

Identification and Evaluation of Options for the Future of KeyArena

Prepared for:

The Seattle City Council
June 2015



TABLE OF CONTENTS

1.	INTRODUCTION AND EXECUTIVE SUMMARY	8
	INTRODUCTION.....	8
	EXECUTIVE SUMMARY	9
2.	OVERVIEW OF KEYARENA AND SEATTLE CENTER	17
	THE FUTURE OF KEYARENA	17
	KEYARENA OVERVIEW.....	18
	SEATTLE CENTER OVERVIEW	29
	OTHER RELEVANT ISSUES	30
3.	MARKET ANALYSIS: SPORTS AND ENTERTAINMENT.....	32
	CURRENT KEYARENA TENANTS.....	32
	THE COMPETITIVE ENVIRONMENT FOR FACILITIES AND EVENTS	34
	OTHER STAKEHOLDER FEEDBACK	44
	COMPARABLE FACILITIES.....	46
4.	NBA AND NHL OVERVIEW.....	58
	NATIONAL BASKETBALL ASSOCIATION.....	58
	NATIONAL HOCKEY LEAGUE.....	72
5.	OTHER POTENTIAL ENTERTAINMENT USES	86
	REVIEW OF AVAILABLE MARKETS	86
	EVALUATION OF SEATTLE ATTRACTIONS MARKET	95
	ARENA REUSE PROJECTS	98
	EVALUATION OF ENTERTAINMENT AND ATTRACTION ALTERNATIVES	102
	SUMMARY OF MARKET ANALYSIS FOR SCENARIO D.....	114
6.	PHYSICAL ANALYSIS.....	116
	SCENARIO A – MAINTAIN KEYARENA.....	116
	SCENARIO B – WITH MAJOR PROFESSIONAL TENANT; NO NEW ARENA IN SEATTLE.....	116
	SCENARIO C – REPURPOSE AS AN ENTERTAINMENT VENUE	131
	SCENARIO D – OTHER USER GROUPS.....	134
	ESTIMATED COSTS.....	135
7.	FINANCIAL ANALYSIS.....	137
	SCENARIOS A THROUGH C – SPORTS/ENTERTAINMENT OPTIONS	137
	SCENARIO D – REPURPOSING OPTION	155
8.	HOUSING POTENTIAL	159
	DRIVERS OF DEMAND.....	159
	SUPPLY METRICS.....	160
	DEVELOPMENT CONDITIONS	166
	WORKFORCE HOUSING	167
	CAPACITY ANALYSIS.....	168
	CONCLUSION.....	168

LIST OF TABLES

Table 1: Estimated Project Costs (\$000s).....	13
Table 2: Forecasted Annual Events for Scenarios A-C.....	14
Table 3: Forecasted Total Annual Attendance for Scenarios A-C	14
Table 4: Forecasted Revenues and Expenses for Scenarios A-C, 2024.....	15
Table 5: KeyArena Events and Attendance, 2010-2013.....	20
Table 6: KeyArena Revenues and Expenses, 2010-2014 (\$000s).....	21
Table 7: KeyArena Subcommittee Conclusions.....	27
Table 8: “New Arena – Imagine the Future” Recommended Improvements.....	28
Table 9: KeyArena Five-Year Business Plan Goals.....	28
Table 10: Tacoma Dome Events and Attendance	37
Table 11: ShoWare Center Events and Attendance	38
Table 12: Xfinity Arena Attendance.....	39
Table 13: Local and Regional Amphitheaters	41
Table 14 : NBA Arena Characteristics and Attendance	59
Table 15: NBA Arena Funding	60
Table 16: NBA Arena Ownership and Management	61
Table 17: NBA Franchise Financial Metrics	66
Table 18: NHL Arena Characteristics.....	74
Table 19: NHL Arena Funding	75
Table 20: NHL Arena Ownership and Management	76
Table 21: NHL Franchise Financial Metrics	79
Table 22: Summary of Available Markets	93
Table 23: Seattle Attractions Characteristics and Performance Metrics.....	97
Table 24: Results of Screening Process (1 of 2).....	105
Table 25: Results of Screening Process (2 of 2).....	105
Table 26: Estimated Project Costs (\$000s).....	136
Table 27: Projected Annual Events, Scenarios A-C.....	139
Table 28: Projected Average Paid Attendance, Scenarios A-C	139
Table 29: Projected Total Paid Attendance, Scenarios A-C	140
Table 30: Turnstile to Paid Attendance, Scenarios A-C.....	140
Table 31: Average General Admission Ticket Prices, Scenarios A-C.....	141
Table 32: Assumed Rents, Scenarios A-C.....	142
Table 33: Facility Surcharge, Scenarios A-C	142
Table 34: Ticketing Fees, Scenario A-C	143
Table 35: Per-Capita Concessions Spending, Scenarios A-C.....	144
Table 36: Per-Capita Catering Spending, Scenarios A-C	144
Table 37: Per-Capita Program/Novelty Spending, Scenarios A-C.....	145
Table 38: Per-Event Arena Expenses, Scenarios A-C.....	148
Table 39: Financial Proforma, Scenario A1 (\$000s)	150

Table 40: Financial Proforma, Scenario A2 (\$000s)	151
Table 41: Financial Proforma, Scenario B1 (\$000s)	152
Table 42: Financial Proforma, Scenario B2 (\$000s)	153
Table 43: Financial Proforma, Scenario C (\$000s)	154
Table 44: Preliminary Financial Analysis for Hypothetical Attraction Concepts	157
Table 45: Attraction Concepts: National and Local	169

LIST OF FIGURES

Figure 1: NBA Team Map	58
Figure 2: MSA Population by NBA Team	67
Figure 3: 2013-18 Population Growth in NBA MSAs	67
Figure 4: 2013 Median Age in NBA MSAs	68
Figure 5: 2013 Median Household Income in NBA MSAs (US)	68
Figure 6: 2012 Number of Firms in NBA MSAs (US)	69
Figure 7: 2011 Share of Firms with More than 500 Jobs (US)	69
Figure 8: 2013 City Population by NBA Team	70
Figure 9: 2013-18 Population Growth in NBA Cities (US)	70
Figure 10: 2013 Median Age in NBA Cities	71
Figure 11: 2013 Median Household Income in NBA Cities (US)	71
Figure 12: NHL Team Map	73
Figure 13: 2013 MSA Population by NHL Team	81
Figure 14: 2013-18 Population Growth in NHL MSAs (US)	81
Figure 15: 2013 Median Age in NHL MSAs	82
Figure 16: 2013 Median Household Income in NHL MSAs (US)	82
Figure 17: 2012 Number of Firms in NHL MSAs (US)	83
Figure 18: 2012 Share of Firms with More than 500 Jobs (US)	83
Figure 19: 2013 City Population by NHL Team	84
Figure 20: 2013-18 Population Growth in NHL Cities (US)	84
Figure 21: 2013 Median Age in NHL Cities	85
Figure 22: 2013 Median Household Income in NHL Cities (US)	85
Figure 23: Map of Resident Market Segments for Seattle Center	87
Figure 24: Comparison of Available Resident Market to Seattle MSA and King County Population	87
Figure 25: Historic Population Growth by County	88
Figure 26: Seattle Resident Market Age Profile, 2014	88
Figure 27: Seattle Resident Market Median Household Income Comparisons, 2014	89
Figure 28: Seattle Resident Market Educational Attainment (age 25+), 2014	89
Figure 29: Total Overnight Visitors to Seattle, 1998-2013	90
Figure 30: Total Visitors by Origin, 2013	90
Figure 31: Overnight Visitors Season of Trip, 2013	91
Figure 32: Overnight Visitors Length of Stay, 2013	91
Figure 33: Visitor Composition, 2013	92
Figure 34: Overnight Visitors Educational Attainment, 2013	92
Figure 35: Overnight Visitors Household Income, 2013	92
Figure 36: Overnight Visitors State of Origin, 2013	92
Figure 37: Activities and Experiences, 2013	93
Figure 38: Aggregate Attraction Attendance per Capita by Market	98

