport sociology has addressed both Western and non-Western societies. Importantly, within sociology, Guttman’s (1991) publication in the *Sociology of Sport Journal* noted that modernization allows for cultural appropriation and is not a hegemonic or wholly westernizing process.

In 1987, Hoberman presented the modernizing changes to China following the death of Mao Zedong. This examination is particularly interesting because it explores the role of sport in a non-Western society seeking to adopt limited, modern capitalist influences. As China pursued economic and industrial development, social changes impacted public interaction with sport.
Hoberman noted that modernization efforts in China led to liberalization and a rise in individuality. This is important to note because individuality was generally discouraged under Mao. Hoberman indicated that fan behavior at sporting events had become increasingly raucous by the early 1980s, further demonstrating individualism emerging in society. Specifically, in sport, the focus shifted to emphasis on personal achievement, a decline in athlete and fan ethics, and the increase in scientific professionalization of athlete coaching and training methods.

The behavior of fans as evidence of modernization described by Hoberman (1987) is also visible in the behavior of fans of English soccer teams. Specifically, Brown (2007) indicated fans of the Manchester United soccer team were unique in that they represented both the city of Manchester, but also a larger global fan community. As such, the team catered to a much larger base of fans. The identity of Manchester United fans is seen as inauthentic in part because the fan base is detached from Manchester itself. This notion is particularly problematic because fans who came to identify with the team and community of fans were simultaneously connected and detached from the city. The influx of foreign, corporate capital threatened this community as an American family purchased the team and essentially a piece of British identity, suggesting that identities formed through sport are fluid and not necessarily as lasting as some social theorists have suggested is possible. In other words, the community relationships (i.e., Gemeinschaft) may be stronger than the allegiances of fandom (i.e., Gesellschaft).

Guttman’s (1991) view that elements of modern societies could be used by premodern groups is supported by Proni and Zaia (2014). Proni and Zaia described the modernizing business practices of professional soccer teams in Brazil. Despite the dominance of Brazil’s national soccer team in international play, the professional divisions of Brazilian soccer were underdeveloped from a business perspective. As a result, teams tended to operate at a deficit, were unable to pay players, and often relied on selling player rights to European clubs to sustain
day-to-day operations. Given the issues facing Brazilian soccer the federal government intervened in league operations in an attempt to strengthen professional soccer. As a result of mandated public record keeping, teams began to employ various strategies to maximize on-field and financial performance. Teams improved amenities to cater to fans, including creating class-based seating sections. Other teams have used resources to acquire expensive talent in an effort to attract fans and win championships. Overall, teams in Brazil decided to adopt professional European sport business operations and apply them to the Brazilian soccer context.

**21st Century Modernization and Sport**

Nations typically viewed as modern have continued the modernization process into the 21st century. Modernization in the 21st century can best be described as reflexive modernization, which Giulianotti (2009) described as modern countries being aware of the risks in the modern world and the dangers facing the increasingly globalized world community. This awareness of risk and the desire to mitigate or eliminate it has affected sport policy. As an example, toward the end of the 20th century a change in leadership of the English national government ushered in a period of Labour Party control and a rise of neoliberal policies. The rise of neo-liberal control changed how sport is treated in England.

English sport response to perceived threats is not without precedent. Llewellyn (2012) found that English officials were willing to modify sport approaches to maintain English global standing. Several scholars have described the current modifications to English sport that have been instituted by the government to promote government objectives for the nation. Adams (2014), Green and Houlihan (2006), Lindsey and Bacon (2016), and Tacon and Walters (2016) presented how the English government sport system is focused on empowering individuals by creating effective policies and programs using scientific evidence to test programs and make decisions regarding funding and leadership. This approach, though designed to empower
individuals, has resulted in increasingly centralized policy-making and decentralized implementation, putting strain on sport entities.

While reflexive modernization emphasizes the attempts to minimize or eliminate risk, ecological modernization is a neoliberal approach to solving ecological problems through the development and implementation of new technology (Johnson & Ali, 2018). Johnson and Ali, as well as Kim and Chung (2018), McLeod, Pu, and Newman (2018), and Millington, Darnell, and Millington (2018) described different ways modern sport entities and governments have intervened to promote positive environmental outcomes. The concern with ecological modernization is that a core component of sport business is the manipulation and acquisition of land, which runs counter to ecologically friendly policies (Kim & Chung). Furthermore, compromises between what is best for the environment and what is best for businesses may be at odds, resulting in legislation that nominally promotes green initiatives but fully supports business (Millington et al.). Moreover, sport entities likely only engage in short-term, self-serving green initiatives (McLeod et al.), but accumulate cultural capital because they are identified as proactive on some environmental policies (Johnson & Ali).

**Modernization Conclusion**

This review presented the ways modernization has been used within sport history and sport sociology scholarship in the time since Guttman’s (1978) *From Ritual to Record* was published. While sport scholarship in history and sociology has used modernization to enhance the extant literature on sport, a dearth of modernization literature still exists in sport management. Again, the search for sport management modernization articles yielded no results. However, Hong (1997) presented why understanding modernization may be of value to sport management. Hong described the changing business landscape in China and emerging modern sport enterprises and sport marketplace, which require the understanding of sport managers. This
notion is important because as markets open and modernize, sport-specific expertise will be needed. However, Henry et al. (2005) cautioned sport managers to consider context when applying modernization within the field.

Within the U.S. context, modernization is necessarily capitalistic and socio-politically appropriate. The works examined within the present study indicate modernization is an effective device for connecting various stages and phases of sport industry development and service improvement. Of particular importance to sport and sport management is modernization’s ability to combine individual and group agency with technological, industrial, and economic changes to explain past, and potentially predict future trends within the field and industry. In light of the increased connectivity of the globalized world, sport management could grow as a field by seeking to understand the modernization of sport in less well examined areas. For example, the recent U.S. Supreme Court decision to nullify the Professional and Amateur Sport Protection Act of 1992 presents a new opportunity to examine the modernization of sport betting and if and to what degree professional leagues will embrace gambling. Furthermore, sport organization decisions to embrace social causes beyond their business purpose could be studied using modernization to understand how those efforts enhance allegiance of their fans or attract future fans.

Next, the current review discovered much of the published sport modernization literature focused on the evolution of sport facilities. Sport facilities serve as the most tangible expression of American society’s interest and emphasis on sport. As economic and technological changes occurred, sport managers created a more refined, sophisticated, and standardized entertainment product reflecting and responding to individual and societal demands. Accordingly, sport facility construction and design adapted and continues to adapt as well. Within, sport scholars described certain facility characteristics that echo Adelman’s (1981) view that modernity “shares more in
common with its future than its pre-modern past” (p. 7). Seifried and Pastore (2009a, 2009b) identified increases in restrooms as evidence of modernization through service improvement. Facility characteristics such as restrooms are indicative of modernization as Field (2008) noted the modern innovations within Maple Leaf Gardens at its opening in 1931 via the number of men’s (i.e., 203) and women’s (i.e., 30) restroom fixtures. Beyond restrooms, many other physical structures (e.g., luxury suites, club seating, concession stands) and several markers (e.g., building square feet, dimensions, capacity, parking) that make up a facility can be used to categorically index modernization.

Based upon the reviewed literature, sport scholars can identify the presence of certain service markers to that deal with modernization, as well as the number of occurrences of each marker to properly index facility modernization. This documentation could be of particular use as Seifried and Novicevic (2017) indicated that Xu, Zeng, and Tam (2012) speculated on means to quantitatively determine modernization. Moreover, the existence and type of Leadership in Energy and Environmental Design (LEED) certification (Johnson & Ali, 2018), if applicable, should be indicated. Additionally, sport scholars should report market demand indicators (Brown, Rascher, Nagel, & McEvoy, 2016), including ticket demand factors like population size, and median household income for a facility-hosting metropolitan area as evidence of modernization. Corporate depth along with presence and number of luxury suites and club seating services should also be assessed (Seifried, 2010b).

Although the examined facility works provide an appropriate application of modernization of sport facilities in the U.S., the current modernization literature focuses almost exclusively on professional and collegiate football and professional baseball facilities. In order to provide a more nuanced understanding of sport and the sport industry the history and modernization of professional basketball and hockey arena development, design, and
construction could be illustrative of the important role sport plays in American society. More specifically, the multipurpose, year-round use of those types of arenas may imply they are culturally significant, even to non-sport enthusiasts.

Furthermore, examinations into facility financing and location selection could provide insight into the ways sport organizations and politicians respond to their shared constituencies. Moreover, examinations seeking to understand how facilities respond to social and cultural pressures, such as emphasis on eco-friendly building practices and sustainability initiatives (e.g., LEED Certification) seems prescient given ongoing and public debates about climate change. Additionally, considerations for renovation or abandonment may provide some insights into possible future trends. Overall, modernization remains a useful tool to continue analyzing trends in sport management while advancing academic, industry, and public knowledge.
CHAPTER THREE
METHODOLOGY

Several scholars (e.g., Barghchi, Omar, & Aman, 2009; Pfleegor & Seifried, 2014; Rosentraub & Ilja, 2008; Seifried, 2010a; Seifried, 2012; Seifried & Clopton, 2013) argued consideration should be given to history, culture, and context during debates to build new or renovate existing sport facilities. Pfleegor, Seifried, and Soebbing (2012), Pfleegor and Seifried, and Seifried (2012) further noted failure to appreciate, history, culture, and context in facility construction and renovation may create negative financial implications and/or image difficulties for a city, organization, and facility.

Importantly, Salevouris and Furay (2015) indicated that history has the potential to influence individual actions and worldviews. Furthermore, organizational and management scholars encouraged their peers and colleagues to expand their methodological approaches toward history to address problems and identify opportunities (Booth & Rowlinson, 2006; Clark & Rowlinson, 2004; Kippling, Wadwhani, & Bucheli, 2014; Mason, McKenney, & Copeland, 1997; Rowlinson, Hassard, & Decker, 2014). Within the sport industry, Zeigler (2007) similarly noted that sport organizations often rely on the past to inform future behavior. However, historical research methods are frequently undervalued within sport management (de Wilde & Seifried, 2012; de Wilde, Seifried, & Adelman, 2010; Seifried, 2010a, 2017). As an example, several research method guidebooks in the social sciences (i.e., Alasuutari, Bickman, & Brannen, 2008) and textbooks in sport management (i.e., Buchanan & Bryman, 2009; Gratton & Jones, 2010; Li, Pitts, & Quarterman, 2008; Skinner & Edwards, 2011) fail to advocate for, or mention historical research in any depth or specificity. Thus, and not surprisingly, de Wilde and Seifried found only three of 394 published articles within prominent sport management journals from 2005 to 2009 to have utilized historical methods. Furthermore, Seifried (2017) suggested there were multiple problems associated with peer review of historical research, suggesting the
possibility that some scholars inaccurately “characterized it as a non-legitimate, narrative form of qualitative research” (p. 462).

Despite the paucity of explicitly historical methods in sport management research, the methodology has garnered some advocacy by sport management scholars over the last decade. For instance, Andrew, Pedersen, and McEvoy’s (2011) Research Methods and Design in Sport Management, explored the application of history research for sport management. Furthermore, historical research on sport has been published in sport management journals (e.g., Girginov & Sandanski, 2008; Seifried & Katz, 2015; Seifried, Katz, & Tutka, 2017; Walker, Seifried, & Soebbing, 2018) and recognized as particularly useful when organized as applied history. Applied history helps “knowledge or theory building” through research on events, identification of patterns or trends, and the effort to appreciate how circumstances or environments of the past can assist practitioners and scholars of the present to be more efficient and productive with their practical and conceptual work (Seifried et al., 2017, p. 380).

Steps in Historical Research

The application of the historical method can be general or specific depending on topic, academic discipline, and research paradigm. For example, within sport management Seifried (2010a; 2017) outlined a scientific guideline for historic research that distinguished history from the typical quantitative and qualitative methods often relied upon by sport management scholars. These steps include: (a) Selection of a narrowly defined topic; (b) Pursuit of primary and secondary sources; (c) Primary and secondary source criticism; (d) Analysis and interpretation of themes emanating from primary and secondary sources; and (e) Presenting the findings. Ultimately, this dissertation will provide an informed presentation of professional basketball and hockey facilities through these general steps of historical research.
Selection of a Narrowly Defined Topic

Historical research methodology, like its quantitative and qualitative counterparts, is not without weaknesses and limitations. Notably, the effectiveness of the methodology can be eroded due to its time-consuming nature (Seifried, 2010a, 2017). Because of this temporal reality, historians should caution against selecting a topic that is too broad in scope (Best, 1970; McDowell, 2002). One way scholars can identify a topic that is appropriately narrow is to develop specific research questions about a general topic of interest (McDowell; Seifried). By developing compelling research questions, the investigator can advance a hypothesis or hypotheses and make inferences about how the world functions (Booth, 2005).

The goal of the present study is to use the modernization construct within the historical research method to develop and disseminate an understanding of how major multipurpose urban facilities (e.g., NBA and NHL arenas) evolved throughout the 20th and into the 21st century. Using modernization under a constructionist approach, the present study aims to predict advances in facility design, as well as recommend best practices for future facility construction from the trends or patterns captured over time. The current project is sufficiently narrow in its topic and scope in that it seeks to understand how and why major (i.e., NBA and NHL) sport arenas were constructed and how they have changed utilizing the organizing construct of modernization. Yet, rather than seeking to specifically explore the construction history and unique circumstances of every arena used throughout the entirety of each league’s existence, the present examination seeks to create an understanding of broader thematic elements.

Primary and Secondary Sources

The overall quality of historic research and publication of findings is dictated by the availability and use of primary and secondary source material (Kraus, 2008; McDowell, 2002). Primary source materials are understood to be materials produced by individuals with first-hand
experience or knowledge of a specific event (Berg, 1998). Seifried (2010a, 2017) listed archival information such as government documents, organizational records, newspapers, interview recordings and transcripts, pictures, and architectural drawings as examples of primary sources that provide facts. Secondary sources are typically scholarly books, journal articles, textbooks, or other materials generated based on the information gleaned from primary sources and useful for interpretative purposes (Seifried, 2010a, 2017).

Notably, before pursuing the collection of primary sources it is advantageous for historical researchers to first accumulate and then read secondary sources to form the foundation of many historical research projects (Kraus, 2008; McDowell, 2002). Quality secondary sources are produced with the use of primary sources and are necessary to enhance authenticity and credibility as well as maximize exposure to other secondary sources (Berg, 1998; Booth, 2005; Seifried, 2010a, 2017; Tutka, 2016). In addition to enhancing basic understanding of the topic, the use of quality secondary sources gives the primary investigator access to potentially fruitful primary and secondary sources via the bibliography and notes sections of the accumulated sources (Tutka).

The accumulation of secondary sources for this project initially focused on materials targeting major professional and college facilities, as well as sources on the founding and histories of NBA and NHL franchises and their arenas. Collecting and examining secondary sources on sport facilities is of particular value to sport management researchers because secondary sources “can accurately portray the history of the venue by identifying the causes for the facility’s construction and changes to its architectural and physical structure” (Seifried, 2010a, p. 587). It should be expressly noted that Booth (2005) cautioned against the use of less methodologically rigorous and more readily available secondary sources because of a potential lack of authenticity to the works. While the researcher agrees with this warning in principle, the
non-academic secondary sources produced on professional sports teams often contain useful information that exist as cultural artifacts (Seifried, 2005, 2010b). As a result, these types of sources, were used to allow the author to generate understanding of the unique cultures of professional basketball and hockey fan nations in the U.S. and Canada.

The relative lack of scholarly secondary sources focused on NBA and NHL arenas made the acquisition of facility-specific and sport-specific sources challenging. Sources used to help inform this project include works on sport-specific facilities such as soccer (Bale, 1993) and football and baseball (Seifried, 2005; Trumpbour, 2007; Tutka, 2016). Further, sources dedicated to modernization and sport (e.g., Adelman, 1986, 1993; Guttman, 1978; Seifried & Pastore, 2009a, 2009b; Seifried & Tutka, 2016) contributed to better understanding of modernization as a paradigm and its effectiveness and usefulness in analyzing sport and sport management. Relevant web sites dedicated to sport facilities (e.g., ballparks.com, probasketballencyclopedia.com) and basketball and hockey research (e.g., Association for Professional Basketball Research; Society for International Hockey Research) also generated information on facility specifications and identify relevant secondary sources and additional web resources (Cox & Salter, 1998).

Seifried (2010a) previously noted that primary sources are the ideal data to use in a historic study in sport management. Tutka (2016) encouraged sport management historians to accumulate primary sources because those sources enhance the quality and significance of research by providing contemporaneous accounts, recollections, reactions, and interpretations of events by participants and observers. Primary sources are particularly valuable for a project focused on professional basketball and hockey facilities. More specifically, primary source data related to facility design, financing, construction figures, and fan demands for amenities and improvements guided this study. Within this study, the researcher used archived newspaper
articles gathered through such sites as *newspapers.com* and *newspaperarchives.com*, political speeches and statements, financial statements, financing agreements, organizational memos, facility schematics, and environmental initiatives. Further, documented statements from individuals (e.g., politicians, owners, and or concerned citizens), organizations (e.g., teams, leagues, labor unions), and government entities such as stadium authorities with first-hand experience of the development of specific facilities were used as primary sources used in this dissertation as well.

Guiliano (2017) noted that access to digital resources varies from institution to institution and impacts the results of historical research. Primary and secondary sources were obtained through various library services (e.g., interlibrary loan) and databases (e.g., HathiTrust Digital, JSTOR, Lexis-Nexis, Academic Search Complete, Business Source Complete, Google Scholar) offered on the campus of Louisiana State University. In addition to utilizing university-library resources, primary sources were also obtained through arena authority web pages when practical (Cox & Salter, 1998) and facility visits. Facility visits can provide a richer, nuanced understanding of not only the facility, but also the unique culture of the host city and fan base. This is possible because both cities and teams pay homage to past facilities and cultural realities by recreating an idealized past to attract fan and tourist dollars (Ramshaw & Gammon, 2005; Seifried & Meyer, 2010; Vesey & Dimanche, 2003). Visits were made to Los Angeles, New Orleans, Pittsburgh, Portland, Washington, D.C., and Winnipeg. Additionally, materials were accessed through organizational archives and special collections where possible (Kirsch, 2009).

**Source Criticism**

Seifried (2010a, 2017) identified historical source criticism, or checking the reliability of sources as the third step of the historical research methodology. Establishing the authenticity and credibility of primary and secondary sources enhances the quality of historical research projects
(Berg & Lune, 2012; Struna, 2011). Moreover, a researcher’s relative certainty in using accurate, reliable, and credible sources assists in producing meaningful hypotheses or propositions (Seifried, 2010a, 2017; Walker et al., 2018).

Determining if a source is accurate and reliable can be achieved through internal and external criticism. Internal criticism is a process of determining if a source is credible by testing the source’s trustworthiness (Decker, 2013; Donnelly & Norton, 2011; Kippling et al., 2014; 2011; Struna, 2011). Struna applied three rules to establish the credibility of a source: (a) Rule of Context; (b) Rule of Perspective; and (c) Rule of Free Editing. The rule of context applies to the definition of specific words within a document at the time the document was produced as well as the positioning of the words within the totality of the document. Specifically, the rule stipulates that a historical researcher must understand the words used in the vernacular of the time period of writing, as well as the information presented before and after particular words and phrases that will inform the analysis of the entire source and presentation of findings. By following this rule, the historic researcher can minimize misunderstanding or misrepresentation of the document’s originally intended message (McDowell, 2002).

Struna’s (2011) rule of perspective stipulates that a researcher needs to critically think about the positioning and potential bias of the document’s author (Decker, 2013; Donnelly & Norton, 2011; Kippling et al., 2014). Seifried (2010a) urged sport management scholars to be acutely aware of author bias, especially with secondary sources as it relates to fan allegiances and the excessive and obsessive support they can show to those entities they support. This rule is closely related to the rule of free editing which holds that any historical document does not present the entirety of the event being documented. Considered in totality, these internal criticism rules require the researcher to pursue more than one source on any topic or event (Struna).
External criticism is the process of determining if a document is authentic (Struna, 2011). Similar to processes in quantitative and qualitative methodologies, external criticism seeks to establish the reliability and validity of the source (i.e., data) used (Seifried, 2010a). Reliability and validity are enhanced by examining the physical characteristics of a source to determine if it is in fact period appropriate (Berg, 1998; Decker, 2013; McDowell, 2002). Furthermore, source reliability and validity is negatively correlated to time between an event and when an account is recorded. In other words, accounts recorded during or shortly after events are considered more reliable than those produced after a long passage of time (McDowell).

Within the present study, internal and external criticism of sources proved paramount. In order to satisfy the rule of context, the researcher read all English primary documents used in the study in their entirety and sought to apply period appropriate definitions of key terms as needed. Professional basketball and hockey arenas were constructed at different times, in different cities and countries. As a result, being aware of when and where the construction or renovation of various facilities occurred impacted the interpretation of the sources. Also, although more appropriately discussed as a limitation, the researcher has no capability to read French or reasonably rely on 19th or early 20th century French Canadian translation into contemporary United States English. Because several teams and facilities were constructed in French-speaking Canada, the context of those documents could not be readily determined and as such those documents were excluded from the analysis.

The rule of perspective and rule of free editing were fulfilled by guarding against potential bias in collected sources (Struna, 2011). The collection of sources required accumulating material that spans two different centuries with origins in cities spread across two countries. Thus, the information to be presented is influenced by geographic location of construction, technological advancement across more than 100 years, and varying levels of
league and fan base popularity and consumer sophistication. To address this concern, the researcher remained aware of changing conditions when examining data. This was critically important given that the two sports compete concurrently and tend to occupy the same facility in multiple municipalities.

The researcher also scrutinized documents externally by first determining if the source data came from reliable archival collections. This scrutiny was applied to both primary and secondary sources. For primary sources careful consideration was given to original date of production (Berg, 1998; Decker, 2013; McDowell, 2002). When original hard copy documents were not readily available, electronic reproductions were examined. The use of digital or electronic reproductions in historic research has garnered increased acceptance within history and sport history, necessitating increased scrutiny of sources by researchers (Klugman, 2017; Sterling, Phillips, & McDonald, 2017). The reliance on electronic reproductions required an additional level of external criticism because electronic reproductions can be easily falsified (Golder, 2002) or biased (Regan, 2017). That this examination of basketball and hockey arenas incorporated some publications that did not necessarily meet the rigor of peer-reviewed, academic publication, the author ensured the accuracy of secondary sources by scrutinizing reference information for accepted, authentic recounting of events. More simply, after gaining access to these types of sources the researcher corroborated the accounts with other existing works to enhance reliability.

**Analysis of Sources**

After collecting and criticizing sources, the researcher began the process of analyzing the source material. Source analysis of documents related to professional basketball and hockey arena construction involved the “establishment of a relationship between the event and larger themes” (Seifried, 2010a, p. 591). In order to make connections between available data, connect
overarching themes, and develop a strong conclusion, Seifried (2010a, 2017) recommended the creation of a detailed, categorical outline to organize information. Seifried (2010a) encouraged this approach because “the outline entitles the researcher to view the overall framework of the research topic and grants them the ability to better shape the article into a logical series of interconnecting themes” (p. 591). Furthermore, the creation of a categorical outline promotes triangulation of data, while limiting researcher bias or preference for particular qualitative or quantitative approaches (Jick, 1979).

To effectively analyze source information, the author synthesized information about each facility and its development circumstances with those of other facilities in order to make generalizations about basketball and hockey facility construction and ultimately put forward hypotheses to explain facility construction phenomenon. In order to make strong and replicable generalizations, the author created spreadsheets using Microsoft Excel software through which categories were generated to assist in the identification of themes, seminal events, facility modifications, and construction/renovation trends (Seifried, 2010a). Sample categories include franchise name, facility name, date of construction, capacity, luxury boxes, and club seats.

Additional analysis emerged through the effort to use the constructionist approach. The constructionist approach attempts to synthesize the sequential and cyclical views of history through the use of previously established historical epistemologies (McDowell, 2002). Constructionists achieve this through the identification of patterns and themes within existing historical research to assess individual and group behavior or situational outcomes. The current constructionist approach also applied the modernization paradigm as an organizing construct to understand the construction of professional basketball and hockey arenas. Modernization has been defined as a “process of human development in which socioeconomic development brings cultural changes” (Inglehart & Welzel, 2005, p. 2). Within sport management and sport history,
academicians have used modernization to make convincing arguments and inferences about society and the evolution of the sports industry (Howell, 1998) to capitalize on the consumer desires through technological development, commodification of space and service improvement (e.g., Adelman, 1986; Guttman, 1978; Seifried, 2010b, 2016; Seifried & Pastore, 2009a, 2009b).

In an effort to be forthcoming and reduce bias, this dissertation acknowledges the potential criticisms of modernization as an organizing construct because as a largely sequential view of history it can be viewed as ahistorical, reductive, and deterministic (Adelman, 1993; Seifried & Novicevic, 2017).

**Presenting Findings**

Utilizing categories, perspectives, and/or constructs like those described above ultimately results in a stronger presentation of findings (Booth, 2005). Furthermore, such organization and analysis prompt the systematic analysis and categorization of quantitative and qualitative data related to sport arenas and arena construction to be communicated through an ideal-type. Tutka and Seifried (2015) encouraged historical sport management researchers to employ the ideal-type as a heuristic device to promote acceptance of historical research within sport management. Rooted in sociology, an ideal-type heuristic device allows a researcher to establish a general construct by examining individual phenomena (Weber, 1948). Within sport management, the ideal-type enables sport management-history scholars to synthesize multiple observed cases within a similar timeframe into representative models or, as is the case with this project, stages (Rogers, 1969; Weber).

Sport scholars have successfully implemented the historic ideal-type device when analyzing and describing the decades-long evolution of sport facility location, design, and construction. Bale (1993) utilized the heuristic device in his description of the progression of soccer stadium design in England. The author established a generalized, four-stage model of
facility evolution that incorporated the modernization construct to explain the growth and changes of the facilities as English society changed. Similarly, Seifried (2010b) developed a six-stage model of professional baseball and football facility evolution in the United States. Like Bale, Seifried developed the model with respect to modernization of society and technological changes in the U.S. Lastly, Tutka (2016) also employed the ideal-type model in his examination of innovation diffusion in major college football stadia. Tutka identified a five-stage model that relied on organizational responses to, and adoption of, technological advances in the construction and renovation of college stadia. Ultimately, the authors used the ideal-type as a means of logically and systematically presenting results of their analyses.

The current project, therefore, is enhanced through the systematic analysis and categorization of source information utilizing the ideal-type heuristic device to create an environment that encourages making inferential connections between seemingly unique data (Tutka & Seifried, 2015). To illustrate this point, the present study complements quantitative data such as construction costs and capacity with qualitative information in the form of statements from politicians, owners, players, and fans in reaction to proposed and completed construction.
CHAPTER FOUR
WEATHER DEPENDENT AND ADAPTED USE FACILITIES

The permanent European (i.e., French and British) settlement of Canada by the mid-19th century produced a necessary, if at times uneasy, compromise between the extractive timber and mining industries and the growing communities that alternately supported and depended on them (Innis, 1936; Lower, 1936; Smith, 1986). For example, Lewis noted “the adventurous and speculative nature” of the timber industry attracted young men from settled land to the wilderness (p. 28). However, those industries also relied on the investment of financial resources only available within established communities to grow (Smith). Interestingly, both the extraction of natural resources and the permanent European settlement of Canadian land demonstrated humanity’s increasing desire to control nature (McKim, 2017). Importantly, the human desire to control nature also manifested in a desire to control human behavior and bring the civility of the cities to the wilderness, but wilderness recreation to the cities (Howell, 2001; McKim).

Beginning in 1700, Montreal served as the hub of Canadian trade (Cooper, 1969). Cooper further argued the status of Montreal as an economic and trading power increased rapidly following the American Revolution when it became the largest British colonial trading location. Additionally, the emergent U.S. control of a portion of the Great Lakes and the creation of the Erie Canal weakened Canadian fur trading, which caused Montrealer businesspeople to focus more intently on developing mining and timber investment by the 1820s. The shift toward mining and timber noticeably coincided with a fivefold increase in Montreal’s population by 1870, which was also reflected in total Canadian population growth from 400,000 to more than 3,000,000 in that same time period. Cooper credited the rapid population increases to immigration in the mid-19th century. Many of these immigrants would take jobs in the mining and timber industries where, by the beginning of the 20th century a skilled worker could earn upwards of $2 a day (Innis, 1936).
Improvements in technology allowed the vast wilderness of Canada and the
aforementioned industries to be connected via railroad lines in the later portion of the 19\textsuperscript{th} century (Cooper, 1969). For example, the completion of the Canadian Pacific Railway (CPR) connected Canadian cities and united the East and West coasts of Canada, but also served as the physical manifestation of the connection between industry and community and their desire to control nature. For the economically established, upwardly mobile Montrealer, wealth did not come from mining and timber, but from controlling routes of trade. Given its historical advantage as both de facto and de jure capital of Canada, Canadian rail lines terminated in and emanated from Montreal. As a result, people, information, technology, and raw materials fluidly moved across the continent. The connectivity allowed outpost or service towns to grow. The growth of service towns, particularly in population and in association with service industries, further modernized Canada. Moreover, such growth across Canada created a situation where opportunities to spread recreation, religion, and to establish a foothold in the New World transformed the burgeoning colony and set the stage for sporting business development (Cooper; Howell, 2001; Innis, 1936; Lower, 1936; McKim, 2017; Smith 1986).

As Montreal emerged as the hub of social and economic activity in Canada during the 19\textsuperscript{th} century, New York City established itself as the preeminent U.S. city by the middle of the century. At the conclusion of the American Revolution, New York City (i.e., 33,131) held a slight population advantage over fellow temporary national capital Philadelphia (i.e., 28,522). Despite this slight population advantage over Philadelphia and the nation’s third largest city, Boston (i.e., 18,320), New York City held no economic advantage over northern port cities (Adelman, 1986). However, by 1830 New York City developed into the largest and most economically and culturally diverse city in the U.S. with a population of 202,589, more than double the second largest city, Baltimore (i.e., 80,620). Adelman argued New York City
emerged as the population and economic leader of the U.S. as a result of its population’s willingness to embrace a pro-business culture (U.S. Census Bureau, 1998).

New York City steadily grew in economic importance following the completion of the Erie Canal system (Adelman, 1986; Burrows & Wallace, 1999). The Erie Canal connected the Great Lakes with New York City via the Hudson River, giving the city unparalleled access to trade from the middle of the continent. Furthermore, Adelman noted the city accommodated an entrepreneurial spirit that attracted talented individuals from other parts of the U.S. and the world. This entrepreneurial spirit manifested in the adoption of new technologies, such as the locomotive and investment in the railroad to maintain the city’s position as a trade and economic hub (Burrows & Wallace). Adelman noted this business spirit eventually resulted in an estimated 115 millionaires in the city by the outbreak of the Civil War and opportunities for upward mobility for those who moved to the city. As a result, New York City featured a significant population (i.e., 1,206,299) with increased discretionary income by 1880.

Over the last quarter of the 19th century the creation of semi-permanent, adaptable hockey facilities reflected the growth of recreational hockey as a potentially lucrative leisure activity in Canada and later the U.S. Furthermore, the construction of these facilities suggests an emerging class of facility owners and managers who sought to capitalize on the potential future commercial prospects of ice sports. This chapter focuses on the first three stages of the ideal-type on urban multipurpose sport and entertainment facilities. Specifically, this chapter presents the first stage of multipurpose sport facilities as dependent upon the weather (i.e., freezing temperatures) and featuring little distinction between the competition and spectating areas, with the exception of the natural barrier imposed by the shoreline. Next, this stage incorporates the creation of the skating pavilion as largely temporary roof structures placed over natural ice
surfaces that provided limited protection from the elements, but again, competition space is not distinguished to facilitate spectating.

Later, this chapter explores the construction of weather dependent urban facilities dedicated to skating and later hockey (Stage Two). These facilities are distinct because they offered clear spectating and play areas but also emerged to support other activities during the warmer months of the year. Importantly, the construction of these multipurpose facilities led to the standardization of rules of play for hockey because of the limited available space in growing communities. It is also during the latter part of the 19th century that basketball was invented as an indoor sport and an important co-tenant of the multipurpose arena in the 20th century. Lastly, this chapter concludes with the examination of facilities (Stage Three) that incorporated the technological innovation of artificial ice plants and the use of ammonia brine. In addition to new technological advances, Stage Three facilities also demonstrated the incorporation of amenities to improve the experience of spectators in their dedicated grandstands. Finally, the exploration of Stage Three introduces the emergence professional hockey leagues in order to provide an appropriate contextual foundation for the future stages of urban arena construction.

**Weather-Dependent Play**

Bale (1993) and Seifried (2010b) indicated that the first stage of outdoor Western facility development emerged during the 19th century within and outside of cities on available greenspace. Further, Seifried (2005) suggested that these improvised play spaces offered no discernable or standardized spectator barriers. In other words, designated boundaries for participants and spectators did not exist, creating a situation where multiple events could, and did, occur simultaneously during and within the playing surface (Bale). Importantly, the extant investigations and identification of the first stage of outdoor facility development has relied on a general lack of discernable spectating and play areas. Nineteenth century outdoor sporting events
on ice, therefore, exist as a unique manifestation of early sport, leisure, and recreation. Stage One outdoor skating facilities are unique because those areas of play are clearly identified as naturally occurring (i.e., bodies of water) in geographic locations with sufficiently cold climates that allowed water to freeze (Figure 4.1). Expectedly, the cold Canadian winter provided an ideal environment for skating sport over months. Importantly, the Northern U.S. also experienced cold winters. This notion, coupled with a relatively unregulated border and the fluid movement of people across it in search of employment allowed skating and skating games to spread (Howell, 2001).

![Figure 4.1. Stage One of Urban Multipurpose Facility Development](image)

*Note. Arrows represent spectator movement; Green areas represent land; Blue represents ice; Red line indicates thin ice area.*

Recreational ice-skating clubs were first established in Europe in the 1650s (Helmer & Owens, 2000). Until the mid-19th century, the recreational facilities were outdoor skating facilities (Shubert, 2011; 2016). In addition to serving as locations for recreation, these natural ice surfaces also hosted a variety of hockey-like games that varied by nation and culture. For example, within the First Nations population, oochamkunutk was played by the Mi’kmaq, while a version of the game of hurling was played on ice in Ireland (McKinley, 2006). Despite the
existence of rudimentary versions of the game, skating and curling tended to monopolize the sporting activity on the ice (Shubert, 2016).

The open-air nature of Stage One facilities left participants, spectators, and the skating surface exposed to the elements. The accumulation of snow combined with the possibility of the thinning of ice created a dangerous and potentially deadly circumstance for skaters. The Morning Chronicle described the precarious situation some participants faced because fallen snow not only made skating difficult, but also covered thin ice; as a result, “during the day, many immersions took place” (1845, p. 5). The danger of poor weather conditions created the first opportunities for individuals to exert some control over nature. The hazard of fallen snow necessitated removal of snow from the skating rink. Fallen snow and ice shavings were typically disposed of along the edge of the rink via a shovel (Shubert, 2016). Furthermore, Shubert identified the threat of falling through thin ice created a situation where safety equipment, posted safety rules, and ice condition markers were instituted, which not only enhanced safety, but also created a rudimentary barrier for play.

Over time increased auxiliary and support services dedicated to participants and spectators emerged around the frozen natural bodies of water where skating occurred. In Detroit, MI, the Woodward Avenue Skating Park offered private skate storage boxes for customers with season-long skating memberships (“From Three to Ten.,” 1864). Additionally, opportunities to rent skates, purchase limited concessions, and huts and gazebos to seek relief from the elements were also made available to paying customers (Shubert, 2016). Lastly, the emergence of covered skating pavilions, constructed for roller skating in warmer months, but with the opportunity to add water to create a man-made natural ice surface for the winter demonstrated an attempt to further control nature as a means of creating a profit generating recreational sport enterprise (“Plan Large Theater at Cost of $250,000,” 1916).
Interestingly, Shubert (2016) described the skating activity in the outdoor facility “as a cross between public park, gymnasium, and dance hall” (p. 20). This note certainly echoes the findings of Bale’s (1993) and Seifried’s (2005; 2010b) work on soccer and baseball respectively. Although varying types of stick games existed during the mid-19th century, the preferred on-ice recreation remained skating and curling. This lack of interest, coupled with competition for skating space and no standardized rules of hockey resulted in the ice rink being a place for recreation and play, but not of hockey competition. Although intentional decisions regarding safety and amenities restricted the skating surface, the lack of man-made boundaries and standardization of space indicates the Stage One facilities were generally undeveloped and spontaneous locations for recreation, like skating and early forms of hockey.

**Victoria Skating Rink and The Rules of Hockey**

Increased public interest in ice skating contributed to the creation of a skating specific sporting goods industry, including a variety of clothes and skate options (Shubert, 2016). This popularity, coupled with the complicating factors of wind and snow eventually led to the purposeful construction of enclosed skating facilities during the mid-19th century (“The International Exhibition,” 1862). As early as 1852 indoor skating rinks were erected in Canada. Over the course of the next four decades purpose-built skating rinks, though enclosed, relied on the cold weather to freeze their ice surfaces. Because of their reliance on natural cold temperatures to create the ice surface, the ice rinks were only utilized for skating during the winter months. During warmer months, the skating area was repurposed, demonstrating an awareness of the commodification of space.

This dissertation argues Stage Two of multipurpose arena design is best identified by the intentional, total enclosure of the skating surface, as well as the creation of a designated playing and spectating area (See Figure 4.2). Similar to Stage One, the Stage Two facility still relies on a
naturally freezing ice surface. As a result, though enclosed, the facility itself was not heated and allowed for the inflow of cold air to ensure that the ice surface remained frozen (Shubert, 2011). Eventually, the size and shape of these new dedicated playing spaces influenced the standardization of the rules of hockey when they were first written down in the mid 1870s. Importantly, those rules limited the number of players allowed per side (i.e., seven or nine) and within the limited oval shaped playing surface.