Figure 39: Potential Attraction Concepts for Evaluation.....	103
Figure 40: Estimate of Available SF for KeyArena Reuse	103
Figure 41: Scoring for Initial Concepts	104
Figure 42: Evaluation of Potential Attraction Concepts.....	106
Figure 43: Households in Seattle	159
Figure 44: Growth Rates, 2014-2019	160
Figure 45: Residential Permits in Seattle, 1998-2013.....	160
Figure 46: Residential Permits by Type in Seattle, 1998-2013	161
Figure 47: Map of Developments in Seattle	161
Figure 48: Historic and Projected Residential Deliveries in Downtown Seattle	162
Figure 49: Renters vs. Owners, Seattle and Uptown	162
Figure 50: Renter's Share of Income for Rent	163
Figure 51: Multi-Family Submarket	163
Figure 52: Multi-family Submarket Inventory.....	164
Figure 53: Multifamily Unit Mix in Submarket and Seattle Metro	164
Figure 54: Vacancy Rates	165
Figure 55: Average Rent	165
Figure 56: Pricing at Luma Condominium Project.....	166

GENERAL AND LIMITING CONDITIONS

Every reasonable effort has been made to ensure that the data contained in this report are accurate as of the date of this study; however, factors exist that are outside the control of AECOM and that may affect the estimates and/or projections noted herein. This study is based on estimates, assumptions, and other information developed by AECOM from its independent research effort, general knowledge of the industry, and information provided by and consultations with the client and the client's representatives. No responsibility is assumed for inaccuracies in reporting by the client, the client's agent and representatives, or any other data source used in preparing or presenting this study.

This report is based on information that was current as of June 2015, and AECOM has not undertaken any update of its research effort since such date.

Because future events and circumstances, many of which are not known as of the date of this study, may affect the estimates contained therein, no warranty or representation is made by AECOM that any of the projected values or results contained in this study will actually be achieved.

Possession of this study does not carry with it the right of publication thereof or to use the name of "AECOM" or "Economics Research Associates" in any manner without first obtaining the prior written consent of AECOM. No abstracting, excerpting, or summarization of this study may be made without first obtaining the prior written consent of AECOM. Further, AECOM has served solely in the capacity of consultant and has not rendered any expert opinions. This report is not to be used in conjunction with any public or private offering of securities, debt, equity, or other similar purpose where it may be relied upon to any degree by any person other than the client, nor is any third party entitled to rely upon this report, without first obtaining the prior written consent of AECOM. This study may not be used for purposes other than that for which it is prepared or for which prior written consent has first been obtained from AECOM. Any changes made to the study, or any use of the study not specifically prescribed under agreement between the parties or otherwise expressly approved by AECOM, shall be at the sole risk of the party making such changes or adopting such use.

This study is qualified in its entirety by, and should be considered in light of, these limitations, conditions, and considerations.

1. Introduction and Executive Summary

INTRODUCTION

The Seattle City Council retained a team consisting of AECOM, J.E. Isaac Consulting, Studio 3MW, and Magnusson Klemencic Associates to identify and evaluate a range of future options for the current KeyArena site. This study was commissioned to help determine the future of the arena, should a new NBA and/or NHL arena be built in Seattle in the next decade; however, the study also explores scenarios that assume that a new arena is not built. Under all scenarios, the City's goal is to maintain the site as financially viable and continue to attract visitors to Seattle Center and contribute to the vitality of the campus.

The scenarios studied in this report are as follows (all scenarios assume a level of renovations to the arena):

- **Scenario A1:** KeyArena becomes Seattle's secondary large arena; this assumes that a new, NBA/NHL-quality arena is built in SoDo.
- **Scenario A2:** KeyArena remains as Seattle's primary large arena, and no new arena is built elsewhere in the city. Also, any improvements to Key would not bring it to NBA or NHL standards.
- **Scenario B1:** KeyArena is renovated in such a way that it would be able to host NBA and/or NHL tenants. This also assumes that no new similar arena is built in Seattle.
- **Scenario B2:** is the same as B1 but also assumes that an NBA tenant plays in the arena.
- **Scenario C:** KeyArena is repurposed as an entertainment venue but not one that would necessarily serve its current tenants in a full-bowl configuration. This also assumes that a new arena is built in SoDo.
- **Scenario D:** KeyArena is repurposed as a different sort of attraction that remains consistent with Seattle Center's purpose statement.

The attached report contains the results of all research and analysis; this section summarizes the results.

EXECUTIVE SUMMARY

KEYARENA AND SEATTLE CENTER

- KeyArena opened in 1962 as part of Seattle's hosting of the World Fair and was the longtime home of the NBA's Seattle Sonics. The facility is an important part of Seattle Center, the 74-acre campus that hosts 12 million visitors per year. The arena has a seating capacity of approximately 17,000 for basketball, 15,200 for hockey, and 16,600 for concerts. The arena's current tenants are Seattle University basketball, the WNBA's Storm, and the Rat City Rollergirls.
- In 1994-95, the arena received more than \$100 million in renovations that were aimed to maintain and improve its ability to host major sports and entertainment events, including the Sonics. Nearly ten years later, a \$200-million plan would have brought Key to then-current NBA standards, provide the ability to generate increased revenues, and add other improvements that were identified as needed by tenants. However, these improvements were never made, and in 2008, following an unsuccessful effort to secure funding for renovations, the Sonics left Seattle for Oklahoma City.
- In recent years, the arena has hosted approximately 100 events per year and more than 550,000 attendees. In addition to its tenants, Key hosts other major sports and entertainment events, concerts, family shows, graduations, private events, and in conjunction with the rest of the Seattle Center campus, events such as the Bumbershoot Festival and Folklife Festival.
- In recent years, the arena's operating revenues have exceeded its operating expenses, and these profits are an important source of funding that supports other Seattle Center operations. (KeyArena does not capture any parking revenues associated with its events, and does not account for the full value of labor expense that it uses; both of these items are recognized by Seattle Center).
- In general, any modification of Key could potentially be limited by its roof, which could be designated as a landmark. Any expansion of the arena would also be limited by the roof's support structure. Inside the facility, the arena is generally in good condition but is dated. Also, much of its footprint is underutilized, particularly in the corners. The current configuration of the arena precludes it from hosting NHL hockey but otherwise provides a great experience for other sports and entertainment events.
- Over the years, a number of other studies have analyzed Key's physical condition and other characteristics. Consistent findings include the general need to make improvements and modernize the arena, its small size and inability to generate revenues compared to other peer NBA arenas, and to identify funding sources for improvements.

THE SPORTS AND ENTERTAINMENT MARKET

- In 2012, the City executed a Memorandum of Understanding with King County and ArenaCo for the development of a new, NBA-quality arena in the SoDo neighborhood. The 700,000-square foot, \$500-million facility would seat approximately 18,500 for basketball. Costs would be shared by the City, County, and private ArenaCo and construction would depend on ArenaCo's ability to obtain an NBA franchise.
- The Seattle area is a very competitive market for sports and entertainment venues. There are a number of major arenas, theaters, amphitheaters, and convention/meetings facilities in the area. Key's niche and strengths within the local competitive environment include its downtown location, its reserved seating capacity, and its sightlines and intimate feel.
- Feedback from stakeholders, such as arena tenants and event promoters, include the following:
 - Key's weaknesses and limitations include the expense of using the arena (including non-negotiable terms and union labor), its limited concourse, backstage, rigging, and loading facilities, and seating configuration.
 - In the future, Seattle will continue to need a major indoor arena such as Key; however, two such arenas are not considered to be viable.
 - Downtown Seattle is lacking a mid-sized arena as well as a larger theater (both in the 5,000- to 7,000-seat range).
- We evaluated the offerings of a range of facility types of other, similar markets:
 - **Large, secondary arenas without major professional sports** tenants: there is a limited supply of these venues in the country, and they generally appear in the largest of markets. However, they can be profitable.
 - **Mid-sized, secondary arenas:** many larger markets have such a facility. While they serve a niche for smaller events, they are typically not as profitable as larger arenas.
 - **Large, primary civic arenas without major professional sports:** in markets without NBA or NHL teams, there are a number of arenas that are of an NBA/NHL quality and size. Their usage profile can be similar to that of KeyArena, and they can also be profitable.
 - **Large, primary arenas with major professional sports:** NBA and NHL arenas will host well over 100 events and one million attendees per year. While they can generate significant revenues, the profitability of the facility to a public-sector partner will depend heavily on the cost- and revenue-sharing agreement with its NBA/NHL tenant.