Figure 4.2. Stage Two of Urban Multipurpose Facility Development
Note. Arrows represent spectator movement; Grey represents physical structure; Brown represents designated spectator area; Blue represents ice.

Shubert (2016) identified the 1852 construction of the Quebec City Skating Rink as the first purpose-built skating rink in North America, however, the author does acknowledge that dedicated curling facilities were built as early as 1837. Shubert (2011) noted that the early skating rinks were constructed out of wood and offered little in the way of ventilation, despite the accepted practice of smoking in the facility and gas lighting. Ten years after the construction of the first Quebec City Skating Rink, the most prominent skating rink of the Stage Two era, Victoria Skating Rink, opened in Montreal (Shubert, 2016). The Victoria Skating Rink is prominent for several reasons: First, it was renown throughout the British Empire, with
newsletters as far away as Australia describing the characteristics of the facility. Second, the facility attracted and catered to the upper classes of Montreal society. Third, it was truly multipurpose, hosting a variety of events in warmer months. Fourth, the facility hosted the first documented game of hockey, a contest between McGill University and the Montreal Athletic Club.

Built at a cost of $22,000, the equivalent of $546,965.38 in 2018, the Victoria Skating Rink opened on Christmas Eve, 1862 (“The Skating Rink,” 1863). The Victoria Skating Rink was built near downtown Montreal, in the Golden Square Mile neighborhood (“141 Years Ago,” 2016). Interestingly, residents of this already wealthy neighborhood would grow to control 70% of Canadian wealth by the turn of the century (Harris & Lyon, 2004). The Birmingham Daily Post (1863) recounted the opening of the 202-foot-long by 80-foot-wide Victoria Skating Rink to a crowd of thousands of well-to-do Montrealers. Men and women skated on the natural ice surface surrounded by a broad promenade spectating ring. Additionally, the building was lit by six gas lamp chandeliers which were assisted by 480 single gas burner lights “making the rink almost as bright as day” (“A Meet on the Ice,” 1863, p. 4). The features of this Stage Two facility also accommodated warm weather events. For example, in the late summer of 1863 the Victoria Skating Rink housed the Horticulture Society’s Exhibition of the larger Provincial Exhibition, where various flowers, as well as crops were displayed in the skating area (“Provincial Exhibition,” 1863).

The popularity and success of the Victoria Skating Rink resulted in the construction of more Stage Two facilities around Canada and the northern U.S. The proliferation of similar facilities suggests that ice skating and the multipurpose facility were commercially viable, if costs could be controlled. Additionally, the spread of recreational facilities across the continent suggests a level of economic and industrial maturity as communities had sufficient populations
with sufficient disposable income to support such entertainment facilities. For example, Butsch (1990) indicated that recreational and professional sport became sustainable businesses because employee wages increased while technological advances and emerging labor regulations decreased the hours of the work week, thereby providing individuals the time and money to consume and participate in sport.

**The Rules of Hockey**

As mentioned above, various stick games on ice had been played around the Northern Hemisphere. Despite the different incarnations of the game, the first written rules of hockey emerged in Windsor, Nova Scotia (“News Accounts,” n.d.). Though fluid, the general rules of the game as played in Nova Scotia required seven players per side, who played two 30-minute periods with a 10-minute break in between, and used either a ball or wooden puck (Windsor “Evolution of the Team,” n.d.; “Original Rules,” n.d.). Nova Scotia native James Creighton brought the rules of hockey with him to McGill University and arranged Canada’s first indoor game of hockey to be played at the Victoria Skating Rink in 1875, a version of the game that featured nine players per side (“James George Aylwyn Creighton,” n.d.). Although Creighton’s version of the game included standardized rules, there was still a lack of familiarity with the sport and a general fear that without protective boundaries that spectators, including children who frequented the skating rink, may be injured by the players (Shubert, 2016).

Notably, the initial popularity of the game of hockey is difficult to measure. Three years after Creighton was credited with bringing hockey to Montreal contests between McGill University students and sporting clubs in Montreal attracted a “fair number” of spectators to the Victoria Skating Rink (“Hockey Match,” 1878, p. 3). However, there was never a guarantee that games as scheduled would be played. On March 26, 1878 the game scheduled between McGill and the Montreal Club was cancelled because neither team came to the rink (“City Items,” 1878).
Such inconsistency highlights the lack of professionalization within the sport, both management and player. Despite some early inconsistencies, over the course of the next two decades hockey, particularly amateur hockey, grew in popularity so that by the mid 1890s hockey became synonymous with Canadian winter sport (Howell, 2001; Shubert, 2016). Furthermore, both men and women were playing organized hockey by the end of the century, with female club teams forming as early as 1894 with *The Illustrated Buffalo Express* describing “the game is quite as suitable for the gentler sex as it is for men” (1894, p. 2). Interestingly, as was the case with other emerging popular sporting pastimes (i.e., football), Wong (2005) noted organized hockey was played at the collegiate, then amateur ranks by upper class citizens, while members of the lower classes would eventually gravitate to the less scrupulous professional version of the game that emerged in the early 1900s.

As the sport of (amateur) hockey grew in popularity, the design of Stage Two facilities and the rules of hockey evolved to accommodate increased spectator interest, while also more specifically defining the competition territory. In the 40 years since it was first erected in the affluent Golden Square Mile neighborhood the Victoria Skating Rink had undergone renovations (i.e., rehabilitation) that added balcony and loge box seating to attract wealthy fans of the increasingly popular sport (Shubert, 2016). In addition to improved seating, Shubert (2011) identified technological advances in electric lighting as critical to lowering the interior temperature of skating rinks. However, poor ventilation and a lack rules prohibiting smoking led to a foggy haze partially obscuring the playing surface (Shubert, 2011). Furthermore, Shubert (2016) indicated the inclusion of four-foot high wooden boards to the edge of the skating surface as a key addition to the Stage Two facility. These bumper boards further separated the territory of the hockey competition space by simultaneously protecting fans from players and equipment, while clearly delineating the spectating area.
While many of the Stage Two facilities evolved as the Victoria Skating Rink had through rehabilitation treatments, by the end of the 19th century urban skating rinks were constructed with consideration for hockey, rather than merely recreational skating. Shubert (2011) pointed to the Westmount Arena as the first of these types of facilities. Located several blocks southwest of the Victoria Skating Rink, the Westmount Arena featured tiered grandstand seating for between 6,000 and 7,000 hockey enthusiasts (Shubert, 2016). In addition to the welcomed addition of dedicated seating, the Westmount Arena also rented blankets to spectators (Shubert, 2011). The 10-cent rental blankets not only suggest a further evolution in arena management through service improvement, the blankets also serve as an important reminder of the reliance of the sport of hockey and the operation of a hockey facility during this stage of development on cold weather to freeze the natural surface.

While facility owners were building larger rinks that placed increased emphasis on the sport of hockey, the rules of hockey became further standardized through the creation of governing bodies. In 1886, the Amateur Hockey Association of Canada (AHAC) formed and held annual meetings concerning the state of the game, rules of play, and governance, suggesting the increased importance of competition within the sport. One of the first rules adopted by the AHAC was the standardization of a vulcanized rubber hockey puck (Shubert, 2016). The AHAC met annually to discuss the state of amateur hockey in eastern Canada (e.g., Ottawa to Montreal), charged a $10 membership fee, organized a schedule of games from January 1 to March 8, modified rules of play, and provided options for member appeals; however, no standard size of skating surface was prescribed (“Hockey Association Meets,” 1893).

While the AHAC emerged as the leading amateur hockey association, the growing interest in the standardized version of the upper-class game resulted in the creation of rival associations in the early 1890s in Ontario and Manitoba (Wong, 2005). The Ontario Hockey
Association (OHA) formed in order to “put a stop to roughness” (“Proposed New Hockey Association,” 1890, p. 8). The OHA proved popular, though less skilled than the AHAC, as Wong noted the association grew to a membership of 63 teams. The proliferation of hockey associations in Canada, and to a lesser extent the U.S., further demonstrated the emerging commercial hockey product. According to Wong, entrepreneurial rink owners and amateur club leaders, as well as the media looked to capitalize on the growth of amateur hockey and an increasing fan base. Moreover, by 1893 the AHAC emerged as the leading amateur hockey organization in Canada and the original caretaker of the Stanley Hockey Championship Cup (Stanley Cup) (“The Stanley Cup,” 1893). Following the donation of the Stanley Cup, the AHAC and the OHA agreed to structure their seasons to conclude so that the AHAC champion and Stanley Cup holder could be challenged by the OHA champion (“The Stanley Cup”).

**Conclusion for Stage Two**

Unlike its outdoor counterparts, ice skating and later hockey created designated spaces for participants and spectators as early as 1852. A combination of desires to mitigate the dangers of open ice skating, coupled with growing popularity of winter sport and the recognition that facilities should pay for themselves resulted in the construction of enclosed skating rinks and later, arenas. While Bale (1993) and Seifried (2005; 2010b) put forward that facilities in the mid-19th century offered little separation between the areas of spectating and play and that rules of play separated participants from spectators, with hockey, the rules of the game were modified to meet the realities and spatial limitations of the skating rink. As a result, the game of hockey was shaped by its facilities, and recognizably emerged as a result of climate and space restrictions.

Stage Two of multipurpose urban sport and entertainment facility development also began when individuals within society responded to emerging industrialization and technological development. Where Stage One facilities were limited by the natural location of bodies of water
(e.g., lakes, ponds, rivers), the locations of Stage Two facilities were planned and could be constructed in high traffic, high population, and/or high affluency areas. Decisions to build skating rinks in such areas is understandable, as the skating-specific sporting goods industry increased rapidly during the third quartile of the 19th century and an emerging managerial class likely sought to exploit early industrial capitalism. The gentle nature and broad appeal of ice skating as a family activity that crossed class and gender lines was juxtaposed by the at times violent reputation and haphazard existence of hockey (Shubert, 2016). In order to gain access to the more controlled environment of the skating rink, the rules of the game were modified to account for spatial restrictions and spectator fears of violence, particularly the puck leaving the playing area.

Creighton’s modified rules of Halifax hockey adapted the game to the realities of the Stage Two facility (e.g., inclusion of puck). The intermittent interest and presentation of hockey during the 1870s gradually gave way to an increased fan following. In response to the growth of spectator interest in hockey, the focus of Stage Two facilities shifted toward the sport. As a result, Stage Two facilities built in the 1880s and 1890s further differentiated and standardized locations for spectating and participating. Notably, the construction of bumper boards increased fan protection, while also creating barriers to accessing the playing surface (Shubert, 2016). Improvements in skating technology and strategy further altered the presentation of the game as teams downsized from nine, to seven, and finally six players on the ice at a time.

Overall, it is during Stage Two, especially late Stage Two, that the contemporary trappings of hockey can be identified by the layperson. However, the Stage Two facility was also limited. While a marked departure from Stage One facilities, Stage Two facilities relied on natural freezing surfaces. Regardless of increased separation of spectators, inclusion of amenities, standardization of rules, and awareness of the territoriality of sporting activities,
hockey could only be played in colder months (“Hockey Association Meets,” 1893). The next stage of facility construction utilized recently modified artificial ice-making technology.

**Madison Square Garden II and Schenley Park Casino**

Increases in disposable income and free time was not lost on entrepreneurs of the late 1800s. The construction of Madison Square Garden II (MSG II) demonstrates the recognition of the potential for multipurpose facilities to generate profit by sport entrepreneurs, as well as a snapshot of how facilities evolved from Stage Two to Stage Three. Constructed as a replacement for William Vanderbilt’s original Madison Square Garden, a facility used primarily for circus attractions, MSG II did not serve as a hockey facility and did not have artificial ice-making capabilities (Seifried & de Wilde, 2014). Rather, MSG II emerged to capitalize on the growing public interest in horse shows and needed space for large social gatherings (Moore, 1964).

Importantly, MSG II was backed by investors from the robber baron class such as J.P. Morgan and Andrew Carnegie who formed the Madison Square Garden Company to build a new facility that catered to the leisure interests and expectations of the monied class (Burrows & Wallace, 1999).

More than 1,000 laborers erected MSG II over a period of 11 months. Demonstrating a desire to attract the dollars of the upper class, MSG II provided a truly multipurpose experience including grandstand seating for 12,000 guests, an attached theatre, restaurant, apartments, and an elevator (Seifried & de Wilde, 2014). Furthermore, Burrows and Wallace (1999) noted that MSG II featured a 300-foot tower, making MSG II “an instant attraction and emblem of the city” (p. 1147). Resultantly, the facility carried the substantial price tag of $3,000,000 at its completion in 1890, an amount equivalent to $82,782,472.53 in 2018. Seifried and de Wilde acknowledged the high cost of the facility and the valuable real estate it occupied in Manhattan required the renting of facility space to attractions inside but also outside the interest and status
of its initial upper-class clientele. As a result, MSG II hosted a variety of activities, such as dog shows, six-day bicycle races, boxing matches, and circuses to increase its revenue. The issues faced by MSG II highlight an important condition of the arena as a multipurpose commercial facility, the need to maximize the profitability of its space and provide attractions, such as ice skating, throughout the year.

The first successful attempt to create ice artificially can be traced to 1783 (“Odds and Ends,” 1894). Shubert (2016) noted that an artificially frozen skating surface first appeared in London in 1841. The first artificial skating rinks were limited in size and too small for competition. Therefore, despite the ability to freeze water artificially, by the late 1870s the preferred method of creating a frozen surface was to rely on naturally cold temperatures (“Skating,” 1879). The most likely reason for the slow adoption of artificial freezing technology was likely the prohibitive costs of installing the technology within a facility footprint (Shubert). Early ice-making machines weighed more than 200 tons and the standardized size of skating surfaces of approximately 200 feet by 80 feet required over 75,000 feet of piping through which brine coolant would be pumped to freeze water to create the ice surface (Greenland, 1997).

The inclusion of artificial ice making technology and the high cost of construction most clearly differentiates the Stage Three facility from its predecessors. The Schenley Park Casino, the first facility with an artificial surface in North America, could accommodate up to 1,200 fans and cost $400,000 to build in 1895 ($11,957,468.25 in 2018) (“1895-1896 Pittsburgh’s Schenley Park Casino,” n.d.). Additionally, facility ownership added $140,000 ($4,185,113.89 in 2018) worth of amenities, such as 20 private luxury dressing rooms resulting in a final cost, more than 24 times that of the Victoria Skating Rink (“1895-1896 Pittsburgh’s Schenley Park Casino”). The casino rink featured 1,500 incandescent lamps, 11 arc lights, and four white calcium lights to illuminate the 225’ x 70’ skating surface. The cost of the casino was in line with similarly
populated cities in eastern North America such as the Arena Gardens, a Stage Three facility in Toronto, ON built for C$500,000 in the early 1900s (See Figure 4.3).

Discussion of the Stage Three facility also shifts the focus away from the northeast corner of the continent. As discussed above, the Canadian Pacific Railway technologically linked the East and West Coasts of Canada. Increased settlement and the expansion of the timber and mining industries in Western Canada helped to develop modern communities in British Columbia and the Plains (Innis, 1936). Just as the emerging modern society of Eastern Canada developed recreational activities to engage in during down periods, the Western society, composed largely out of adventure-seeking men from the East also sought out recreation (Howell, 2001). The ability of people to quickly transfer information and technology afforded entrepreneurial-minded individuals with resources the opportunity to construct hockey arenas and form professional and amateur leagues, albeit to a smaller size and scale than in cities like Toronto and Montreal.

Wong (2009) described the circumstances which led to the construction of purpose-built hockey facilities and the emergence of professional hockey in British Columbia. The combination of relative wealth from the timber industry, interest in hockey, and the desire to develop a professional hockey league led the Montreal-based Patrick family to construct hockey arenas in British Columbia as part of their efforts to establish the Pacific Coast Hockey Association. Brothers Lester and Frank Patrick used money from the sale of their father’s timber company to form the Vancouver Arena Company and financed the construction of two arenas in British Columbia. The larger Denman Arena, built in Vancouver, accommodated 10,000 fans and cost $226,382, the equivalent of $5,983,796.54 in 2018. The company also financed the construction of Victoria’s Patrick Arena, a 4,000-seat artificial ice arena for $110,000, the equivalent of $2,907,552.81 in 2018. While the western Stage Three facilities were less
expensive than their eastern counterparts, all Stage Three facilities suffered from one weakness brought about by a general lack of sophistication of the hockey business and arena building technology, flammability.

Figure 4.3. Stage Three of Urban Multipurpose Facility Development
*Note.* Arrows represent spectator movement; Grey indicates exterior structure; Red represents grandstand; Blue represents skating surface.

The Schenley Park Casino served the greater Pittsburgh community for less than two years. The explosion of an ammonia pipe led to a fire that resulted in a total loss of the $540,000 facility (“Casino in Ruins,” 1896). A similar fate befell the Westmount Arena, a 1918 fire resulted in $150,000 in damage to the facility which only had $50,000 in insurance coverage (“Arena Not Likely to Rise from Ashes,” 1918). Similarly, fire destroyed the Calgary Sherman Rink in 1915 and Jubilee Rink in Montreal in 1919 (Shubert, 2011). To the west, the wooden structures built by the Patrick Family in 1911 eventually succumbed to fire as well, with the Denman Arena burning in 1936, while the Patrick Arena was destroyed by fire in 1929.

**Emergence of Professional Hockey**

Amateur hockey’s growth in popularity during the late 19th century did not translate into interest in professional hockey. In fact, Shubert (2016) found that amateur games frequently
outdrew games advertised as professional. Nonetheless, the evolution of interest in the game, coupled with extrinsic rewards like the Stanley Cup and the financial success of facility owners and the management class with the intrinsic reward of besting business and athletic rivals created a situation conducive to the creation of a professional hockey league(s). The first recognized professional league, the International Professional Hockey League emerged in 1904 and folded within three years. By 1909, a healthier conglomeration of teams formed the National Hockey Association (NHA), the precursor to the National Hockey League (NHL).

The Stanley Cup trophy was intended to be held by the best Canadian hockey team each year. At its inception in 1893, the trophy went to the best amateur team in Canada. Pursuit of the trophy, as well as the large gate receipts that came for top amateur teams, resulted in the best teams seeking to form new, better associations (Wong, 2005). By the beginning of the 20th century, the AHAC folded after its best teams left the organization to establish a stronger athletic association, the Canadian Amateur Hockey League (CAHL) (Wong). While the OHA remained, the CAHL, among other amateur governing bodies formed to challenge for the Stanley Cup, a right they were entitled to by Stanley’s provisions (“The Stanley Cup,” 1893). Implicit in its rules, the Stanley Cup was designed to be awarded among amateur clubs. However, the rules governing Cup competition did not ban professional teams and also had rules governing how championship gate receipts would be split, financial penalties for cancelled games, and a final provision that accounted for the creation of a superior senior league of “the best hockey irrespective of local associations” to have an opportunity to win the cup and force the creation of new championship regulations (“The Stanley Cup,” p. 5).

The creation of the Stanley Cup encouraged the formation of teams with the best available players. In addition, for the opportunity for a team to win the Cup, the opportunity to have the best team in Canada as tenants of a certain arena was likely enticing. It is not surprising
then, that by the early 1900s professional hockey teams were assembled by facility owners. Howell (2001) cautioned that the professional game of hockey in the early 1900s attracted a different demographic than that typically attracted to skating rinks. In other words, the hockey fanbase became increasingly male and disregarded the interests and sensibilities of female and youth fans who enjoyed access to arenas and elite amateur hockey games (Shubert, 2016). Still, the business of professional hockey held appeal, otherwise it seems unlikely that the Patrick family would sell its timber concerns for the equivalent of more than $11 million today and use half of that money to build hockey arenas and recruit talent for their three-team Pacific Coast Hockey Association in 1911 (Wong, 2009).

Professional hockey did not just emerge out of competition between facility owners. The isolated existence of the mining and timber industries also required distractions and opportunities for leisure. The NHA, formed in 1909, not only featured teams from established cities like Montreal and Ottawa, but from mining outpost communities in Cobalt and Haileybury. The existence and rivalry between the Cobalt Silver Kings and Haileybury Comets rose out of the Timiskaming Professional Hockey League (TPHL) that entertained the mining communities of the region. While skilled mine workers could make more than two dollars a day, the professional hockey players earned a salary of $1,800 per year ($49,129.60 in 2018). The sense of rivalry between owners encouraged teams to sign established stars from other regions to short-term contracts to best their rivals. For example, Art Ross was paid $1,000 to play for Cobalt in the final game of the 1909 season against Haileybury (“Cobalt Hockey Club,” 2012).

The Cobalt and Haileybury clubs left the NHA after one season due to mine employee protests over the insufficient 12-game NHA schedule (“Cobalt Hockey Club,” 2012). The east-based NHA contracted and expanded over the course of the next several years. Similarly, the three-team PCHA briefly expanded to four teams, but eventually settled on three franchises in
Seattle, Vancouver, and Victoria. These early professional leagues were limited by several factors. First, the lack of consistent and affordable artificial ice technology limited many owners to the use of natural ice surfaces in Stage Two facilities. Second, the early professional leagues were established just before World War I, which Canada was brought into due its colonial relationship with Britain, limiting the male audience and participants for the sport. Additionally, hockey arenas were, by design or through adaptive-reuse, large warehouses. As a result, facilities like the Patrick Arena were seized by the government to be used as armories for the duration of the war (“Victoria’s Hockey History,” n.d.). After the war, the rededication of resources and technology to hockey facilities ushered in a Golden Era of hockey facility design and construction.

**The Invention of Basketball**

As hockey emerged as an indoor sport that relied on the winter cold to play, James Naismith, a Canadian graduate student at the International Young Men’s Christian Association (YMCA) Training School in Springfield, Massachusetts set out to develop a competitive indoor game to escape the cold. By the late 1800s, competitive games targeted at an adult audience were primarily played outdoors (e.g., baseball, football, lacrosse, rugby, soccer) (Rains & Carpenter, 2009). Similar to hockey, the sport that would eventually be known as basketball was developed within an existing physical space and with an eye toward competition, though basketball was designed to eliminate violence (i.e., tackling) (“Where Basketball was Invented,” n.d.).

Rains and Carpenter (2009) identified the invention of basketball as the culmination of a series of desperate attempts to encourage a disinterested physical education class to find some level of joy in indoor recreation. More specifically, the indoor athletic activities at the training school were essentially calisthenics and were perceived as work rather than play by the students, a condition Naismith was tasked with changing (“Where Basketball was Invented, n.d.). The 13
original rules for the game were drafted in one day. The dimensions of the playing surface were developed because of existing structural limitations to the gymnasium. The original basketball court measured 60 feet long by 35 feet wide. The out-of-bounds areas were walls and any part of the gymnasium where exercise equipment was exposed. The baskets were placed at height of 10 feet because a gallery around the gym was that height. Lastly, the teams were nine players to a side, due to the class having 18 students (Rains & Carpenter).

Naismith’s basketball seemed to be an instant success at the training school. Rains and Carpenter (2009) reported that as many as 200 spectators watched early versions of the game in the Springfield gymnasium and both men and women were interested in playing almost immediately. The sport also spread rather rapidly throughout the U.S. and Canada. Naismith’s first game of basketball was played December 21, 1891. Within weeks of the first formal game, the rules of basketball were being disseminated to YMCA facilities around the world (Baerwald, 1995; “Where Basketball was Invented,” n.d.). In Canada for example, YMCA facilities proliferated as the CPR moved across the country in order to provide clean, safe recreation spaces and housing for railway workers (“Our History,” n.d.). By May 1892, the game was being played on the campuses of Cornell University and the University of Pennsylvania, as well as in YMCA gymnasium around the region (“Funny Things in the Gym,” 1892). By the end of the year 1892, various YMCA’s in the North established competitive amateur club teams (“Kingston,” 1892). Further, by June 1893, the game spread to the American South (“The Game of Basket-Ball,” 1893).

Though James Naismith developed the 13 original rules prior to the first basketball exhibition at Springfield College, no truly standard layout of a basketball court, with the exception of the baskets being placed 10 feet off of the ground, existed. For example, a June 1893 basketball exhibition at Forest Hill Park in Richmond, VA was played with the baskets
placed 10 feet off of the ground and 150 feet apart (“The Game of Basket-Ball, 1893). The rules of basketball proved to be readily adaptable to the facility. Over time, further standardization of rules distinguished the playing surface. A May 1892 article of New York’s *The Sun* stated that sidelines of the basketball court should be placed six feet from the gym walls (“Funny Things in the Gym,” 1892). Over the course of the next decade other standardized changes appeared including decreasing players per team from nine to five, allowing players to dribble, introducing an iron ring and net in lieu of a peach basket, and replacing a soccer ball with a specially designed basketball (Rains & Carpenter, 2009). In the first decades of the 20th century, the amateur and later professional iterations of basketball would be used by various educators and entrepreneurs to satisfy competitive spirits and monetize growing spectator interests (Kuska, 2004).

**Conclusion for Stage Three**

The intentionality and consideration of amenities highlight Stage Three facility construction. Technologically, the ability to utilize large surface artificial ice technology allowed facility owners to create ice throughout the year. This technology not only extended the winter sports season, it also eliminated concerns regarding early thaws while ensuring the creation of a consistent, smooth surface. Further, the inclusion of amenities to cater to wealthy clientele (e.g. luxury boxes and dressing rooms) further commodified the facility space. Additionally, the Stage Three facility incorporated electric lights, over existing gas lamp lighting. Resultantly, Stage Three facilities in urban areas carried previously unseen construction costs. Moreover, the popularity of hockey and the relative ease with which people and information could move across the continent allowed the modern trappings of developed cities such as Montreal to be built in more recently established communities such as those in British Columbia and the Canadian Plains. Further, the emerging core demographic of male fans who populated many trade and
mining outposts bolstered hockey’s position as the winter game of Canada through their
demands to see the modern version of the sport.

Emergence of professional hockey further underscores increased sophistication of facility
managers and the evolution of the economy of the early 20th century. With rising construction
costs the need for facilities to pay for themselves and provide return on investment increased.
The attraction of championships, rivalry, and the need for distractions and diversions created a
professional ice hockey industry. Still in its infancy, professional hockey in Canada and the U.S.
did not flourish. Relatively small market appeal and geographic limitations, as well as
unimaginable global conflict limited resources, talent, and spaces for play. As a result, the first
two decades of professional hockey in North America witnessed more franchise contraction than
expansion by the end of the 1910s. Lastly, while the sport of basketball was invented at the end
of the 19th century and quickly diffused across the U.S. and Canada via the YMCA, that game
had not yet developed to a point where it would be considered a legitimate tenant for the larger,
emerging urban multipurpose sport venues.

Shubert (2011) noted that despite incorporating technological advances, hockey facilities
were primarily constructed from wood. The large, cold, and dry facilities were fire hazards.
Exposed flames, faulty electrical wiring, and insufficient risk management and transfer (i.e.,
insurance) threatened the facility and the financial security of the facility owner and franchise.
The awareness of these threats, coupled with post-war prosperity and advances in building
technology created a situation where forward-thinking sport business entrepreneurs were able to
build facilities to a size, scale, and incorporate new technology to a degree not previously seen in
indoor sport. Between 1924 and 1949 a Fourth Stage of facility construction emerged. Those
facilities were built out of steel and concrete, catered to fans from the upper, middle, and lower
classes, and emerged as truly multipurpose, yet largely sport-centric facilities.
CHAPTER FIVE
PERMANENT, PURPOSE-BUILT FACILITIES: 1924 to 1949

Sport facilities in the U.S. and Canada increased in size, scope, and durability in the decade following World War I. More specifically, between 1924 (Montreal Forum) and 1937 (Cleveland Arena) eight urban arenas were purpose-built to accommodate major professional hockey as well as other sport, entertainment, and social functions on a scale not previously seen in North America. Beyond the introduction of purpose-built, permanent constructions, the post-World War 1920s introduced a geographic shift in professional hockey from its historical roots in Canada to the U.S. At its founding in 1917, the National Hockey League (NHL) was comprised of four teams, two playing in Montreal, and one in Ottawa and Toronto respectively. Within one decade the league expanded to 10 teams with six franchises located in the U.S. Similar to Seifried and Pastore’s (2009a) claim that baseball and football facility expansion was spurred by industrialization, the early period of NHL expansion was supported, in part, through the emergence of new urban arena construction in response to socioeconomic changes brought on by industrialization.

The previous chapter noted the Canadian population increased from approximately 400,000 to 3,000,000 between 1820 and 1870. By 1920 the Canadian national population reached roughly 9,000,000 (Kalbach, Trovato, James-abra, & Baker, 2019). By comparison, the U.S. population grew from over 38,500,000 in 1870 to more than 106,000,000 by 1920 (“Fast Facts,” n.d.). By the 1920s the Canadian and U.S. economies were also increasingly interconnected as the U.S. became Canada’s leading trade partner (Crane, 2015). In the U.S., population growth was triggered by an influx of immigrants, including Canada to U.S. immigration, and the job creation brought about by rapid industrialization (Howell, 2001; Kalbach et al.). Though new immigrants, including U.S. to Canada immigrants, flocked to Canada pursuing manufacturing jobs with steadily increasing nominal wages, the populations in
Canada’s largest cities (i.e., Montreal and Toronto) lagged behind their major American counterparts (See Table 5.1 and Table 5.2 below) (Emery & Levitt, 2002; Hurd & Cameron, 1935; Cooper, 1969). For example, the population of Canada’s largest city, Montreal, reached 618,506 by the census of 1921, while Toronto totaled 521,893 (Piva, 1983). Conversely, the largest city in the U.S., (i.e., New York City) registered a population of 5,620,048 by 1920 (Gibson, 1998).

Table 5.1. Top Ten U.S. Cities by Population from Census 1920

<table>
<thead>
<tr>
<th>City</th>
<th>State</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>New York</td>
<td>5,620,048</td>
</tr>
<tr>
<td>Chicago</td>
<td>Illinois</td>
<td>2,701,705</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>Pennsylvania</td>
<td>1,823,779</td>
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<tr>
<td>Detroit</td>
<td>Michigan</td>
<td>993,078</td>
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<tr>
<td>Cleveland</td>
<td>Ohio</td>
<td>796,841</td>
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<tr>
<td>Saint Louis</td>
<td>Missouri</td>
<td>772,897</td>
</tr>
<tr>
<td>Boston</td>
<td>Massachusetts</td>
<td>748,060</td>
</tr>
<tr>
<td>Baltimore</td>
<td>Maryland</td>
<td>733,826</td>
</tr>
<tr>
<td>Pittsburgh</td>
<td>Pennsylvania</td>
<td>588,343</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>California</td>
<td>576,673</td>
</tr>
</tbody>
</table>

*Note. Data gathered from Gibson (1998).*

Table 5.2. Top Ten Canadian Cities by Population from Census 1921

<table>
<thead>
<tr>
<th>City</th>
<th>Province</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Montreal</td>
<td>Quebec</td>
<td>618,506</td>
</tr>
<tr>
<td>Toronto</td>
<td>Ontario</td>
<td>521,893</td>
</tr>
<tr>
<td>Winnipeg</td>
<td>Manitoba</td>
<td>179,087</td>
</tr>
<tr>
<td>Vancouver</td>
<td>British Columbia</td>
<td>117,217</td>
</tr>
<tr>
<td>Hamilton</td>
<td>Ontario</td>
<td>114,151</td>
</tr>
<tr>
<td>Ottawa</td>
<td>Ontario</td>
<td>107,843</td>
</tr>
<tr>
<td>Quebec</td>
<td>Quebec</td>
<td>95,193</td>
</tr>
<tr>
<td>Calgary</td>
<td>Alberta</td>
<td>63,305</td>
</tr>
<tr>
<td>London</td>
<td>Ontario</td>
<td>60,959</td>
</tr>
<tr>
<td>Edmonton</td>
<td>Alberta</td>
<td>58,821</td>
</tr>
</tbody>
</table>

*Note. Data gathered from Piva (1983).*

Although Montreal lagged behind New York City in terms of total population, during the first third of the 20th century Montreal developed traits of a modern urban center. According to Cooper (1969), the city’s footprint expanded beyond its traditional center and new
neighborhoods were established in the metropolitan area. The Canadian Census of 1921 supports this assertion of a burgeoning population of the Montreal metroplex as the city population stood at 618,506 while the Montreal metropolitan area housed an additional 714,466 individuals ("Population of Quebec," 2000). In addition to the growing population, Cooper suggested “the most conspicuous evidence of Montreal’s enjoyment of prosperity was the transformation of the city’s skyline” (p. 152-153). Specifically, Cooper identified cosmetic upgrades to train stations and the construction of new corporate office buildings as evidence of the city maintaining its status as a railway transportation hub and its ongoing transition into a center of investment banking, hydroelectricity, telecommunications, and media.

The changing urban landscape and shifting industry focus also produced an identifiable middle-manager class of workers. The Montrealer middle-management class was comprised of two types of workers, white collar clerical middle managers and “black coated” skilled labor engineers and foremen (Cooper, 1969, p. 130-131). The emergence of an identifiable professional middle management class suggested a modern urban economy. Schwartz (2009) proposed the managerial class was necessary for modern, technologically advanced organizations to function efficiently because educated workers possessed mental skills that bridged the gap between top level managers and organizational operatives. The gap between the upper and lower class was stark. The upper-class neighborhoods were generally shielded from the experiences of the lower classes. Cooper noted that disease outbreaks were common in the lower-class neighborhoods, but rarely impacted upper class parts of the city. Moreover, the conspicuous new corporate construction in the city rose above the low-income neighborhoods, creating a dramatic representation of the haves and have nots.

The prosperous upper class subsidized professional hockey in eastern Canada. The National Hockey Association (NHA) emerged within the footprint of Montreal economic
influence. The popularity of hockey in Canada led well-resourced entrepreneurs to seek teams as the league and sport’s popularity shifted from mining outposts toward urban centers. The first generation of major professional hockey owners were calculated and competitive. Rather than focus their resources on facility construction, team owners opted to rent ice time so that money could be spent on filling rosters with the best available talent. Interestingly, the cooperative and collaborative nature of the modern professional sport league eluded this generation of owners. Rather than promoting the health of the league, NHA owners operated their teams in a traditional Darwinian sense. In other words, while some cooperation in the form of agreed upon salary caps and reserve clauses were instituted, the owners also tried to put their on-ice competitors out of business in an effort to establish their team as the best in the new professional winter league (Holzman & Nieforth, 2002; Ross, 2008; Wong, 2005).

**Context of Major North American Team Sport in the 1920s**

By the 1920s Major League Baseball (MLB) existed as the pre-eminent professional sport in the U.S. The National and American leagues supported 16 professional franchises across 10 U.S. cities. Notably, the MLB season extended from April through early October. While professional football increasingly served as an attractive diversion from October to December, few alternatives were available during the winter months, particularly in cities that experienced harsh winter weather. In discussing the rise of indoor sport in major arenas, Koppett (1999) noted professional hockey emerged as an ideal sporting spectacle for major league cities with populations increasingly interested in consuming professional sport, in part because its season was contested between December and March.

Although basketball spread across the U.S. and Canada through the YMCA network, the sport had not achieved the widespread professional appeal by the 1920s to necessitate purposeful facility construction (Shubert, 2016). Koppett (1999) suggested that though the game was
developed using a gymnasium at Springfield College, it could be adapted to fit any open space of adequate size. This fact is important because, as both Koppett and Kuska (2004) found, available YMCA and dedicated gymnasium space was limited. The limited space, coupled with the almost instant fan appeal of the game, led participants and eventually promoters to pursue alternative playing spaces (Koppett; Rains & Carpenter, 2009). As a result, venues such as bars, concert halls, and ball rooms were adapted to host basketball contests. Koppett further claimed the need for playing space created a situation where some teams paid to rent facility space.

Given the burgeoning popularity of basketball, admissions fees or collections were often taken from spectators in order to defray facility rental costs (Koppett, 1999). Not surprisingly, the potential profitability of basketball resulted in the professionalization of the sport. As was the case with other sports, including hockey in the early 1900s, basketball also experienced a debate between the desirability of amateur or professional athletics status (Kuska, 2004). By the 1920s professional basketball contests could be seen regularly in major American cities, with teams competing for various world championships, and occasionally doing so in major urban arenas through the fledgling American Basketball League.

The proceeding examination of Stage Four facilities begins with the exploration of the emergent NHL in 1917, as well as the decline of its competitor the Pacific Coast Hockey Association (PCHA) in the 1920s. This transitional period resulted in NHL franchises being established in major metropolitan areas in the U.S. Next, the design and construction of Stage Four facilities is undertaken. Ultimately, expanding urban populations with newly realized means and appetite for entertaining diversions created an opportunity for entrepreneurs to purposely finance and construct indoor facilities to accommodate regularly scheduled sport, entertainment, and social events, including professional hockey, during the 1920s. These facilities are unique from their Stage Three predecessors in that they were constructed from steel
and concrete to promote safety and longevity, incorporated standardized hockey play space into their design, offered multiple levels of seating options and improved amenities to cater to economically distinct fans, and demonstrated an understanding of embracing broadcast technology. As a result, Stage Four facility owners eschewed recreational sport participation in favor of professional competition (Field, 2007; Shubert, 2016). Finally, the chapter concludes by examining the creation of the NBA in 1949, thereby formalizing the existence of co-tenant professional sport franchises through the 21st century.

**Major Professional Hockey Leagues in Flux**

Fall 1917 proved to be a pivotal time for both the NHA and the NHL. Since 1910, the NHA served as the premier professional hockey league of eastern Canada. Much of the strength of the NHA circuit came from the location of its teams. Following its first season, which contained teams from mining outposts, the league expanded to include franchises in eastern Canada’s largest and most prosperous cities, Ottawa and Toronto (Holzman & Nieforth, 2002; Ross, 2008, Wong, 2005). Ross noted that the expansion of professional hockey into Toronto was possible because of the advent of consistent artificial ice-making technology. Over the course of its first seven seasons the league’s existence faced challenges in the form of player poaching from the Patrick family’s PCHA, infighting between owners, and the outbreak of World War I (Holzman & Nieforth; Ross; Wong).

Though the NHA faced several legitimate business concerns in 1917, hockey scholars suggested a general distaste and displeasure for the litigious owner of the Toronto franchise, Eddie Livingstone, united the owners of the other teams in the common goal of continuing professional hockey in Canada without him (Holzman & Nieforth, 2002; Ross, 2008, Wong, 2005). On February 11, 1917 the owners of the Montreal Canadiens, Montreal Wanderers, Ottawa Senators, and Quebec Bulldogs voted to suspend the Toronto franchise for the remainder
of the season, an act which resulted in Livingstone suing the league and its owners for damages resulting from the “unlawful, unconstitutional, and illegal acts” that suspended the team (“Writs Issued,” 1917, p. 10). Following a meeting on November 11, 1917 in Montreal’s Windsor Hotel, the NHA, with Livingstone still positioned as Toronto owner, decided to suspend league play for the 1917-18 season (“National Hockey League,” 1917).

The decision to temporarily suspend NHA activity was a final end around Livingstone’s ownership. Within two days of the meeting to halt league activity, reports that a new league comprised of the non-Toronto members of the NHA would likely play a 1917-18 schedule emerged (“Montreal Star is Favorable,” 1917). Further, less than two weeks after the meeting to suspend the NHA, the NHL was formed, with four teams set to compete beginning on December 19, 1917 (“New National Hockey League,” 1917). Ross (2008) indicated the NHL essentially adopted the existing rules and governing structure of the NHA, but with greater power given to league president Frank Calder, establishing that position as unquestioned and unchallengeable leader of the league.

Still playing in facilities susceptible to fire, the first NHL season began with four franchises and finished with three. In the previous chapter, the fire that destroyed the Westmount Arena was mentioned. The January 2, 1918 fire and financial losses forced Montreal Wanderer owner Samuel Lichtenhein to fold and the team and leave professional sport due to the six-figure loss of the facility (“Montreal Club Owner,” 1918). Following the completion of the 1917-18 and 1918-19 seasons with only three franchises, the NHL added a team from Quebec for the 1919-20 season, restoring the league to a four-team membership. After the 1919-20 season, the Quebec Bulldogs moved operations to Hamilton, ON and were renamed the Hamilton Tigers (Holzman & Nieforth, 2002; Ross, 2008; Wong, 2005).
After surviving early tumult and continued legal attacks from Eddie Livingstone, the league expanded its product with the establishment of a second Montreal franchise, later named the Maroons, and creation of the Boston Bruins in 1924. These franchises served a critical importance to the future of the NHL. With the Maroons, the league added a team and tenant for the newly constructed 9,300 seat Montreal Forum, the first Stage Four facility. The Boston Bruins represented the first U.S. franchise for the league. By 1931 the league expanded into several major U.S. markets and played in new, modern Stage Four facilities. Before discussing the Stage Four facilities, it is necessary to discuss the demise of professional hockey on the West Coast, specifically because the talent on the rosters of the defunct western teams supplemented and populated NHL expansion during the later 1920s.

**Demise of Professional Hockey to the West**

Following their creation of the single entity ownership PCHA in 1911, the Patrick family served the role of competition for the NHA and later the NHL for access to professional talent and the prestige of claiming the Stanley Cup. The Vancouver-based PCHA faced several limitations when it emerged in 1911. The two greatest challenges facing the PCHA at its inception were a lack of hockey tradition in western Canada and the absence of a local talent pool from which to draw (Wong, 2005). Importantly, while western Canada had no hockey tradition, the spectacle of professional hockey was not foreign to the citizens of British Columbia as local newspapers reported NHA results, offering sport fans insights into the sport and the best professional players (Wong, 2009). Name recognition, coupled with the stinginess of the NHA owners and lack of local players allowed the Patrick’s to recruit and sign well known NHA players to PCHA contracts, giving their new league instant credibility (Holzman & Nieforth, 2002; Ross, 2008; Wong, 2005; 2009).
Credibility did not immediately translate into profitability. The PCHA lost $9,000, the 2018 equivalent of $232,985.88, in its first season (Wong, 2009). Nonetheless, the Patrick family continued their policy of recruiting the best players and the players from the best teams, strategically weakening the NHA and strengthening their league (Wong, 2005). Following several years of player poaching on both sides of the country, the PCHA and NHA reached an agreement that granted stability to major professional hockey in Canada and established a championship series exclusively between PCHA and NHA champions for the Stanley Cup. Regarding access to players, the PCHA gained the right to draft three players from the ranks of the NHA each year, as well as the rights to any new professional players from west of Thunder Bay, ON, while the teams of the NHA were allowed to protect three players each year from the PCHA draft ("Hockey Agreement Has Been Reached," 1913). Additionally, the agreement between the leagues established a best of five series for the Stanley Cup between PCHA and NHA champions that alternated host locations and rules each year ("Ottawa Players," 1913). The PCHA solidified its status as a legitimate professional league in 1915 when the Vancouver Millionaires defeated the Ottawa Senators for the Stanley Cup.

The PCHA-NHA agreement fundamentally changed elite professional hockey following the 1917 season when the PCHA champion Seattle Metropolitans defeated the Montreal Canadiens in the Stanley Cup series. According to Wong (2005), the Seattle victory established the precedent that the Stanley Cup could be won by a team from the U.S. and therefore was no longer a trophy for the best team in Canada, but the best hockey team in the world. In addition to its expansion into the U.S., the PCHA still lacking a reliable local source of talent, turned to amateur leagues in the west Canadian prairies, such as the Big Four League of Saskatchewan to develop talent to supplement its rosters. By the close of the 1910s, the premier amateur league began paying its players, an act that jeopardized the PCHA’s monopoly on professional hockey.
in western Canada. The Big Four rebranded itself as the Western Canada Hockey League (WCHL) and reached an agreement with the PCHA that gave the WCHL an opportunity to compete for the Stanley Cup, while guaranteeing the PCHA access to talent (Ross, 2008).

Wong (2005) identified the WCHL-PCHA agreement as the first sign that the league was on shaky footing because it recognized the WCHL as another legitimate professional league in western Canada. As the PCHA continued into the 1920s, poor attendance figures, financial challenges, and the NHL’s expansion into major U.S. markets further hastened the demise of the league (Holzman & Nieforth, 2002; Ross, 2008; Wong, 2005; 2009). Holzman and Nieforth, Ross, and Wong (2009) agreed that the expansion of the NHL into the U.S. was the most difficult challenge for western hockey to overcome. Unlike the hockey markets in western Canada, the cities targeted for expansion in the U.S. in the mid-1920s (i.e., Boston, Chicago, Detroit, New York City, and Pittsburgh) supported larger populations, had wealthier owners, and planned larger facilities than those of the PCHA or WCHL. Resultantly, the NHL could outspend either league for talented human capital (i.e., players). Despite the merger of the PCHA and WCHL into the Western Hockey League (WHL) prior to the 1924-25 season, major professional hockey in western North America ceased one year later.

**Toward an NHL “Original Six”**

After the NHL added the Montreal Maroons and Boston Bruins franchises in 1924, the league continued to increase its membership in the coming years as part of an ongoing effort to minimize the opportunity for Eddie Livingstone to enter major professional hockey, while also lining the pockets of existing NHL owners. In 1925, two new franchises, the New York Americans and Pittsburgh Pirates, were added to the league. Prior to the 1926 season, the Chicago Blackhawks, Detroit Cougars, and New York Rangers were added, bringing the total franchise number to 10. NHL expansion was done with little foresight, however. While the
expansion brought immediate cash infusions into bank accounts of existing owners, the process created circumstances that stressed the management and infrastructure of the league, eventually setting the stage for contraction to six teams in 1942 (Wong, 2005).

Despite being excluded from the NHL in 1917, Eddie Livingstone attempted to create a rival professional league that would compete in both Canada and the U.S.; however, Frank Calder worked tirelessly to undermine Livingstone’s efforts (Wong, 2005). In order to block Livingstone and his allies from starting a legitimate competitor, the NHL rushed to establish professional teams in viable markets (Holzman & Nieforth, 2002; Ross, 2008). Due in part to having high level “amateur” hockey teams, cities like Boston and Pittsburgh had the existing facility infrastructure and fan bases to support major professional hockey. New York City also emerged because it dominated the continent in financial and media presence, as well as hosting the notable boxing promoter Tex Rickard who was set to complete a new arena, Madison Square Garden III (MSG III) in 1925 (Ross, 2008). Placing franchises in those three cities before Livingstone could organize afforded the NHL a premier position in each city, while also expanding the overall territorial reach of the league (Holzman & Nieforth; Ross). Furthermore, NHL expansion provided an initial financial windfall for the league’s existing franchises. Beginning with the inclusion of the Boston Bruins and Montreal Maroons in 1924, new franchises were required to pay a $15,000 expansion fee. Wong (2005) highlighted that expansion fees were pooled into a common account accessible to pre-existing teams only, which provided a financial incentive for adding new franchises.

Wong (2005) cautioned that although NHL expansion further legitimizied its hockey product as the unquestioned top professional league, it also stressed its members. League expansion created logistical problems, as well as human and physical resource issues. The 10-team NHL required additional travel over longer distances, which forced them to spend more
money on transportation to away games over the expanded, international schedule. For example, in the last season before expansion, the NHL played a 24-game schedule. Three years later, the league played a 44-game schedule. In addition to the expanded, international schedule, there was an insufficient pool of quality professional players. The collapse of the WHL allowed some expansion franchises to purchase WHL player rights (Holzman & Nieforth, 2002; Ross, 2008; Wong). The Pittsburgh Pirates paid to professionalize the amateur Pittsburgh Yellow Jackets team (Holzman & Nieforth). The decreased supply of players paired with the demand for elite talent inflated player salaries. The financial issues faced by teams were further exacerbated by the Great Depression.

While logistical and salary issues could be mitigated through the creation of accommodating schedules and enforcing a salary cap, access to a modern facility capable of generating ticket revenue separated teams that would survive the Great Depression from their counterparts who folded. There are two exceptions to this point. First, the New York Americans, the first tenant of MSG III ceased operations after 1942. While the Americans had access to MSG III, the New York Rangers owned the building. Thus, the Americans paid rent to their competition, acknowledging a hockey hierarchy in the New York market. More damaging to the Americans finances was their positioning as the lone U.S. team in the Canadian Division of the NHL, which required extensive international travel (Ross, 2008). Second, though the Montreal Maroons entered the league as the sole tenant of the new Montreal Forum in 1924, the team was never fully embraced in Montreal because of the popularity of the Canadiens franchise among the large French Canadian population. Aside from this caveat, playing in a modern facility in a large metropolitan area allowed teams to weather the Great Depression (See Table 5.3 below).

The fates of the Pittsburgh Pirates and Ottawa Senators bring the importance of a modern facility in a major city into greater focus. The Pirates played their games in the 5,000-seat
Duquesne Gardens, a 30-year-old facility that was converted from a trolley car barn in 1896 for $500,000, or roughly $15,000,000 in 2018. By comparison, the New York Americans joined the league the same season, but played their games in the 15,000-seat, $5,600,000 MSG III. When adjusted for inflation, MSG III would cost $80,354,240.00 in 2018. The differences in the two facilities’ costs, capacity, and age are significant. Following a playoff appearance in their first year in the league, the Pirates struggled on the ice and at the box office. As Rhee and Wong (2018) profiled, the Pirates hockey team ultimately moved to Philadelphia in 1930 and rebranded as the Quakers, playing their games in the 5,500-seat Philadelphia Arena before shuttering after one season.

Unlike the upstart Pirates, the Ottawa Senators had been a part of the NHA-NHL since 1910 and won multiple Stanley Cups, including four as part of the NHL. However, the Senators also played in the smallest market in the NHL. Ottawa recorded a population of 107,843 at the census of 1921, but had a stable economic base due to the large bureaucratic workforce living in the Canadian capital (Piva, 1983). In 1923, the team moved into the new Ottawa Auditorium, a $355,000 ($5,213,040.06 in 2018) facility that seated 7,500 fans. The city’s size, as well as that of the Ottawa Auditorium compared to the major market facilities of the NHL limited the Senators earning potential. Despite efforts to save the franchise, by 1934 the financial situation became unsustainable and the team moved to Saint Louis, MO to take advantage of the recently built $1,500,000 ($22,026,929.82 in 2018), 14,200-seat Saint Louis Arena. Much like the Pirates-turned-Quakers, the Senators-turned-Eagles ceased operations after one season.

Ironically, just as the NHL expansion into the U.S. in the mid-1920s effectively closed the WHL, the competitive advantages of major U.S. markets and the ability of U.S. franchises to build and/or fill facilities with greater capacities than their smaller counterparts, threatened the existence of the NHL’s Canadian franchises (Wong, 2005). Financial difficulties, particularly for
teams in smaller facilities were exacerbated by the onset of the Great Depression and extensive international travel. The demise of the Pirates, Senators, Maroons, and Americans by 1942 left the NHL with six franchises spread across Canada and the U.S. Interestingly, the NHL became a league where viable franchises played in modern facilities. The league would not embrace expansion again until 1967.

Theaters of Competition

The success of the NHL as an entertainment product in the U.S., as well as Canada, hinged on its ability to attract in-facility spectator dollars. The first three decades of the 20th century brought cultural changes that afforded both facility owner/managers and NHL owners the opportunity to further capitalize on the business of professional hockey in urban arenas. While leisure activities and entertainment existed well before the 1900s, an identifiable entertainment industry emerged and rapidly expanded throughout the first third of the century. Various scholars examined how professionalized entertainment and the emergence of consumer culture, such as within the music, movie, and theatre industries, grew in response to the transition from Victorian to post-World War I society (e.g., Carney, 2009; May, 1980; Schwartz, 2009; Shindo, 2010). The norms of Victorian athletic culture emphasized amateur competition, while the modern society of the 1920s increasingly preferred the entertainment spectacle of professional athletics (Field, 2002; 2009; Nelson, 2009; Raitz, 1995b).

Table 5.3. Stage Four Urban Multipurpose Facility Cost and Initial Seated Capacity for Hockey

<table>
<thead>
<tr>
<th>Facility</th>
<th>City</th>
<th>Date Opened</th>
<th>Construction Cost</th>
<th>Cost Adjusted for Inflation</th>
<th>Initial Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Montreal Forum</td>
<td>Montreal</td>
<td>1924</td>
<td>$1,500,000</td>
<td>$22,026,929.82</td>
<td>9,300</td>
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<tr>
<td>Madison Square Garden III</td>
<td>New York City</td>
<td>1925</td>
<td>$5,600,000</td>
<td>$80,354,240.00</td>
<td>15,000</td>
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</table>

(Table 5.3 Continued)
### Facility Information Table

<table>
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<tr>
<th>Facility</th>
<th>City</th>
<th>Date Opened</th>
<th>Construction Cost</th>
<th>Cost Adjusted for Inflation</th>
<th>Initial Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detroit Olympia</td>
<td>Detroit</td>
<td>1927</td>
<td>$2,500,000</td>
<td>$36,078,591.95</td>
<td>11,563</td>
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<tr>
<td>Boston Garden</td>
<td>Boston</td>
<td>1928</td>
<td>$4,000,000</td>
<td>$58,738,479.53</td>
<td>13,909</td>
</tr>
<tr>
<td>Chicago Stadium</td>
<td>Chicago</td>
<td>1929</td>
<td>$7,000,000</td>
<td>$102,792,339.18</td>
<td>16,000</td>
</tr>
<tr>
<td>Saint Louis Arena</td>
<td>Saint Louis</td>
<td>1929</td>
<td>$1,500,000</td>
<td>$22,026,929.82</td>
<td>14,200</td>
</tr>
<tr>
<td>Maple Leaf Gardens</td>
<td>Toronto</td>
<td>1931</td>
<td>$1,500,000</td>
<td>$24,780,296.05</td>
<td>12,473</td>
</tr>
<tr>
<td>Cleveland Arena*</td>
<td>Cleveland</td>
<td>1937</td>
<td>$1,250,000</td>
<td>$21,797,482.64</td>
<td>9,700</td>
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<tr>
<td>Average</td>
<td></td>
<td></td>
<td>$3,106,250</td>
<td>$70,824,411.12</td>
<td>12,768</td>
</tr>
</tbody>
</table>

Note. Cleveland Arena hosted the minor league Cleveland Barons American Hockey League Franchise. Inflation calculated using CPI Inflation Calculator (n.d.)

The proliferation of professional sports and a professional sports industry similarly served the desires of modern society. Permanent urban multi-purpose arenas rose to meet various consumer entertainment demands and capture consumer dollars (Raitz, 1995b; Seifried, 2010b). Unlike facilities built to house professional baseball and football, Stage Four facilities were designed with consideration for hockey, but were decidedly more focused on other entertainment activities such as boxing, wrestling, cycling, the circus, and variety shows (Koppett, 1999; Seifried & de Wilde, 2014; Shubert, 2016). Furthermore, the Stage Four facilities marked a conscious decision by facility owners to build their facilities as entertainment centers, not just sporting locales (Field, 2002; Shubert, 2016). As a result, Stage Four facilities tended to be built in close proximity to the city center, rather than on inexpensive real estate on the outskirts of town as Seifried and Pastore (2009a) found with professional baseball and football facilities. Of the eight identifiable Stage Four facilities, seven were built in the city, rather than on its outskirts. This point is well illustrated by the construction of MSG III.

Raitz (1995a) suggested sport stadia were like theatres. The emergence of Stage Four facilities critiques this point. Stage Four facilities were not just like theatres, they were...
intentionally designed to be psychologically indistinguishable from theatres. By the mid-1920s New York City had a vibrant entertainment core in the form of its theatre district. The most notable component of the theatre district is the commercial and artistic enclave known as Broadway. Schwartz (2009) delimited the Broadway portion of the theatre district to the artistic spaces between 13th and 45th street on the road named Broadway. The broadly identifiable entertainment center catered almost exclusively to New York City’s upper class in 1900; however, the rise of the middle manager class gave access to leisure entertainment for a larger subset of the population. Owners of newly constructed multipurpose indoor facilities capable of hosting attractions, sport and otherwise, enhanced their facility’s legitimacy, the legitimacy of its attractions, and financial viability by choosing sites in or near the entertainment districts.

MSG III came into existence through a combination of necessity and ingenuity. Madison Square Garden II (MSG II) served as a location of recreation and entertainment beginning in 1890. Located on 26th Street and Madison Avenue, MSG II existed near, but not within the theatre district. This difference in locale manifested in the population and audience attending sporting events. Seifried and de Wilde (2014) noted that the crowds attracted to MSG II and similar facilities were comprised of “underworld hustlers, gamblers, and gangsters” in part because the facility hosted a myriad of honorable (e.g., 1924 Democratic National Convention) and sometimes unscrupulous events (e.g., boxing) (p. 459). Rickard scheduled those various events in MSG II to turn a profit in a facility previously known for financial loss before his arrival in 1920 (Seifried & de Wilde). Given its general unprofitability over a period of 30 years before Rickard’s entry into the New York market, the facility’s owner, New York Life Insurance Company elected to close MSG II in 1925 to make space for the New York Life Building (Shubert, 2016). After learning that he would no longer have access to MSG II, Rickard set out to establish a new facility, MSG III, to be built at 50th Street and 8th Avenue within the theatre.
district and just off of Broadway (Seifried & de Wilde). By constructing his arena in the entertainment district of New York City and mere blocks from Times Square, Rickard established that MSG III would focus on sport as an attractive entertainment locale for more desirable, monied patrons.

Seifried and de Wilde (2014) suggested Tex Rickard planned MSG III to court the customers of the 1920s who Fullerton (1990) proposed were seeking to demonstrate their social status through consumption. In order to legitimize MSG III to the growing consumer class, Rickard designed a building with a brick exterior to replicate contemporary theatres in New York City while also hiring trained ushers and event security staff (Seifried & de Wilde). Improved construction design and enhanced security helped to legitimize MSG III and its events to both male and female audiences (Boddy, 2008). The connection between the Stage Four facility and the theatre industry is further exhibited through architectural influence. Shubert (2016) stressed the importance of the architects generally, and theatre architects specifically in the design of Stage Four facilities. As an example, Shubert noted Thomas Lamb, a New York theatre and cinema architect designed MSG III. Incorporating a professional design demonstrated an increased level of sophistication and consideration that allowed facilities to be designed in a more distinct way, as well as reflecting a societal desire to recruit qualified, skilled professionals in business dealings. As a result, the Stage Four facility came to be recognized as a distinct feature of the urban landscape, representative of the city, and established cities with Stage Four facilities as more advanced than those that lacked them (Shubert).

**Bigger and More Practical**

Shubert (2016) suggested that the professional architects who designed urban arenas were able to propose the larger multi-accommodating facilities because of access to affordable, permanent construction materials. Shubert’s claim furthered that of Rader (2002) and Seifried
and Pastore (2009a) and their focus on ballparks and stadiums. Although the urban multi-purpose wood facility grew in size and scope since its inception in the mid-1800s, the facilities were limited in durability and susceptible to fire damage and destruction. As previously noted, several wood facilities that housed major professional and amateur hockey teams succumbed to flames and explosions, particularly in the first decades of the 1900s. The threat of fire made the proposition of owning, operating, or attending any of those facilities a legitimate concern.

The threat of fire to multipurpose arenas was most noticeable in Montreal, where a string of fires threatened the viability of its major professional hockey franchises. Above, the loss of the 4,300-seat Stage Three Westmount Arena to fire in January 1918 and subsequent dissolution of the Montreal Wanderer franchise is mentioned. In addition to the Wanderers, the Montreal Canadiens also played their home contests within that facility. The Canadiens finished the season in the Jubilee Rink, a 3,200-seat natural ice surface arena. An electrical fire destroyed the Jubilee Arena in April 1919 ("Fire Destroyed Jubilee Rink," 1919). The destruction of both arenas left the Canadiens without a suitable replacement or viable home rink, threatening the future of professional hockey in Montreal ("Strange Fires in Sport Places," 1919). The Canadiens played the first four games of the 1919-20 season on the road while they awaited the hasty construction of the 6,000-seat Mount Royal Arena, another Stage Two facility ("Canadiens Made Great Start," 1920). Mount Royal Arena was “a respectable enough place” when compared to the Jubilee Rink but it was not a long-term solution (DesRoches, 1988, p. 111).

Prior to the 1924-25 season, a group of 17 investors financed the construction of the first Stage Four facility, the Montreal Forum, to give the city a “bigger and more practical” sport and entertainment venue (DesRoches, 1988, p. 111). According to DesRoches, the Montreal Forum’s original plans called for a cost-prohibitive 12,500-seat arena with no obstructed views. The affordable permanent artificial ice facility that was built seated 9,300 fans and cost $1,5000,000
($22,026,929.82 in 2018). The arena also displayed practical utility from its opening when the Maroons shared the facility with the Canadiens after a planned conversion to artificial ice in the Mount Royal Arena was delayed (“Ice Not Available,” 1924).

The Montreal Forum’s practicality rested with its steel and concrete construction. The Montreal Forum was the first multipurpose facility in the city to mitigate the risks of fire. While this durability helped to minimize risk, steel and concrete construction materials allowed the Montreal Forum and subsequent Stage Four facilities to accommodate nearly double the spectators of their predecessors. The Stage Four facility achieved greater capacity through the adoption of multiple decks within the facility framework. For example, the Chicago Coliseum, the original home facility of the Chicago Blackhawks franchise held 8,000 spectators, while the Stage Four Chicago Stadium opened with a hockey capacity of 16,000 spectators spread over three wrap-around decks just three years later. Given its strength and flexibility compared to other materials, steel was ideal in maximizing space within city street grids. For instance, Serby (1930) encouraged the use of structural steel for grandstands and upper decks because its strength minimized the number of columns necessary to support the structure, thereby allowing space to be maximized within the facility and below grandstands.

While the use of steel and concrete was less expensive in the 1920s and 1930s than previous decades, the proposition of building a massive multipurpose arena from those materials was expensive nonetheless. For example, the Chicago Stadium used enough concrete to construct a 92-mile-long sidewalk that could connect Chicago and Milwaukee (“Do You Know,” 1929). Despite escalating costs, the construction of the Stage Four facility was financed with private money, but not by a lone individual. While the Montreal Forum was built with the resources of 17 private citizens, other facilities were financed through the sale of ownership stock. The construction of Maple Leaf Gardens was financed with the assistance of $700,000 in stocks.
(Shubert, 2016). Similarly, the Chicago Stadium construction was financed through bond sales that also guaranteed the opportunity to buy 15 shares of common stock in the Chicago Stadium Corporation per bond purchase (“The Chicago Stadium Corporation,” 1928). Furthermore, the $5,600,000 MSG III was financed, in part, through the sale of $1,000 Madison Square Garden Club memberships which guaranteed 125 shares of stock and one seat for every event at MSG III (“Madison Square Garden,” 1935). These outstanding debt obligations to investors encouraged facility managers and management companies to maximize profits through efforts to meet the needs of customers and host multiple events throughout the year.

**Designed for the Fans You Want, Not the Fans You Have**

While geographic location contributed to legitimizing the Stage Four facility as an urban entertainment facility, the construction and layout of the facility further distinguished it from its predecessors. The Stage Four facility emphasized accommodations for myriad events. The multipurpose nature of the Stage Four facility necessitated that the structure be built to a size not previously attempted in order to accommodate adequate storage for its various potential renters (Shubert, 2016). Although the NHL emerged as the dominant, viable professional hockey league in North America by the mid-1920s, it was far from the most attractive or lucrative professional sport or form of entertainment. However, as Shubert (2011) stated “the improved solidity and stability of these arenas were essential components to the financial success of the fledgling National Hockey League” (p. 110). Importantly, the Stage Four facility, though not hockey-centric, incorporated both a 200’ x 85’ hockey rink serviced by an artificial ice plant into its design and construction (Shubert, 2016). Moreover, Stage Four facilities were designed to attract upper and upper middle-class clientele. Various design elements and amenities (e.g., restrooms and ventilation) were included within Stage Four facilities to enhance community and spectator comfort (Field, 2008; Seifried & de Wilde, 2014; Shubert, 2011; 2016).
Internally, the Stage Four facility offered a minimum of 9,300 seats and averaged 12,768 seats spread over multiple levels priced and designed to attract different socioeconomic segments of the population. In the case of Maple Leaf Gardens, Field (2008) identified three different price points, $3, $2, and $1 for seating. The $3 ticket ($49.56 in 2018) was for lower bowl box seats that included upholstered seats with chair backs and exclusive access to the lower bowl via the main entrance. The $1 ticket ($16.52 in 2018) granted access to the upper deck of the arena and bleacher seating. The result of offering different levels of tickets and exclusivity had the desired result of attracting upper class citizens to Stage Four facilities. Stage Four facilities, therefore, helped legitimize professional sport as an entertainment product on similar footing as legitimate art forms like the theatre. Male and female customers of means, rather than the nefarious characters Seifried and de Wilde (2014) located in earlier sport facilities, could choose to spend an evening out at a professional game without fear or stigma, just as they would expect if they attended a play or musical.

Beyond its seats, the Stage Four facility included several amenities intended to enhance spectator comfort. Modern heating, ventilation, and air conditioning (HVAC) systems were included in Stage Four facilities. As an example, MSG III housed 10 ventilation fans for the purposes of circulating air throughout the venue (“Madison Square Garden,” 1935). Still, the effectiveness of the HVAC systems across all Stage Four facilities during this time period is debatable. For instance, Foulds (2005) noted several difficulties with the Boston Garden’s HVAC system. In the summer months, the facility was nonetheless oppressively hot, in the winter, it was often cold, and cigarette and cigar smoke often lingered in the facility.

Increased restroom space is another notable amenity improvement within Stage Four facilities. Take for example the contrast between Dey’s Arena, a 7,000-seat Stage Three facility and home to the Ottawa Senators from 1908-1923 and the 13,909-seat Boston Garden. Dey’s
Arena had three restrooms, two for men and one for women, while the Boston Garden featured 10 restrooms. Further illustrating the emphasis on adequate restroom space, the Boston Garden provided one restroom for every 1,391 fans, while Yankee Stadium in New York with an initial capacity for 58,000 seats offered one restroom for every 3,625 fans.

Notably, concession stands were conspicuous in their absence from Stage Four facilities. Little information was available on the presence or offerings, if any, of in-facility concessions, suggesting this ubiquitous component of the 2018 multipurpose urban arena was not noteworthy in 1920s. Interestingly, the concessions stand was not a prominent feature of baseball and football facilities that emerged in this timeframe and would not become a prominent feature of baseball and football facilities until the 1950s and 1960s (Seifried & Pastore, 2009b).

The Stage Four facility further embraced technology and the importance of broadcast media coverage to the growth of sports such as hockey and basketball, but also in establishing remote access to the facility for fans unable to attend games. Shubert (2011) pointed to Maple Leaf Gardens and the Maple Leafs’ principal owner Conn Smythe as willing to embrace technology to enhance fan experience at an event, while also reaching out to remote fans. As one example, a radio broadcast booth was suspended 56 feet above the ice in Toronto which allowed Toronto Maple Leaf games to be broadcast to more than 2,000,000 listeners each week (Shubert, 2016). Smythe also provided a four-sided clock, making live attendees aware of the game’s official time while also incorporating state-of-the-art sound that played music and announcements in the arena. Similarly, at MSG III, Tex Rickard secured a deal with RCA to broadcast events via radio, thereby growing the reputation of his facility, as well as the remote sport consumer population to create sport and team fan nations (Seifried & de Wilde, 2014).

The external design of Stage Four facilities also reflected the neighborhoods in which they were built. The facilities adopted box office marquees reminiscent to contemporary theatres
in host cities (Shubert, 2016). Furthermore, the facilities incorporated multiple entrance points into the arena, including one main or grand entrance that afforded access to the entire facility and faster ingress and egress (Field, 2008). Shubert found the main entrance was typically placed on the busiest thoroughfare outside the facility. Locating the entrance on the busiest location outside the facility served two purposes. First, it offered an easily identifiable point of entry along established transportation routes. Second, it served as a cost saving measure, where the more expensive facility core could be built on less costly plots of land within the city block, while a relatively inexpensive lobby was built on more expensive real estate with street access. This bit of savvy impacted the internal structure as the grandstand wrapped around the ovular shape of the hockey rink while compromising that shape to meet rectangular limits of a building constructed within the interior of a city block. Ultimately, the design of Stage Four facilities, coupled with their capacity and access to affluent urban populations emboldened their owners to pursue greater profits through the increasingly acceptable, popular, and successful sport of professional basketball.

The Establishment of the National Basketball Association

The NHL’s status as a small professional league with six stable franchises in major facilities within major markets benefitted the Stage Four facility. The presence of professional hockey helped to occupy the Stage Four facility schedule. Considering the $3,106,250 average cost of Stage Four facilities and their private investment financing, facility owners were pressured to host as many profitable events as possible. Koppett (1999) found facilities like MSG III opened with less than one third of possible dates booked via weekly boxing matches and the circus. Beyond those events, the facility schedule needed to be filled. The need to fill their facilities created a situation where Stage Four facility owners welcomed the increasingly popular
sport of collegiate basketball, in addition to hockey, and laid the foundation for major professional basketball to become a Stage Four facility co-tenant.

Following Naismith’s invention of basketball in 1891, identifiable professional basketball teams emerged by 1898 (Koppett, 1999). The earliest incarnations of professional basketball were particularly attractive to working class U.S. citizens due to the largely ethnic makeup of rosters representing particular urban neighborhoods within major cities (Nelson, 2009). By the 1920s, interest in basketball had grown so that the sport became a source of revenue for various facility owners looking to fill open event dates. For example, William Roach incorporated Basketball contests within the 89’ x 100’ ballroom to the Harlem Renaissance Casino, so that its team, the Renaissance Big Five, could play four home games per week (Kuska, 2004). While teams such as the Renaissance Big Five, and especially the Original Celtics could attract large crowds, they played outside of a formal league structure (Koppett). As a result, their renown led them to adopt barnstorming as a means to pursue greater revenue (Kuska).

While professional basketball lacked a formal league structure and affluent fan base, Nelson (2009) indicated college basketball emerged as an attractive diversion for the managerial class by the 1920s. As mentioned earlier, the managerial class of the early 20th century was comprised of college educated men. Basketball was developed within the college setting and played on a competitive and recreational basis on college campuses. For Nelson, this familiarity with the game, coupled with alumni pride created a network of interested fans. Schwartz (2009) found that following the consolidation of its constituent boroughs into New York City in 1897, one third of the U.S.’s 200 largest companies moved their headquarters to New York City, inflating the managerial class population. Therefore, the opening of MSG III created an opportunity to host attractive college basketball contests and tournaments in a venue consistent with the background, educations, and expectations of the burgeoning middle-manager class.
College basketball quickly became a popular attraction in MSG III. College basketball became such a spectacle in New York City so that by 1946 the 29-game college basketball circuit hosted in MSG III averaged 98% of the facility’s maximum basketball capacity of 18,000 (Koppett 1999). The ability of college basketball to draw large, paying crowds of some means to a major metropolitan facility resulted in the creation of tournaments and special college series within other Stage Four facilities. Importantly, the rise of college basketball coincided with the rise of consumer culture and the creation of star athletes and the dissemination of their exploits through the national media. As a result, the population became increasingly aware of the stars of college basketball. Not surprisingly, sport entrepreneurs interested in forming a sustainable, profitable professional league turned to the collegiate ranks to build rosters around players with name recognition. Professional basketball, therefore, followed a similar developmental path of professional football. Initially, collegiate football attracted large, passionate fan bases that supported large, permanent stadia. Eventually, entrepreneurial outdoor facility owners incorporated the growing spectacle of professional football into existing sport facilities (i.e., professional baseball) and modified their facilities to capture consumer dollars and interest in professional football (Seifried & Pastore, 2009a).

Beginning in the mid-1930s and into the mid-1940s two basketball leagues, the National Basketball League (NBL) and Basketball Association of America (BAA) came to represent major professional basketball in North America (Nelson, 2009). The NBL was the first sustained professional basketball league in the U.S. However, Nelson was quick to note that the NBL teams did not operate in a manner consistent with their major contemporaries (e.g., MLB or NHL) in that the teams existed as living billboards for team ownership and sponsors. The NBL capitalized on cultural awareness of college basketball stars from specific communities in the Midwest so the positive fan perception of players would be transferred to the team sponsor. In
addition to name recognition, the players also worked for the sponsor company in many cases, and certainly lived in the communities. These factors helped to bridge the acceptability gap between professional and college (amateur) basketball. Professional basketball players were educated as members of the managerial class, but were viewed as peers by the working class, expanding the customer base, legitimizing the sport, and serving their communities (Nelson; Surdam, 2012).

The NBL’s geography and the business strategies of owners limited the economic growth of the league. Koppett (1999) and Nelson (2009) highlighted that franchises were located in places such as Sheboygan and Oshkosh, WI as complements to major metropolises like Chicago and Detroit (See Table 5.4). Despite the discrepancies in size, small markets were able to compete with their larger counterparts because the league emphasized community and did not pursue profits (Nelson). As a result, team ownership was not concerned with occupying major, modern arenas, rather the use of armories and high school gymnasiums were suitable (Surdam, 2012). Importantly, Nelson suggested that larger markets (e.g., Rochester Royals, Syracuse Nationals) that were able to connect with the community using the league model were best positioned to survive long term and ultimately join the NBA when the NBL merged with the BBA in 1949.

Table 5.4. NBL Franchises and Cities by 1940 Population and 1946 Facility Capacity

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<thead>
<tr>
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<th>NBL Team</th>
<th>City Population</th>
<th>Facility Capacity</th>
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<td>Chicago American Gears</td>
<td>3,396,808</td>
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<td>Detroit</td>
<td>Detroit Gems</td>
<td>1,623,452</td>
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<td>Buffalo</td>
<td>Buffalo Bisons</td>
<td>575,901</td>
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<td>Indianapolis</td>
<td>Indianapolis Kautskys</td>
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<td>Toledo</td>
<td>Toledo Jeeps</td>
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<td>Syracuse Nationals</td>
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<td>Youngstown</td>
<td>Youngstown Bears</td>
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(Table 5.4 Continued)
Table 5.5. BAA Franchises and Cities by 1940 Population and 1946 Facility Capacity

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<td>New York Knickerbockers</td>
<td>7,454,995</td>
<td>18,499</td>
</tr>
<tr>
<td>Chicago</td>
<td>Chicago Stags</td>
<td>3,396,808</td>
<td>17,317</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>Philadelphia Warriors</td>
<td>1,931,334</td>
<td>7,777</td>
</tr>
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</table>

(Table 5.5 Continued)
<table>
<thead>
<tr>
<th>City</th>
<th>BAA Team</th>
<th>City Population</th>
<th>Facility Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detroit</td>
<td>Detroit Falcons</td>
<td>1,623,452</td>
<td>14,000</td>
</tr>
<tr>
<td>Cleveland</td>
<td>Cleveland Rebels</td>
<td>878,336</td>
<td>10,000</td>
</tr>
<tr>
<td>St. Louis</td>
<td>St. Louis Bombers</td>
<td>816,048</td>
<td>15,000</td>
</tr>
<tr>
<td>Boston</td>
<td>Boston Celtics</td>
<td>770,816</td>
<td>13,909</td>
</tr>
<tr>
<td>Pittsburgh</td>
<td>Pittsburgh Ironmen</td>
<td>671,659</td>
<td>6,500</td>
</tr>
<tr>
<td>Toronto*</td>
<td>Toronto Huskies</td>
<td>667,457</td>
<td>12,473</td>
</tr>
<tr>
<td>Washington</td>
<td>Washington Capitols</td>
<td>663,091</td>
<td>7,500</td>
</tr>
<tr>
<td>Providence</td>
<td>Providence Steamrollers</td>
<td>253,504</td>
<td>5,300</td>
</tr>
</tbody>
</table>

Note. Data gathered from Gibson (1988); * Toronto data gathered from Dominion Bureau of Statistics (1944).