- **Theaters:** markets the size of Seattle typically have multiple theaters, and Seattle currently has Benaroya Hall and, at Seattle Center, McCaw Hall. Theaters in other markets typically host a wide variety of events but are not necessarily significant profit centers.

NBA-NHL ANALYSIS

- The average NBA and NHL arena is approximately 20 years old and has a capacity of more than 18,000 seats. (Many arenas have both an NBA and NHL tenant.) The average cost of an NBA or NHL arena is roughly \$300 million, and on average, the public sector has contributed approximately 45 to 50 percent of costs.
- In the NBA, neither expansion nor relocation of an existing franchise is considered likely in the near future. In recent years, multiple teams have been considered candidates to relocate but all have found long-term solutions in their home market. The Milwaukee Bucks are currently under new ownership and appear headed towards a new arena solution that will keep them in Milwaukee, but funding and site issues have yet to be determined. Should an expansion or relocated team seek a new market, other cities such as Las Vegas, Kansas City, and others have facilities that could accommodate a team.
- In the NHL, similar to the NBA, expansion is not considered to be a near-term possibility, and a number of teams have recently been candidates for relocation but none currently appear to be imminent threats to leave their home market. However, the league's current alignment may provide for the opportunity to add two new western franchises through relocation. And similar to the NBA, markets other than Seattle (including Bellevue and Tukwila in suburban Seattle) have shown a desire to compete for franchises.
- At the city and metro level, Seattle is a relatively small market but has a high income level, compared to other NBA and NHL markets.

THE MARKET FOR OTHER POTENTIAL KEYARENA USES

Major findings from AECOM's market analysis for Scenario D, alternative entertainment uses for KeyArena, include the following:

- **Available Markets** – Seattle resident and tourist markets are large and high quality. The majority of the resident market population is within a one-hour drive (i.e. the primary market), which is favorable. Income and education levels for residents and tourists are very strong, and tourism has experienced steady growth. The tourist market is comprised of primarily leisure tourists, including a large number of people visiting friends and relatives. There is significant peaking of tourists in

the summer, which may result in larger than typical visitor areas for attractions to accommodate seasonality patterns.

- **Existing Seattle Attractions** – Seattle has a large number of visitor attractions, ranging from major “must-see” attractions such as the Space Needle that draw over 1 million visitors annually to many specialty museums that attract fewer than 100,000 visitors per year. Overall, attractions in Seattle perform very well, with strong attendance, resident, and tourist market penetration rates. The pricing at Seattle attractions is particularly strong, with pricing at even mid-tier and specialty attractions relatively higher than other similar markets. Seattle has a broad range of attractions as well, with most major product types represented. A review of aggregate attractions attendance compared to market size compared to other cities indicates that Seattle is generally well-supplied with respect to attractions. In order for a new attraction to perform well, it would need to have a strong concept suitable for the market and be well-located.
- **Arena Reuse** – We examined a number of arenas that were no longer used for sports or concerts. Most that are no longer used have been torn down and replaced with mixed-use entertainment or commercial projects. A few facilities have been re-purposed with a mix of private real estate uses and entertainment, but there are no examples of re-purposed arena facilities that have been repurposed without some type of market rate real estate development. Generally speaking, purpose built facilities such as arenas do not work well for attractions, as the cost to maintain and operate the facilities often cannot be supported by an attraction. While there are no shortage of entertainment concepts, entertainment uses and attractions typically serve as anchors for attracting visitors and their spending, and the value is captured through surrounding real estate uses. It is our understanding that such uses may be incompatible with current goals for Seattle Center and the KeyArena facility. Furthermore, the cost to develop other uses within arenas is often prohibitive due to deferred maintenance issues and building suitability challenges.
- **Potential Entertainment Concepts** – There are a number of entertainment concepts that may be suitable for the KeyArena site from a mission and high-level market perspective. We evaluated a large number of attraction concepts for compatibility with the Seattle Center purpose statement, ability to attract residents and visitors and contribute to the overall vitality of Seattle Center, public access, and financial viability. We eliminated attractions which are well-represented in the Seattle market or would not fit in the KeyArena facility. Concepts which met these criteria included: an indoor sports adventure park, a high tech edutainment attraction, an IP-based attraction, a STEM or “maker” center, and a dinner theater attraction.

The Seattle market is well-supplied with attractions and entertainment venues. While there could be potential for well-located attractions that are suitable to the market, the challenge in locating within the existing KeyArena facility is likely to be financial viability.

KEYARENA PHYSICAL ANALYSIS

- In general, under Scenario A1, we recommend an interior renovation of Key that would upgrade its amenities and finishes. This would not involve any major reconfiguration of the facility or seating bowl modifications.
- In Scenario A2, an improvement program would be similar to that of Scenario A1 but would be slightly more involved, due to Key's assumed position as the market's primary large arena. This could include improvements to fan experience opportunities and the arena's ability to generate revenues, in order to more closely resemble a modern arena.
- Scenarios B1 and B2 would require a more significant renovation to enable it to host NHL hockey and/or NBA basketball. We have identified seating bowl reconfigurations that would accommodate both types of tenants, and appropriate levels of other square footage and amenities. We have also identified necessary modifications to the annex building on the arena's south side to accommodate non-gameday functions.
- Scenario C includes dividing the current arena into two, separated event facilities – a smaller arena with a maximum permanent seating capacity of approximately 10,000 with a horseshoe seating bowl, and a theater with approximately 2,000 permanent seats. This reconfiguration would require the creation of a dividing wall and backstage system to acoustically separate the two venues so that multiple simultaneous events could be held.
- In Scenario D, eliminating the arena bowl would leave the 360 x 360 footprint to be configured for a number of other potential uses. The event, mezzanine, main concourse, and premium levels all offer between approximately 75,000 and 125,000 square feet.
- Estimated project costs for these scenarios, as well as demolition costs for the arena, are summarized below.

Table 1: Estimated Project Costs (\$000s)

	Scenario A1	Scenario A2	Scenario B1/B2	Scenario C	Scenario D	Demolition
Recommended Construction Budget	\$ 80,398	\$ 120,006	\$ 228,006	\$ 119,817	\$ 80,945	\$ 5,393
Soft Costs - 25%	20,099	30,001	57,002	29,954	20,236	1,348
Recommended Project Budget	\$ 100,497	\$ 150,007	\$ 285,008	\$ 149,771	\$ 101,181	\$ 6,742

Source: AECOM

DEMAND AND FINANCIAL ANALYSIS

We have evaluated the potential usage and operations of all scenarios considered in this report. The results of our forecasts are summarized below.

Scenarios A-C (Sports and Entertainment Facility)

- Annual events and total attendance for the first ten years are shown below for each scenario.

Table 2: Forecasted Annual Events for Scenarios A-C

	Scenario A1	Scenario A2	Scenario B1	Scenario B2	Scenario C
NBA	0	0	0	45	0
NHL	0	0	45	45	0
Storm	0	18	18	18	0
Rollergirls	8	8	0	0	0
Seattle University	0	16	16	16	16
Concerts	8	22	18	15	20
Family Shows	2	4	4	2	4
Other Entertainment	6	10	8	4	10
Other Sports	6	10	10	6	8
Graduations	6	8	6	2	8
Other - Private	4	4	4	2	10
Other - Major/Public	4	8	6	2	4
Total	44	108	135	157	80

Source: AECOM

Table 3: Forecasted Total Annual Attendance for Scenarios A-C

	Scenario A1	Scenario A2	Scenario B1	Scenario B2	Scenario C
NBA	0	0	0	720,000	0
NHL	0	0	675,000	675,000	0
Storm	0	72,000	72,000	72,000	0
Rollergirls	22,400	22,400	0	0	0
Seattle University	0	24,000	24,000	24,000	24,000
Concerts	40,000	242,000	198,000	165,000	60,000
Family Shows	6,000	14,000	14,000	7,000	10,000
Other Entertainment	18,000	47,500	38,000	19,000	30,000
Other Sports	24,000	60,000	60,000	36,000	40,000
Graduations	27,000	36,000	48,000	24,000	64,000
Other - Private	1,200	1,200	1,200	600	10,000
Other - Major/Public	24,000	48,000	36,000	12,000	24,000
Total	162,600	567,100	1,166,200	1,754,600	262,000

Source: AECOM

- Based on a wide range of assumptions regarding rental rates, ticket prices, attendee spending, event expenses, and other financial terms, as well as the forecasted events and attendance, we have forecasted the future operating revenues and expenses of each scenario, as summarized below. Forecasts are also based on the actual operations of similar facilities and the past operations of KeyArena.