Following its relatively disastrous first year, the BAA adopted several rule changes aimed at improving the league’s financial and spectator foundations. Interestingly, the BAA modeled some of the policies that helped the NBL reach viability and notoriety in smaller markets. First, the BAA was able to recruit collegiate talent in a way it had not before. The BAA did not agree to a formal structure until June 1946, a situation that gave the NBL the opportunity to select the best college players exiting the amateur ranks in 1946. For 1947, the BAA instituted a player draft system that allowed the league to lay some claim to the services of specific college athletes while limiting rookie player pay and bargaining power. Additionally, the BAA also included a geographic draft exemption that allowed each team to claim one player prior to the first round of the draft, provided that player attended a college near the BAA franchise (Koppett, 1999).

In advance of the third BAA season the league moved against the NBL in an effort to not only steal talent, but whole franchises. Prior to the beginning of the 1948-1949 season, BAA President Maurice Podoloff lobbied and admitted the NBL’s Fort Wayne Pistons, Indianapolis Kautskys, Minneapolis Lakers, and Rochester Royals into the league. This transition conferred legitimacy to the BAA product as the league with the biggest markets gained the two best teams from the NBL (i.e., Lakers and Royals) and the biggest star in the game, George Mikan. The weakened NBL played the 1948-49 season with eight teams. In 1949 the NBL and BAA merged, forming the 17-team NBA on August 3, 1949 (Koppett, 1999; Nelson, 2009; Surdam, 2012).
Conclusion for Stage Four

During the first third of the 20th century, industrialization spurred changes to the socioeconomic and demographic conditions within the U.S. and Canada. The changes brought on by industrialization, including the emergence of an identifiable middle class and increased discretionary income created the opportunity for sport business entrepreneurs to form competitive, professional leagues with games and championships contested in temporary structures. Like their facilities, professional sport leagues, as well as their memberships were transient in nature. In time, major indoor sports leagues achieved permanence through a combination of geography and construction technology. The largest, most modern cities came to dominate major professional hockey and basketball because the presence of wealth and population justified the construction of permanent, purpose-built facilities (Stage Four). In the decades between World War I and World War II eight permanent, Stage Four facilities emerged in major cities in the U.S. and Canada that fundamentally changed professional sport, entertainment, and sport consumer behavior (See Figure 5.1).

Stage Four facilities were constructed to attract wealthy clientele. Where previous indoor arenas subsisted on the gate receipts of lower-class fans and individuals of dubious character, Stage Four facilities were positioned alongside theatres and cinemas as respectable multipurpose entertainment venues. Designed by trained, professional architects, the Stage Four facility was located in or near entertainment districts with easy access to transportation lines. Furthermore, its external design, including grand entrances and attractive marquees emulated the theatres whose legitimacy it hoped to adopt. Internally, the facility presented intentional characteristics meant to seat and satisfy customers from each economic class, enhance the overall experience of attending an event through improved amenities, such as more abundant restrooms, rudimentary HVAC systems, speakers and game clocks, and provided space for radio broadcasts.
Figure 5.1. Stage Four of Urban Multipurpose Facility Development

*Note.* Black arrows represent spectator movement; Purple arrows represent spectator movement for basketball and boxing; Grey indicates exterior structure; Red represents lower grandstand; Yellow represents upper deck seating; Blue represents skating surface; Orange represents basketball surface; Black represents boxing ring.

Unlike previous facility stages, the Stage Four facility was constructed from steel and concrete. The use of these construction materials presented various facility stakeholders with a sense of safety and security. Permanent construction materials reduced the threat of fire for the facility’s long-term viability. Steel and concrete building materials also enabled the Stage Four facility to emerge on a size and scale not before seen in urban multipurpose arenas. Stage Four facilities broke ground and were completed within an average of seven months and seated 12,768 spectators spread across an upper and lower deck of seats. The incorporation of new construction technology and the building of facilities to accommodate larger numbers of fans and amenities resulted in previously unseen costs for the Stage Four facility, with the eight facilities averaging $3,106,250. An important final distinction associated with the cost of the Stage Four facility is its financing by private citizen ownership.
CHAPTER SIX
SERVICE-ORIENTED FACILITIES: 1950 to 1988

The construction of permanent multipurpose facilities during the 1920s and 1930s helped to establish a hierarchy of professional hockey and basketball cities in Canada and the U.S. so that by 1950 only six cities supported National Hockey League (NHL) franchises while the newly-formed 17-team National Basketball Association (NBA) was comprised of franchises exclusively in the U.S. Furthermore, the decision of enterprising facility owners to contract architects to design facilities that met the expectations of wealthy consumers provided both literal and metaphorical blueprints for how to build a financially viable arena. Following World War II, surges in population, as well as economic growth in the U.S., created the opportunity for professional league expansion and new facility construction in emerging urban areas. Notably, the facilities built in the four decades after World War II demonstrated sport facility managers’ increased understanding of the importance of adding value to the fan experience by improving amenities and embracing new technology. This chapter identifies a new distinct stage (Stage Five) of facility development that occurred between 1950 and 1988 in response to increased prosperity, population shifts, and a transition to a service-based economy.

Beginning in the 1950s, the U.S. economy surged, in part, because the industry and infrastructure of the continental U.S. remained intact throughout World War II (Hendricks, 2019). However, a shift toward mechanization and the adoption of new technologies also drastically changed the U.S. workforce and workplace in the decades after the war (Hendricks; Lewis, 2007). For example, by the close of the 1950s, the U.S. workforce had shifted for the first time to one where the population of the professional managerial class exceeded the population of skilled and unskilled laborers as the economy evolved from manufacturing to service industries (Young & Young, 2004). Importantly the growth in the management class accompanied new prosperity throughout the decade as median family income rose from $3,319 in 1950 to $5,620 in
1960. When adjusted for inflation, median family income rose by more than $13,000 from $34,581.89 to $47,676.36 in 2018 figures over the decade (“Median Family Income,” n.d.). As a result, the typical U.S. consumer had sufficient disposable income by 1960 to spend on leisure activities and entertainment, a trend that would continue for most of the rest of the century (Hendricks; Young & Young).

Perhaps the most important consumer product of the 1950s, or at least the product that would have the most significant impact on professional sport was the television (Hendricks, 2019; Grundy & Rader, 2016; Seifried, 2005; Young & Young, 2004). While the ubiquity of the automobile in the second half of the 20th century would ultimately result in an increased facility footprint via parking lots for stadiums and ballparks, television viewers and the advertising dollars television broadcasts generated gradually helped to position the remote spectator as more important than the in-stadium fan (Grundy & Rader; Seifried & Pastore, 2009b). The presence of television in the U.S. fundamentally changed individuals’ behavior. For example, Young and Young indicated that as television became more accepted as a medium, attendance at movies, sporting events, restaurants, and libraries experienced noticeable drops in patronage. Grundy and Rader support the public attraction to television by identifying 75% of U.S. homes had a television by the late 1950s. Moreover, by 1960, 13% of U.S. homes had more than one television, thus presenting even more incentive to stay home (Young & Young).

Televised sport broadcasts initially favored indoor sport because indoor activities such as boxing occurred in a climate-controlled environment with fewer participants than offered by outdoor sport (Grundy & Rader, 2016; Hendricks, 2019). Hendricks acknowledged that despite being played in a controlled climate, professional hockey had a limited fan base beyond the northeast U.S. and Canada, while professional basketball had a similarly limited national fan base compared to baseball and football. Further, large market NBA owners were reluctant to
embrace television broadcasts out of fear that they would minimize gate receipts, the main
source of revenue (Koppett, 1999). Financially struggling NHL franchises also worried about the
effect of television on fan turnout (Ross, 2008). Outdoor sports owners were similarly hesitant to
risk gate receipts for remote viewers. For instance, baseball offered a difficult television
entertainment product because the broadcast technology available did not allow suitable pictures
to follow the ball or see all the players (Grundy & Rader; Seifried & Pastore, 2009b).

In addition to rising wages and opportunities to engage in leisure spending that was
increasingly common in the U.S., the population steadily rose in the decades after World War II,
first through the Baby Boom and then as a result of economic prosperity. To illustrate this point,
Young and Young (2004) suggested that because families had more disposable income the
nuclear family grew to include three or four children. Further, Hendricks (2019) noted that by
1960 approximately 40% of the U.S. population was born after 1946. In addition to population
growth, the concentration of population in the U.S. shifted from the Northeast and Midwest to
the South and West Coast as moving away from one’s hometown became normal following
World War II deployments (Hendricks) and industrial expansion into less developed regions,
such as the U.S. South (Lewis, 2007). The spread of U.S. population is of critical importance to
understanding the expansion of facility construction in the U.S. as the Pacific states realized 40%
population growth each decade between 1950 and 1970 while the Southern and Mountain states
experienced 20% population growth (Seifried & Pastore, 2009b). Overall, as the U.S. population
expanded and incomes increased, new viable markets for professional sport emerged. The trend
in population growth and median family income in the U.S. can be seen in Table 6.1 with similar
trends in Canadian population and average family income available in Table 6.2 for comparison.
Table 6.1. U.S. Population and Median Family Income by Decade: 1950 to 1980

<table>
<thead>
<tr>
<th>Census Year</th>
<th>Population</th>
<th>Median Family Income</th>
<th>Income Adjusted for Inflation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>151,325,798</td>
<td>$3,319</td>
<td>$34,581.89</td>
</tr>
<tr>
<td>1960</td>
<td>179,323,175</td>
<td>$5,620</td>
<td>$47,676.36</td>
</tr>
<tr>
<td>1970</td>
<td>203,302,031</td>
<td>$9,876</td>
<td>$63,915.75</td>
</tr>
<tr>
<td>1980</td>
<td>226,542,199</td>
<td>$21,023</td>
<td>$64,065.76</td>
</tr>
</tbody>
</table>


Table 6.2. Canadian Population and Average Family Income by Decade: 1951 to 1981

<table>
<thead>
<tr>
<th>Census Year</th>
<th>Population</th>
<th>Average Family Income</th>
<th>Income Adjusted for Inflation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1951</td>
<td>14,000,000</td>
<td>$3,821.69</td>
<td>$36,909.71</td>
</tr>
<tr>
<td>1961</td>
<td>18,200,000</td>
<td>$5,836.39</td>
<td>$49,015.30</td>
</tr>
<tr>
<td>1971</td>
<td>21,600,000</td>
<td>$11,543.30</td>
<td>$71,570.41</td>
</tr>
<tr>
<td>1981</td>
<td>24,300,000</td>
<td>$32,336.30</td>
<td>$89,327.46</td>
</tr>
</tbody>
</table>

Note. Population data gathered from Kalbach, Trovato, James-abra, and Baker (2019); Average Family Income data gathered from Canadian Council on Social Development (n.d.).

Unlike previous stages of facility construction, the popularity of professional sport became enmeshed with the concept of being classified as a major league city. As a result, facility managers and politicians combined their efforts to build new, modern facilities in developing cities. While some facilities were still financed using private ownership groups (e.g., Cincinnati Gardens in 1949), the framework for the justification, construction, and financing of multipurpose urban facilities first emerged during the Great Depression and immediately after World War II. Interestingly, public subsidies for multipurpose facility construction first occurred in the 1930s as part of the Works Progress Administration (WPA) (“History of the Cow Palace”, 2019). For example, in 1935 the California State Livestock Pavilion (Cow Palace) emerged after receiving $1,199,000 ($21,976,430.16 in 2018) in federal funds and $500,000 ($9,164,482.97 in 2018) from the city of San Francisco to host shows “that have proven their worth many times over to the cities in which they are held” (“Don’t Spurn ‘Cow Palace’,” 1935, p.2).
The Cow Palace could seat 10,403 spectators when it opened but did not host major professional sport competition until 20 years after it was completed when the San Francisco Warriors of the NBA used the facility beginning in 1962 (Capacity of ‘Cow Palace,’” 1941). Despite this, the facility hosted important civic events, such as the 1956 Republican National Convention. Similar to San Francisco and the Cow Palace, small and large cities in both the U.S. and Canada began financing, building and opening new, state-of-the-art facilities beginning in the 1950s that could accommodate multiple events, including professional hockey and basketball. For example, the individual cases of the Victoria Arena and Milwaukee Arena illustrate the initial city government forays into constructing multipurpose facilities.

The Victoria Memorial Arena exists as a unique case of facility construction. The arena was built in Victoria, Canada, a city with a population of 51,331 in 1951 (Government of British Columbia, n.d.). Initially conceived in May 1944, the facility was proposed as a memorial to Canadian soldiers who fought and died during World War II to justify the $215,000 ($3,067,498.25 in 2018) construction costs and secure public funding for Canada’s first all-concrete arena (Obee, 2012). Obee described the facility as a “a classic example of how not to build a public project” due to its lack of overall planning and project oversight (para. 12). As a result of poor planning, the facility took more than five years to build and had a final price tag at its opening in September 1949 of $1,200,000 ($12,660,848.74 in 2018). Despite the costs, the 5,021-seat facility became beloved by Victoria residents and its modern features attracted major music acts such as Tina Turner, The Beach Boys, and Johnny Cash, as well as sport spectacles like Andre the Giant, international hockey, minor league hockey, and NHL training camps for the Los Angeles Kings, Montreal Canadiens, and Vancouver Canucks (Dheensaw, 1986). Overall, the construction of Victoria Memorial Arena demonstrated the potential to draw premier attractions to medium and small cities, thereby boosting city morale or psychic income.
By the beginning of the 1950s, each of the top 12 cities by population in the U.S. hosted at least one major professional sport team (i.e., MLB, NBA, NFL, and NHL). The 13th most populous city, Milwaukee (population 637,392) had no major sports franchise although it did previously support an American League team in 1901 (Gibson, 1998). Previous sport management and sport history literature suggested that Milwaukee civic leaders utilized the construction of Milwaukee County Stadium to attract a major professional team to move to the city; thus, creating the Milwaukee Model of facility construction (Seifried & Pastore, 2009b; Sullivan, 1987).

Despite not having a primary hockey or basketball tenant in place in 1946, the Milwaukee city council also notably approved the construction of a $2,600,000 sports arena ($33,480,911.11 in 2018) (“Milwaukee Plans Arena,” 1946). The Milwaukee Arena ultimately cost $6,000,000 ($62,516,224.07 in 2018) by the time it opened in 1950 (“Six Clubs Accepted,” 1950). Further, the arena accommodated 10,500 spectators when configured for basketball (“Globe Trotters Beat Boston,” 1950). Prior to the 1951 season, the Tri-Cities Blackhawks franchise of the NBA took up residence in the Milwaukee Arena and changed its name to the Milwaukee Hawks, giving Milwaukee a major sport franchise.

Municipalities with existing NBA franchises produced new facilities in the immediate aftermath of World War II as well. Fort Wayne, IN (Pistons) and Syracuse, NY (Nationals) proposed, erected, and opened war memorial arenas between 1944 and 1952 that created new playing spaces for their professional basketball teams. The planning and construction of the Allen County War Memorial Coliseum in Fort Wayne and the Onondaga County War Memorial in Syracuse provide examples of the growing levels of sophistication and planning needed to properly construct sport arenas by the 1950s. These cases also illustrate the average citizen’s
willingness to financially support the construction of a multipurpose sport arena was necessary to sustain a city, especially a middle or small market city, as modern and relevant.

Both Syracuse and Fort Wayne hosted NBL franchises that eventually survived the aftermath of the NBL-BAA merger that created the NBA. Citizens and politicians in both metropolitan areas recognized the appeal of constructing multipurpose sport facilities to enhance their communities while also honoring World War II veterans killed in action (Allen County War Memorial Coliseum, n.d.; “Original War Memorial,” n.d.). The proposition of both facilities proved popular, not only in the cities, but the surrounding county as well. For example, the referendum to approve construction of the Allen County War Memorial Coliseum received 25,705 votes for construction compared to 5,720 against (Allen County War Memorial Coliseum).

Beyond public support, the cities performed their due diligence in consulting existing facilities, as well as professional associations regarding arena construction. This activity supports Shubert’s (2016) assertion that tours of existing facilities for comparison became standard practice in the planning of new arenas by the mid-20th century. William Stark personally visited approximately 60 arenas to determine the best approach to constructing the Onondaga County War Memorial arena, while Allen County sent representatives throughout the Midwest and consulted the International Association of Auditorium Managers to effectively plan their arena (Allen County War Memorial Coliseum, n.d.; “Original War Memorial,” n.d.). Ultimately Allen County built a 10,000-seat arena for $3,125,000 ($29,611,654.87 in 2018) while Onondaga County constructed its 8,000-seat facility for $3,500,000 in 1951 ($33,802,842.95 in 2018).

With the above facility contextual elements in mind, the Stage Five urban multipurpose indoor arena emerged between 1950 and 1988 in the U.S. and, to a lesser degree, Canada to attract and accommodate major professional hockey and basketball franchises (i.e., NHL and
NBA). Importantly, the discussion of Stage Five facilities begins with further contextual positioning of major professional sports in the U.S. and Canada. This context is critical to understanding the differences between the business realities of professional hockey and basketball as small, regional, niche businesses in the 1950s when compared to baseball and football. Finally, the context section of the chapter concludes with a brief discussion of the emergence of legitimate rival professional hockey and basketball leagues for the NHL and NBA (i.e., World Hockey Association in 1972 and American Basketball Association in 1967). Recognition of these leagues is important because some franchises from those associations would be incorporated into the NHL and NBA by the conclusion of the 1970s.

Next, Stage Five facilities are discussed, with particular emphasis paid to their intentional design elements intended to meet the service expectations of the growing population. The growing role and influence of the NHL and NBA also surface as the expectations of the NHL and NBA regarding minimum seating capacities resulted in facilities being constructed to a minimum standard capacity. The discussion of the design of these facilities also warrants further exploration because of their financing mechanisms. Unlike previous stages of construction, Stage Five facilities were typically financed by municipalities, rather than private citizens. Later, renovations like new scoreboard/videoboard technology were also incorporated into this facility design, allowing for video replay to become part of the fan experience in the facility. This became a standard element to recapture lost television fans for the facility.

Lastly, this chapter explores the construction and renovation of suburban and urban multipurpose facilities designed to attract and extract upper class and corporate dollars by incorporating private suites (sky boxes) into facility design. This design modification further demonstrates the intentional decision of sport managers to attract spending from wealthy fan
sources. Notably the sky boxes were incorporated into the top of the facility, above the upper deck.

**Major North American Team Sport in the Mid-20th Century**

Relocation and expansion became important topics for major professional sports leagues in the middle of the 20th century. Franchise relocation and league expansion became possible due to several socio-cultural reasons. As noted above, shifting populations and growing prosperity helped transform cities to the west and south into viable markets for professional sport (Seifried & Pastore, 2009b). Additionally, the presence of television, as well as other broadcast mediums enabled sporting events and results to be broadcast nationwide, helping to create national fanbases (Hendricks, 2019). Technologically, the advent of the commercial jet airplane decreased the time and expense of cross-country travel, making national, rather than regional leagues possible (Seifried, 2005; Young & Young, 2004). Notable league responses to these changes first emerged in the MLB and NFL, then eventually surfaced in the NHL and NBA.

The example of Milwaukee attracting the relocated Tri-Cities Blackhawks NBA franchise to the newly constructed Milwaukee Arena was presented as the first case of franchise relocation in this era. While the presence of an NBA franchise provided some status to Milwaukee as a major league city, the city’s response to the relocation of the Boston Braves franchise to Milwaukee provided more attention. For instance, within two seasons of the move to Milwaukee, the Braves led the league in attendance, attracting more than 2,000,000 fans (Seifried & Pastore, 2009b). In contrast, the Milwaukee Hawks failed, routinely played home games in a less than half full arena despite the presence of future NBA MVP Bob Pettit (Surdam, 2012). Therefore, by 1955, the team relocated to St. Louis, MO due to lack of interest (Koppett, 1999).

The Braves move to Milwaukee was the first in a series of franchise relocations for many MLB franchises seeking to improve attendance numbers and profits by occupying state-of-the-
art facilities (Seifried & Pastore, 2009b). For instance, following the Braves move to Boston in 1953, the Philadelphia Athletics moved to Kansas City, the St. Louis Browns moved to Baltimore, and the Brooklyn Dodgers and New York Giants moved to Los Angeles and San Francisco respectively (Young & Young, 2004). MLB’s expansion through relocation across the country mirrored the NFL’s growth in the same time span.

The NFL of the 1950s and 1960s, as a business property, was not as developed as the MLB, yet it was more developed than the NBA or NHL. Similar to the NBA, the NFL lagged behind the college football product in terms of popularity (Young & Young, 2004). Just as the NBL and BAA looked to the college ranks to boost interest in their respective leagues, the NFL continued to grow in popularity during the 1950s in part because college football stars increasingly chose to pursue professional football careers (Crippen, 2018; Grundy & Rader, 2016). Beginning with its first player draft in 1936, NFL teams claimed the rights to the best college football players in the U.S. Importantly, the NFL claimed rights to players regardless of player interest in pursuing a professional career while its main rival following World War II, the All-America Football Conference (AAFC) only pursued players interested in playing professional football (Crippen). Notably, Crippen found the AAFC placed franchises in cities the NFL ignored, such as San Francisco, Los Angeles, Baltimore, Buffalo, and Miami where AAFC teams did not have to share facilities with MLB teams. Interestingly, attendance figures for the AAFC exceeded the NFL, which prompted the NFL to seek a merger (Seifried, 2005). The AAFC and NFL merged operations for the 1950 season with teams from Baltimore, Cleveland, Los Angeles, New York, and San Francisco joining the NFL.

Despite westward expansion with the absorption of some AAFC franchises, fan interest in professional football continued to outpace the expansion efforts of the NFL. As an example, following a failed attempt by future Kansas City Chiefs owner Lamar Hunt to purchase the
Chicago Cardinals franchise, Hunt organized a network of prospective team owners in markets the NFL had ignored (Miller, 2003). The emergent rival league created by Hunt in 1960, the American Football League (AFL), included franchises in non-NFL cities like Boston, Buffalo, Dallas, Denver, Houston, and Oakland. The AFL focused on entertaining in-stadium and remote fans by emphasizing high-scoring and passing offenses (Rappoport, 2010). Additionally, the AFL further established itself as a legitimate sport product by expanding into cities like Cincinnati and Miami. In response, the NFL established franchises in Atlanta, Dallas, Minneapolis, and New Orleans prior to the formal AFL-NFL merger in 1970 (Seifried, 2005). It should be noted that a television broadcast contract allowed the upstart AFL to compete financially with the NFL (Roberts & Olson, 1989). Both the AFL and NFL benefitted from improved television capabilities during the 1960s as the pace of the game and structure of a line-of-scrimmage proved ideal for television (Grundy & Rader, 2016; Young & Young, 2004).

The NHL and NBA of the Mid-to-Late 20th Century

The experiences of the NHL and NBA franchises were different from those of the MLB and NFL, though similarly influenced by the social and cultural changes that occurred in the U.S. and Canada. The NHL existed as the smallest major league with only six teams. Despite having six stable franchises, the NHL faced ownership, revenue, and player issues throughout the 1950s and 1960s (Brewitt, 1975; Ross, 2008). Unlike the NHL, the NBA operated competing strategies of retrenchment, relocation, and expansion in the 1950s and 1960s. Despite its tumultuous existence, franchise upheaval helped to create a better, more consistent on-court basketball product by consolidating talent on the remaining teams (Koppett, 1999). Although the business experiences of the two leagues were unique, ultimately, the NHL and NBA began a concerted effort of national expansion in 1967.
As the NHL navigated the post-World War II sport business and consumer landscape, the league enjoyed a solid base of fan support as evidenced by setting a gate receipt record during the 1949-1950 season (Ross, 2008). This mention is further supported by the league averaging 95% in-facility attendance in an expanded 70-game schedule (Brewitt, 1975). Although this figure suggests the NHL enjoyed consistent support from its fans, the number was also misleading. As discussed in chapter five of this dissertation, the Stage Four facilities were built to be entertainment venues as well as sport arenas and team sports were sometimes used to fill open schedule dates. The end effect of this was that facilities relying more heavily on hockey for profit (i.e., Detroit Olympia, Montreal Forum, and Maple Leaf Gardens) provided favorable schedules and Saturday night dates to the hockey teams while the others (i.e., Boston Garden, Chicago Stadium, and Madison Square Garden) did not (Ross). This point, not surprisingly, caused conflict between team owners.

With the exception of league and owners’ concerted effort to block and undermine Eddie Livingstone’s forays into professional hockey (Holzman & Nieforth, 2002; Ross, 2008; Wong, 2005), NHL owners also rarely embraced the concept of copetition during its first three decades of existence. This practice is best exemplified by the fact that the owner of the Detroit Red Wings and Detroit Olympia Stadium, James E. Norris also owned the Chicago Stadium and held controlling interest in Madison Square Garden. Overall, Norris essentially enjoyed control over the business and scheduling of three teams, which partly explains the lack of a balanced schedule for Chicago and New York. In addition to the power wielded by Norris, his controlling interests were in major U.S. markets, which at best highlighted, and at worst exacerbated, the Canadian-U.S. divide amongst owners. As a result, management of the Canadiens and Maple Leafs collaborated, though colluded may be a better term, to maintain the strength of the Canadian franchises by providing favorable trades and access to player rights (Ross).
While management of the Canadiens and Maple Leafs worked to maintain Canadian hegemony in the NHL, the demographic forces and economic realities of the U.S. and Canada contributed to the league looking south to the U.S. for expansion. While the NHL had a stable and consistent source of revenue in terms of ticket sales, few options to generate further revenue existed unless new arenas were built or the league expanded from the opportunities made available (Bass, 2011). As one example, the role that television played in encouraging league expansion cannot be understated. In 1952, 10% of Canadian homes had a television set (McKinley, 2006). By comparison in 1952 approximately 34% of U.S. homes also had televisions (“Number of TV Households,” n.d.). Resultantly, in 1952, 15,300,000 U.S. homes had televisions, a figure greater than the entire population of Canada in 1951. By 1971, the U.S. had just under 61,000,000 homes with televisions, 27,600,000 of which were color televisions, while Canada’s national population reached just below 22,000,000 (“Number of TV Households”). With burgeoning populations and media markets emerging throughout the U.S. the league faced the possibility of a rival emerging and seizing control of those markets (Bass).

The threat of a rival league emerging to challenge the NHL was real. In the 1910s and early 1920s, the PCHA emerged as a legitimate threat to the NHL. By the 1930s, the league collaborated with rivals the American Hockey League and Western Hockey League as sources for minor league talent to avoid their emergence as a credible rival (Bass, 2011; Ross, 2008). In the 1950s, the six-team NHL offered limited professional opportunities for players. Thus, players in the minor leagues often opted to leave hockey rather than flounder in the minor leagues (Brewitt, 1975). Many NHL players were dissatisfied with their compensation as a result of the small number of franchises and therefore, had an antagonistic relationship with league and team management in the 1950s and 1960s (Ross; Willes, 2004). Overall, the popularity of professional
hockey (e.g., major and minor) suggested there was an abundance of talented but disgruntled employees who could be willing to sign with an upstart league.

By expanding the league to new markets, opportunities for those players could be controlled by the league (Willes, 2004). This was important because the nature of NHL franchise ownership also included the burden of paying for player development (Brewitt, 1975). The league office estimated that by the late 1950s it cost as much as $40,000 ($357,447.45 in 2018) to develop a player from an amateur to the NHL (Ross, 2008). Considering their investment in talent and the opportunity to secure lucrative television contracts, NHL management and ownership coalesced on the business significance of expansion.

The NHL formally expanded in 1967 when six new franchises (i.e., California Seals, Los Angeles Kings, Minnesota North Stars, Philadelphia Flyers, Pittsburgh Penguins, and St. Louis Blues) joined the league. The first wave of NHL expansion was notably targeted and noticeably non-Canadian. Overall, 15 bids from 10 cities (i.e., Baltimore, Bay Area, Buffalo, Cleveland, Los Angeles, Philadelphia, Pittsburgh, St. Louis, Twin Cities, and Vancouver) were considered (Brewitt, 1975). As a condition of joining the league, prospective franchises were required to submit a non-refundable $10,000 application fee, as well as a $2,000,000 entrance fee, if selected, to join the league. Moreover, each franchise was required to demonstrate they could provide compensation to the existing teams for their 20 player expansion rosters (“NHL Bidders Slow,” 1965).

The primary factor in determining locations for expansion was heavily influenced by projected television revenue (Brewitt, 1975; Carroll, 1966). As a result, Los Angeles and San Francisco were assured franchises (Brewitt). Perhaps most surprising was the fact that no Canadian cities were awarded a franchise in the first round of league expansion. Furthermore, expansion did not include the Southern U.S., supporting Lewis’s (2007) assertion that though
modernizing, the South was the least developed economy of the U.S. While this would change with future expansion, by 1967 the league signaled that it was more focused on its finances than on maintaining Canadian cultural dominance of the sport (Brewitt).

Finally, and of specific importance to this project, the league included facility requirements as part of expansion. New franchises were required to provide a facility with a capacity of 12,500 seats with a renewable 10-year lease (Brewitt, 1975; Ross, 2008). The result of this requirement was that a professional league bureaucracy imposed size specifications and an added layer of intentionality on new facility construction. Importantly, the NHL demonstrated that as a sport entity, it was still capable of influencing facility design into the latter half of the century, suggesting the NBA was an inferior business.

The World Hockey Association

Following the six-team expansion of 1967, the NHL continued its expansion efforts, first by adding two teams in 1970, 1972, and 1974, as well as one team in 1976. This expansion allowed the NHL to further penetrate into southern and western markets as it tripled in size over a decade to 18 teams. Despite the growth of the NHL, the desire of prospective owners and markets to achieve major league status outpaced league growth (McKinley, 2006). For entrepreneurially-minded individuals, ownership of an NHL franchise was particularly appealing in part because the league continued to enjoy over 90% average capacity attendance through the mid-1970s, suggesting ownership in the NHL would likely provide a positive return on investment (El Hodiri & Quirk, 1974; Horvitz & Hoffman, 1976). Beyond return on investment, ownership of a major professional sport franchise also provided a tax shelter for owners where they could delay and reduce their tax obligations (Horvitz & Hoffman; Koch, 1974). More specifically, savvy team owners could establish ownership of the team as an S corporation so that they could deduct the team’s financial losses from their personal income tax obligations (Koch).
The attraction of major franchise ownership, as well as open markets, contributed to the creation of the World Hockey Association (WHA) in 1972. In 1971, sport entrepreneur and founder of the American Basketball Association (ABA), Dennis Murphy organized a professional hockey league to rival the NHL. In order to legitimize the WHA and compete with the NHL, WHA owners exploited NHL player dissatisfaction with compensation by offering players significantly more money than NHL owners were willing to pay (Alyluia, 1973; Willes, 2004). For example, the Chicago Blackhawks offered 32-year-old forward Bobby Hull a $250,000 salary for the 1972-1973 season while the Winnipeg Jets of the WHA offered Hull an annual salary of $250,000 per year for 10 years, plus a $1,000,000 signing bonus (Mitchell, 2015). The WHA also recruited European players to the league, a practice generally ignored by the NHL, thereby introducing a new, more open style of play (McKinley, 2006).

Overall, the WHA blueprint to compete with the NHL involved placing franchises in undervalued markets and offering more lucrative player contracts than NHL owners were willing to extend. However, the WHA model proved unsustainable as franchises were unable to generate sufficient interest and gate receipts to cover the increasing costs of player salaries and team operations (McKinley, 2006). The teams played in smaller markets than the NHL and in smaller, outdated facilities. During its first year of operations, the average WHA facility accommodated 9,786 fans (See Table 6.3). Furthermore, during the 1973-1974 season WHA league-wide attendance averaged 5,200 spectators per game, compared to the NHL average of 14,200 per game that same year (El Hodiri & Quirk, 1974). Even teams like the New York Raiders, in viable sports markets with state-of-the-art arenas, struggled to attract fans and generate revenue.
Table 6.3. WHA Season One Facilities

<table>
<thead>
<tr>
<th>Team</th>
<th>Facility</th>
<th>Capacity</th>
<th>Date Opened</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alberta Oilers*</td>
<td>Edmonton Gardens</td>
<td>5,200</td>
<td>1913</td>
</tr>
<tr>
<td>Chicago Cougars</td>
<td>International Amphitheatre</td>
<td>9,000</td>
<td>1934</td>
</tr>
<tr>
<td>Cleveland Crusaders</td>
<td>Cleveland Arena</td>
<td>9,900</td>
<td>1937</td>
</tr>
<tr>
<td>Houston Aeros</td>
<td>Sam Houston Coliseum</td>
<td>9,217</td>
<td>1937</td>
</tr>
<tr>
<td>Lost Angeles Sharks</td>
<td>Los Angeles Sports Arena</td>
<td>14,546</td>
<td>1959</td>
</tr>
<tr>
<td>Minnesota Fighting</td>
<td>St. Paul Auditorium</td>
<td>7,000</td>
<td>1932</td>
</tr>
<tr>
<td>Saints</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New England Whalers*</td>
<td>Boston Arena</td>
<td>4,666</td>
<td>1921</td>
</tr>
<tr>
<td>New York Raiders</td>
<td>Madison Square Garden IV</td>
<td>17,843</td>
<td>1968</td>
</tr>
<tr>
<td>Ottawa Nationals</td>
<td>Ottawa Civic Centre</td>
<td>9,300</td>
<td>1967</td>
</tr>
<tr>
<td>Philadelphia Blazers</td>
<td>Philadelphia Civic Center</td>
<td>9,100</td>
<td>1931</td>
</tr>
<tr>
<td>Quebec Nordiques*</td>
<td>Colisee de Quebec</td>
<td>12,000</td>
<td>1949</td>
</tr>
<tr>
<td>Winnipeg Jets*</td>
<td>Winnipeg Arena</td>
<td>9,671</td>
<td>1955</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td>9,786</td>
<td></td>
</tr>
</tbody>
</table>

Note. * indicates team joined NHL

The New York Raiders had access to Madison Square Garden IV (MSG IV), a facility whose owners also operated the NHL’s New York Rangers. While the Raiders were given access to MSG IV, the facility fees guaranteed the team would not make a profit during home games (Willes, 2004). As a result, the franchise relocated first to New Jersey before a move to San Diego, CA where it was renamed the San Diego Mariners. The Mariners franchise still struggled, losing $1,000,000 during the 1975-1976 season (Boer, 2006). The precarious financial position of WHA teams also resulted in ownership and management turnover. The Edmonton Oilers, for example, experienced three ownership changes during the 1976-1977 season, including Nelson Skalbania exchanging a 50% ownership stake in the Oilers with Peter Pocklington for a Rolls Royce automobile, a painting, and a diamond ring (Boer). Despite its financial issues, the WHA similarly demonstrated viable markets for professional hockey existed in cities that had otherwise been ignored by the NHL. Eventually, four WHA franchises (i.e., Edmonton Oilers, Hartford Whalers, Quebec Nordiques, and Winnipeg Jets) were admitted to the NHL as expansion teams prior to the 1979 season.
The merger of the WHA and NHL could best be described as retributive. With the exception of two goalies and two other rostered players, all WHA players could be claimed and reassigned to the NHL team that previously controlled their rights without compensation to the newly-admitted teams. The former WHA squads were also assigned the last four picks in each round and assessed a $125,000 fee per player selected in the expansion draft (McKinley, 2006). Furthermore, the NHL imposed new facility capacity requirements on its newest members, mandating the arenas accommodate 15,000 spectators. The result of this requirement ultimately prompted the Colisee de Quebec to undergo a $15,000,000 ($51,881,577.13 in 2018) renovation (“Money for Arena,” 1979), while the Winnipeg Arena underwent $5,000,000 ($17,293,859.04 in 2018) in renovations (“Jets Waiting,” 1979) to meet NHL standards.

Ultimately, the WHA-NHL merger resulted in a period of relative stability for the NHL. The addition of the four teams increased the total number of NHL franchises to 21. Of note, prior to the 1978-1979 season, the Cleveland Barons and Minnesota North Stars franchises merged rosters, dropping the NHL franchise number to 17. Throughout the 1980s, none of the league’s franchises folded, while only the Atlanta Flames and Colorado Rockies relocated during the decade, becoming the Calgary Flames and New Jersey Devils in 1983 and 1982 respectively.

The NBA of the Mid-to-Late 20th Century

The merger of the two leading professional basketball leagues in the U.S. in 1949 gave the newly-formed 17-team NBA unrivaled access to the most talented professional basketball players, as well as major media markets and facilities in the U.S. The union of the BAA and NBL also created a league with tremendous disparities in population and facilities. The league’s largest market, New York City, NY (Knickerbockers) with access to MSG III (capacity of 18,499) drew from a population of 7,891,957 in 1950 (Gibson, 1998). Conversely, Sheboygan, WI (Redskins) playing in the Sheboygan Municipal Auditorium and Armory (capacity of 3,500)
drew from a population of 42,485 (Census of Population, 1950). Thus, despite having a relatively robust number of teams in the league by comparison to the MLB, developing competitive balance was inherently problematic. This point is further illustrated by the fact that six teams (i.e., Anderson Packers, Denver Nuggets, Sheboygan Redskins, Waterloo Hawks, Chicago Stags, St. Louis Bombers) shuttered after one season of operation (Koppett, 1999). The streamlined NBA of 1951 featured 11 teams, a number that eventually dropped to eight teams before the 1955-1956 season.

The league and its fluctuating membership faced logistical and image challenges throughout much of the 1950s and into the 1960s beyond the discrepancy in facility and city sizes. For example, travel between games was difficult because some teams played in cities (e.g., Fort Wayne, IN and Moline, IL) without major airports or train stations, thereby requiring expensive and uncomfortable road travel to some cities (Surdam, 2012). In order to overcome long and expensive travel to remote destinations, the league adopted an irregular schedule where teams would play home, away, and neutral site games in an unbalanced schedule because some teams played a majority of their games at home, while others played away from home for most of the season (Surdam). Beyond helping to alleviate some travel disparities, neutral site games were also used to promote double-headers and improve gate receipts for home teams, though this practice had little practical benefit for teams in small arenas because they had so few seats to sell (Koppett, 1999; Surdam).

NBA teams with access to major arenas only used them on occasions where they were likely to have large houses. When visiting teams with star players and strong records traveled to cities like Boston, MA and New York City, the Boston Celtics and New York Knicks could host games in the Boston Garden or MSG III to maximize profits (Koppett, 1999; Surdam, 2012). Surdam noted when lesser teams traveled to these major markets, the Celtics and Knicks would
play games at smaller facilities with lower operating costs (i.e., Boston Arena and 69th Regiment Armory). In short order, the creation of star player attractions became important for league strategy to not only enhance interest, but also profits (Surdam). The NBA relied on securing the services of the best college players to feed its star-driven model, a condition that could be problematic if the best collegiate and former collegiate players did not join the league.

In the previous chapter the role of MSG III and the prominent position of college basketball in the U.S. was discussed. Into the 1950s, college basketball, particularly college basketball at MSG III, represented the most attractive form of basketball being played in the country (Koppett, 1999). Importantly, MSG III and similar facilities, though designed to be an attractive alternative entertainment venue on par with other upper-class leisure facilities, still hosted events that attracted gamblers and ne’er-do-wells (Rosen, 1999). As a result, professional and amateur sporting events faced the specter of match fixing. The concern over gamblers interfering with amateur collegiate basketball was particularly high because of the popularity of college basketball and the condition of amateurism attached to player eligibility (Koppett). The concerns of gambling influencing college basketball proved to be well-founded as in the early 1950s college basketball gambling scandals permeated throughout the sport. The epicenter of match fixing, not surprisingly, was MSG III.

In addition to hosting premier college basketball double headers for decades, MSG III served as one of the New York Knicks home venues. Despite the Knicks’ and team president Ned Irish’s relationship with MSG III, the NBA was not mired in the basketball gambling scandal. The NBA avoided backlash from the gambling scandal because the league did not attract significant attention from bettors because NBA basketball was less popular (Koppett, 1999; Rosen, 1999). Further, the gambling scandal was one of national proportions, while the NBA was viewed and operated as a regional sport. The gambling scandal, therefore, helped
legitimize professional basketball, because the professional product was not tainted (Koppett). Interestingly, it should be noted that the scandal had ramifications for the league, as many implicated current and former college players received lifetime bans from the NBA.

The discovery of college basketball’s gambling ring and subsequent NBA player ban correlated to further depletion of the league when three more franchises, folded between 1951 and 1955. However, between 1956 and 1960 a series of elite collegiate players including Bill Russell, Wilt Chamberlain, and Oscar Robertson entered the professional ranks and spurred growing interest in the NBA (Surdam, 2012). The emergence of a new generation of stars coincided with rule changes designed to attract the attention of national television audiences such as the 24-second shot clock (Koppett, 1999; Surdam). Moreover, growing populations and facilities of increasing size became attractive destinations for small market teams and expansion franchises so that by the late 1960s the league embraced a pattern of growth it would follow into the 21st century (i.e., approve new franchises in markets capable of providing financial rewards).

The American Basketball Association

Similar to its professional counterparts in the NFL and NHL, the NBA of the early 1960s existed as a mostly regional league, with franchises concentrated in the Northeast and Midwest U.S. The eight-team league added one expansion franchise in 1961 and another in 1966 before expanding rapidly by adding two teams in 1967 and 1968, as well as three more in 1970, before adding a single franchise in 1974. NBA expansion, as well as franchise relocation during this time, established the league in western and southern markets. The expansion of the NBA during the 1960s and 1970s is noteworthy because the league did not initially view expansion as an urgent or necessary matter until the late 1960s (Koppett, 1999). Furthermore, the expansion of the NBA occurred in direct response to the creation of the rival ABA.
The AFL-NFL partnership and merger between 1966 and 1970 directly influenced the formation of the ABA. Dennis Murphy created the ABA in 1967 with one purpose, to force a merger with the NBA in a manner similar to that of AFL-NFL collaboration that created the Super Bowl (Pluto, 1990). If owners in the ABA could successfully force a merger with the NBA, they believed the value of their franchises would increase by a factor of ten, ensuring a robust return on investment in addition to the prestige of owning a pro sport team (Horvitz & Hoffman, 1976; Koch, 1974). Despite this goal, Murphy and his colleagues lacked formal understanding of how to actually start or run a league. Resultantly, the league lacked formal structure, planning, and adequate funding (Koppett, 1999; Pluto). To illustrate this point, Pluto noted that by 1966, the NBA required that an expansion franchise pay a fee of $1,500,000 while the ABA asked prospective owners to pay between $5,000 to $25,000 to secure a franchise.

Despite its economic stability as an eight and later 10-team league, the NBA was particularly susceptible to the encroachment of a viable rival league because its leadership did not prioritize western expansion (Koppett, 1999; Surdam, 2012). As an example, in 1961 the upstart American Basketball League (ABL) established franchises in Midwest and Pacific Coast markets in an attempt to challenge the NBA, but ultimately dissolved following one season after failing to attract any notable players, with the exception of those players banned from the NBA for gambling, to the league (Koppett). The ABL’s failure helped establish a working model for the ABA to compete with the NBA, specifically through player compensation.

One of the chief concerns of ABA owners was player acquisition. In its early years, the league had no set policy or procedure to draft or claim players (Pluto, 1990). Thus, the initial years of the ABA featured teams populated through open tryouts, rather than more established means, such as player drafting. However, the emergence of the new league did present an alternative to the NBA, which helped to create a bidding war for players emerging from the
college ranks (Koppett, 1999; Pluto). Unlike the NBA, the ABA courted and signed players with remaining college eligibility. The means ABA teams used to sign players to lucrative contracts represented rare business acumen on the part of the league. The ABA offered many of its players deferred contracts and annuity payments. The practice allowed teams to offer talented players large contracts while keeping adequate cash on hand to operate the team on a daily basis (Koch, 1974). Additionally, the practice of deferred salary was ideal because of the short-sighted nature of the league. If the ABA merged with the NBA, the ABA teams would likely be sold quickly, ensuring that current owners would not be responsible for paying out the deferred money (Koch).

The bidding war between the ABA and NBA drastically increased player salaries so that during the 1970s professional basketball players were the most highly compensated athletes in U.S. professional sports (Alyluia, 1973). Similar to the issues the WHA encountered during its existence, the ABA struggled to generate revenue due to its smaller arenas, as well the inability to secure a television contract (Koppett, 1999). Relying almost exclusively on gate receipts and playing in small facilities (i.e., average capacity of 9,190), the league was generally unable to secure adequate ticket revenue with average league attendance hovering below 3,000 spectators per game in its first season (See Table 6.6) (Pluto, 1990). By its seventh season no ABA franchise averaged more than 9,000 fans per game while seven NBA franchises exceeded that mark (El Hodiri & Quirk, 1974). After accumulating nearly $50,000,000 in losses since its creation, the ABA folded in 1976, but not before four franchises (i.e., Indiana Pacers, New York Nets, San Antonio Spurs, and Denver Nuggets) joined the NBA for an expansion fee of $3,200,000 (Pluto).

Despite the ABA’s overall collapse, the league did alter the presentation of NBA competition. The ABA offered a modern sport product. For example, the league utilized the three-point shot, slam dunk contest, and kept extensive records, as well as individual and team
performance statistics (i.e., blocked shots, rebounds, steals, turnovers) (Pluto, 1990).

Furthermore, over the course of its existence, the ABA did demonstrate that some markets (i.e., Denver, Indianapolis, Newark, New Orleans, Salt Lake City, and San Antonio) were viable for the NBA. Following the ABA-NBA merger in 1976, 22 franchises comprised the NBA. The NBA expanded again in 1980, adding the Dallas Mavericks franchise, thereby increasing the franchise number to 23 stable organizations, with only the San Diego Clippers and Kansas City Kings relocating to Los Angeles and Sacramento in 1984 and 1985 respectively.

Table 6.4. ABA Season One Facilities

<table>
<thead>
<tr>
<th>Team</th>
<th>Facility</th>
<th>Capacity</th>
<th>Date Opened</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anaheim Amigos</td>
<td>Anaheim Convention Center</td>
<td>9,100</td>
<td>1967</td>
</tr>
<tr>
<td>Dallas Chaparrals*</td>
<td>Moody Coliseum</td>
<td>9,305</td>
<td>1956</td>
</tr>
<tr>
<td>Houston Mavericks</td>
<td>Sam Houston Coliseum</td>
<td>9,200</td>
<td>1937</td>
</tr>
<tr>
<td>Indiana Pacers*</td>
<td>Indiana State Fairgrounds Coliseum</td>
<td>8,200</td>
<td>1939</td>
</tr>
<tr>
<td>Denver Larks*</td>
<td>Denver Auditorium Arena</td>
<td>6,841</td>
<td>1909</td>
</tr>
<tr>
<td>Kentucky Colonels</td>
<td>Louisville Gardens</td>
<td>6,000</td>
<td>1905</td>
</tr>
<tr>
<td>Minnesota Muskies</td>
<td>Met Center</td>
<td>15,500</td>
<td>1966</td>
</tr>
<tr>
<td>New Orleans</td>
<td>Loyola Field House</td>
<td>6,500</td>
<td>1954</td>
</tr>
<tr>
<td>Buccaneers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New York Americans*</td>
<td>Teaneck Armory</td>
<td>3,500</td>
<td>1936</td>
</tr>
<tr>
<td>Oakland Oaks</td>
<td>Oakland-Alameda County Coliseum Arena</td>
<td>13,502</td>
<td>1966</td>
</tr>
<tr>
<td>Pittsburgh Pipers</td>
<td>Pittsburgh Civic Arena</td>
<td>13,449</td>
<td>1961</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td>9,190</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* * indicates team later joined NBA.

**Stage Five: Service-Oriented Facilities**

The construction of mid-20th century expansion and relocation facilities that housed the NHL and NBA mirrored those of the NFL and MLB. Specifically, the facilities were constructed in a manner that accommodated two sports away from the city core, while also taking into consideration in-facility and remote customer needs by providing ample parking, improved sightlines, circulation through the facility, and dedicated space for television cameras. Stage Five of the ideal-type model represents a unique period in sport, as well as municipal history. While public funding had been used in previous decades and locations, that money was largely part of
New Deal or WPA jobs programs. Facilities like the Cow Palace in Daly City, CA, the Sam Houston Coliseum in Houston, TX, and Buffalo Memorial Auditorium in Buffalo, NY were built using WPA money. Similarly, facilities like the Saint Louis Arena were privately financed, but built away from the main population center of Saint Louis, MO in order to bring notoriety to the city (“The World’s Greatest Show,” 1929). The Stage Five facility is unique because it represents an ideal-type of facility construction that relied on public money to build a facility to the specification of private businesses to help enhance the community.

The use of public money to construct sport facilities became accepted practice in the U.S. following World War I by creating sport facilities that doubled as memorial sites. By situating sport facilities as war memorials, facility planners were able to rally support for the construction of a profit center (Ingrassia, 2012). Moreover, state governments enacted legislation in the 1920s that allowed for referendums for tax expenditures on war memorials (Allen County War Memorial Coliseum, n.d.). Following World War II, the practice of soliciting public support for memorial sport facilities in the U.S. and Canada continued, as was described above in the examples of the Onondaga and Allen County arenas, as well as the Victoria Arena. Though more modern than Stage Four venues, these public arenas had smaller capacities in smaller markets and had interior spatial limitations similar to the Stage Four predecessors.

Public financing is a key identifier of the Stage Five facility ideal-type. While it was uncommon for a single individual to personally finance a facility in the Stage Four era, the ownership of the facility remained in the control of private citizens through arena stock purchases. By the mid-20th century, municipalities were willing to fund the construction of major multipurpose indoor arenas. Previously, Milwaukee’s use of $2,600,000 in public financing was identified as the first attempt by a city to build an arena to position itself as a major market. The use of public financing for facilities became common during the 1950s. The justification for such
expenditures is a familiar, though misleading trope in sport management (Baade & Dye, 1988; Johnson, Whitehead, Mason, & Walker, 2012; Noll & Zimbalist, 1997; Prophetter, 2016; Siegfried & Zimbalist, 2000; Swindell & Rosentraub, 1998): If a city finances the construction of a new facility for a professional sport team the facility would improve the city’s image and spur economic activity (Delaney & Eckstein, 2003; Seifried & Pastore, 2009b; Shubert, 2016; Trumpbour, 2007). Absent, or ignorant of, evidence of the likelihood that a sport facility would spur economic growth, municipalities throughout the U.S. financed multipurpose sport facilities to promote and improve their image. Overall, 36 facilities were identified as new Stage Five constructions for either a primary hockey or basketball tenant (See Table 6.5 and Table 6.6).

Table 6.5. Stage Five Urban Multipurpose Facility (Primary Hockey)

<table>
<thead>
<tr>
<th>Facility</th>
<th>Year Opened</th>
<th>Cost</th>
<th>Cost Adjusted</th>
<th>Capacity</th>
<th>Parking</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA Sports Arena</td>
<td>1959</td>
<td>$6,000,000</td>
<td>$51,774,604.81</td>
<td>14,546</td>
<td>7,000</td>
</tr>
<tr>
<td>Civic Arena</td>
<td>1961</td>
<td>$22,000,000</td>
<td>$184,760,880.71</td>
<td>10,732</td>
<td>5,000</td>
</tr>
<tr>
<td>Long Beach Convention Center</td>
<td>1962</td>
<td>$8,000,000</td>
<td>$66,518,366.45</td>
<td>15,000</td>
<td>5,000</td>
</tr>
<tr>
<td>Oakland Arena*</td>
<td>1966</td>
<td>$25,500,000</td>
<td>$197,630,378.09</td>
<td>13,061</td>
<td>9,600</td>
</tr>
<tr>
<td>The Forum**</td>
<td>1967</td>
<td>$16,000,000</td>
<td>$120,290,698.60</td>
<td>16,005</td>
<td>3,500</td>
</tr>
<tr>
<td>Met Center**</td>
<td>1967</td>
<td>$5,800,000</td>
<td>$43,605,378.24</td>
<td>14,600</td>
<td>X</td>
</tr>
<tr>
<td>Spectrum**</td>
<td>1967</td>
<td>$12,000,000</td>
<td>$93,002,530.86</td>
<td>14,646</td>
<td>12,000</td>
</tr>
<tr>
<td>Pacific Coliseum</td>
<td>1968</td>
<td>$6,000,000</td>
<td>$43,294,281.61</td>
<td>15,570</td>
<td>3,500</td>
</tr>
<tr>
<td>Nassau Coliseum</td>
<td>1972</td>
<td>$31,300,000</td>
<td>$188,029,757.97</td>
<td>14,665</td>
<td>6,000</td>
</tr>
<tr>
<td>Winnipeg Arena</td>
<td>1955</td>
<td>$2,500,000</td>
<td>$23,424,144.90</td>
<td>9,671</td>
<td>2,000</td>
</tr>
<tr>
<td>Capital Center</td>
<td>1973</td>
<td>$18,000,000</td>
<td>$101,800,067.57</td>
<td>18,130</td>
<td>4,300</td>
</tr>
<tr>
<td>Kemper Arena</td>
<td>1974</td>
<td>$23,000,000</td>
<td>$117,149,232.59</td>
<td>16,000</td>
<td>4,000</td>
</tr>
<tr>
<td>Northlands Coliseum</td>
<td>1974</td>
<td>$12,000,000</td>
<td>$61,121,338.74</td>
<td>15,248</td>
<td>1,100</td>
</tr>
<tr>
<td>Hartford Civic Center*</td>
<td>1975</td>
<td>$30,000,000</td>
<td>$140,022,397.77</td>
<td>7,627</td>
<td>X</td>
</tr>
<tr>
<td>Joe Louis Arena</td>
<td>1979</td>
<td>$57,000,000</td>
<td>$197,149,993.11</td>
<td>19,275</td>
<td>3,200</td>
</tr>
<tr>
<td>Saddledome</td>
<td>1983</td>
<td>$118,000,000</td>
<td>$297,496,047.52</td>
<td>16,605</td>
<td>X</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td>$24,506,667</td>
<td>$120,441,881.22</td>
<td>14,461</td>
<td></td>
</tr>
</tbody>
</table>

Note. * indicates facility was part of a larger development project. ** indicates facility was privately financed.
The use of public funds to build multimillion-dollar facilities became increasingly common following the 1968 alteration of the tax code in alignment with the Revenue Expenditure and Control Act which allowed sport stadiums to be financed with tax-exempt municipal bonds (Williams & Seifried, 2013). Of particular significance to the Stage Five ideal-type is the intentional construction and renovation of facilities specifically to host a major professional hockey or basketball team. Though facilities were built at no or minimal cost to the teams that would occupy them, the public funding limited the size and scope of the facilities, assuring that Stage Five facilities would limit overspending (Williams & Seifried). Stage Five facilities were built at a cost between $24,506,667 and $31,350,000 (between $120,441,881.20 and $130,024,670.57 in 2018).

Table 6.6. Stage Five Urban Multipurpose Facility (Primary Basketball)

<table>
<thead>
<tr>
<th>Facility</th>
<th>Year Opened</th>
<th>Cost</th>
<th>Cost Adjusted</th>
<th>Capacity</th>
<th>Parking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milwaukee Arena</td>
<td>1950</td>
<td>$6,000,000</td>
<td>$27,090,363.76</td>
<td>10,500</td>
<td>X</td>
</tr>
<tr>
<td>Portland Memorial Coliseum</td>
<td>1960</td>
<td>$8,000,000</td>
<td>$67,866,711.71</td>
<td>12,666</td>
<td>X</td>
</tr>
<tr>
<td>Cobo Arena*</td>
<td>1961</td>
<td>$56,000,000</td>
<td>$470,300,423.63</td>
<td>12,191</td>
<td>X</td>
</tr>
<tr>
<td>Seattle Center Coliseum</td>
<td>1962</td>
<td>$7,000,000</td>
<td>$58,203,570.64</td>
<td>14,098</td>
<td>650</td>
</tr>
<tr>
<td>Arizona Memorial Coliseum</td>
<td>1965</td>
<td>$7,000,000</td>
<td>$55,801,518.52</td>
<td>12,371</td>
<td>6,500</td>
</tr>
<tr>
<td>San Diego Arena</td>
<td>1966</td>
<td>$6,500,000</td>
<td>$50,376,370.88</td>
<td>14,500</td>
<td>4,500</td>
</tr>
<tr>
<td>HemisFair Arena</td>
<td>1968</td>
<td>$13,000,000</td>
<td>$93,804,276.82</td>
<td>10,070</td>
<td>6,000</td>
</tr>
<tr>
<td>MSG IV**</td>
<td>1968</td>
<td>$43,000,000</td>
<td>$310,275,684.87</td>
<td>18,596</td>
<td>X</td>
</tr>
<tr>
<td>Salt Palace</td>
<td>1969</td>
<td>$17,000,000</td>
<td>$116,316,516.80</td>
<td>13,200</td>
<td>X</td>
</tr>
<tr>
<td>The Omni Market Square Arena*</td>
<td>1972</td>
<td>$17,000,000</td>
<td>$102,124,788.68</td>
<td>16,181</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>1974</td>
<td>$23,000,000</td>
<td>$117,149,232.59</td>
<td>16,530</td>
<td>1,275</td>
</tr>
</tbody>
</table>

(Table 6.6 Continued)
<table>
<thead>
<tr>
<th>Facility</th>
<th>Year Opened</th>
<th>Cost</th>
<th>Cost Adjusted</th>
<th>Capacity</th>
<th>Parking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Richfield Coliseum</td>
<td>1974</td>
<td>$36,000,000</td>
<td>$183,364,016.23</td>
<td>20,900</td>
<td>6,200</td>
</tr>
<tr>
<td>McNichols Sports Arena</td>
<td>1975</td>
<td>$10,000,000</td>
<td>$46,674,132.59</td>
<td>16,660</td>
<td>5,500</td>
</tr>
<tr>
<td>The Summit Reunion Arena</td>
<td>1975</td>
<td>$13,000,000</td>
<td>$60,676,372.37</td>
<td>15,676</td>
<td>6,000</td>
</tr>
<tr>
<td>Brendan Byrne Arena</td>
<td>1980</td>
<td>$25,000,000</td>
<td>$76,185,325.65</td>
<td>17,007</td>
<td>6,200</td>
</tr>
<tr>
<td>Miami Arena</td>
<td>1981</td>
<td>$85,000,000</td>
<td>$234,808,370.00</td>
<td>20,149</td>
<td>24,800</td>
</tr>
<tr>
<td>Charlotte Coliseum</td>
<td>1988</td>
<td>$52,500,000</td>
<td>$111,437,943.79</td>
<td>16,640</td>
<td>4,500</td>
</tr>
<tr>
<td>ARCO Arena II</td>
<td>1988</td>
<td>$52,000,000</td>
<td>$110,376,630.04</td>
<td>24,042</td>
<td>8,000</td>
</tr>
<tr>
<td>Orlando Arena</td>
<td>1989</td>
<td>$40,000,000</td>
<td>$84,905,100.03</td>
<td>16,517</td>
<td>11,000</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td>$31,350,000</td>
<td>$130,024,670.57</td>
<td>15,679</td>
<td></td>
</tr>
</tbody>
</table>

Note. * indicates facility was part of a larger development project. ** indicates facility was privately financed.

Stage Five facility construction noticeably accommodated automobile commuter culture.

In addition to the increased presence of televisions in U.S. and Canadian homes, automobiles became an identifiable marker of modernity, as well as a means to engage in and access leisure activities (Hendricks, 2019; Young & Young, 2004). By the dawn of the 1960s, approximately 70% of American families owned an automobile (Young & Young). The surge in automobile ownership, along with state and federal investment in highways and the interstate system helped grow automobile culture and the idea of convenience travel and commuting (Hendricks; Seifried & Pastore, 2009b; Young & Young). Just as cookie cutter or concrete donut baseball/football stadiums of this time were built in large open areas outside of the city, so too were multipurpose indoor sport facilities (Seifried & Pastore; Shubert, 2016). In many cases, Stage Five facilities were built near other suburban facilities as part of a larger sport complex (e.g., Oakland Alameda County Coliseum Complex, Twin Cities Sports Complex). Resultantly, Stage Five facilities had
ample parking, such as was the case with the Philadelphia, PA Spectrum, a 14,646-seat arena with a 12,000-space parking lot. Overall, the Stage Five facility averaged 5,969 parking spaces.

In addition to offering numerous parking spaces, the location of Stage Five facilities afforded architects the opportunity to design facilities without regard for surrounding structures (Shubert, 2016). Furthermore, advances in construction technology had improved so that lighter and stronger materials that did not require internal support could be used to create cable-supported or domed-roof structures (Shubert). The technical aspects of the new roof technology are impressive. As an example, the Oakland Coliseum Arena used 96 steel cables measuring 2 and 3/16 inches thick to support its 6,500,000-pound, 420-foot diameter roof (“A Roof That Hangs,” 1966). Less restrictive construction space and improved construction technology also resulted in facilities being built to a size and scope not previously seen in multipurpose arenas.

Based on available data, the average surface area of the Stage Four facility was 3.12 acres. Conversely, the average surface area of the Stage Five facility more than doubled its predecessor at 8.70 acres (See Table 6.7). The use of new construction technology and designs fundamentally altered the viewing experience within the Stage Five facility.

Table 6.7. Stage Four and Stage Five Facilities Comparison of Surface Areas

<table>
<thead>
<tr>
<th>Stage Four Facility</th>
<th>Surface Area in Acres</th>
<th>Stage Five Facility</th>
<th>Surface Area in Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Montreal Forum</td>
<td>3.87</td>
<td>LA Sports Arena</td>
<td>7.27</td>
</tr>
<tr>
<td>Detroit Olympia</td>
<td>1.78</td>
<td>Portland Memorial Coliseum</td>
<td>3.1</td>
</tr>
<tr>
<td>Boston Garden</td>
<td>2.02</td>
<td>Civic Arena</td>
<td>2.8</td>
</tr>
<tr>
<td>Chicago Stadium</td>
<td>3.32</td>
<td>Seattle Center Coliseum</td>
<td>9.18</td>
</tr>
<tr>
<td>Saint Louis Arena</td>
<td>3.02</td>
<td>MSG IV</td>
<td>18.82</td>
</tr>
<tr>
<td>Maple Leaf Gardens</td>
<td>4.70</td>
<td>Spectrum</td>
<td>8.03</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nassau Coliseum</td>
<td>9.41</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kemper Arena</td>
<td>2.97</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Northlands Coliseum</td>
<td>11.02</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The Summit</td>
<td>13.91</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reunion Arena</td>
<td>7.23</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Charlotte Coliseum</td>
<td>10.67</td>
</tr>
<tr>
<td>Average</td>
<td>3.12</td>
<td></td>
<td>8.70</td>
</tr>
</tbody>
</table>
The Stage Five facility offered a unique in-arena experience. Importantly, the Stage Five facility was free of view-obstructing support poles (Curran, 1968). Support poles were no longer structurally necessary because the use of cable-supported and domed roofs (Shubert, 2016). The ability to design and construct larger facilities not only removed support poles, it also modified the appearance of the grandstands. Stage Five facilities possessed what Shubert called the “sawtooth” grandstand (p. 153). Though partly practical due to roof design, the sawtooth shape also maximized the number of seats along the sidelines of the basketball and hockey playing surfaces. Additionally, the increased size of Stage Five facilities welcomed more seating. Though the NHL mandated future facilities seat at least 12,500 hockey spectators by 1967, the Stage Five facility exceeded that requirement, seating between 14,317 and 15,679 customers.

The internal structure of the Stage Five facility also incorporated enhanced amenities to improve fan comfort. The grandstands of Stage Four facilities like MSG III were built against the exterior wall and presented small corridors that led fans from the entrance to their seats. Stage Five facilities offered broad concourses that allowed fans to comfortably enter, exit, and walk around the facility (Shubert, 2016). Additionally, multiple entrances/exits were included as part of the facility, reducing wait times to enter and exit the arena. The increased space in the Stage Five facility also accommodated restroom space and more concessions points of sale and items. Notably, during the first half of the 20th century sport facilities did not offer consistent, accessible in-house concessions (Seifried & Pastore, 2009b). This project identified that Stage Five facilities featured approximately 12 restrooms, as well as between four and 14 permanent concessions stands. The Stage Five facility offered a variety of food and beverage options. During the early 1970s, Pittsburgh Civic Arena attendees had the option of purchasing an array of food and beverage items, such as a roast beef sandwich ($1.00 or $5.09 in 2018), Polish sausage sandwich ($0.95 or $4.84 in 2018), foot-long hotdog and 16-ounce beer ($0.75 or $3.82
each in 2018), hamburgers ($0.55 or $2.80 in 2018), hot dogs ($0.45 or $2.29 in 2018), candy and pizza ($0.40 or $2.04 each in 2018), and cotton candy, popcorn, coffee, and soda pop for ($0.25 or $1.27 in 2018) (Hritz, 1974).

A new type of amenity was conspicuously present in Stage Five facilities. The remote viewer was also accommodated in the Stage Five facility through the inclusion of purpose-built television camera locations. The $6,000,000 ($51,774,604.81 in 2018) Los Angeles Memorial Sports Arena included television and television lighting platforms as part of the catwalk system above the facility (Kendall, 1959). Other West Coast facilities followed suit as the Portland Veterans Memorial Coliseum and Oakland Coliseum Arena similarly hung television camera stands from their respective ceilings. Related, facility designs directed high intensity lighting at the playing surface while utilizing low intensity lights around the grandstand to enhance the visibility of contests for cameras (“New Metropolitan Sports Center,” n.d.). Lastly, video projection screens were also included in the design, bringing the television viewing experience into the arena by giving fans the opportunity to watch game action and replays while providing facilities an opportunity to increase revenue by introducing commercial messages and advertising locations in the facility (“TV Screens Hamper Scorers,” 1975).

**The Suites Life**

Facility management responses to the service economy shift of the mid-20th century catered to the expectations of the growing middle class. An ongoing theme of this dissertation has been the desire of urban multipurpose indoor facility managers and teams to attract and secure consumer entertainment spending. By the 1960s, the motivation of facility and franchise owners remained true to this idea. NHL Commissioner Clarence Campbell declared that while team and facility owners where interested in sport, “they are also primarily interested in the entertainment business, and this will motivate a large portion of the decisions and attitudes which
they have to take from time to time” (Campbell, 1963, para. 10). With this notion in mind, the upper-class citizens of U.S. and Canadian cities have always been a key target demographic of entrepreneurial sport facility operators. Victoria Skating Rink, MSG II, Schenley Park Casino, and MSG III were designed to attract wealthy customers. While Stage Five facilities generally catered to the growing middle class, Stage Five facilities evolved to include or adopt a limited number of overt structures in the form of private suites to cater to the service needs of upper class and corporate customers.

Private suites were reintroduced to upper class sport fans with the construction of the Houston Astrodome (Seifried & Pastore, 2009b.; Shubert, 2016). This project identified 16 facilities as including a small number of private suites in the design of the facility or as part of facility rehabilitation treatments (See Table 6.8). The location and level of sophistication of private seats varied. The Metropolitan Sports Center in Bloomington, MN offered 14-person ice-level box seats (“Boxes,” 1966). The Kemper Arena situated 25 private suites around the facility at the top of the lower seating bowl. The Kemper Arena suites could best be described as minimalist in nature with dropped ceilings, optional carpeting for the floor, plastic chairs, and a plexiglass partition separating the suite from the grandstand (Rosin, 2016). Finally, the Capital Centre in Landover, MD provided the first large scale commitment to building private suites in a multipurpose indoor facility.

Table 6.8. Stage Five Urban Multipurpose Facilities with Private Suites

<table>
<thead>
<tr>
<th>Facility</th>
<th>Year</th>
<th>Construction Type</th>
<th>Cost</th>
<th>Private Suites/Boxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Olympia Stadium</td>
<td>1966</td>
<td>Rehabilitation</td>
<td>$2,000,000</td>
<td>9</td>
</tr>
<tr>
<td>Montreal Forum</td>
<td>1968</td>
<td>Rehabilitation</td>
<td>$9,500,000</td>
<td>10</td>
</tr>
<tr>
<td>Buffalo Memorial Auditorium</td>
<td>1971</td>
<td>Rehabilitation</td>
<td>$8,700,000</td>
<td>16</td>
</tr>
<tr>
<td>MSG IV</td>
<td>1973</td>
<td>Rehabilitation</td>
<td>X</td>
<td>29</td>
</tr>
<tr>
<td>Capital Center</td>
<td>1973</td>
<td>New Construction</td>
<td>$18,000,000</td>
<td>78</td>
</tr>
</tbody>
</table>

(Table 6.8 Continued)
<table>
<thead>
<tr>
<th>Facility</th>
<th>Year</th>
<th>Construction Type</th>
<th>Cost</th>
<th>Private Suites/Boxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kemper Arena</td>
<td>1974</td>
<td>New Construction</td>
<td>$23,000,000</td>
<td>25</td>
</tr>
<tr>
<td>Richfield Coliseum</td>
<td>1974</td>
<td>New Construction</td>
<td>$36,000,000</td>
<td>96</td>
</tr>
<tr>
<td>Joe Louis Arena</td>
<td>1979</td>
<td>New Construction</td>
<td>$57,000,000</td>
<td>61</td>
</tr>
<tr>
<td>Brendan Byrne Arena</td>
<td>1981</td>
<td>New Construction</td>
<td>$85,000,000</td>
<td>29</td>
</tr>
<tr>
<td>Boston Garden</td>
<td>1983</td>
<td>Rehabilitation</td>
<td>X</td>
<td>36</td>
</tr>
<tr>
<td>Pacific Coliseum</td>
<td>1983</td>
<td>Rehabilitation</td>
<td>$5,400,000</td>
<td>14</td>
</tr>
<tr>
<td>McNichols Sports Arena</td>
<td>1986</td>
<td>Rehabilitation</td>
<td>$12,900,000</td>
<td>27</td>
</tr>
<tr>
<td>Olympic Saddledome</td>
<td>1988</td>
<td>Rehabilitation</td>
<td>$1,000,000</td>
<td>31</td>
</tr>
<tr>
<td>Miami Arena</td>
<td>1988</td>
<td>New Construction</td>
<td>$52,500,000</td>
<td>16</td>
</tr>
<tr>
<td>Charlotte Coliseum</td>
<td>1988</td>
<td>New Construction</td>
<td>$52,000,000</td>
<td>12</td>
</tr>
<tr>
<td>Orlando Arena</td>
<td>1989</td>
<td>New Construction</td>
<td>$110,000,000</td>
<td>26</td>
</tr>
</tbody>
</table>

The Capital Centre included 40 private suites situated above the second level of the facility as part of 78 total luxury boxes (Berlet, 1982). The suites carried an annual cost of $25,000 to $35,000 per year ($141,388.98 to $197,944.58 in 2018) and guaranteed access to hockey and basketball games, as well as 15 tickets to every Capital Centre event (Beard, 1973). In addition to 15 tickets to every Capital Centre event, the suite spectators had access to private elevators that delivered individuals to the suites which contained a “reception area, wet bar, wall-to-wall carpeting, private powder room, closed circuit and commercial television and a panoramic view of the arena floor” (Gross, 1973, p. 18). Additionally, Gross noted the Capital Centre also featured a 125-seat private club and restaurant. While Stage Five facilities adopted various versions of private suite seating, the Capital Centre model of expensive suites above the upper deck emerged as an early precursor for the next stage of multipurpose arena construction.

**Rehabilitating Stage Four and Five Facilities**

By April 1968, $130,000,000 ($938,042,768.20 in 2018) were dedicated to new facility construction or existing facility renovation (Curran, 1968). New construction was not the only option available to accommodate the needs of the modern sport fan and business. While Stage Five facilities like MSG IV and Stage Six facilities like the Richfield Coliseum replaced their
Stage Four predecessors (i.e., MSG III and Cleveland Arena) several Stage Four facilities were renovated to meet existing league standards while also incorporating new technology and amenities that catered to the expectations of customers.

Renovating existing facilities was not a foreign concept to sport facility owners. For example, baseball stadium owners modified their facilities to accommodate growing interest in professional football by adding seats and creating enclosed grandstands around the facility (Seifried & Pastore, 2009a). The renovation of Stage Four multipurpose indoor facilities coincided with the NHL and NBA expansion between the late 1960s and 1980s. The renovation of Stage Four facilities occurred in response to Stage Five of multipurpose urban facility construction. Notably, facilities like the Montreal Forum and Boston Garden underwent rehabilitation treatments rather than build new facilities.

By the late 1960s the Stage Four facilities that served as the homes for NHL teams were roughly four decades old. Despite their age, these facilities possessed certain advantages that newly constructed facilities did not. Above, the physical location of Stage Five facilities was identified as moving toward suburban areas outside the city center as more affluent potential customers moved away from the cities (Seifried & Pastore, 2009b; Shubert, 2016). The previous chapter echoed Shubert’s assertion that some Stage Four facilities were constructed on major thoroughfares to promote easy transportation to the arena. Facilities such as the Boston Garden and Montreal Forum were situated on train lines that offered public transportation access from the suburbs to the arena (Curran, 1968). Furthermore, some Stage Four facilities, such as Maple Leaf Gardens, had become culturally and synecdochally important representations of their cities and places to pilgrimage to demonstrate your membership in a fan nation (Field, 2007).

Prior to the 1968 season, a $9,500,000 ($68,549,279.21 in 2018) rehabilitation of the Montreal Forum was completed. The renovation of the Montreal Forum, as well as its Stage Four
contemporaries in the late 1960s demonstrated cost consciousness was an important component to the decision to renovate an existing facility or build new. Prior to deciding to renovate the Montreal Forum, the Canadian Arena Company surveyed nearly 100 potential locations for a replacement facility before determining the $9,500,000 renovation was more practical than the roughly $22,000,000 ($158,745,699.23 in 2018) cost of building a new arena (Curran, 1968). Further, the decision by the Canadian Arena Company to rehabilitate the Montreal Forum rather than build new reflected prevailing building rules concerning facility renovations where an existing facility should be replaced if the cost of renovation exceeded 50% of the cost of replacement facility construction (Galvan, 2006; Pfleegor & Seifried, 2014). The most significant renovations to Stage Four facilities were directed at enhancing opportunities to generate revenue.

The renovations that transformed Stage Four facilities responded to the service-oriented upgrades introduced by newly constructed Stage Five facilities that enhanced and improved amenities to attract new revenue. For example, the Montreal Forum’s hockey seating capacity increased from 9,300 in 1924 to 16,500 seats in 1968. Moreover, as part of the effort to improve the customer experience the concourses were widened and escalators were added to improve movement around the arena, while the Canadian Arena Company added 10 luxury suites costing $3,600 ($25,976 in 2018) to lease as part of the facility rehabilitation (“Montreal Forum to Open,” 1968). Similarly, the Norris family’s rehabilitation of the Olympia Stadium in Detroit, MI, included nine private boxes, as well as expanding the physical footprint of the arena to increase seating, restrooms, and parking spaces (Berry, 1965).

**Conclusion for Stage Five**

Following World War II, the U.S. and Canada experienced surges in economic and population growth. Economic, as well as technological improvement provided an increasingly
white-collar middle class with greater amounts of discretionary income to spend on suburban homes, automobiles, and televisions. Furthermore, growing wealth provided more opportunities to pursue leisure activities in an increasingly service-oriented society. Moreover, growing populations pursuing economic opportunity migrated across the country, helping Western, and to a lesser degree, Southern cities grow and modernize. These societal changes created opportunities for professional sport leagues to expand or relocate franchises while partnering with municipalities seeking to legitimize or revitalize themselves by funding and constructing new, service-oriented multipurpose indoor sport facilities (Stage Five). For nearly four decades after World War II, Stage Five facilities helped transform the fan experience in indoor facilities.