The table below shows all forecasted operating revenues and expenses of the facility for its fifth year after improvements are made (which is assumed to be 2024).

Table 4: Forecasted Revenues and Expenses for Scenarios A-C, 2024

	Scenario A1	Scenario A2	Scenario B1	Scenario B2	Scenario C
Operating Revenues (Net)					
Rent	\$740	\$563	\$4,394	\$8,347	\$955
Reimbursements	1,440	3,729	4,847	5,696	2,054
Ticketing	406	2,883	2,291	1,778	586
Concessions	452	1,715	1,411	1,014	642
Programs & Novelties	71	306	251	191	103
Naming Rights	197	1,299	0	0	259
Premium Seating	397	1,095	0	0	646
Sponsorship	240	395	749	999	240
Other	79	240	279	360	110
Total Operating Revenues	\$4,023	\$12,226	\$14,221	\$18,385	\$5,595
Operating Expenses					
Event Expenses	\$2,285	\$5,920	\$7,693	\$9,042	\$3,260
Non-Event Expenses	1,371	2,664	3,462	4,069	1,467
Utilities	500	656	2,498	3,747	624
Major Maintenance	125	125	125	156	125
Taxes	101	306	356	460	140
Total Operating Expenses	\$4,382	\$9,670	\$14,133	\$17,473	\$5,616
Net Operating Income	(\$359)	\$2,556	\$89	\$912	(\$21)

Source: AECOM

- **Scenario A1:** We project an annual operating deficit of approximately \$350,000 in Scenario A1, due to decreased overall usage of the arena, and in particular, the loss of many higher-rated events to a new arena in SoDo. Over the ten-year period, the estimated loss ranges from approximately \$220,000 to \$510,000 per year.
- **Scenario A2:** in this scenario, we project a profit of approximately \$2.6 million in 2024, based primarily on the ability of Key to generate increased revenues compared it its current condition. Over the ten years, annual profits range from \$2.4 million to \$2.7 million.
- **Scenario B1:** with an NHL team as an anchor tenant of KeyArena, we estimate that the facility will approximately break even. Although the arena would experience increased usage in this scenario, we assume that many significant revenue streams would be captured by the team rather than the arena. In the ten-year period, we forecast small operating profits in the first six years (no more than \$270,000) followed by losses ranging up to approximately \$150,000.

- **Scenario B2:** in this scenario, we assume the arena would benefit from the overall additional usage of the facility due to the NBA tenant. However, because of the NBA schedule, we also assume that the number of other events that are more profitable to the arena will decrease. We forecast operating profits of \$725,000 to \$1.1 million per year.
- **Scenario C:** in this scenario, we assume a small operating profit or deficit in each of the first ten years, ranging from a deficit of approximately \$160,000 to a profit of approximately \$80,000.

Scenario D (Repurposed Facility)

While attractions can be positive revenue generators, they also function to create value for surrounding real estate. The financial analysis of alternative entertainment uses for KeyArena indicates that the revenue that could be generated from other attraction concepts is largely offset by the additional costs of basic operations and maintenance of the KeyArena facility. The attractions cannot support this cost, as their business model does not support ancillary occupancy costs and cannot typically cross subsidize other site costs. Combining two or more attraction concepts may be feasible, but the development costs of adapting KeyArena to be suitable will also not be supported by the revenue from the attractions.

- Attractions are often profitable, but do not typically generate revenues that private real estate or commercial development can. Instead, they tend to act as anchors that enhance and create value in surrounding properties. If the City as landowner does not create real estate opportunities that allow this value to be captured,
- There is market potential for a range of attractions and entertainment venues, but most of them will not maintain the current KeyArena net contribution to Seattle Center.
- We reviewed a wide range of attraction types, from dinner theaters to STEM incubator and educational centers to sports adventure parks and high technology cultural attractions. While the inputs and business models are very different for all of these, with very different attendance estimates, pricing models, and operating margins, the “bottom line” was very consistent. All of the attractions generated between \$500,000 and \$1.2 million of revenue for the City annually, before considering the additional cost of maintaining the KeyArena facility.
- After the cost of operating KeyArena is considered, the net revenue for the City was either negative or very modest, due primarily to the cost of maintaining the arena facility for uses that underutilize the facility. While it may be possible to combine some of these concepts to generate more revenue or develop a strategic partnership with one entity (i.e. the Bass Pro Shops in the Memphis Pyramid), it is our opinion that if sports or concert uses are not viable, these are not likely to fulfill the stated goals and the City may want to consider a broader approach to assessing site opportunities that do not necessarily involve keeping the existing structure.

2. Overview of KeyArena and Seattle Center

In this section, we first describe the potential future scenarios that will be analyzed for KeyArena and the goals that will guide our analyses. We then provide a comprehensive overview of the facility and the environment in which it operates (including the Seattle Center campus).

THE FUTURE OF KEYARENA

The primary intent of this study is to identify and evaluate a range of future use options for the KeyArena site. In general, the City of Seattle's goal is to maintain the arena site as a financially sustainable facility that will continue to attract visitors to Seattle Center and contribute to the vitality of the campus.

The impetus for this study is the City's goals as stated above and its need for information and recommendations on the optimal future usage of KeyArena, both under current competitive conditions and assuming that a new NBA/NHL arena is built pursuant to the 2012 Memorandum of Understanding between the City, King County, and WSA Properties III ("ArenaCo").

The specific scenarios to be analyzed in this study are as follows:

A. Maintain KeyArena:

A1. In a configuration that is suitable for its current basketball tenants and comparable sporting events as well as for concerts, family shows, and other events suited to the "full bowl" layout. *This scenario assumes that the SoDo arena is built and that KeyArena would serve as a "secondary" arena in the market.*

A2. Similar to Scenario A1, but assume that *the SoDo arena is not built in the next decade* and that KeyArena remains as the City's primary large arena venue. This also assumes that any improvements to KeyArena will not bring it up to NBA or NHL standards.

B. No new arena is built in the City for a major professional sports tenant(s) in the next decade *and KeyArena is renovated in such a way that it would be able to host a major professional sports tenant(s).*

B1. This scenario assumes that the arena secures an NHL franchise.

B2. This scenario assumes that the arena has both an NHL franchise as well as an NBA franchise.

C. Repurpose KeyArena in a manner that maintains the facility as an entertainment venue but not one that *would necessarily serve the WNBA, college basketball, or other tenants requiring a “full bowl” configuration.*

D. Other approaches to repurposing the KeyArena site that would be financially feasible for the City, draw visitors to the Seattle Center, and offer consistency with Seattle Center’s purpose statement, which is to “create exceptional events, experiences and environments that delight and inspire the human spirit to build stronger communities.” *These options would not need to accommodate existing tenants of KeyArena.*

We further assume that no other large arena that can accommodate major professional sports is built in the Seattle area in the near future.

The criteria to be used to evaluate the feasibility of the development scenarios described above are:

- **Financial viability** – Will the identified reuse options allow the KeyArena site to cover its ongoing operational and maintenance costs (including periodic major maintenance) as well as generate positive net revenues that are sufficient to offset some share of Seattle Center’s overall operating expenses? What level of capital investment will be needed to implement the proposed improvements? What funding sources exist for such improvements and can the facility generate the necessary revenues to cover any associated debt service? Is it realistic to expect the KeyArena site to generate a profit for Seattle Center?
- **Contribution to the overall vitality of Seattle Center** – Will the refurbished or repurposed KeyArena site complement the other elements of Seattle Center and help draw a significant number of users to the campus’s other facilities, tenants, and services? Under what configurations would the KeyArena site draw the most people to the Seattle Center campus?
- **Appeal to tourists and local residents** – Will the proposed future use for the KeyArena site attract local residents as well as tourists? Will it offer dynamic attractions that encourage multiple visits from individual patrons?
- **Other criteria** identified by the Consultant and approved by the City.

KEYARENA OVERVIEW

HISTORY, USAGE, AND OPERATIONS



KeyArena first opened in 1962 as part of Seattle’s World’s Fair and is located north of downtown, within Seattle Center. The arena was the primary home of the NBA’s Seattle Sonics until the franchise moved to Oklahoma City in 2008.

The arena has a seating capacity of approximately 17,000 for basketball, 15,200 for hockey, and 16,600 for a typical end-stage concert. The arena's current tenants are Seattle University basketball, the WNBA's Seattle Storm, and the Rat City Rollergirls. In addition to the Sonics, other past sports tenants included multiple minor-league hockey and soccer teams.



A timeline of significant events and milestone's in KeyArena's history include the following:

- **1962** – KeyArena opened as the Washington State Coliseum for the World's Fair.
- **1967** – The SuperSonics began playing at the arena.
- **1994-95** – The arena was renovated in order to maintain and improve its ability to host major sports and entertainment events, including NBA games. The \$104-million project included approximately \$73 million in City funds that would be repaid by increased arena revenues. Specific improvements included an increased seating capacity, lowering the event floor by 35 feet, a permanent rigging grid, premium seating, and a parking garage.
- **2003** – The City and SuperSonics committed to a next round of major improvements, which resulted in the "KeyArena Concept Plan." The Plan identified \$200 million (in 2005 prices) in renovations that would bring the facility to then-current NBA standards, generate increased revenues, and provide other improvements needed by tenants. However, the improvements were never made.
- **Fall 2008** – Following an unsuccessful attempt to secure State funding for an arena renovation, the Sonics relocated to Oklahoma City after being sold to a local group.
- **2012** – The City, King County, and a private group led by Seattle native Chris Hansen signed a memorandum of understanding to develop a new NBA-quality arena in SoDo, near CenturyLink Field and Safeco Field.

KeyArena Operations

Currently, the arena has three tenants – the WNBA’s Seattle Storm, Seattle University men’s basketball, and the Rat City Rollergirls. The facility is owned and operated by the City/Seattle Center, but has major contracts with two private partners:

- AEG – sells the arena’s premium seating and sponsorships, and staffs the suite concourse, and
- Levy Restaurants – provides food and beverage service.

AEG was hired by the City in 2009, the first full year after the Sonics left KeyArena; Levy took over for Aramark, the arena’s previous concessionaire, in 2010. Both contracts end in 2015.

Events and Attendance

The following table shows the arena’s range of annual events and attendance for the four full years since 2009 (a full year after the Sonics and Thunderbirds left the facility).

Table 5: KeyArena Events and Attendance, 2010-2013

	# of Events			Average Attendance			Total Attendance		
	Minimum	Average	Maximum	Minimum	Average	Maximum	Minimum	Average	Maximum
Storm	18	20	22	3,543	4,609	5,532	63,768	92,182	121,704
Rollergirls	5	6	8	2,827	4,112	5,110	14,136	26,316	34,524
Seattle University	5	14	19	1,153	1,863	2,793	13,697	25,336	33,510
Concerts	15	21	27	8,406	9,384	9,924	126,087	193,303	241,799
Family Shows	0	2	11	2,858	2,858	2,858	0	6,287	31,435
Other Entertainment	2	6	14	4,042	4,927	6,866	13,731	28,577	56,586
Other Sports	2	6	12	4,481	5,907	9,259	18,518	37,808	60,674
Graduations	5	7	10	3,672	4,462	5,525	25,704	32,123	45,736
Other - Major/Public	5	10	14	4,027	5,610	9,180	38,353	53,860	72,415
Other - Private	1	4	6	0	293	441	0	1,054	2,645
Total	80	95	105				405,633	496,845	578,042

Source: City of Seattle, AECOM

- Overall event levels have ranged between 80 and 105 per year, and there have been significant variations within individual event categories.
- Total attendance has also varied (between approximately 405,000 and 578,000), and individual event types have also seen significant year-to-year changes, due to changes in both event levels as well as average attendance.
- Many smaller events use a cut-down capacity with curtaining that closes off the upper deck.
- Since the Thunderbirds left the arena, the ice has been used only a few times (for an annual Stars on Ice Show, a Disney show, and public skating).
- AEG Live is currently the arena’s most frequent promoter, followed by Live Nation.

Financial Performance

The following table summarizes the arena’s revenues and expenses for its last five years.

Table 6: KeyArena Revenues and Expenses, 2010-2014 (\$000s)

	2010	2011	2012	2013	2014
Revenues					
General Fund/Admissions Tax	\$1,449	\$0	\$0	\$0	\$0
Rent	953	973	226	480	455
Reimbursements	2,009	2,024	2,176	2,801	2,776
Ticketing	1,296	1,492	1,845	2,196	1,828
Concessions	529	826	1,100	1,064	814
Programs & Novelties	184	142	228	292	180
Naming Rights	300	0	0	0	0
Premium Seating	189	297	783	885	735
Sponsorship	62	15	168	94	336
Other	95	104	72	308	321
Total	\$7,066	\$5,873	\$6,596	\$8,121	\$7,445
Expenses					
Event Expenses	\$3,248	\$3,480	\$3,562	\$4,380	\$4,116
Non-Event Expenses	1,648	1,445	1,633	1,719	1,919
Utilities	429	413	452	502	510
Major Maintenance	135	70	116	121	159
Taxes	138	156	196	197	161
Total	\$5,598	\$5,564	\$5,959	\$6,919	\$6,865
Net Income	\$1,468	\$309	\$637	\$1,202	\$579
Excluding General Fund Revenues	\$19	\$309	\$637	\$1,202	\$579

Source: City of Seattle

It is important to note that these line items do not include all revenues or expenses that are associated with the arena's operations. Most significantly, the arena does not capture any parking revenues associated with its events (this spending is considered a Seattle Center revenue stream, and it is not possible to separately identify parking revenues generated by KeyArena attendees compared to other parking lot users). In addition, the arena's expenses do not include indirect labor from other Seattle Center staff that could otherwise be allocated to KeyArena. According to Seattle Center and arena representatives, the arena's share of parking revenues would exceed its share of indirect labor used. Also, since the arena's debt has been retired, the revenues that repaid the debt have been removed from its financial statements.

Physical Characteristics

External

The physical review of the facility outlined in both previous studies and in this assessment has identified a couple of consistent and relevant issues. The facility appears to have a historic roof, not in the sense that it has been classified through a formal process and designation as a historical landmark, but in the sense that many in the Seattle area consider this arena and its iconic structure to be historic in their minds. While simply an assumption and opinion, it was strongly believed that if a major project was to be undertaken at the facility that it may obtain



historical landmark status as a result of that project. The roof inherently produces the next challenge in the facility.

Due to the limiting nature of the roof structure and its supports, expansion of the building is possible, but limited by the support structure for the roof, both along the perimeter and within the building's geometry. There is ample height both outside of and within the arena to renovate as well as the ability to increase the floor plates on the two subterranean levels. Although costly to excavate and shore up the internal subterranean levels, it is possible as the interior foundations are only holding up the seating bowl, which acts as a separate and independent structure within the roof.

There is a good opportunity to expand upon or replace in a more efficient and connected manner, the annex building on the south side of the facility. This area adjacent to the marshaling yard and loading dock access to the facility could potentially provide for a cohesive annex to the facility at all levels and provide much needed additional support spaces without taking away internal fan experience square footage.