The Stage Five facility emerged as a structure designed to meet the service expectations of the U.S. sport consumer. Stage Five facilities were revolutionary in their design and construction, and emerged as larger than previous stages of construction, while also being built of stronger and lighter materials. The facilities were built near the suburbs and included significant parking space to cater to the expectations of the commuter culture. Internally, the facility is distinguishable from its predecessor because it offered increased capacity and unobstructed views by eliminating structural support poles. Furthermore, the Stage Five facility featured approximately 12 restrooms. Additionally, expanded concourses and concessions offerings demonstrated an attempt to make customers more comfortable, while also providing reasonably priced food and beverage options for middle class adults and children through permanent concessions stands, as well as private seating options for wealthy citizens and corporations. Ultimately, the Stage Five facility surface area grew to 8.70 acres and cost between $24,506,667 and $31,350,000 while seating between 14,461 and 15,679 customers who had the ability to pay for one of 5,969 parking spaces (See Figure 6.1).
Figure 6.1. Stage Five of Urban Multipurpose Facility Development

Note. Black arrows represent spectator movement; Purple arrows represent spectator movement for basketball; Grey indicates exterior structure; Black rectangles represent entrance/exists; Red represents lower bowl; Yellow represents upper bowl; Purple represents sky boxes and suites; Green triangles represent television camera stands and Green oval represents scoreboard; Blue represents skating surface; Orange represents basketball surface.

Notably, major sport leagues targeted cities with large media markets for expansion, demonstrating management’s understanding of the potential future earnings television offered. The Stage Five facility reflected this commitment to television as television camera platforms and improved lighting focused on the playing surface were included within the building. Furthermore, current and prospective NHL and NBA owners not only established franchises in growing media markets to secure future revenue. League expansion and relocation was also done to limit the emergence of legitimate rival leagues. Two leagues, the WHA and ABA emerged during the late 1960s and early 1970s to briefly challenge the NHL and NBA. While neither league sustained operations, four franchises from the WHA and ABA merged with the NHL and NBA respectively, increasing the national reach of both leagues.
As professional sport facilities approached the 21st century, Boston Globe journalist John S. Driscoll provided an astute observation that echoed Clarence Campbell’s view in the early 1960s regarding major professional sport and its role in the multipurpose urban sport facility: “The game was secondary. It wasn’t a sport event; it was a social event” (1977, p. 42).

Beginning in 1988 multipurpose urban facility construction entered its modern era, or Stage Six of facility construction. The Stage Six facility emphasized luxury amenities, environmental issues, festival seating and generally catered to the interests of increasingly wealthy and well-educated customers.
CHAPTER SEVEN
CORPORATE-CONSUMER FACILITIES: 1988 to PRESENT

Following relocation and expansion efforts throughout the 1960s and 1970s, the National Hockey League (NHL) and National Basketball Association (NBA) emerged as the two dominant major professional hockey and basketball leagues in North America. The expansion of both leagues, particularly the NHL, into burgeoning U.S. markets demonstrated that major professional team owners increasingly operated their organizations as profit maximizing businesses (Fisher, 1993). As the NHL and NBA expanded, the venues used by the teams transitioned from facilities designed to showcase sport and entertainment (Stage Four) to arenas designed to enhance the comfort and experiences of the growing spectators (Stage Five). Importantly, regardless of time period, multipurpose urban sport facility operators consistently considered the wealthiest segments of the population in addition to the developing middle class.

By the late 1980s, changing demographic and economic realities in the U.S. had a trickle-down effect on the professional sports landscape and the construction of multipurpose urban sport facilities. As early as 1988, a new, discernable type of facility (Stage Six) emerged and reflected the intent on the part of sport managers to build facilities to maximize corporate and upper-class spending, while also appealing to an increasingly educated population.

The economic prosperity the U.S. and Canada experienced during the middle half of the 20th century slowed by the close of the 1970s as wages failed to rise to match inflation (Moffitt & Campbell, 2011; Rashid, 1993; Weiss, 2011). This trend is presented in the previous chapter (see Table 6.1) where the inflation adjusted median family incomes in the U.S. in 1970 rose by less than one percent by 1980. The slowing economy of the 1970s contributed to the decline of U.S. industry as well as an increased national concern for the future direction of the country (Weiss). The general malaise that gripped the U.S. at the close of the 1970s abated during the early years of the 1980s when unemployment rates dropped following the adoption of the
economic policies of Ronald Reagan’s presidential administration (Batchelor & Stoddart, 2007; Weiss). Commonly referred to as trickle-down economics, or Reaganomics, the fiscal policy employed by the U.S. during the 1980s aimed to decrease some government spending while emphasizing growth of private industry.

Under the policies of Reaganomics, businesses and upper-class citizens received tax cuts so that their retained income could be reinvested in business operations and spent in the consumer market where it would eventually reach the middle and lower classes (Batchelor & Stoddart, 2007). While Reaganomics provided an initial, positive impact on the national economy by raising the stock market and personal incomes, the program also contributed to a decline in business development as increasingly wealthy corporations expanded by absorbing smaller firms (Batchelor & Stoddart). Corporate expansion contributed to unemployment among the middle classes as one out of every 14 U.S. workers lost their jobs to corporate downsizing during the 1990s (Harrison, 2010).

An additional side effect of corporate growth in the late 1900s was increased income inequality as the corporate executive pay rate increased 535% during the 1990s (Oxoby, 2003). Resultantly, 20% of the U.S. population earned more than half of the income in the country by the end of the 1900s (Harrison, 2010). Furthermore, by the mid-1990s, the differences in annual earnings and level of formal education were stark. For example, individuals with a high school diploma realized an average annual salary of $21,400 ($35,260 in 2018), while those with bachelor’s degrees and advanced degrees earned $37,000 ($60,964.26 in 2018) and $56,700 ($93,423.61 in 2018) respectively (Oxoby). Ultimately, the inflation-adjusted median family income in the U.S. declined during the last decade of the 1900s, dropping from $67,921.80 in 1990 to $61,461.39 by the year 2000 and continued to decline to $56,939.40 by 2010 ("Median
Family Income,” n.d.; U.S. Census Bureau, 2001; U.S. Census Bureau, 2011) (see Table 7.1).

Similar trends for Canadian income are available for comparison in Table 7.2.

Table 7.1. U.S. Population and Median Family Income by Decade: 1990 to 2010

<table>
<thead>
<tr>
<th>Census Year</th>
<th>Population</th>
<th>Median Family Income</th>
<th>Income Adjusted for Inflation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>248,709,873</td>
<td>$35,353</td>
<td>$67,921.80</td>
</tr>
<tr>
<td>2000</td>
<td>281,421,906</td>
<td>$42,148</td>
<td>$61,461.39</td>
</tr>
<tr>
<td>2010</td>
<td>308,745,538</td>
<td>$49,445</td>
<td>$56,939.40</td>
</tr>
</tbody>
</table>


Table 7.2. Canadian Population and Average Family Income by Decade: 1991 to 2001

<table>
<thead>
<tr>
<th>Census Year</th>
<th>Population</th>
<th>Median Family Income</th>
<th>Income Adjusted for Inflation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>27,296,859</td>
<td>$54,560</td>
<td>$49,842.59</td>
</tr>
<tr>
<td>2001</td>
<td>30,007,094</td>
<td>$55,016</td>
<td>$56,581.50</td>
</tr>
</tbody>
</table>

Note. Population data for 1991 from Statistics Canada (n.d.a); Population data for 2001 from Statistics Canada (n.d.b); Median Family Income data from Statistics Canada (2003) The Canadian government altered how it recorded census data in 2011, as a result, that year was excluded from the table. Inflation calculated using CPI Inflation Calculator (n.d.).

As corporate wealth and the income of the educated and upper class increased at the end of the century, the migration trends that emerged during the middle of the 20th century continued. Beginning in the 1950s, the U.S. population in the Mountain, Pacific, and Southern states increased rapidly as a result of the baby boom and migration (Hendricks, 2019; Seifried & Pastore, 2009b). By the year 2000, 19 of the 30 most populated cities in the U.S. were located in Southern and Western States (U.S. Census Bureau, 2004). Furthermore, once prominent and populous cities in the U.S. North and Midwest realized significant declines in population. For example, Detroit (1,511,482 population) was the fifth most populated city in the U.S. following completion of the 1970 census; however, by 2000 the city’s population declined 37% to 951,270 or to 10th in terms of population size (See Table 7.3). Unlike the mid-20th century, increased life
expectancy, as well as immigration in an increasingly globalized economy spurred U.S. population growth (Oxoby, 2003). In fact, during the 1980s and 1990s, less than 15% of population increases in the country were attributed to new births (Oxoby).

Table 7.3. Top Ten U.S. Cities by Population: 1970 vs 2000

<table>
<thead>
<tr>
<th>City</th>
<th>1970 Population</th>
<th>City</th>
<th>2000 Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York City</td>
<td>7,894,862</td>
<td>New York City</td>
<td>8,008,278</td>
</tr>
<tr>
<td>Chicago</td>
<td>3,366,957</td>
<td>Los Angeles</td>
<td>3,694,820</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>2,816,061</td>
<td>Chicago</td>
<td>2,896,016</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>1,948,609</td>
<td>Houston</td>
<td>1,953,631</td>
</tr>
<tr>
<td>Detroit</td>
<td>1,511,482</td>
<td>Philadelphia</td>
<td>1,517,550</td>
</tr>
<tr>
<td>Houston</td>
<td>1,232,802</td>
<td>Phoenix</td>
<td>1,321,045</td>
</tr>
<tr>
<td>Baltimore</td>
<td>905,759</td>
<td>San Diego</td>
<td>1,223,400</td>
</tr>
<tr>
<td>Dallas</td>
<td>844,401</td>
<td>Dallas</td>
<td>1,188,580</td>
</tr>
<tr>
<td>Washington, D.C.</td>
<td>756,510</td>
<td>San Antonio</td>
<td>1,144,646</td>
</tr>
<tr>
<td>Cleveland</td>
<td>750,903</td>
<td>Detroit</td>
<td>951,270</td>
</tr>
</tbody>
</table>

*Note.* Population data from U.S. Census Bureau (2004).

The interconnectedness of global economies and cultures accelerated near the conclusion of the 20th century. As early as the 1970s, disruptions in non-aligned markets had wide-sweeping ramifications on modern Western economies (Moffitt & Campbell, 2011). Moreover, cable television allowed for information to be rapidly transferred around the world through ubiquitous telecommunications channels and the onset of the information age (Harrison, 2010; Morikawa, 2011). The expansion of the internet and computer technologies fundamentally changed the ways individuals and societies communicated and did business (Harrison; Oxoby, 2003). Online communication systems created the opportunity for instantaneous remote interaction (Harrison). Furthermore, technological expansion all but eliminated the need for paper records and documents (Oxoby). Additionally, the growth and reach of cable television allowed national and international news and entertainment to be delivered directly into U.S. homes and abroad (Morikawa). The global reach of entertainment through technology helped to create global sports stars and introduce them to previously undeveloped and underdeveloped markets (Anderson, Thompson, & Harris, 2011; Oxoby; Grundy & Rader, 2016).
Within this broader historical context, Stage Six of urban multipurpose facility construction commenced as a response to the economic, demographic, and cultural changes in the U.S. and continues through today. Moving forward, this chapter explores the unique features of Stage Six facilities. Before discussing the design elements and enhanced amenities of Stage Six facilities, the broader U.S. major professional sports context is explored. The examination of the professional sports context is particularly important as the desire of sport managers to maximize profits through facility construction was not simply a hockey and basketball phenomenon, but a practice of all major professional sport organizations.

While facility managers had always considered wealthy customers when designing multipurpose urban facilities, Stage Six facilities were designed and constructed to meet the expectations of the only subset of the population experiencing economic prosperity, the educated upper classes and corporations. Stage Six of urban multipurpose facilities proliferated across major U.S. and Canadian cities to accommodate corporate consumers and the needs of NHL and NBA franchises. After discussing the sport context of the late 20th and early 21st century, a discussion of the dominant mode of facility financing, public-private partnerships (PPP) and the concept of franchise free agency is examined through a brief case study of the construction of PPG Paints Arena.

Next, the Stage Six facility is discussed with attention given to facility design, location, and infrastructure features. First, the luxury seating component of the facility, including both suite and club seating is examined. The design of Stage Six facilities contributed to increased concourse space and opportunities for improved services and amenities in the form of increased concession stands and restrooms for less wealthy fans. The holdover service-oriented elements like concession stands and restrooms are discussed, as well as improved services, such as restaurants and social spaces. Then the incorporation of technology into the facility is discussed.
with implications for in-facility, as well as remote fans. The evaluation of Stage Six facilities concludes with emerging environmental considerations and the implications for facility design. Finally, the chapter concludes with an exploration of how Stage Five facilities were altered to compete with Stage Six facilities or how the modifications of those facilities transitioned them from Stage Five to Stage Six.

**Contemporary Major Professional Sport from 1988**

At the close of the 20th century major professional sports leagues continued to respond to the economic and demographic changes occurring in the U.S., as well as Canada. The MLB and NFL existed as the clearly dominant sport and entertainment entities since in the 1960s, with football surpassing baseball in popularity in the early 1970s (Fort & Winfree, 2013). Importantly, the NBA matured as an entertainment product during the 1980s and 1990s and rivaled the popularity of the MLB and NFL (Grundy & Rader, 2016; Oxoby, 2003). The ability to rapidly transmit sport images, information, and contests created the opportunity to promote professional sports leagues through the marketing of star players. The NBA was uniquely situated to capitalize on the emergence of the information age because the league was built on attraction to star players and spectacle, rather than teams (Oxoby; Surdam, 2012). For instance, Michael Jordan emerged as the most prominent of the star basketball players of the 1980s and 1990s, not only becoming the league’s premier player, but a global brand (Anderson, Thompson, & Harris, 2011; Rhoden, 2006).

The popularity of the entertainment product of major professional sport is reflected in the national television broadcast deals signed by each league. In 1993 the NFL signed a broadcast agreement with ABC, ESPN, Fox, NBC, and TNT for $4,390,000,000 over four years (Fang, 2015). That same year MLB concluded its four-year $1,070,000,000 agreement with CBS (Ryan, 1988). Furthermore, the NBA agreed to a four-year $1,100,000,000 broadcast partnership with
NBC and TNT in 1993 (Oxoby). By comparison, the NHL’s 1994 national broadcast deal with Fox paid $155,000,000 over five years (Sandomir, 1994). Unlike the MLB, NFL, or NBA, the NHL relied heavily on its loyal, regional, ticket buying fanbase for revenue by the 1990s and had few marketable, star players (Shubert, 2016). Wayne Gretzky, the NHL’s most notable player, played in Canada’s fifth smallest NHL market, Edmonton, AB (McKinley, 2006).

Wayne Gretzky established himself as the preeminent hockey talent in the NHL, winning four Stanly Cup titles, as well as earning the Hart Memorial Trophy (most valuable player) eight times and the Art Ross Trophy (scoring leader) seven times between the 1979-1980 and 1986-1987 seasons with the former WHA franchise Edmonton Oilers. Gretzky’s contract was unique among professional athletes in that he signed a 10-year contract worth a minimum $10,000,000 in 1982 with owner Peter Pocklington (Matheson, 1982). Despite the on-ice success of the Oilers, Pocklington’s other business ventures struggled during the 1980s, leaving the owner indebted to lenders and in possession of one significant asset, the exclusive rights to Wayne Gretzky’s personal services contract (McKinley, 2006). The financially strapped Pocklington traded Gretzky’s contract to the Los Angeles Kings for three players, three first round draft picks, and most importantly $10,000,000 to $20,000,000 in cash (Matheson, 1988). The next year the NHL moved the league office from Montreal to New York City. Therefore, by the close of the 1980s, the NHL had effectively shifted its best known player and headquarters to the U.S. (Jackson, 1994).

Importantly, the Gretzky trade and league office move occurred several years before the league secured its national broadcast deal with Fox. Since its first expansion in 1967 the NHL had pursued a national broadcast deal with a U.S. provider, but no substantive deals materialized. The most notable deal emerged in 1967 where CBS paid $3,600,000 ($27,065,407.19 in 2018) over three years to broadcast 14 games per season, while most teams secured deals in their local
markets (Kalbfleisch, 1967). The relocation of the league office, the Gretzky trade, as well as the appointment of Gary Bettman to the position of commissioner reflected the prosperity of the broader U.S. market and the emerging status of U.S. television rights deals challenging gate receipts as a main revenue generator for teams (Lapointe, 1993; McKinley, 2006).

The ability of a major professional sports league to secure billion-dollar television broadcast deals with network and cable partners suggests remote viewership became an increasingly important consideration of facility design. Although indoor and outdoor sport facilities incorporated infrastructure to support television broadcasts and attract remote viewers, facility design did not fully embrace television broadcast technology. For instance, the compromise cookie-cutter facilities shared by MLB and NFL teams that emerged in the mid-20th century offered limited television camera platforms (Seifried, 2010b). Similarly, the multipurpose indoor facility offered few television camera platforms so that a facility with eight camera locations was considered to be focused on television broadcasting (Shubert, 2016). By the late 1900s, outdoor facilities incorporated 20 camera locations (Sheard, 2001). Indoor facilities included many camera locations as well, with a new facility like the Consol Energy Center including 40 camera locations in the arena (Belko, 2010).

Beyond embracing television broadcast technology, professional sport team owners desired to construct sport-specific facilities toward the beginning of the 21st century to further maximize profits by attracting preferred, upper class and corporate customers (Bélanger, 2000; Chapin, 2000; Thornley, 2002). Despite the historical tendency for professional baseball and football teams to share facilities, discrepancies in the presentation of football and baseball made sharing a facility less than ideal as football teams desired facilities with larger capacities while baseball favored smaller more intimate ballparks. As a result, sport organizations lobbied for
new sport-specific facilities for professional baseball and football that emerged with an average of 117 luxury suites and 6,997 club seats (Seifried, 2010b).

By the mid-1980s, the notion of adding value within multipurpose indoor facilities for increasingly wealthy corporate customers emerged when Detroit Pistons owner Bill Davidson proposed moving luxury suites from the upper deck to the lower bowl of The Palace of Auburn Hills. Generating profits motivated Davidson’s decision to shift luxury suites to the lower bowl as by moving the most expensive seats in the arena to the lower bowl, Davidson could charge higher prices for the suites. Additionally, including suites at various levels of the facility created different tiers of luxury seating and more opportunities to generate revenue. When the Palace of Auburn Hills opened in 1988 it featured 180 luxury suites, 100 in the lower bowl and 80 in the upper deck. Importantly, Davidson personally financed the construction of the $90,000,000 ($193,391,208.79 in 2018) facility to assure his control over the design of the profit-maximizing facility (Monarrez, 2017).

Public-Private Partnerships and Franchise Free Agency

The publicly financed facility construction boom that began in the 1960s created a situation where many pro sports teams rented facilities from municipalities, resulting in the government, not teams receiving most revenue from contests (Monarrez, 2017). In addition to public ownership, these multipurpose urban facilities were built at a minimal cost through the Revenue Control and Expenditure Act of 1968 (Williams & Seifried, 2013). Importantly, tax law changed in 1986 with the Tax Reform Act of 1986 that ended tax exemption on the municipal bonds used to finance sport facilities (Williams & Seifried). The use of public moneys for facility construction after 1986 required a new model and justification for public money to build a facility focused on corporate customers.
The Tax Reform Act of 1986 limited how major urban sport facilities were financed. Beyond personally financing the facility, as the Detroit Pistons owner elected with the construction of The Palace of Auburn Hills, team and municipal leaders collaborated to finance new arena construction through the PPP model. PPP sport facility construction financing represents a collaboration where state and/or local governments and the private entity teams each agree to contribute to the payment of the project through various mechanisms, such as general obligation bonds or revenue bonds (Brown, Rascher, Nagel, & McEvoy, 2016). Stage Six facility funding promoted the idea of the sport anchored development (SAD) where a new sport arena would be featured as part of a broader municipal redevelopment plan (Shubert, 2016).

Furthermore, professional teams utilized the concept of franchise free agency in an attempt to leverage their history and status within a city to achieve favorable facility construction deals (Danielson 1997; Shubert, 1998; Weiner, 2000). Franchise free agency has previously been defined as “the ability of a team to relocate to another city when it is not obligated to a facility through a lease or a municipality through an agreement” (Brown et al., p. 465). By 1997, 49 facility construction and renovation projects using PPP funding were proposed across the MLB, NFL, NBA, and NHL (Hiltzik & Dillman, 1997).

In an effort to leverage their importance to host cities and secure public funds for a private business, teams seek to demonstrate their positive economic and psychic impact within the municipality. Historically, teams have demonstrated their importance through the use of economic impact studies. Scholarly studies on the economic impact of professional sport facilities indicate they do not provide significant financial returns to cities, although limited benefits emerge when a facility is located downtown (Baade & Dye, 1988; Nadeau & O’Reilly, 2006; Siegfried & Zimbalist, 2000). Additionally, the SAD model does not significantly improve the neighborhood in which it is located (Prophettor, 2016; Siegfried & Zimbalist, 2000). As a
result, teams and civic boosters tend to rely on their positive emotive impact on cities and the economy (Crompton, 2004; Delaney & Eckstein, 2003; Groothuis, Johnson, & Whitehead, 2004; Groothuis & Rotthoff, 2016; Johnson, Groothuis, & Whitehead, 2001; Lubrano, 2005; Sanderson, 1999; Schwester, 2007; Seifried & Clopton, 2013; Swindell & Rosentraub, 1998; Trumpbour, 2007). Because of the potential positive cultural impact of pro sports teams, civic governments contribute significant resources to build professional sport facilities (Noll & Zimbalist, 1997; Owen, 2006).

The threat to leave one city in favor of a more promising market could not be ignored, as during the 1990s the three preeminent major professional leagues continued to expand and relocate into emerging markets. Specifically, MLB awarded expansion franchises in Miami Gardens, FL and Denver, CO in 1993 and Phoenix, AZ and St. Petersburg, FL in 1998. The NFL expanded into Charlotte, NC and Jacksonville, FL in 1995, approved the relocation of the Cleveland Browns to Baltimore, MD in 1996 and Houston Oilers to Memphis, then Nashville, TN in 1997. This all occurred before placing expansion franchises in Cleveland, OH and Houston, TX in 1999 and 2002 respectively. The NBA expanded into the Canadian market with the creation of the Toronto Raptors and Vancouver Grizzlies franchises in 1995, though the Grizzlies would relocate to Memphis in 2001. Prior to the 2002-2003 NBA season the Charlotte Hornets relocated to New Orleans, LA with an expansion franchise replacing the Hornets in Charlotte in 2004. Finally, the Seattle Supersonics moved to Oklahoma City, OK in 2008, becoming the Oklahoma City Thunder.

The trade of Wayne Gretzky to Los Angeles signaled the beginning of the NHL’s expansion into the Sun Belt and withdrawal from smaller Canadian markets (McKinley, 2006; Shubert, 2016). Following the Gretzky trade, the NHL further expanded into the California sports market with the addition of the San Jose Sharks in 1991 and Mighty Ducks of Anaheim in
1993. The league also placed expansion franchises in Tampa, FL in 1992 and Miami, FL in 1993. During the mid-1990s, several NHL franchises relocated to lucrative markets with the Minnesota North Stars relocating to Dallas, TX in 1993, the Quebec Nordiques to Denver in 1995, the Winnipeg Jets to Phoenix in 1996 and the Hartford Whalers to Raleigh/Greensboro, NC in 1997. The southern expansion continued with teams being established in Nashville in 1998 and Atlanta, GA in 1999 before expanding into Las Vegas, NV for the start of the 2017-2018 season. Interestingly, the NHL also explored and expanded into northern U.S. and Canadian markets in the Stage Six era. The league expanded into Ottawa, ON in 1992, as well as Columbus, OH and St. Paul, MN in 2000. In 2011 NHL hockey returned to Winnipeg, MB with the relocation of the Atlanta Thrashers.

The continued readiness with which leagues expanded and approved franchise relocation demonstrates the loyalty to profits that existed among many professional sport owners and sport managers (Fisher, 1993). Corporate growth and the concentration of wealth and star players in the U.S. was not lost on professional sport operators. As discussed in the previous chapter, the Stage Five facilities were service-oriented, but those services were generally targeted at a middle-class audience with the exception of some upper deck suites designed for wealthy customers. The development of Pittsburgh’s Consol Energy Center (now PPG Paints Arena) provides an illustrative example of how a professional sports team utilized PPP financing and franchise free agency to leverage favorable facility deals.

The Case of PPG Paints Arena

As mentioned above, during the 1990s, it became rather common for NHL franchises to relocate from hockey cities with small, older arenas and populations to cities with large, new arenas and friendly lease agreements (Hiltzik & Dillman, 1997). By the late 1990s, the Pittsburgh Civic Arena (Stage Five facility), which was originally constructed as a concert venue
for the civic light opera, had outlived its usefulness as a hockey venue. Without a new arena, the Penguins’ player/owner Mario Lemieux cautioned, it “will be very difficult to keep the team here” (Barnes, 2001, para. 2). Accessing public money for a new Penguins facility in 2001 was difficult, in part, because the state circumvented no-vote referendums and approved financing for the Pittsburgh Pirates and Steelers new stadia, as well as the Philadelphia Phillies and Eagles at the end of the 1990s (Trumpbour, 2007). Even though Lemieux personally acquired $8,000,000 ($11,343,052.89 in 2018) worth of land across from the Civic Arena and hired sports architecture firm HOK to produce cost estimates and design a new arena, the prospect of any new construction was initially unlikely for the Penguins (Barnes).

The arena construction project Mario Lemieux proposed in 2001 had an estimated construction cost between $204,500,000 and $225,600,000 ($289,956,789.48 and $319,874,091.47 in 2018) (Barnes, 2001). By February 2006, the estimated cost of a similar stadium project rose to $290,000,000 ($361,215,186.84 in 2018). Unlike previous pleas for a new facility, the Penguins had a viable private partner willing to contribute funds for the new arena construction (i.e., Isle of Capri Casinos). In an effort to secure a license to operate slot machines in the state, The Isle of Capri included an offer to fund the entirety of the new arena project in their gaming bid (Belko, 2006a). Despite the positive reception of the Isle of Capri proposal, the organization did not receive a gaming license when the Pennsylvania Gaming Control Board awarded slot licenses in December 2006 (Belko, 2006b). The seeming unwillingness of the state to approve a construction project at no cost to the taxpayers signaled to the Penguins they needed to pursue options in another city. Kansas City, MO in an effort to gain an NHL franchise for the soon to open $276,000,000 ($334,256,860.65 in 2018) Sprint Center offered the Penguins rent free use of the facility and 75% of facility revenue (Gutierrez, n.d.).
Nonetheless, Penguins management continued to negotiate with Pennsylvania Governor Ed Rendell, Pittsburgh Mayor Luke Ravenstahl, and Allegheny County Chairman Dan Onorato throughout the first quarter of 2007. With negotiations at an apparent stalemate in early March, the Lemieux Group sent a letter to Rendell, Ravenstahl, and Onorato stating “We have no choice but to declare an impasse and to notify Commissioner Gary Bettman that we will aggressively explore relocation” (Belko, 2007a, p. A1). However, Penguins CEO David Morehouse later acknowledged that the owners “wanted to be in Pittsburgh,” even though “the Kansas City deal was better” (Gutierrez, n.d., para. 28).

One week after Lemieux and Burkle informed Rendell, Ravenstahl, and Onorato they were actively seeking a new home for the Penguins, a tentative agreement was reached between the parties. The March 12, 2007 preliminary agreement required the Penguins to sign a 29.5-year lease to the new arena. In terms of financial obligations, the Penguins agreed to pay $3,600,000 each year for 30 years. Once the new arena was constructed, the Sports and Exhibition Authority of Allegheny County (SEA) agreed to demolish the Civic Arena, as well as build a parking garage. At completion of the garage the Penguins agreed to increase their annual payment to $4,100,000. The parties agreed to a $290,000,000 project budget, plus the approval of up to an additional $20,000,000 to be divided between the Penguins and the state for cost overruns. The SEA agreed to compensate the team $8,500,000 for the purchase of the land on which the arena would be built (Pittsburgh Arena Term Sheet, 2007).

On September 20, 2007, the Penguins and the SEA officially signed the new arena lease. With the agreement complete, the SEA expected to close on $313,000,000 of bond financing issued in June 2007. The arena financing was divided between three parties. Casino operator Don Barden agreed to pay $7,500,000 each year for 30 years. The state economic development fund, through revenue generated from slot machines, also agreed to pay $7,500,000 annually for 30
years. The Penguins would contribute a minimum of $3,600,000 and a maximum of $4,300,000 annually once the SEA built a parking lot ($200,000) and a parking garage ($500,000). Additionally, the Penguins negotiated the right to receive all revenue generated by the arena in exchange for providing management, operations, and maintenance services. Approximately $3,000,000 from the bond issue were set aside for capital projects, to be supplemented by an annual $400,000 parking surcharge. The team and state agreed to split any construction overruns up to $20,000,000 over the $290,000,000 construction budget; however, no budget cap was established (Belko, 2007b).

Built for a final construction cost of $321,000,000 ($369,654,095.74 in 2018) (Dvorchak, 2010), the HOK Populous-designed arena occupies a space of 720,000 square feet and has a seating capacity of 18,087 including 66 luxury boxes and 1,950 club seats. The arena design also features a full-service restaurant, food court, and public bars, resulting in one concession point of sale for every 158 spectators. Further demonstrating the upgraded amenities and fan expectations, the arena offers five retail outlets. Bauder and Boren (2016) reported the Penguins sold the naming rights to the new arena to Consol Energy for an estimated $105,000,000 over 21 years (Dvorchak, 2008).

Of important note for the potential risk of public funding of a private sport team facility, the agreement reached by the Penguins, government, and casino demonstrates the difficulties of projecting cash flows over a period of 30 years. In a conventional business setting, corporate bonds are expected to reach maturity between six and 10 years. As stated previously, the financing agreement for the new Pittsburgh arena required the state of Pennsylvania to pay $7,500,000 per year using gambling revenue for 30 years. However, the timing of the bond issue and construction of the arena could not have been worse from a financial perspective. The financial agreement was reached while the nation was in a recession and heading toward the
financial meltdown of 2008. As a result, the bond insurer rating was downgraded, increasing interest rates. According to the Memorandum of Understanding, “The Commonwealth of Pennsylvania, Allegheny County and the City of Pittsburgh shall be responsible for the full and timely performance of all public sector obligations” (Pittsburgh Arena Term Sheet, 2007, para. 18). Due to this provision, the state is responsible for all coupon payments beyond the Penguins and Barden obligations. As of 2014, the state has contributed a total of $5,080,000 on top of its annual $7,500,000 payment (Belko, 2014).

Furthermore, the uncertain economy and volatility of the energy industry caused almost immediate change to the naming rights deal agreement between the team and Consol Energy. Less than six years into the agreement Consol Energy sought to rework the $105,000,000 naming rights deal. As part of the restructuring of Consol’s deal with the team the company agreed to maintain a sponsor relationship for the remaining 14 years expected from the naming rights agreement, but at a reduced annual commitment. PPG Paints agreed to a new naming rights deal through 2040, however the financial terms of the agreement were not disclosed (Bauder & Boren, 2016).

Stage Six: Corporate-Consumer Facilities

Stage Six of multipurpose urban facility construction represents sport manager responses to a changing economy and potential in-venue customer base. While the design elements of Stage Six facilities represent a departure from their service-oriented predecessors, the physical location of the Stage Six facility is an important distinguishing characteristic. Where Stage Five facilities generally moved away from the city center to the suburbs, just as had occurred with MLB and NFL stadia, Stage Six facilities returned to the city in search of revenue (Bélanger, 2000; Chapin 2000; Thornley, 2002). Similar to Stage Four facilities, Stage Six facility construction marks a return to the downtown area. Again, the changing economic realities in the
U.S. influenced facility relocation. As indicated above, the prosperity that contributed to growing middle class incomes and leisure spending abated near the end of the century while corporate wealth grew considerably. Where the location of Stage Five facility construction was a response to population shifting from cities to the suburbs, Stage Six facilities emerge in the city to pursue corporate customers with disposable income.

Although Stage Six facilities surface in downtown locations, the size and scope of the facilities notably increased over Stage Five facilities despite the spatial limitations of the urban environment. The larger geographic footprint of Stage Six facilities is a result of the inclusion of lower bowl luxury suites, increased overall capacity and amenities (e.g., restrooms and concessions), and the inclusion of bigger seats with more leg room (Evenson, 1996). The average surface area of the Stage Six facility ranges from 15.49 to 18.04 acres, where the Stage Five facility average was just 8.70 acres. Increased surface area correlated to increased capacity as Stage Six facilities accommodate between 18,300 and 19,281 customers on average. Despite the increase in size and capacity, number of parking spaces declined so that Stage Six facilities offer an average between 2,889 to 3,329 spaces compared to the 5,969-parking space average of the previous stage (See Table 7.4 and Table 7.5). Overall, the Stage Six facility carries an average cost of $251,477,083 ($339,251,113.21 in 2018) (See Table 7.6).

The increased seating capacity of Stage Six facilities is particularly noticeable in the lower bowl of the arena. At its opening, Cleveland, OH’s, Gund Arena placed 60% of its 20,750 seats in the facility’s lower bowl (Paulk, 1994). The increased volume of seats was accompanied by a more gradual incline of the grandstand. The seats were built on a more gradual incline than previous stages of construction pushing lower bowl luxury suites closer to the playing surface with the side effect of creating obstructed views for regular ticket holders (Dyer, 1994). Montreal’s Molson Centre grandstand begins with a 21-degree incline that grows to 27 degrees
by the top of the lower bowl, then 34 degrees above the suite level, before increasing to 37 degrees in the upper deck compared to the Montreal Forum’s 32-degree incline from lower to upper bowl (Jonston, 1996). As a result, upper deck ticket holders in the Stage Six facilities are situated further away from the playing surface than in previous facilities, but with improved sight lines (Evenson, 1996; Prentice, 1996).