There are numerous planning efforts currently occurring around the Seattle Center area involving street and transportation issues. These would need to be closely monitored and evaluated as part of any planned capital improvements to KeyArena.

Additionally, there are issues involved with any potential project to KeyArena that would need to involve the surrounding neighborhood, Seattle Center activities and political issues around the use of the facility and intended use.

Internal



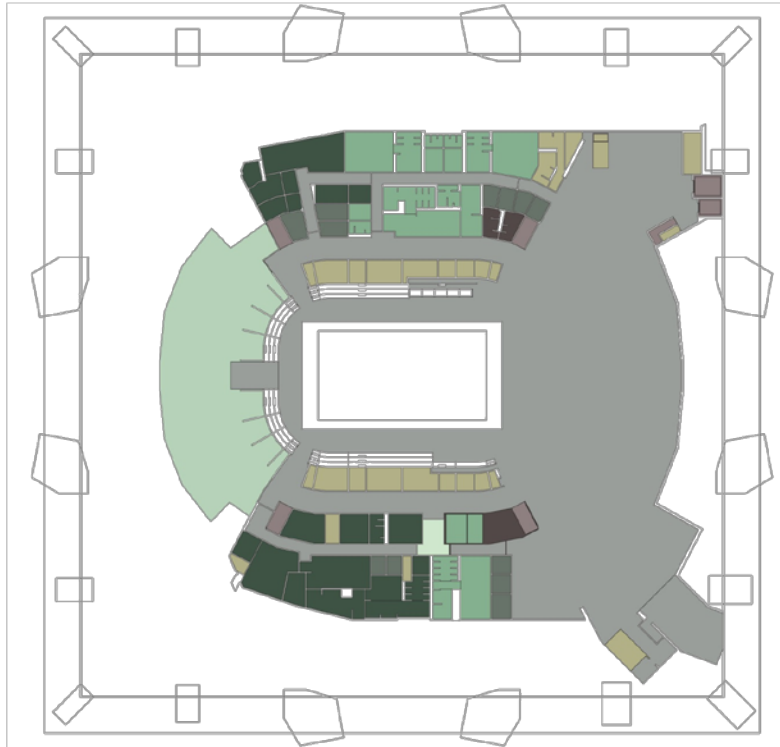
Internally, the facility is generally in good condition. The structure from visual observation appears to be in good condition for being close to 20 years old, with no visible spalling or water damage. Spatially, the corners of the facility are underutilized from a fan experience standpoint. There exists more square footage in the current configuration in these areas that is not being utilized. Potential for these spaces could entail restaurants, retail, and other fan experience or social gathering areas. These could be multi-story in nature, given the openness to the various levels of the facility, and would engage fans throughout the various levels of the facility.

The current configuration of the arena seating bowl will prevent an NHL team from permanently occupying KeyArena in the future. The inability to view one end of the ice rink from the seats on that end not only detracts from the overall and expected experience of an NHL game, but it brings the usable seating capacity to a level which the NHL as a league and the potential ownership would not recognize enough seating revenue to make the venture worthwhile.

With that being said, the current configuration of the seating bowl and facility makes for a great concert venue both experience-wise and from an operational standpoint. Hosting concerts here is not and would not be in the future an issue based upon the physical configuration of the facility. The layout of the event level could be renovated to make it more efficient. There is an excessive number of circulation corridors and underutilized spaces on the end opposite the vehicular access to this level.

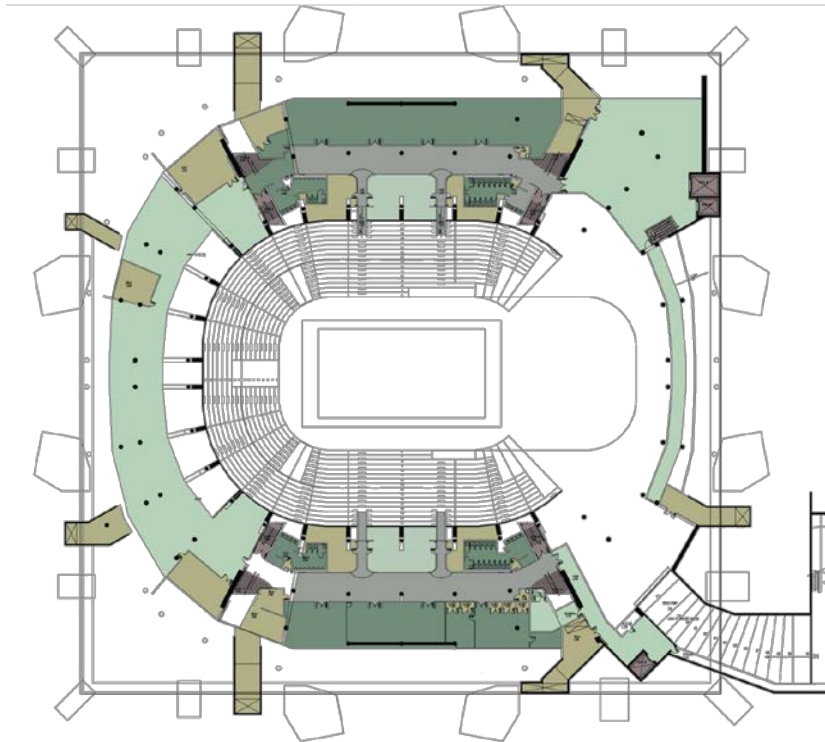
Lastly, the current state of the arena from an aesthetic perspective is out of date. The finishes reflect the time period of the previous renovation and should be updated regardless of the scenario chosen or pursued. The level to which the finishes are updated could vary depending upon the scenario, but they are due for an update and modernization.

EXISTING CONDITIONS – EVENT LEVEL



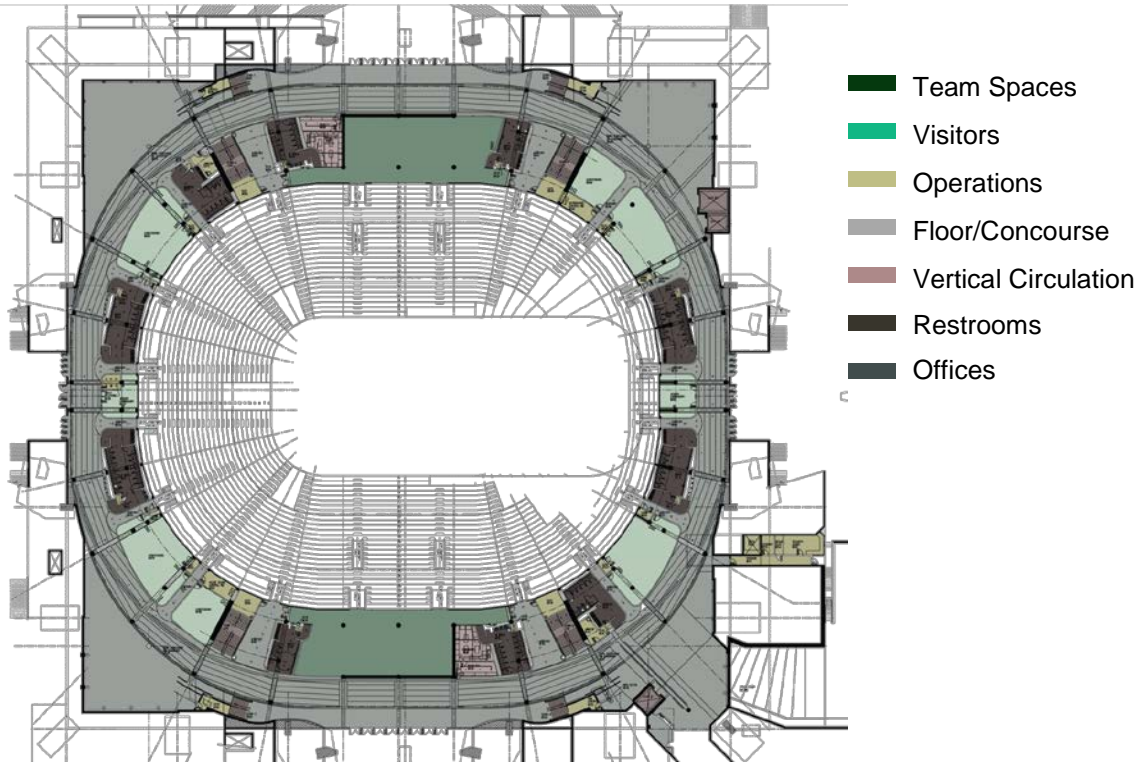
- Team Spaces
- Visitors
- Operations
- Floor/Concourse
- Vertical Circulation
- Restrooms
- Offices