The type of seats used in Stage Six facilities promote customer comfort, as well as the added benefit of improving facility acoustics. By taking the simple step of adding padding to Stage Six facility seats, ambient noise is better absorbed, creating fewer echoes and reverberations within the facility (Monarrez, 2017). Furthermore, engineering technology and sophistication improved so that noise dampening construction materials absorb sound within the grandstand, while also enabling sound to be projected toward the playing surface (Evenson, 1996; McCollum, 2017). Consideration for acoustics is critically important for the Stage Six facility as other entertainment events, beyond sport, such as music concerts, routinely use the facilities (Shubert, 2016).
Table 7.4. Stage Six New Construction (Basketball)

<table>
<thead>
<tr>
<th>Facility</th>
<th>Open</th>
<th>Cost</th>
<th>Capacity</th>
<th>Parking</th>
<th>Surface Area (Acres)</th>
<th>Luxury Suites</th>
<th>Club Seats</th>
<th>Construction Length (Months)</th>
<th>Restrooms</th>
<th>Concession Stands</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Orleans Arena</td>
<td>1999</td>
<td>$112,000,000</td>
<td>17,003</td>
<td>5,000</td>
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<td>56</td>
<td>X</td>
<td>48</td>
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<tr>
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<td>X</td>
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<td>X</td>
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<td>173</td>
<td>2,500</td>
<td>30</td>
<td>55</td>
<td>23</td>
</tr>
<tr>
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<td>18,118</td>
<td>4,345</td>
<td>15.61</td>
<td>96</td>
<td>2,000</td>
<td>24</td>
<td>26</td>
<td>23</td>
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<td>94</td>
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<td>26</td>
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<td>X</td>
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<th>Surface Area (Acres)</th>
<th>Luxury Suites</th>
<th>Club Seats</th>
<th>Construction Length (Months)</th>
<th>Restrooms</th>
<th>Concession Stands</th>
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<td>75</td>
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<td>760</td>
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<td>68</td>
<td>X</td>
<td>23</td>
<td>28</td>
<td>12</td>
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<tr>
<td>Fiserv Forum</td>
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<td>16.62</td>
<td>67</td>
<td>1,673</td>
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<tr>
<td>Ford Center</td>
<td>2002</td>
<td>$89,200,000</td>
<td>19,136</td>
<td>900</td>
<td>13.45</td>
<td>48</td>
<td>3380</td>
<td>37</td>
<td>48</td>
<td>38</td>
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<tr>
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<td>1,000</td>
<td>21</td>
<td>88</td>
<td>870</td>
<td>22</td>
<td>X</td>
<td>31</td>
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<tr>
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<td>1995</td>
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<td>21,401</td>
<td>2,200</td>
<td>18</td>
<td>70</td>
<td>2397</td>
<td>27</td>
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<td>19</td>
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<td>17</td>
<td>50</td>
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<td>64</td>
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<td>180</td>
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<td>22</td>
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<td>55</td>
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<td>144</td>
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<td></td>
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<td>2,033</td>
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Table 7.5. Stage Six New Construction (Hockey)

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<th>Cost</th>
<th>Capacity</th>
<th>Parking</th>
<th>Surface Area (Acres)</th>
<th>Luxury Suites</th>
<th>Club Seats</th>
<th>Construction Length (Months)</th>
<th>Restrooms</th>
<th>Concession Stands</th>
</tr>
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<tbody>
<tr>
<td>Fleet Center</td>
<td>1995</td>
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<td>17,565</td>
<td>1,150</td>
<td>17.33</td>
<td>104</td>
<td>2,442</td>
<td>29</td>
<td>34</td>
<td>47</td>
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<td>18,595</td>
<td>1,100</td>
<td>16.07</td>
<td>80</td>
<td>5,000</td>
<td>22</td>
<td>X</td>
<td>24</td>
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<tr>
<td>RES Arena</td>
<td>1999</td>
<td>$158,000,000</td>
<td>18,730</td>
<td>6,000</td>
<td>16.07</td>
<td>75</td>
<td>2,000</td>
<td>26</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Pepsi Center</td>
<td>1999</td>
<td>$180,000,000</td>
<td>18,129</td>
<td>5,000</td>
<td>15.5</td>
<td>95</td>
<td>2,500</td>
<td>22</td>
<td>41</td>
<td>17</td>
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<td>18,500</td>
<td>560</td>
<td>16.07</td>
<td>78</td>
<td>3200</td>
<td>28</td>
<td>42</td>
<td>45</td>
</tr>
<tr>
<td>Little Caesar’s Arena</td>
<td>2017</td>
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<td>19,515</td>
<td>8,000</td>
<td>X</td>
<td>62</td>
<td>378</td>
<td>35</td>
<td>72</td>
<td>42</td>
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<tr>
<td>Rogers Place</td>
<td>2016</td>
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<td>18,347</td>
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<td>57</td>
<td>900</td>
<td>30</td>
<td>52</td>
<td>28</td>
</tr>
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<td>7,600</td>
<td>20.02</td>
<td>70</td>
<td>2300</td>
<td>23</td>
<td>43</td>
<td>X</td>
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<td>Anaheim Arena</td>
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<td>83</td>
<td>1750</td>
<td>25</td>
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<td>X</td>
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<tr>
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<td>62</td>
<td>2800</td>
<td>27</td>
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<td>17.91</td>
<td>135</td>
<td>2500</td>
<td>33</td>
<td>X</td>
<td>X</td>
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<td>70</td>
<td>1859</td>
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<td>30</td>
<td>19</td>
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<td>76</td>
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<td>24</td>
<td>X</td>
<td>9</td>
</tr>
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<td>The Palladium</td>
<td>1996</td>
<td>$200,000,000</td>
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<td>6,500</td>
<td>13.77</td>
<td>150</td>
<td>X</td>
<td>18</td>
<td>34</td>
<td>156 points of sale</td>
</tr>
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<td>2003</td>
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<td>6,000</td>
<td>14.92</td>
<td>87</td>
<td>400</td>
<td>18</td>
<td>34</td>
<td>156 points of sale</td>
</tr>
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</table>

(Table 7.5 Continued)
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<tr>
<th>Facility</th>
<th>Opened</th>
<th>Cost</th>
<th>Capacity</th>
<th>Parking</th>
<th>Surface Area (Acres)</th>
<th>Luxury Suites</th>
<th>Club Seats</th>
<th>Construction Length (Months)</th>
<th>Restrooms</th>
<th>Concession Stands</th>
</tr>
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<tbody>
<tr>
<td>Consol Energy Center</td>
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<td>2,900</td>
<td>16.53</td>
<td>66</td>
<td>1950</td>
<td>24</td>
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<td>1,800</td>
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<td>64</td>
<td>X</td>
<td>45</td>
<td>X</td>
<td>X</td>
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<td>91</td>
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<td>X</td>
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<td>T Mobile Arena</td>
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<td>0</td>
<td>15</td>
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<td>83</td>
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Table 7.6. Stage Six New Construction Cost Adjusted for Inflation for 2018

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<th>Year Opened</th>
<th>Cost</th>
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<td>1999</td>
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<td>1999</td>
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<td>1994</td>
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<td>1991</td>
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<td>2003</td>
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</tr>
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<td>1994</td>
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<td>2005</td>
<td>$265,000,000</td>
<td>$340,723,557.77</td>
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<tr>
<td>FedEx Forum</td>
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<td>$250,000,000</td>
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<td>1996</td>
<td>$210,000,000</td>
<td>$336,089,451.88</td>
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<td>Bradley Center</td>
<td>1988</td>
<td>$90,000,000</td>
<td>$191,036,475.06</td>
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<tr>
<td>Fiserv Forum</td>
<td>2018</td>
<td>$524,000,000</td>
<td>$524,000,000.00</td>
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<td>1995</td>
<td>$262,000,000</td>
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<tr>
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<td>2002</td>
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<tr>
<td>MCI Center</td>
<td>1997</td>
<td>$260,000,000</td>
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<tr>
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<td>$80,000,000</td>
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<td>Target Center</td>
<td>1990</td>
<td>$104,000,000</td>
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</tr>
<tr>
<td>Amway Center</td>
<td>2010</td>
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<tr>
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<td>1995</td>
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<tr>
<td>RES Arena</td>
<td>1999</td>
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<tr>
<td>Pepsi Center</td>
<td>1999</td>
<td>$180,000,000</td>
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<td>Nationwide Arena</td>
<td>2000</td>
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<td>Little Caesar’s Arena</td>
<td>2017</td>
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<td>2016</td>
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<td>$185,000,000</td>
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<td>Anaheim Arena</td>
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<td>$140,000,000</td>
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<tr>
<td>Molson Centre</td>
<td>1996</td>
<td>$230,000,000</td>
<td>$368,097,971.11</td>
</tr>
<tr>
<td>Nashville Arena</td>
<td>1996</td>
<td>$144,000,000</td>
<td>$230,461,338.43</td>
</tr>
<tr>
<td>Prudential Center</td>
<td>2007</td>
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<tr>
<td>The Palladium</td>
<td>1996</td>
<td>$200,000,000</td>
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</tr>
<tr>
<td>Glendale Arena</td>
<td>2003</td>
<td>$220,000,000</td>
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<tr>
<td>Consol Energy Center</td>
<td>2010</td>
<td>$321,000,000</td>
<td>$369,654,095.74</td>
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<tr>
<td>San Jose Arena</td>
<td>1993</td>
<td>$162,500,000</td>
<td>$282,386,577.28</td>
</tr>
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</table>

(Table 7.6 Continued)
Note. Inflation calculated using CPI Inflation Calculator (n.d.).

Notably, corporate prosperity presented a unique opportunity for sport managers, specifically the opportunity to design a facility to attract the spending of another business entity, rather than the leisure dollars of other individuals. Stage Six Facilities typically have a corporate naming rights sponsor for the facility (Crompton & Howard, 2003; Howard & Crompton, 2004; Shubert, 2016) (See Table 7.7). Relatedly, the most overt design feature of the Stage Six facility manifested in the form of lower bowl luxury suites and seating. Dedicated space in the lower bowl for affluent sport consumers was not a new phenomenon. For example, Maple Leaf Gardens dedicated private entrances and lower bowl seating to individuals willing to pay for that experience (Field, 2008). Similarly, the design of the Kemper Arena included 25 private suites within the lower bowl of the arena. Despite the presence of these types of luxury seating opportunities, the seats were not particularly exclusive. The Maple Leaf Gardens seats were not private, and the Kemper Arena suites were little more than raised platforms (Field; Rosin, 2016). Moreover, the facilities that modified their existing structures (e.g., Boston Garden, Montreal Forum, Olympia Stadium) or included suites into new facility construction (e.g., Capital Centre and Richfield Coliseum) placed sky boxes within the upper levels of the facility. Incorporating luxury suites into the upper deck of the arena helped turn once unprofitable seats into revenue generators (El Hodiri & Quirk, 1974). The luxury suites present in Stage Four or Stage Five facilities were capable of attracting between $3,800 and $35,000 per year (Beard, 1973; “Montreal Forum to Open,” 1968).
Table 7.7. Stage Six Facility Name Changes

<table>
<thead>
<tr>
<th>Initial Name</th>
<th>Name Change 1</th>
<th>Name Change 2</th>
<th>Name Change 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Orleans Arena</td>
<td>Smoothie King Center*</td>
<td>State Farm Arena</td>
<td>Rocket Mortgage Fieldhouse*</td>
</tr>
<tr>
<td>Philips Arena</td>
<td>Quicken Loans Arena</td>
<td></td>
<td>Vivant Smart Home Arena*</td>
</tr>
<tr>
<td>Gund Arena</td>
<td>EnergySolutions Arena</td>
<td>Bankers Life Fieldhouse</td>
<td></td>
</tr>
<tr>
<td>Delta Center</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conseco Fieldhouse</td>
<td>TD Banknorth Garden</td>
<td>TD Garden*</td>
<td></td>
</tr>
<tr>
<td>Fleet Center</td>
<td>Time Warner Cable Arena</td>
<td></td>
<td>Wells Fargo Center*</td>
</tr>
<tr>
<td>Charlotte Bobcats Arena</td>
<td>First Union Center</td>
<td>Wachovia Center</td>
<td></td>
</tr>
<tr>
<td>CoreStates Center</td>
<td>BMO Harris Bradley Center</td>
<td></td>
<td>Chesapeake Energy Arena*</td>
</tr>
<tr>
<td>Bradley Center</td>
<td>Oklahoma City Arena</td>
<td></td>
<td>Talking Stick Resort Arena*</td>
</tr>
<tr>
<td>Ford Center</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>America West Arena</td>
<td>US Airways Arena</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rose Garden</td>
<td>Moda Center*</td>
<td>AT&amp;T Center*</td>
<td></td>
</tr>
<tr>
<td>SBC Center</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air Canada Centre</td>
<td>Scotiabank Arena*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MCI Center</td>
<td>Verizon Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marine Midland Arena</td>
<td>HSBC Arena</td>
<td>Capital One Arena*</td>
<td>KeyBank Center*</td>
</tr>
<tr>
<td>Raleigh Entertainment and</td>
<td>RBC Center</td>
<td>PNC Arena*</td>
<td></td>
</tr>
<tr>
<td>Sports Arena</td>
<td>Office Depot Center</td>
<td>Bank Atlantic Center</td>
<td>BB&amp;T Center*</td>
</tr>
<tr>
<td>National Car Rental Center</td>
<td>Arrowhead Pond Bell Centre*</td>
<td>Honda Center*</td>
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</tr>
<tr>
<td>Anaheim Arena</td>
<td>Gaylord</td>
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<td>Nashville Arena</td>
<td>Entertainment Center</td>
<td>Sommet Center</td>
<td>Bridgestone Arena*</td>
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<td>Corel Centre</td>
<td>Scotiabank Place</td>
<td>Canadian Tire Center*</td>
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<tr>
<td>Glendale Arena</td>
<td>Jobing.com Arena*</td>
<td>Gila River Arena*</td>
<td></td>
</tr>
<tr>
<td>Consol Energy Center</td>
<td>PPG Paints Arena*</td>
<td></td>
<td>SAP Center*</td>
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<tr>
<td>San Jose Arena</td>
<td>Compaq Center</td>
<td>HP Pavilion</td>
<td>Enterprise Center*</td>
</tr>
<tr>
<td>Kiel Center</td>
<td>Saavis Center</td>
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</table>

(Table 7.7 Continued)
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<tr>
<th>Initial Name</th>
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<th>Name Change 2</th>
<th>Name Change 3</th>
</tr>
</thead>
<tbody>
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<td>Ice Palace</td>
<td>St. Pete Times Forum</td>
<td>Tampa Bay Times Forum</td>
<td>Amalie Arena*</td>
</tr>
<tr>
<td>General Motors Place</td>
<td>Rogers Arena*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* indicates current facility name.

In addition to attracting upper class and corporate spending, including luxury suites into facility design provided additional benefits to sport teams. First, by leasing luxury suites for multiple years teams are able to guarantee repeat customers for multiple seasons, making suite revenue a source of fixed revenue rather than variable revenue (Brown et al., 2016; Howard & Crompton, 2004; Koba, 2012). Furthermore, revenues generated from luxury suite rentals can also be used to pay for new facility construction or renovations (Brown et al. Titlebaum & Lawrence, 2011). Finally, the revenue generated from luxury suite rentals is not placed into revenue sharing pools, allowing teams to control the profits generated by the luxury suites (Bloom, 2014; Koba). An analysis of contemporary multipurpose sport arenas revealed that a Stage Six facility averages between 83 and 94 luxury suites in the facility with many in the lower bowl. By moving luxury suites to the lower bowl of the facility, sport organizations are able to demand greater prices from corporate customers (Monarrez, 2017). For example, The Palladium in Ottawa, ON opened in 1996 and leased its lower bowl luxury suites in for $140,000 ($230,657.57 in 2018) per year for five years (“Pure Luxury,” 1995). The initial amenities offered in Stage Six luxury suites were not dissimilar from the Stage Five facilities. The $140,000 per year Palladium suites were 500 square feet and included a bar, bathroom, closet, lounge, and 12 tickets (“Pure Luxury”). The Ice Palace in Tampa, FL charged approximately $100,000 ($160,042.60 in 2018) for suites with televisions, kitchen, bathroom, and a private attendant when it opened in 1996 (Stengel, 1996). Over time, the cost of private suites drastically increased. The final facility examined in this project, the Fiserv Forum (opened 2018) charged an
annual fee of $300,000 to use a private suite (Kirchen, 2016). The Fiserv Forum suites require lessees to rent a suite for at least seven years (“Premium Experiences,” n.d.).

The amenities provided within luxury suites have also improved. The Fiserv Forum suites include private entrances and parking, as well as a suite attendant (“Premium Experiences,” n.d.). In addition to these amenities, The PPG Paints Arena suites include access to private lounges, high definition flat screen televisions, wireless internet, bar, refrigerator, warming stations, and a restroom (“PNC Legends Level Suites,” n.d.). Beyond enhanced suite amenities the corporate customer focus of the facilities has become increasingly overt. The Fiserv Forum gives its suite renters access to the space for corporate meetings (“Premium Experiences”). Similarly, Detroit’s Little Caesar’s Arena luxury suites include five smart televisions that allow the luxury suite to serve as a corporate presentation/meeting space (St. James, 2016). As part of the PPG Paints Arena luxury suite leasing agreement, suite renters are given year-round access to the facility’s conference rooms (“PNC Legends Level Suites”).

Stage Six facilities offer tiers of luxury seating beyond the most expensive suites. Though similar in layout, the upper level suites in Tampa’s Ice Palace cost approximately $15,000 to $45,000 less than lower bowl suites (Stengel, 1996). Furthermore, exclusive club seating is also available. The average Stage Six facility contains approximately 2,030 club seats. To provide some pricing context, the Capital One Arena in Washington, D.C. offers five club seating levels that range in price from approximately $7,500 to $22,000 for the 2018-2019 regular season (“Capital One Arena VIP,” n.d.). Stage Six club seats exist within the lower bowl of the facility and offer a range of exclusive benefits for club members. Rocket Mortgage Fieldhouse (formerly Gund Arena 1994-2005 and Quicken Loans Arena 2005-2019) in Cleveland, OH offers five different club seating options that range from court side viewing options to seats at the lower bowl suite level. The Rocket Mortgage Fieldhouse club dining is also unique from typical
stadium fare, as the club dining is Brazilian, Caribbean, and Iberian inspired cuisine ("Premium Seating," n.d.). The club seats within Stage Six arenas also double as locations for teams to improve revenue generation by selling corporate sponsorship of club seating locations (Shubert, 2016). The Rocket Mortgage Fieldhouse club sections are sponsored by company’s like Bacardi, Huntington, and Westfield. Similarly, the Oracle Arena’s four club sections are sponsored by Tanduay Rum, BMW, JP Morgan, and MOJO ("Clubs," n.d.).

Importantly, upper class and corporate customers were not the only unique population whose needs were increasingly accommodated within Stage Six facilities. The Americans with Disabilities Act of 1990 (ADA) required accessible seating locations be provided throughout a sport facility. The inclusion of accessible seats further expanded the size of the Stage Six facility as the incorporation of accessible seats accounted for an up to 10% increase in sport facility size (Blickstein, 1995). More specifically, the ADA required that a minimum of one percent of a sport facility’s seating be wheelchair accessible, as well as half of facility entrances (U.S. Department of Justice, n.d.). Beyond simply providing wheelchair seating, the law mandates at least one companion seat be installed per accessible seat, seats be made available at all price points, and with consideration for lines of sight, particularly in the event that a facility will host events that encourage standing (U.S. Department of Justice). In 1996 the U.S. Justice Department sued facility architecture firm Ellerbe Beckett for its failure to design multipurpose facilities (i.e., Fleet Center, Marine Midland Arena, CoreStates Center, Rose Garden, and MCI Center) in accordance to ADA regulations (Burrell, 1996).

The inclusion of various types of seating locations contributed to increased concourse space. Within the concourse space, service-oriented elements such as restrooms were improved and enhanced in Stage Six facilities. Specifically, by the year 2000, the accepted standard for restrooms in a facility promoted one restroom per 100 male fans and one restroom per 50 female.
fans expected within the facility (Seifried, 2005). Overall, Stage Six facilities contained an average of 38 to 45 restrooms, with some flex rooms capable of switching based on the expected market for events. Besides the number of restrooms, restroom fixtures also increased dramatically. As an example, the Reunion Arena in Dallas, TX featured 241 restroom fixtures while its Stage Six replacement American Airlines Center included 713 fixtures. Beyond male and female restrooms, family restrooms and nursing parent rooms have also emerged as parts of the Stage Six facility. Interestingly, the Golden 1 Center features 77 restrooms, including 23 gender neutral restrooms.

The increases associated with restrooms were also often associated with improvements to concession stands because enabling fans to quickly leave their seats and return encourages them to spend more money in the venue (Shubert, 2016). With respect to concessions, a myriad of offerings emerged in the Stage Six facility which also saw an increase in the number of concession stands over Stage Five (i.e., averaging between 27 and 35 concession stands). With respect to options, the Molson Centre (now Bell Centre) in Montreal offered 29 different menu items (“Molson Centre,” 1996). Next, the typical Stage Six facility adapted to include restaurants as part of concessions offerings. For instance, the National Car Rental Center (now BB&T Center) offered six food courts in the arena (Passy, 1998). Chain restaurants, such as Dunkin and Rita’s Italian Ice exist as concession locations in the Capital One Arena, while Bell MTS Place in Winnipeg included Tim Horton’s coffee and doughnut holes within the facility (“Food & Beverage,” n.d.). Little Caesar’s Arena contains four different restaurants within the facility (McCollum, 2017). Additionally, quality of concessions provided improved so that local restaurants emerged in arenas, as is the case with Burgatory hamburgers, Nakama sushi, and Primanti Brothers sandwiches at PPG Paints Arena or upgraded stadium fare such as The

In addition to concessions locations, Stage Six facilities also offer social gathering and festival spaces. When it opened in 1998, the National Car Rental Center included a 6,140 square foot sports bar (Passy, 1998). The Glendale Arena incorporated three outdoor lounges as part of the facility design, enhancing fan leisure experience (Flannery, 2003). Dedicated social space and festival space appears as an important component of Stage Six facilities, supporting the notion that the experience in the facility is more important than the game (Shubert, 2016). Furthermore, inclusion of dedicated team store space demonstrated a desire to monetize the facility space, as was the case when the Anaheim Arena included an 1,800 square foot team store for the Anaheim Ducks a space that would expand to 6,100 square feet (Liddane, 2013).

Within the expanded concourse and footprint of the facility interactive displays also emerged as a feature of Stage Six facilities. The interactive displays served multiple purposes. The interactive areas serve as a way for fans to connect to the history and heritage of the team’s success in a previous facility (Shubert, 2016). Little Caesar’s Arena installed the Detroit Red Wings team bench from its previous facility, Joe Louis Arena, as a version of an in-facility selfie stand (Gallagher, 2017). Furthermore, the Red Wings placed statues around the concourses, as well as the original sign from Olympia Stadium to enhance fan nostalgia (Gallagher). The second reason for such interactive features is the ability to increase revenue in the facility (Seifried, 2010b). Within PPG Paints Arena, the Highmark sponsored Kid’s Zone, a 30 to 50-person event area, can be rented at a cost of $1,500 for five hours of use (“Highmark Kid’s Zone,” n.d.).

The design of Stage Six facilities readily incorporated technology into the facility to enhance the fan experience, as well as improve business operations. The concourses of Stage Six facilities are lined with hundreds of television sets, which encourage fans to continually engage
with the sporting event while decreasing congestion (i.e., standing and watching). For example, the PPG Paints Arena included more than 700 televisions throughout the facility (Belko, 2010). Meanwhile, the Molson Centre positioned 150 televisions in low-traffic concourse areas to prevent crowding and congestion during period breaks (Jonston, 1996). Scoreboards also emerged as massive digital video boards, such as the Glendale Arena’s 35,000-pound scoreboard featuring 21 display screens and four 16-foot by 9-foot LED video screens (Flannery, 2003). More recently, Little Caesar’s Arena placed a 5,100 square foot center-hung scoreboard (Gallagher, 2017). Digital advertising ribbons that encircle the arena bowl also emerged as a key feature of facilities to project advertising and game statistics to spectators (“World’s Largest,” 2017; Flannery).

Beyond television within the arena, the remote viewer experience drastically changed within the Stage Six facility. As previously noted, Consol Energy Center featured approximately 40 camera positions throughout the arena enabling at-home fans and in-facility customers to watch or stream the contest from varied and personalized angles (Belko, 2010). Of note, gameplay and presentation also changed to suit the remote viewer. The most infamous case of adopting technology to enhance the remote viewer experience occurred when Fox utilized FoxTrax, a system designed to display a color outline and trail around the puck so that television viewers would be able better able to follow the action (McKinley, 2006; Shubert, 2016).

The consideration for computer technology in the Stage Six facility is another important element of this stage of multipurpose facility construction. The use of computers in previous facility stages and professional sport business operations was limited prior to the 1990s. The Montreal Forum and Montreal Canadiens office had 5 computers in 1986. By 1996, the team utilized 150 computers in the Molson Centre to fully integrate business operations, such as player scouting, manage the various event broadcast and technology needs, and computerized
cash registers through more than 900 miles of cables (Friedman, 1996). Furthermore, the use of computer technology enabled fans to rapidly access information and pay for services using credit cards and Automated Teller Machine services (Fernandez, 1996). The recently opened Little Caesar’s Arena in Detroit, MI spent $11,000,000 ($11,268,665.01 in 2018) to install its fiber optic system and more than 1,000 wireless routers for spectator use (McCollum, 2017).

Of recent and emerging prominence in Stage Six facility design is the importance and consideration for the environment. The NHL, perhaps more than any other league, has taken an ecological modernization leadership role in professional sport in part because the sport of hockey requires cold temperatures and water (Johnson & Ali, 2018). In recent years, Canada has experienced a surge in interest in outdoor pond hockey which, along with organized indoor hockey, helps cultivate future generations of hockey players and consumers (McCullough & Kellison, 2016; McKinley, 2006). NHL fans as a whole are more educated than other professional sport leagues and are similarly more likely to be engaged in environmental initiatives and make purchasing decisions based on environmental impact (Johnson & Ali).

Considering the association between education level and income mentioned previously, multipurpose sport facility operators, particularly facilities that house professional hockey may be able to attract consumer dollars by being ecologically friendly (Mallen & Chard, 2012).

The United States Green Building Council’s Leader in Energy and Environmental Design (LEED) rating system is a certification system that recognizes buildings that have been constructed or renovated with environmental considerations such as water efficiency and indoor environmental quality with one of four ratings: Certified, Silver, Gold, or Platinum. This dissertation identified 13 Stage Six facilities that have achieved LEED rating, with Sacramento, CA’s Golden 1 Center as the only Platinum-rated facility (See Table 7.8). The Golden 1 Center utilizes several design elements to reduce its environmental footprint, including locally-sourcing
90% of facility concessions, using solar panels to provide electricity, and allowing prevailing winds to cool the facility (Golden 1 Center, 2016). The incorporation of LEED design and other eco-friendly ratings standards into facility design has increased in prominence so that leading sport facility architectural firms AECOM, HKS, and Populous feature sustainability in their facility designs (Kellison, Trendafilova, & McCullough, 2015). Finally, considering eco-friendly practices within facility design and operations can help reduce operating costs (Bonafe, Convey, & Goulding, 2014; Ciletti, Lanasa, Ramos, Luchs, & Lou, 2010).

Table 7.8. Facility by Leader in Energy and Environmental Design (LEED) Rating

<table>
<thead>
<tr>
<th>LEED Certified</th>
<th>LEED Silver</th>
<th>LEED Gold</th>
<th>LEED Platinum</th>
</tr>
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<tr>
<td>Oracle Arena</td>
<td>Amway Center</td>
<td>American Airlines Arena</td>
<td>Golden 1 Center</td>
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<tr>
<td>State Farm Arena</td>
<td>Barclays Center</td>
<td>Moda Center</td>
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<tr>
<td>Xcel Energy Center</td>
<td>Bell Centre</td>
<td>PPG Paints Arena</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rogers Centre</td>
<td>T Mobile Arena</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Toyota Center</td>
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</tr>
</tbody>
</table>

Facility Renovation Since 1988

The previous chapter discussed Stage Five construction and Stage Four facility rehabilitation treatment that incorporated luxury suites into facilities as a response to the opening of the Houston Astrodome (Seifried & Pastore, 2009b; Shubert, 2016). The wave of new facility construction that occurred beginning in 1988 existed concurrently with renovation treatments of existing facilities. Just as construction of Stage Six facilities occurred in part to promote the financial viability of sport franchises, renovations, particularly facility rehabilitation, occurred in response to the corporate-consumer model that emerged with the opening of The Palace of Auburn Hills. Stage Five facilities also sold naming rights sponsorship for the facility (See Table 7.9). Of note, three Stage Five construction facilities were still in full-time use by NHL or NBA tenants at the beginning of the 2018-2019 seasons (Scotiabank Saddledome-Calgary, MSG IV-New York City, and Oracle Arena-Oakland). However, the modifications to these facilities classify them as Stage Six multipurpose indoor sports facilities. Lastly, NYCB Live, the former
Nassau Veterans Memorial Coliseum, is only partially used by NHL’s New York Islanders and Oracle Arena will be replaced by Chase Center in Fall 2019.

Table 7.9. Stage Five Facility Construction Name Changes

<table>
<thead>
<tr>
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<th>Name Change 1</th>
<th>Name Change 2</th>
<th>Name Change 3</th>
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</thead>
<tbody>
<tr>
<td>ARCO Arena</td>
<td>Power Balance Pavilion</td>
<td>Sleep Train Arena</td>
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</tr>
<tr>
<td>The Summit</td>
<td>The Compaq Center</td>
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</tr>
<tr>
<td>Brendan Byrne Arena</td>
<td>Continental Airlines Arena</td>
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<tr>
<td>Capital Centre</td>
<td>USAir Arena</td>
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<td></td>
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<tr>
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<tr>
<td>Orlando Arena</td>
<td>TD Waterhouse Centre</td>
<td>Amway Arena</td>
<td>Scotiabank Saddledome*</td>
</tr>
<tr>
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<td>Canadian Airlines Saddledome</td>
<td>Pengrowth Saddledome</td>
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</tr>
<tr>
<td>Northlands Coliseum</td>
<td>Skyreach Centre</td>
<td>Rexall Place</td>
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<tr>
<td>Washington State Pavilion</td>
<td>Washington State Coliseum</td>
<td>Seattle Center</td>
<td>KeyArena at Seattle Center</td>
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<tr>
<td>Nassau Veterans Memorial Coliseum</td>
<td>NYCB Live*</td>
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<tr>
<td>Civic Arena</td>
<td>Mellon Arena</td>
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<td>St. Louis Arena</td>
<td>Checkerdome</td>
<td>St. Louis Arena</td>
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</tbody>
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Note. * indicates facility is still open and operating under this name.

Much like newly constructed Stage Six facilities, prior to being replaced, many Stage Five facilities rehabilitated their interiors to include luxury suites to attract corporate spending. Interestingly, some facilities chose to not only expand luxury seating, but also overall capacity, while others opted to reduce capacity by replacing existing seats with luxury seating. Before being replaced by PPG Paints Arena, the Civic Arena expanded its capacity throughout much of its existence. During the Stage Six era, the Civic Arena increased its capacity from 16,164 to 17,537 before the 1993-1994 season (Halvonik, 1994). Additionally, for the beginning of the 1993 season the facility experienced approximately $5,000,000 ($8,688,817.76 in 2018) in rehabilitations in the form of 18 suites and expanded restrooms for fans (Dulac, 1993). By 1998 the facility featured 56 luxury suites and 1,696 club seats, however its overall capacity declined.
to 16,958 (Kovacevic & Dvorachek, 1998). The cost of those upgrades totaled approximately $12,900,000 (Hiltzik & Dillman, 1997).

Unlike the piecemeal rehabilitation of the Civic Arena, MSG IV and the Oakland Arena utilized a different method of renovation. The way the facilities were renovated cost more than the accepted 50% threshold for new construction (Galvan, 2006; Pfleegor & Seifried, 2014). The Oakland Arena was renovated for $102,000,000 ($159,581,912.77 in 2018) over a period of 14 months between 1996 and 1997 increasing its basketball capacity to over 19,000 while adding 72 suites, where the estimated cost of a replacement arena was $177,000,000 ($276,921,554.52 in 2018) (“Warriors to Debut,” 1997). MSG IV underwent two major renovations, the first between 1989 and 1991 expanded to 89 suites and 2,100 club seats while increasing capacity to 18,200 for hockey at a cost of $200,000,000 ($368,732,501.22) (“World Famous Arena,” 1991). The proposed cost of a new Madison Square Garden reached nearly $300,000,000 dollars, however, keeping the facility shell and replacing the inside allowed the arena to remain at the intersection of New York City public transportation (DelNagro, 1989). MSG IV underwent a similar renovation beginning in 2011, for an estimated cost of $1,000,000,000.

The 2013 renovation of the Scotiabank Saddledome is a particularly interesting case as the facility underwent rehabilitation and reconstruction treatments. Following the 1988 Winter Olympic Games in Calgary, the facility boasted 31 luxury suites. Following the 1993 season 45 luxury suites and 1,200 club seats were added to the lower bowl of the facility for $35,000,000 ($60,821,724.34 in 2018). Unlike the commonly used rehabilitation treatment, the reconstruction of multipurpose indoor facilities scarcely occurred. In addition to the reconstruction of the Saddledome, three other reconstruction treatments were identified (i.e., Hartford Civic Center in 1980, Kemper Arena in 1979, and The Spectrum in 1968). Each of those reconstructions were done to repair roof damage caused by weather events. The Saddledome reconstruction also
responded to a natural disaster as flood waters from the Elbow River in Calgary rose above the eighth row of lower bowl seats, destroying 2,500 seats, as well as the ice making plant, production room, and locker rooms (Odland, 2014).

The 30-year history of Stage Six facilities has also led to those facilities undergoing rehabilitation treatments to generate revenue and provide amenities consistent with those offered in more recent constructions, including the incorporation of new technologies and customer expectations. The TD Garden and Boston Bruins owners, Delaware North, spent $4,000,000 ($4,665,180.39 in 2018) to add five club sections to the facility (Reidy, 2008). Furthermore, $20,000,000 were spent between 2010 and 2014 to upgrade its luxury seats, roof, and internet infrastructure (Fernandes, 2014). Beginning in 2014 a two-year, $70,000,000 renovation expanded the team store from 2,800 square feet to 6,000 square feet and refurbished the facility concourses (Fernandes).

The modifications to TD Garden occurred as part of a broader sports anchored development project, The Hub on Causeway which includes LEED rated retail, office, hotel and residential space on the former site of the Boston Garden (Gensler, 2018). With a projected cost of $1,200,000,000, the 1,500,000 square foot development coincides with an announced $100,000,000 renovation to TD Garden to provide festival space within the facility and incorporate The Hub on Causeway into a main entrance into the arena (“The Hub,” 2018). Incorporating Stage Six facilities into mixed-use real estate is also being utilized by Rogers Arena in Vancouver, where the $300,000,000 construction of commercial and residential space that also expands the facility began in 2012 as part of a multi-billion-dollar arena district development plan (Duggan, 2015). Rogers Arena patrons will benefit from the expansion via increased restroom space, widened concourses, and concessions locations (“Construction Updates,” n.d.).
Conclusion for Stage Six

By the conclusion of the 20th century the economic realities in the U.S. and Canada had shifted so that the relative prosperity the middle class experienced for more than two decades after World War II failed to meet price inflation. Despite stagnant middle-class wages, U.S. fiscal policy spurred growth in the stock market and increased corporate wealth and executive pay. While the economic realities were changing the population growth patterns that emerged in the 1950s continued as Southern and Western population outpaced that in the North and Midwest. As a result of these changes, the publicly funded facilities that emerged on inexpensive suburban real estate in pursuit of middle-class wealth were now positioned away from executives and corporations with disposable income. In response to the shifting concentration of wealth and population, sport managers partnered with municipal governments to build urban multipurpose sport facilities as part of urban economic development plans. The multipurpose indoor sport facilities that emerged from these public private partnerships (Stage Six) catered to corporate customers. Importantly, Stage Six of multipurpose urban facility development represents the contemporary facilities that host the teams of the NHL and NBA.

The Stage Six facility is unique in that it was designed for the primary purpose of attracting corporate spending, particularly through the inclusion of lower bowl luxury seating and improved amenities, while still offering service-oriented expectations for middle class consumers. The size of the Stage Six facility dwarfed previous stages of construction. Typical Stage Six surface area grew to between 15.49 and 18.04 acres, as internal capacity increased to between 18,300 and 19,281 seats. Despite the increase in size, Stage Six parking space numbers decreased to between 2,889 and 3,329 average parking spaces. The most identifiable internal feature of Stage Six facilities is the lower bowl luxury suite. Stage Six facilities contained an average of 83-94 suites with features specifically designed to cater to corporate clients, such as
dedicated meeting spaces. Additionally, Stage Six facilities also cater to affluent fans through the use of private club seats and include slightly more than 2,030 club seats (See Figure 7.1).

Figure 7.1. Stage Six of Urban Multipurpose Facility Development

Note. Black arrows represent spectator movement; Purple arrows represent spectator movement for basketball; Grey indicates exterior structure; Black rectangles represent entrance/exits; Red represents lower bowl; Yellow represents upper bowl; Purple represents sky boxes and suites; Blue represents club sections; Ribbon boards are located above suites but below club seat ring; Green triangles represent television camera stands and Green circle represents video scoreboard; Brown trapezoid represents social/festival space; Blue represents skating surface; Orange represents basketball surface.

The increased size of facilities also created larger concourses. Within larger concourse space more concession stands with greater food options and increased restrooms emerged so that the average Stage Six facility contains between 27 and 35 concession stands, as well as 38-45 restrooms. Additionally, teams also dedicated increasingly more space to profit generating locations like sports bars and lounges, as well as team stores and interactive fan kiosks. Finally, an important infrastructure and design feature of the Stage Six facility represents sport managers’ increased awareness and adoption of broadcast and information technology as more camera
positions, computers, and internet access capabilities were installed to improve remote and in-person consumer experiences. Notably, *Montreal Gazette* journalist Matthew Friedman described the trend in including technology within the facility as “answering the needs of the present while preparing for the future (1996, p. D6).

Friedman’s quote is particularly useful when considering the likely future trends in multipurpose indoor facility design. Over time, the design elements of these facilities demonstrated an intentional effort on the part of sport managers to attract consumer dollars. New sport facilities will likely continue this trend by continually improving services and amenities to meet the needs of the population with leisure dollars to spend. Ultimately, these facilities and their geographic footprint will likely increase in size and cost, while facility seating capacity decreases as the adaptability of the facility space for multiple entertainment and social events, as well as mixed-use real estate development in an attractive location presents sport managers with an opportunity to secure consumer dollars by establishing the urban multipurpose facility as part of a broader sport and entertainment experience.
CHAPTER EIGHT
CONCLUSION

Six Stage Ideal-Type

This dissertation endeavors to express that the design of multipurpose indoor professional sport facilities changed in response to various social and economic factors. Over time, these facilities grew in size and sophistication as new technology was adopted and incorporated into the facility. This dissertation used the lens of modernization theory and the ideal-type as a heuristic device to demonstrate the changes that occurred to multipurpose indoor sport facilities. Ultimately, this project identified six stages of the evolution of multipurpose indoor sport facilities. These findings from this dissertation may be of particular interest to scholars in the fields of history, human geography, and sport management (e.g., facility management, event management, operations, etc.).

The first research question investigated within this dissertation asked what factors stimulated changes in, and modifications to professional hockey and basketball facilities during the 20th and 21st centuries? Relatedly, the second research question asked what is the unique ideal-type of the evolution of modern NHL and NBA facilities? As mentioned above, this dissertation identified six stages of urban multipurpose sport facility evolution. Stage One through Stage Three facilities emerged prior to the 1900s and during a period of social and economic changes within an industrializing Canada and U.S.

The growing industrial economy of the pre-1900s is notable as extractive industries such as mining spurred trade while also contributing to community expansion (Innis, 1936; Lower, 1936; Smith, 1986). Resultantly, control over trade routes and the means of the transportation of goods created more opportunities to generate wealth and ultimately positioned some cities as economic centers (Adelman, 1986; Burrows & Wallace, 1999; Cooper, 1969). The emergence of railroads further linked communities across Canada and the U.S. as industries that supported...
trade and railroad activities both attracted and facilitated the growth of new city populations (Burrows & Wallace; Cooper). Within the context of this study, the growing economic importance of Montreal and New York City as the major trading centers in Canada and the U.S. is noteworthy. Amid this growth, support for entrepreneurial ideas in large business centers flourished (Adelman). Of significant importance to the business of sport, increased populations and wages created the opportunity to create and support social or recreational diversions (Howell, 2001; McKim, 2017).

Stage One facilities emerged from naturally occurring, frozen bodies of water. Resultantly, this stage of facilities existed in Canada and parts of the Northern U.S. only during the winter months. Stage One facilities existed as recreational centers for several centuries and hosted various hockey-type games. Because these facilities relied on the natural environment, sporting participants were exposed to freezing temperatures, wind, snow and the threat of thin ice. Given the potential for discomfort and danger to participants several safety measures, such as cautionary signs and safety rules eventually emerged to protect participants. Beyond these rudimentary safety features, limited support services and structures emerged around and above the Stage One facility. However, huts that offered participants a respite from the weather, as well as storage space for personal property manifested. Ultimately, pavilion roof structures emerged over natural bodies of water to provide protection from precipitation. Eventually, Stage One facilities transitioned to include covered, open air, man-made skating areas that could be flooded in the winter while still being used for other events in warmer months, thereby allowing the facility space to generate revenue throughout the year.