EXISTING CONDITIONS – MEZZANINE LEVEL

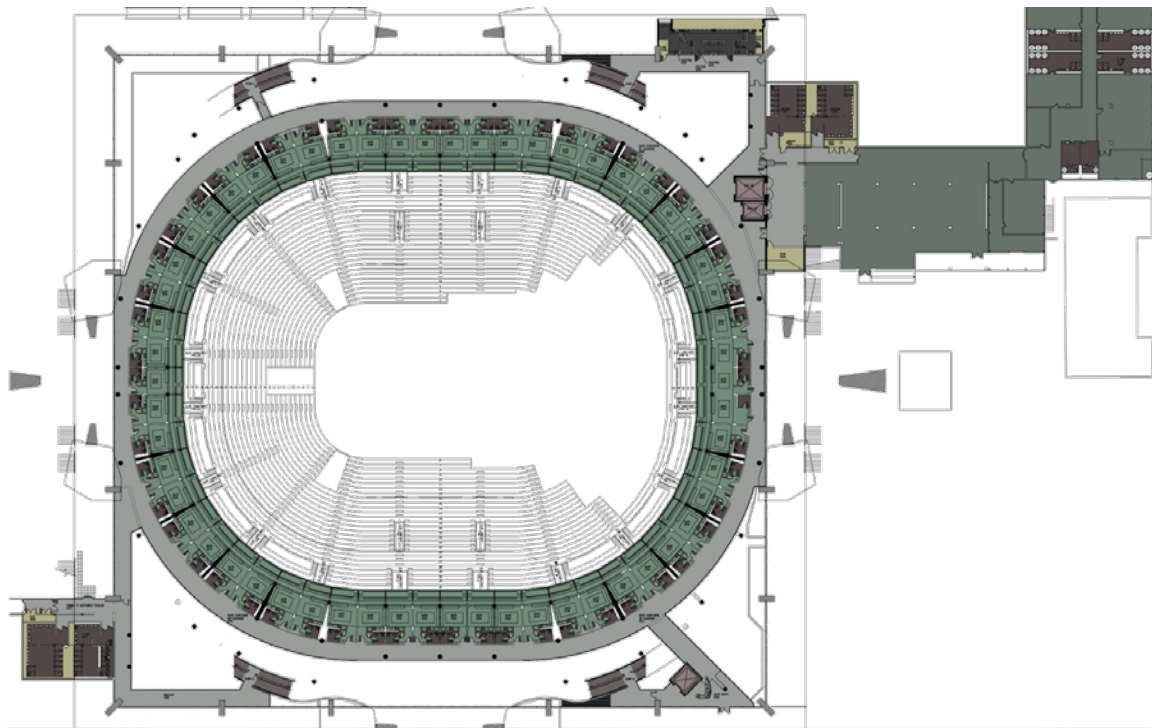


- Team Spaces
- Visitors
- Operations
- Floor/Concourse
- Vertical Circulation
- Restrooms
- Offices