Stage Two facilities emerged as purpose-built, enclosed skating facilities. In other words, Stage Two is the first indoor stage of multipurpose indoor sport facility construction. The total enclosure of the skating surface is an important distinguishing element of Stage Two facilities.
Despite providing better protection from winter weather, these facilities still relied on natural freezes to create the ice surface, resulting in underheated and uninsulated wooden structures. Nonetheless, the growing awareness of the commodification of space and the role of human geography can be seen in Stage Two facilities as entrepreneurs intentionally built these structures within wealthy neighborhoods and also hosted non-sport events during warmer months. Of particular note, the enclosed nature of the facility offered defined areas for spectating and play while impacting the formal rules of both hockey and later basketball.

The rules of both hockey and basketball were created in the era of Stage Two facilities. As a result, the games developed within standardized spaces, limiting the number of participants and the style of play. Subsequently, the emergence of governing bodies further standardized the rules of play and offered legitimacy to the contests and the event host. Therefore, the Stage Two facility is a specialized sport location (Bale, 1993). Growing interest in organized indoor sport created the opportunity for enhanced amenities, such as electric lights and the incorporation of thousands of seats, including private boxes. The emerging designation of Stage Two facilities as sport space, not recreation space, is further characterized by modifications made within the facilities to enhance spectator safety, such as the inclusion of bumper boards to define the play space and protect spectators from players and hockey pucks.

Stage Three of multipurpose indoor professional sport facility construction is highlighted by sport manager emphasis on amenities and the adoption of new technology. Stage Three is perhaps the most important stage of facility development because this stage features the incorporation of artificial ice-making technology into the facility. The incorporation of this technology reduced the impact of weather on hockey, creating the opportunity for the sport to be played on a consistent, replicable ice surface in virtually any location at any time of the year. The inclusion of luxury amenities is also an important feature of the facility as private dressing rooms
and luxury seats were made available to wealthy customers, suggesting that recreational use was still a component of the facility’s business operations, though less important. Despite the ability to artificially create a skating surface, the Stage Three facility was semi-permanent as it was still largely constructed out of wood. As a result, the facilities were susceptible to fire damage and destruction, a condition exacerbated by a lack of regulation within building codes, as well as the dry, cold interior environment of the facility.

By the close of the 19th century, the industrial economies of Canada and the U.S. further evolved so that limited automation and growing regulation of worker hours created the opportunity for more leisure activity. In the early decades of the 20th century, the increasingly industrialized economy of the U.S., as well as Canada, offered employment opportunities for a burgeoning immigrant population (Howell, 2001; Kalbach, Trovato, James-abra, & Baker, 2019). Growing population and industry contributed to urban expansion, while a white collar, middle management class emerged for the first time, effectively bridging the gap between low-level employees and top-level managers (Schwarz, 2009). Moreover, this new, educated economic class of citizen existed as a customer population with disposable income in an increasingly crowded urban entertainment landscape.

Within the early 20th century entertainment landscape, the owners of professional hockey teams, and to a lesser degree professional basketball teams, formed and operated teams in a manner consistent with typical businesses. In other words, little cooperation or coopetition existed in early major indoor professional sport (Holzman & Nieforth, 2002; Ross, 2008; Wong, 2005). The personal rivalries amongst professional hockey owners led to the creation of the NHL and its expansion into U.S. markets. The economic and demographic advantages of U.S. markets created an imbalance in franchise location, where the Canadian headquartered NHL was comprised of more teams in the U.S. than Canada (Wong). The presence of multiple, viable
professional sport markets in the U.S. also attracted basketball entrepreneurs to attempt to grow the sport in various U.S. markets by connecting the college version of the sport to the college educated middle class of managers (Koppett, 1999; Nelson, 2009; Surdam, 2012). Ultimately, large cities in the U.S. monopolized major professional sport, including professional hockey and professional basketball.

Stage Four of urban multipurpose indoor sport facility construction represents a desire to construct permanent professional sport entertainment facilities to attract this new class of customer. Notably, these facilities were constructed from steel and concrete and grew to a size and cost not previously realized. The facilities were decidedly entertainment complexes that offered hockey and basketball. The notion of entertainment is an important element of this stage because the growing middle class pursued various entertainment options. The facilities were professionally designed to resemble theatres in an effort to demonstrate their legitimacy and safety for customers. Furthermore, they were positioned with available transportation methods in mind, as entrances were placed on easily accessed main thoroughfares.

Stage Four facilities were dedicated to enhanced customer comfort. The facilities featured comfortable seats at high price points and offered improved climate control (i.e., HVAC) for spectators. Yet, the presence of restrooms for spectators was more conspicuous in Stage Four facilities. The facility also adopted technologies to enhance the game watching experience for in-venue fans while also making contests accessible to a remote audience. Stage Four facilities also included electronic game clocks and scoreboards that allowed fans to track game information. Furthermore, Stage Four facilities featured radio technology to broadcast games to remote audiences. The ability to broadcast games to remote audiences would become an increasingly vital component of the business model of both the NHL and NBA and the development of not only team-level but league-level fan nations beyond the local or immediate city locale.
Effort to design facilities that catered to the expectations of a growing middle class proliferated in the decades of economic prosperity that immediately followed World War II. Within this point, it should be noted that the U.S. emerged as the unrivaled capitalist power in the Western world (Hendricks, 2019). Specifically, the industrial manufacturing economy that existed since the 19th century transitioned into a service economy as skilled laborers surpassed unskilled workers (Young & Young, 2004). Moreover, the demographics in the U.S. also changed with the growing, increasingly prosperous population migrating to the South and West (Seifried & Pastore, 2009b). The burgeoning middle class population moved away from cities to suburban locations as automobile ownership increased. Similarly, disposable income grew which facilitated the steady growth of television ownership during mid-20th century; 75% of U.S. homes owned televisions by 1960 (Grundy & Rader, 2016).

Within these conditions, Stage Five facilities catered to the service expectations of the growing middle class and provided ample parking spaces for automobile-owning customers in the aforementioned suburban locations. By the mid-20th century construction technology continued advancement so that Stage Five facilities emerged without obstructed-view seats as internal poles were not required to support the roof. Beyond reducing or eliminating support poles and therefore obstructed view seats, the Stage Five facility featured various service enhancements. For instance, the facility included multiple restroom locations and within its expanded concourses, offered multiple concession stands with numerous product offerings. By the 1960s, dedicated luxury suites at the top of the facility were also added through facility rehabilitation treatments or included in new facility construction. The inclusion of sky box suites added value to the in-facility experience for wealthy customers as leasing a suite secured private entrances, concierge services, and personal bar and restroom facilities.
Importantly, remote viewership continued and emerging media markets became an important aspect of Stage Five design and construction. The Stage Five facility also notably emerged as the NHL and NBA expanded during the 1960s, 1970s, and 1980s. These expansions and relocations introduced franchises to emerging markets. The NHL expansion in particular was motivated by the potential to secure television broadcast rights in major media markets (Brewitt, 1975; Carroll, 1966). The pursuit of television revenue influenced Stage Five facilities as television camera stands were incorporated into the design, while in-facility lighting illuminated the playing surface in a way that would enhance the television product so that customers either unwilling or unable to attend the game in person could experience the game from remote locations.

The contrast between the in-facility fan and the remote fan has become increasingly prominent since the late 1980s. The general prosperity experienced by the middle class in the U.S. slowed before declining during the last decade of the 20th century and the first decade of the 21st century (Moffitt & Campbell, 2011; Rashid, 1993; Weiss, 2011). While the middle class experienced a decline in income, corporate wealth grew under the economic policies and tax reform initiatives of the Reagan administration (Batchelor & Stoddart, 2007). Resultantly, corporate customers were increasingly targeted as potential in-facility customers. Within this same time period, consideration for expanded television cable networks and the rapid growth of the burgeoning internet and information technology systems were incorporated into sport facilities to enhance the remote experience.

Stage Six of multipurpose indoor professional sport facility construction marked a return to the city as facility design focused on attracting corporate customer dollars. The most overt example of the emphasis of Stage Six facilities on courting corporate spending is the placement of luxury suites in the lower bowl of the facility. Placing luxury suites in the lower bowl of the
facility allowed sport managers to charge greater suite leasing fees. A consequence of this design decision is that Stage Six facilities increased in size as the lower bowl was built on a more gradual incline than in previous facilities, moving individual seats further away from the playing surface. Importantly, spectating space and the consideration for accessibility issues manifested as Americans with Disabilities Act legislation created numerous improved consumption options for this special population among others involving restrooms, security, communication, and customer services. Concourse space also increased within the facility with greater numbers of restrooms and concession stands manifesting. The importance of capitalizing and commodifying facility space further exhibited in the Stage Six facility as restaurants, team stores, and club spaces exist as locations to attract consumer spending in the facility. Furthermore, opportunities to attract advertising dollars was also reinvigorated as new technology was incorporated into the facility via video boards and LED-ribbon boards. Remote broadcasts were further supported by numerous cameras dedicated to covering multiple angles and specific players so that remote viewers have the opportunity to customize their viewing experience.

The ubiquity of various technologies and the ability of fans to interact with team and game content through multimedia is an increasingly important component of Stage Six facilities as the ability to engage with the remote communities has become increasingly common within society (Harrison, 2010). The importance of expectations and technology is also featured in facility design as consideration for environmentally and socially responsible facility design has been pushed to the forefront by an increasingly educated and eco-conscious customer base (Johnson & Ali, 2018). Ultimately, Stage Six facility construction exhibits and reinforces the actions of multipurpose indoor sport facility owners and managers to design facilities in a way that would generate revenue by attracting disposable income and leisure dollars of customers seeking to be entertained by sport or within sport facilities.
Overall, the history of multipurpose indoor sport facilities is a worthy and valuable topic for sport management scholars to consider, evaluate, and put forward. Investigating such facilities through the lens of modernization theory and the ideal-type heuristic device provides practical and contextual understanding for the current state of major professional sport facilities, as well as the business of major professional sport in the U.S. and Canada. By providing these treatments to the facilities of the NHL and NBA, a greater understanding of these facilities, as well as the time period they were constructed, emerged. Overall, six ideal-type stages were identified, filling an apparent gap in the scholarly literature regarding the understanding of urban multipurpose sport facilities. Facilities were built in a manner to attract leisure spending and the design of facilities responded to both technological and prevailing economic trends to enhance features and amenities to generate revenue. This behavior will likely continue, and as this project supports, sport managers and sport management scholars must be aware of the broader context of the society in which they operate in order to promote continued viability of the industry.

**Modernization and Urban Multipurpose Facilities**

Studying sport as an intentional activity creates the opportunity for scholars to develop an understanding of society as it modernizes (Adelman, 1983). The second chapter of this project traced the scholarly use of modernization theory, as well as its applications within sport scholarship (i.e., sport history and sport sociology). Importantly, modernization theory developed as a means of explaining development in the Western (i.e. capitalist) world (So, 1990; Weber, 2011). As is the case with scholarly works utilizing modernization theory, this dissertation relied on both historical and economic data to describe how multipurpose indoor facilities changed as a result of individual agency, structural factors, and cultural responses to economic development (Inglehart & Welzel, 2005; Thornton, 2005). The six-stage ideal-type of urban multipurpose facility evolution put forward above illustrates the proactive approach of sport managers in
responding to expectations of their customers (Black, 1966; Wiebe, 1967). Overall, the present study demonstrates the elements of evolutionary, functionalist, and reflexive modernization recur throughout the history of multipurpose indoor sport facilities (Giulianotti, 2009; So, 1990).

When So (1990) referred to Comte in differentiating between evolutionary and functionalist modernization, the author highlighted that evolutionary modernization emphasized continuous improvement of the human experience, while functionalist modernization utilized specific entities to maintain a vibrant, modern society. A key component of evolutionary modernization is distinguishing between pre-modern and modern. Within this point, Smith (n.d.) suggested a modern nation emerges when its citizens are able to engage in leisure activities after technological advances increase free time through improved labor productivity. In the present dissertation, Smith’s foundational notion can be seen as the emerging industrial economy of the 19th century created opportunities for individuals to pursue leisure activities. Within Stage One, Stage Two, and Stage Three, this leisure activity manifested as recreational skating, play, and then as spectating. Importantly, with the emergence of play and spectating, rational rules of play emerged through governing bodies to standardize how both hockey and basketball were played within an existing space (Maine, 1861). As the economic realities of the nations changed throughout the 20th century, the emergent middle class represented a growing population with the means to pursue leisure activities.

As mentioned above, various cities (e.g., Montreal, New York City) grew in population and importance as economic opportunities emerged. In essence, cities rose to prominence in part because civic leaders and entrepreneurs emphasized industry and commerce. Importantly, a vibrant, modern city not only focuses on economic growth, but on the well-being of its citizens by offering leisure/recreation opportunities (Wirth, 1938). Stage Four of multipurpose facility construction emerged within a vibrant urban space with numerous recreational opportunities for
the new class of middle managers. The intentional decisions by sport managers like Tex Rickard and Conn Smythe to design and construct sport and entertainment facilities to attract well-heeled customers in well-trafficked areas with other legitimate entertainment options (e.g., theatres) indicates the intent of sport managers to position spectator sport as a recreational element of the vibrant modern city. Within functionalist modernization, recreational opportunities help foster a cohesive identity for the urban center (Parsons, 1950). Parsons, as well as Weber (2011) contended that religious practices served such a purpose. This dissertation details how sport, particularly spectator sport, is another recreational activity that fosters a cohesive urban identity.

Seifried and Clopton (2013) suggested sport facilities can help create a community identity. The relationship between teams and community identity has also been discussed in the context of sport and modernization as both real and imagined communities are represented by professional sport teams and facilities (Brown, 2007). Professional sport, and the need for a modern indoor sport facility to demonstrate urban prosperity clearly manifested during Stage Five and Stage Six. Scholarly research has indicated that municipal residents value having professional teams in their cities because it produces psychic income and helps create a more vibrant city (Johnson, Groothuis, & Whitehead, 2001; Johnson, Whitehead, Mason, & Walker, 2012; Schwester, 2007). Stage Five and Stage Six of construction occurred as the NHL and NBA expanded into new markets fighting to enhance their status among other communities. For example, the public financing and construction of facilities like the Stage Five Milwaukee Arena or Stage Six PPG Paints Arena supports the idea that building a multipurpose indoor facility that houses major professional hockey and basketball is a marker of a modern city.

Notably, Groothuis, Johnson, and Whitehead (2004) and Groothuis and Rothoff (2016) found that city residents like having professional sport teams; however, citizens are hesitant to use public money to create a facility for a private business. This concern over public resource
allocation highlights an important criticism of modernization theory, specifically, that the theory overemphasizes how the wealthy impact society (Tyrell, 1987). As it relates to sport facility construction, evidence in the existing sport facility modernization literature (e.g., Pujadas, 2012; Seifried & Pastore, 2009b), as well as this dissertation, acknowledges a pattern of facility construction based on the movement of wealthy populations exists. Certainly, within Stage Six construction the emphasis on corporate customers and luxury suites appears to suggest the emphasis is solely on the wealthy. However, this critique of modernization by Tyrell is reductive. Multipurpose indoor facility construction did not follow and cater just to the wealthy over time. Specifically, intentional decisions were made to pursue concentrations of disposable income emanating from a variety of income classes. Indeed, the interests and desires of the middle class tended to dominate facility design decisions for most of the 20th century.

The intentional pursuit of populations with disposable income demonstrates the application of reflexive modernization by sport managers. Reflexive modernization occurs when an entity, typically a government, recognizes threats in an increasingly globalized world and then attempts to mitigate those threats (Giulianotti, 2009). Broadly, sport matured as a business entity beginning in the 19th century (Adelman, 1986). Furthermore, indoor professional sport and urban multipurpose professional sport facilities exist in the realm of leisure activities reflecting modern business practices. Within, sport organizations and managers are presented with various threats to viability of their operations (Llewellyn, 2012). Thus, the history of the design and construction of sport facilities represents a century of applied reflexive modernization to develop, capture, and respond to various types of markets and changes to sport practices.

From the perspective of the sport manager, the design and construction of multipurpose indoor facilities exemplifies reflexive modernization because facilities were designed to mitigate threats to the sport team and/or facility as a business. Importantly, the ability of sport managers
to master physical landscapes and the natural world by making intentional facility decisions exists in all stages (Adelman, 1986). Stages One through Three primarily responded to the threat of weather by covering (Stage One), then enclosing the skating surface (Stage Two), before utilizing artificial ice-making technology to create ice regardless of climate (Stage Three). The Stage Four facility, for example, was not simply placed and designed in a way that matched its surroundings, the facility was designed to attract customers with disposable income who would be just as likely to go to a concert or a play than a hockey game. As a result, Stage Four facilities were designed as steel and concrete buildings with comfortable seats, improved ventilation, tiered ticket prices, and accessible entrances to attract customers to a safe and reputable entertainment event. This action serves as reflexive modernization because these decisions were done, in part, to mitigate the perceived dangers of attending a sporting event, while also limiting the potential strengths of legitimate theatre productions that attracted the middle manager and upper classes (Schwartz, 2009).

Similarly, within Stage Five the emergence of television technology followed radio and the need to respond to population shifts helped spur league expansion and facility design. Facility properties were designed with automobiles in mind and included a gradually growing number of television camera positions. During this era of construction, the two leading professional sport leagues (i.e., MLB, NFL) in the U.S. also prescribed facilities by outlining some building requirements. Within, the popularity of professional football on television and the revenue that television broadcasts could generate clearly motivated league decisions to expand and relocate to new specially-designed facilities to attract potential in-person and remote customers. Furthermore, the incorporation of improved concessions further suggests an awareness of the service-orientation of the economy. By providing affordable and safe food and beverages in the facility, organizations catered to the expectations of their customers across
multiple price ranges, rather than simply allow those customers to spend their dining dollar elsewhere. Stage Five again demonstrates reflexive modernization as the intentional design of facilities responded to trends in society and sport that threatened the long-term viability of the sport organization.

Reflexive modernization and the Stage Six facility is evident on the stage’s featured design element, the lower bowl luxury suite. Where the middle class and middle manager class significantly influenced facility design in Stage Four and Stage Five, by the end of the 20th century wages had declined, limiting leisure spending (Moffitt & Campbell, 2011; Rashid, 1993; Weiss, 2011). At the same time corporate wealth and prosperity increased dramatically (Batchelor & Stoddart, 2007; Oxoby, 2003). With a traditional base of customers now limited in its ability to spend, sport managers made design decisions to attract concentrated wealth, through corporations. Similarly, managers also responded to the information that suggested educated customers earned more by incorporating design features that are attractive to educated customers (e.g., ecological modernization, local food sourcing, family restrooms, Wi-Fi and power stations).

Just as Stage Five considered the expanded role of the remote customer and the potential competition of other television programming, Stage Six facilities not only compete with television, but also the internet and its ubiquity in our society. Beginning in the 1990s, the internet, and expanded use of computer technology fundamentally changed how businesses operated and individuals interacted (Harrison, 2010; Oxoby, 2003). Not surprisingly, sport managers increased television coverage capability, while also incorporating significant space to computer and internet infrastructure. These decisions give customers the opportunity to engage the sport product within or outside of the facility in a manner that best suits their individual preferences. Importantly, the in-facility experience accommodates multiple levels of leisure
engagement, where customers can experience the game in the physical space, as well as the social media space simultaneously.

Adelman (1981) presented six characteristics that could be used to identify a modern sport (i.e., formal governance, written rules, governed competition, professionalization, periodical record keeping, and statistical record keeping) and distinguish it from premodern sport. Indexing various design features and amenities has also been used to differentiate modern sport facilities from pre-modern sport facilities (Doyle, 1994; Pfleegor & Seifried, 2015; Seifried, 2016; Seifried & Tutka, 2016). Therefore, it may be valuable for sport managers, particularly urban multipurpose sport facility managers, to consider the facility elements in Table 8.1 as they continue to approach sport facility design, construction, and renovation through reflexive modernization.

**Table 8.1. Urban Multipurpose Sport Facility Modernization Index**

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<td>LEED Rating</td>
<td>Local Food Sourcing</td>
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<tr>
<td></td>
<td>Accessible Seats</td>
<td>Social Space (Square Feet)*</td>
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<td></td>
<td>Ribbon Board</td>
<td>Full Service App*</td>
</tr>
<tr>
<td></td>
<td>Parking Spaces</td>
<td>On-Site Betting*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Number of Luxury Suites</th>
<th>Number of Club Seats</th>
<th>Number of Restrooms</th>
<th>Number of Neutral Restrooms</th>
<th>Video Score Board</th>
<th>Number of Wireless Routers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Area (Acres)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

*Note. * Indicates proposed future index category.

**Propositions for Sport Managers to Consider**

The final research question considered for this dissertation asked *what reasonable suggestions can be made regarding future facility design trends?* Pointedly, this dissertation acknowledges the problematic nature of attempting to predict the future within academic circles. Importantly, this project embraced modernization theory in part because it has been used to understand how communities changed over time (Inglehart & Baker, 2000; Inglehart & Welzel;
Seifried & Novicevic, 2017) and “to predict their future shapes, patterns, and constructions” (Seifried & Novicevic, p. 52). Rather than attempt to predict what facilities will look like, this section offers several modernization and historically informed propositions for current and future sport managers and facility managers to consider when constructing or renovating multipurpose indoor sport facilities.

**Expansion/Relocation.** Both the NHL and NBA have histories of franchise expansion and relocation. As recently as December 2018, the NHL announced that it would be adding an expansion franchise based in Seattle to the league for the beginning of the 2021-2022 season. The addition of the Seattle franchise for a $650,000,000 expansion fee will bring the total number of NHL franchises to 32 (Schram, 2018). Despite this expansion and the apparent health of the NHL and the NBA as business entities, some franchises are notably struggling to remain viable in their current markets (e.g., Arizona Coyotes) and economic and demographic changes may elevate some cities to the status of viable NHL or NBA markets in the future.

Cintron, Levine, and Hambrick (2016) explored potential expansion locations for the NHL as the league looked to grow from 30 to 32 teams. Within their case study the authors identified five potential markets for NHL expansion: Indianapolis, Kansas City, Las Vegas, Quebec City, and Seattle. Ultimately, Seattle and Las Vegas were awarded franchises. This dissertation identified the role television markets played in league expansion decisions (Brewitt, 1975; McKinley, 2006). Cintron et al., indicated current league expansion considered demographic changes, existing modern facilities, local economies, and media markets. Local economy is particularly important to consider as Brown, Rascher, Nagel, and McEvoy (2016) noted that corporations purchase more than half of NBA season tickets. Furthermore, the emphasis on selling luxury suites to corporate customers has dominated facility gate receipt planning since 1988. Considering league and scholarly expectations and considerations for
franchise relocation and expansion, this dissertation supports the aforementioned works and presents five cities to be considered for NHL or NBA expansion (See Table 8.2).

Table 8.2. Potentially Viable Markets for Future NHL or NBA Expansion/Relocation

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>San Diego, CA</td>
<td>NBA</td>
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<td>2,650</td>
<td>29</td>
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<td>NHL</td>
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<td>5,320</td>
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<td>Either</td>
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<td>2,250</td>
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<td>3,590</td>
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<td>57</td>
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<tr>
<td>Baltimore, MD</td>
<td>NBA</td>
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</tbody>
</table>

Note. Population data according to U.S. Census Bureau (2019); Corporate inventory (Brown et al., 2016); Nielsen data from The Nielsen Company (2018).

Proposition 1: Sport managers should continually evaluate markets and demographics to consider as expansion and/or relocation sites.

Design with Hockey in Mind. Giulianotti (2009) noted that reflexive modernization is identified as recognizing threats and attempting to eliminate or mitigate those threats. As mentioned previously, the presence of other entertainment options that attract consumer dollars is a threat to sport organizations and sport facilities. With this notion in mind, the proactive design of a sport facility to include both professional hockey and basketball enhances the utility of a facility and limits the opportunity for a competitor facility to emerge. Given the space needed to host a hockey game, the hockey rink should be considered as a primary design feature over basketball, lest a second facility that would also compete for non-sport entertainment emerge to accommodate hockey.

Professional hockey emerged as a viable entertainment product before professional basketball. Additionally, the incorporation of artificial ice into facility design not only created the opportunity to host hockey games and skating sport, but other ice-based entertainment (e.g., Ice Follies and Ice Capades). Major professional basketball materialized later and often in
facilities that already hosted hockey. In the last 25 years, notable examples of the issues created when designing an arena with basketball, not hockey, at the forefront surfaced. As an example, America West Arena (now Talking Stick Resort Arena) opened in 1992 as a facility specifically designed for the NBA’s Phoenix Suns. When the Winnipeg Jets franchise relocated to Phoenix and became the Coyotes they became the secondary tenant of the facility. However, because the facility was designed to enhance the basketball viewing experience, the much larger hockey playing surface extended below the arena’s north upper deck, resulting in obstructed views of one of the goals from 2,500 seats (approximately 14% of the facility’s total seats) (Young, 1995). Seven years after the Coyotes began playing in Arizona, the team finally moved into its own hockey arena in Glendale, AZ.

The incongruence of playing hockey in a facility designed for basketball is perhaps most notable in Barclays Center in Brooklyn, where the NHL’s New York Islanders play in a facility designed for the NBA’s Brooklyn Nets. Interestingly, the center-hung scoreboard is not centered on the hockey rink, but hangs above one of the bluelines and 416 seats have obstructed views (Gross, 2013). Unlike the seats at America West Arena that obscured part of the goal, the obstructed-view seats of Barclays Center obscure most of one offensive end, making it impossible to see any game action in a third of the zone nearest those seats (DeLessio, 2013). The Islanders resultantly initiated and agreed to build a new arena in Belmont Park, NY for the 2021-2022 season (Cyrgalis, 2019). Given major professional league preferences to relocate to growing markets, it is possible that a city that hosts an NBA franchise may come to host an NHL team as well, in addition to various ice-related entertainment.

Proposition 2: Multipurpose facilities should be designed for hockey first, then basketball.
Increase Social Space. The means which sport managers commodified space within the multipurpose arena have become increasingly more sophisticated over time. For much of the existence of these facilities, the primary source of revenue was gate receipts. However, by the end of the 1980s, luxury suite rentals were used to create fixed sources of gate revenue, or contractually obligated income for sport teams and facilities (Brown et al., 2016; Howard & Crompton, 2004; Koba, 2012). Following the banking crisis of 2008 various corporate customers reconsidered their luxury suite rentals, contributing to empty luxury suites in various facilities (Shapiro, DeSchriver, & Rascher, 2012; Titlebaum & Lawrence, 2010, 2011). Recently-opened facilities have opted to decrease luxury suites in favor of varying levels of club and social spaces and/or modified their existing suites to either be more specialized or adaptable space.

Within the category of evolutionary modernization, Tonnies (1957) suggested that modern societies place greater emphasis on social laws and conventions rather than interpersonal, and community relationships. Though Tonnies was able to identify this in modern societies, Brown (2007) indicated interpersonal relationships and community values are important to sport fans. In light of this, it would be beneficial for sport organizations to increase opportunities for sport fans to share in community and interpersonal relationship building. This project noted that the two newest indoor facilities, Little Caesar’s Arena and Fiserv Forum offered 62 and 67 suites respectively. The facilities they replaced (i.e., Joe Louis Arena (88), the Palace of Auburn Hills (180), and Bradley Center (68) offered more luxury seating opportunities. Notably, recently-opened and renovated facilities offer numerous club and social gathering experiences within and outside the facility. These spaces allow fans to purchase tickets to events and enjoy the leisure experience of attending a game, without necessarily watching the contest or ever sitting in their seat (Monarrez, 2018). Interestingly, Monarrez noted that the behavior of fans at Little Caesar’s Arena was reminiscent of the way people behave at a friend’s house in
that fans gather in the concourses “similar to the way people hang out in kitchens at parties” (p. 11C). Overall, facilities evolved to provide fans with desired experiences (Seifried, 2005). Therefore, sport managers should provide more opportunities to enhance the fan experience by creating desired social spaces.

Proposition 3: Multipurpose facilities should decrease seating capacity in favor of social space (e.g., large or intimate).

Incorporate Sports Betting Sites. On May 14, 2018, the U.S. Supreme Court, via a 6 to 3 decision, declared the Professional and Amateur Sports Protection Act unconstitutional. As a result, the federal prohibition on sports gambling was lifted, allowing individual states to regulate sports betting (Perez, 2018). Since the Supreme Court decision eight states legalized sports betting (i.e., Delaware, Mississippi, Nevada, New Jersey, New Mexico, Pennsylvania, Rhode Island, and West Virginia). Furthermore, as of January 2019 proposed legislation in Arizona would allow casinos operated by Native Americans to offer sport betting, a fact that is interesting as it relates to this project as both the Phoenix Suns and Arizona Coyotes play in facilities sponsored by casinos.

The societal shift toward a service-oriented economy in the 1950s changed the services and amenities provided in sport facilities. Similarly, sport managers need to react to cultural responses and changes to structural factors that occur as the economy develops (Inglehart & Welzel, 2005; Thornton, 2005). Given the legislative component of sport betting and betting regulation at the state level, sport organizations should partner with government entities to use sport to help society transition into this new reality. Ample precedent exists where government worked with or utilized sport to achieve a desired result (Popa, 2017; Sotomayor, 2015; Wang, 2015). Furthermore, for sport managers, given the structural and cultural change that, for now, accommodates legal sports betting, an opportunity exists for early adopters to limit an emerging
sport entertainment threat, while also leveraging existing casino relationships to emerge as a leading provider of sport betting for all sport bettors in a given city.

Currently three states (i.e., Nevada, New Jersey, and Pennsylvania) that host NHL and/or NBA franchises legalized sports betting. In both New Jersey and Pennsylvania, existing relationships between sport facilities and casinos suggest that sports betting sites are primed to open in multipurpose indoor facilities. The Prudential Center, home to the NHL’s New Jersey Devils partnered with the sports book William Hill to open a sports lounge in the facility. Though not an official sports betting site, the William Hill Sports Lounge offers video screens and continuously updated betting odds for sports events, while the Prudential Center scoreboard also displays betting odds during games (Parry, 2018). Beyond offering a location to track sports bets in the facility, the William Hill Sports Lounge is open during all Prudential Center events, making the sports lounge available to guests more than 200 days each year (New Jersey Devils, 2018). In Pennsylvania, PPG Paints Arena is partially financed by Majestic Star Casino. This relationship may create opportunities for both the casino and sport facility to further commodify space by incorporating a year-round sports book into PPG Paints Arena. Finally, other sport facilities such as Capital One Arena in Washington, D.C. created sponsorships agreements with casinos. In Capital One Arena, the MGM National Harbor VIP Lounge is an exclusive, casino-sponsored location for wealthy fans (“Capital One Arena VIP,” n.d.).

Proposition 4: Sport managers and facility operators will embrace sports betting by incorporating sports books into the facility footprint.

Full-Service Apps. Related to the notion of sport betting within multipurpose indoor facilities, Carolina Hurricanes majority owner Tom Dundon reportedly invested in the Alliance of American Football to gain control of a sports betting app developed through MGM casinos (Bogage, 2019). The willingness of sport managers to embrace information technology,
particularly service-related apps has grown in importance in recent years. Little Caesar’s Arena incorporated more than 1,000 wireless routers into the facility to enhance customer connectivity (McCollum, 2017). Furthermore, Little Caesar’s Arena offers its own app, District Detroit, which allows customers to engage with the facility in specific modes for basketball, hockey, and other events (Sweeney, 2019). The District Detroit App allows fans to purchase tickets and parking, preorder and prepay for concessions items, in addition to a facility navigation feature (“The District Detroit,” n.d.).

As previously stated, the rise of the internet and information age fundamentally changed how businesses operate and how individuals interact (Harrison, 2010; Oxoby, 2003). The mobile phone device and access to social networks and instant information have emerged in the last decade as sources of recreational and leisure activities. Those types of activities serve a function of standardizing social behaviors and building a cohesive identity (Parsons, 1950; Weber, 2011). Given the ability of sport facilities to also build community identity (Seifried & Clopton, 2013) sport organizations would benefit from capitalizing on the opportunity to strengthen their position as an entity to reinforce not only social behavior, but to reinforce identity and behavior of their fans.

The District Detroit App is one example of a full-service, facility-specific app. Sport franchises gradually embraced mobile applications to engage with their fans and create opportunities to generate revenue (Watkins & Lewis, 2014). Despite the willingness to embrace mobile apps, rather than adopt the full-service facility-specific apps, many teams and facilities partnered with various service apps. Parking for events at Edmonton’s Rogers Place for example is arranged through the app Parking Panda. YinzCam, an app creator, has contracted its services with 21 NBA franchises, three NHL franchises, and five multipurpose arenas to provide enhanced fan experiences through the use of technology (“Our Clients,” 2019). Rather than
contracting with individual service apps or software developers, sport teams and facilities can secure greater profits by creating their own full-service apps. Additionally, these apps should expand on the cashless model adopted by the Tampa Bay Rays in 2019 (Topkin, 2019). Team and facility control of mobile apps can enable organizations to track customer purchasing behavior to create an enhanced customer experience in the facility.

Proposition 5: Sport facilities need to embrace technology by creating full-service apps.

Suggested Future Research

This project explored and documented the history of multipurpose indoor facility construction. Given the expansive time period and number of facilities examined, future research projects regarding the facilities of the NHL and NBA should be undertaken. The adoption of new technologies, especially the ability to make ice artificially, created the opportunity for hockey to be played throughout the year and in locations that otherwise could not offer the sport. Similarly, the adoption of broadcast technologies into facilities like the Maple Leaf Gardens embracing radio broadcasting technology helped create the important remote customer. Therefore, a future project exploring the diffusion of technology through multipurpose indoor facilities would benefit sport management.

The academic exploration of the diffusion of innovations within sport facilities is not without precedent. Tutka (2016) previously studied the diffusion of innovations through major college football facilities, demonstrating the role geography and communication played in the diffusion of innovations. Furthermore, the extant literature on diffusion of innovations also includes the role of social systems and time (Rogers, 2003). The regional nature of the early NHL presents the opportunity to further explore the role of geography and communication in diffusion of urban multipurpose facility innovations. For example, the small size of the league (i.e., six teams in six facilities) from 1942 to 1967 provides a 20-year window for renovation
comparisons. Furthermore, the rapid adoption of basketball via railroads and the YMCA network exists as an interesting case to explore the role of social systems in diffusion.

The examination of specific facilities serves as a second area of future research that should be undertaken. Case studies of the development, design, financing, and construction of urban multipurpose facilities should be viewed as valuable undertakings for their scholarly and pedagogical utility (Stake, 1977). Notably, many of these examinations focused on collegiate football facilities (e.g., Downs & Seifried, in press; Pfleegor & Seifried, in press; Seifried, 2016; Seifried & Tutka, 2016). Limited scholarly work has been completed on specific multipurpose indoor facilities. The work of Seifried and de Wilde (2014) concerning Madison Square Garden III, Field (2002, 2007, 2008) on Maple Leaf Gardens, and Shubert (2011) on the Montreal Forum demonstrate this type of research is valued within sport scholarship. The cases of specific multipurpose facilities should also be explored. Relatedly, an examination of the impact of the Tax Cuts and Jobs Act on facility and construction may be fruitful in the coming years. Williams and Seifried, (2013) outlined the changes federal tax law had on sport facility financing. Given the recent trend of expanded corporate wealth for more than three decades, this new legislation and its impact on wages and disposable income may impact future facility design.

While there are numerous facility case studies to explore, some urban multipurpose facilities with unique stories warrant expedient exploration. Given its current status on the National Register of Historic Places, the Kemper Arena (now Hy-Vee Arena) in Kansas City is a particularly attractive sport management history target. In addition to its historic status, the exploration of the facility would enhance scholarship by explaining the reconstruction renovation treatment, adaptive reuse of a facility, and can be instructive for how facilities and municipalities respond once a major league tenant relocates. Furthermore, the construction of the Sprint Center in Kansas City is also interesting, as the facility was built without a major professional sport
tenant. Such a study may provide insight into why a municipality would construct a tenantless facility. Overall, individual facility development histories are a rich and attractive source of scholarly work with outlets in sport management, sport history, and state history journals.

The investigation of more than a century of sport facility construction yielded many interesting stories and historical figures. Those figures are worthy of scholarly consideration. An examination of the career of Dennis Murphy, the creator of the ABA and WHA among other professional sport leagues would be a worthy endeavor. While Murphy has published his account of his career, his career is worthy of examination by sport scholars (e.g., history and management). Given the fact that Murphy, now aged over 90, is still alive, a study of his work in professional sport can be enhanced by conversation with Murphy as a primary source. Similarly, individuals who owned teams in failed rival leagues may prove to be interesting targets to study. For example, John Bassett and his motivations for ownership of the Birmingham Bulls (WHA), Memphis Grizzlies (World Football League), and Tampa Bay Bandits (United States Football League) would be an interesting case to study related to sport and entrepreneurship. Finally, James E. Norris and his franchise and multiple facility ownership may provide interesting insights into sport management in the Original Six era.

During the 20th century, various underworld elements were noted as being part of the sport industry, as well as sport facility management and operations. Organized crime has been linked to event operations as Delaware North, the current owners of TD Garden and the Boston Bruins, as well as an event concessions organization and financier of Buffalo’s KeyBank Center was convicted of conspiracy for its role in an organized crime purchase of Las Vegas’s Frontier Casino (Affleck, 1996). Tex Rickard operated in the legitimate business world while also working with less scrupulous individuals to grow his sport business and MSG III (Seifried & de Wilde, 2014). Furthermore, the role of known bootlegger and organized crime figure and Bill
Dwyer and his ownership of the NHL’s New York Americans and Pittsburgh Pirates has been mentioned in several hockey histories (e.g., Ross, 2008; Wong, 2005). The historical study of the role of various underworld elements in sport would be a worthy historical study.
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VITA

Benjamin Downs earned his Bachelor of Arts degree as a double major in History and Black Studies from the College of Wooster in 2008. Following graduation Benjamin worked in higher education admissions, as well as college and professional athletics before earning a Master of Science degree in Kinesiology with a concentration in Sport Administration from Mississippi State University. Benjamin has spent the last three years as a Graduate Teaching Assistant and Doctoral Student in Louisiana State University’s (LSU) Sport Management program. Benjamin plans to graduate from LSU with his Doctor of Philosophy degree in Kinesiology in August 2019.