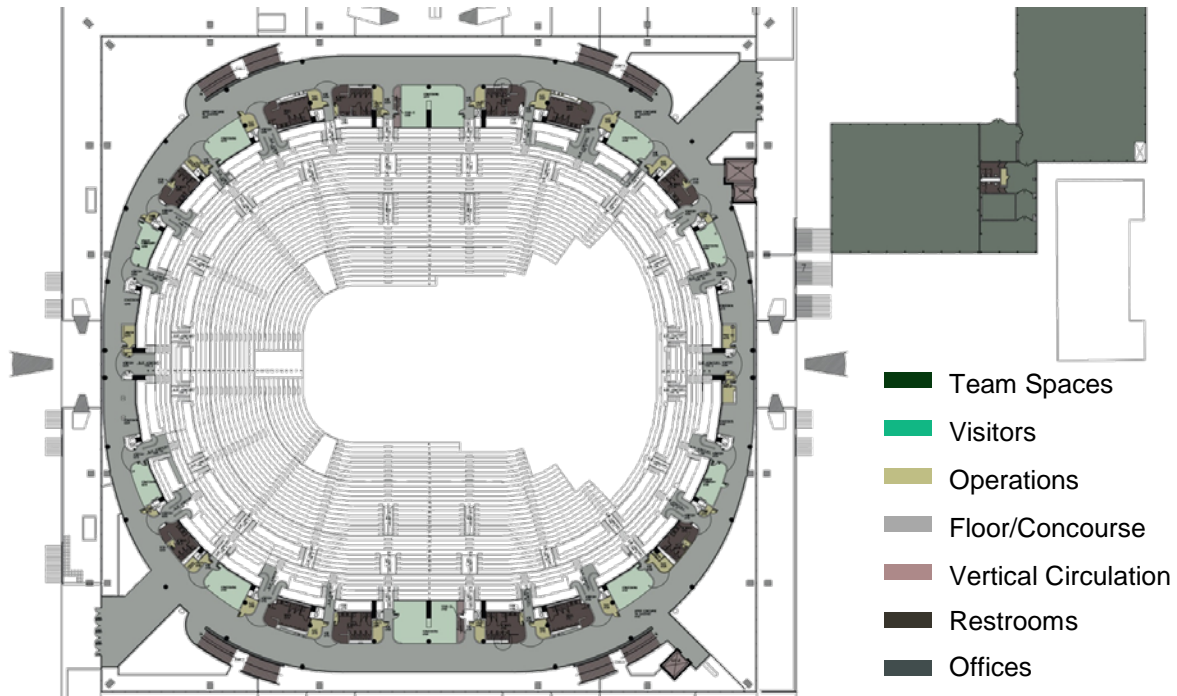
EXISTING CONDITIONS – MAIN CONCOURSE



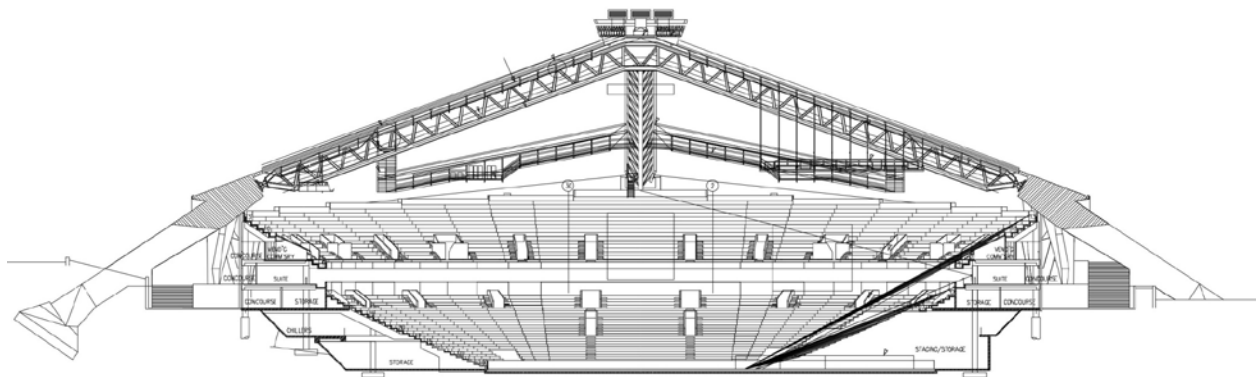
EXISTING CONDITIONS – SUITE LEVEL



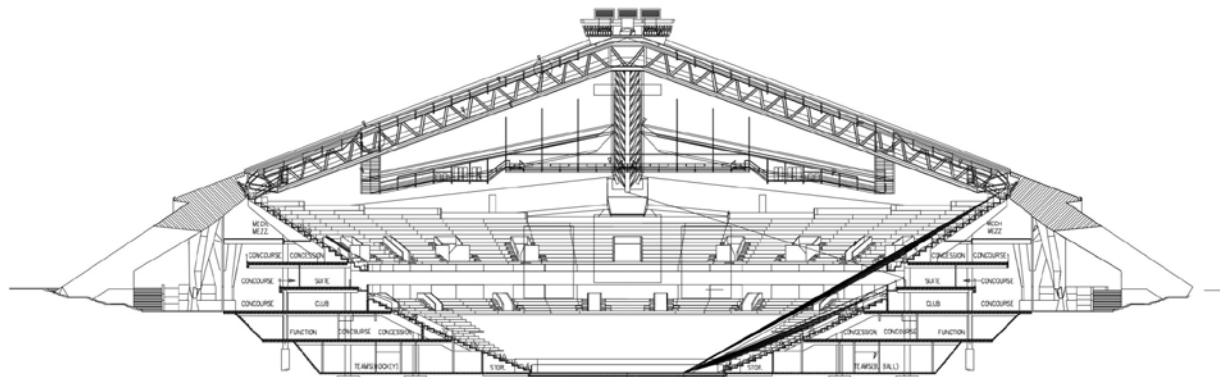
EXISTING CONDITIONS – UPPER CONCOURSE



EXISTING CONDITIONS - LONGITUDINAL SECTION



EXISTING CONDITIONS – TRANSVERSAL SECTION



PAST STUDIES OF KEYARENA

In recent years, a number of studies have attempted to help plan the future of KeyArena. These studies, and their relevance today, are briefly summarized below.

KeyArena Subcommittee (2005-2006)

This committee, comprised of local stakeholders and national consultants, was tasked with identifying “what changes and improvements in the KeyArena are critical to making it more competitive in the marketplace and financially successful for the benefit of Seattle Center and the KeyArena’s anchor tenants/users?” (At the time, the Sonics were still a tenant.)

Table 7: KeyArena Subcommittee Conclusions

Challenges	Recommendations
Arena is undersized as an NBA arena	Meaningful efforts to retain Storm (and Sonics)
Low revenue potential as an NBA arena	Capital investment:
Operational inefficiencies	~\$200M for NBA usage
	\$20M+ for "civic" usage
	Investment should be funded by both public and private money
	Public funds should consider a broad set of public values and benefits
	Major reevaluation of arena if a new arena is developed
	Annual investments should be made to capital reserve fund to maintain arena
	Develop a transportation management plan with reliance on transit use
	Maintain the roof profile and enhance pedestrian connections

Source: KeyArena Subcommittee Final Report and Recommendations

New Arena – Imagine the Future (2008)

Working with the KeyArena Subcommittee, a team of local and national consultants analyzed renovation/improvement options for the facility, under the assumption that it remains an NBA arena for the Sonics. Specific improvements are summarized below.

Table 8: “New Arena – Imagine the Future” Recommended Improvements

Expansion to 730,000 SF

New clubs and other amenities

Modernize suite level; convert 24 suites to other forms of seating

Concert improvements: expanded facilities on event floor, rigging grid

Theatre configuration (5,000-7,000 capacity): new lobby and curtain system

Increase total seating capacity to ~17,500

Increase parking within footprint to ~360

Improved exterior access and views, new entries

NBA practice court/office building

Improved traffic flow

Upgrade technology and concessions infrastructure

Source: New Arena - Imagine the Future

The cost of these recommendations was estimated to be approximately \$260 million, assuming that work began in late 2008.

KeyArena Five-Year Business Plan (2011)

Following the loss of the Sonics, this document formalized a vision for the arena’s short-term future. Its five goals are summarized below.

Table 9: KeyArena Five-Year Business Plan Goals

<p><u>1. Maximize the Quality, Quantity, and Profitability of the Event Mix</u></p> <ul style="list-style-type: none"> A. Retain Existing Successful Event Mix B. Grow events in key categories C. Support Anchor Tenants D. Include Community Programming E. Achieve 140 Performances/Year (Long-Term) 	<p><u>3. Improve Service Areas & Organizational Structure</u></p> <ul style="list-style-type: none"> A. Develop New Guest Services Structure B. Improve Leadership Structure C. Increase Labor Resources as Business Grows
<p><u>2. Enhance Targeted Revenue Lines</u></p> <ul style="list-style-type: none"> A. Grow Sponsorship Revenue B. Secure New Naming Rights Partner C. Grow Premium Seating Revenue D. Establish Group Sales Function/Grow New Revenue E. Maintain Ticketing Revenue/Box Office Services F. New Marketing/PR Strategy 	<p><u>4. Invest in Asset Preservation</u></p> <ul style="list-style-type: none"> A. Develop Reliable Sources of Funds B. Establish Long-Term Asset Preservation Plan
	<p><u>5. Develop Plans and Funding Strategies for Redevelopment</u></p> <ul style="list-style-type: none"> A. Create Master Plan for Major Renovation B. Secure Long-Term Funding

Source: KeyArena 5-Year Business Plan

Seattle Center Strategic Plan – Destination 2012 (2012)

This plan addressed a wide range of issues related to the entire Seattle Center campus, including programming, physical improvements, and others. However, one of the eight “Strategic Initiatives” of the plan was a “vibrant multi-purpose arena,” as “Seattle Center’s success is closely tied to the fortunes of

KeyArena.” Specific goals included obtaining a new naming rights partner, improved customer satisfaction/guest services, development of new sports and entertainment offerings, upgrading technology, and asset preservation and cultivating long-term capital funding support.

SEATTLE CENTER OVERVIEW



KeyArena is an important part of Seattle Center, which is the largest attraction in the region. The campus hosts 12 million visitors per year, through approximately 500 public programs and 5,000 events. The 74-acre campus hosted the 1962 World’s Fair, although many buildings predate the event. Seattle Center is now the home of more than 30 cultural, educational, and entertainment organizations. Between 1990 and 2012, \$760 million was invested in Seattle Center, including more than \$460 million from private sources.



Major events held at Seattle Center (some of which use KeyArena) include Seattle Center Festál, Northwest Folklife, PrideFest, Bite of Seattle, Bumbershoot, and Winterfest.

In addition to KeyArena, major attractions and facilities at Seattle Center include:

- The International Fountain,
- The Space Needle, which is one of the world's most recognizable landmarks and is privately owned,
- The Armory, which includes theaters, the Children's Museum, and a food court,
- The Experience Music Project and Science Fiction Museum and Hall of Fame,
- The Chihuly Garden and Glass Museum,
- McCaw Hall, home of the Seattle Opera and Pacific Northwest Ballet,
- Mercer Arena,
- The Mural Amphitheater,
- Memorial Stadium,
- The Pacific Science Center, and
- Others.

While Seattle Center is an incredibly successful and vibrant attraction, a number of improvements are anticipated in the coming years. The Seattle Center Century 21 Master Plan was adopted by City Council in 2008 and is a \$570-million, 20-year plan that is intended to continue to improve the campus; some identified improvements have already been made.

Other recent and future changes include:

- Radio station KEXP is moving into the Upper Northwest Rooms by KeyArena,
- The Cornish College for the Arts moved into the Playhouse,
- Mercer Arena will become back-of-house space for the Opera,
- Reuse of Memorial Stadium has been studied and changes could include the addition of underground parking and reuse of the stadium into an amphitheater/sports field,

OTHER RELEVANT ISSUES

Based on other research and interviews completed by the consulting team, we also note the following items that are relevant to the future of the KeyArena site:

- The City's Department of Planning and Development is developing an Urban Design Framework with the surrounding Uptown neighborhood that aims to establish a shared urban design vision for the future development of Uptown, similar to those prepared for other neighborhoods that have resulted in concrete actions that advance community goals. The Urban Design Framework is scheduled to be released to the public in the second quarter of 2015. Height and design

changes in the Urban Design Framework will be analyzed in an environmental impact statement prior to final adoption.

- The KeyArena roof is not a historic landmark but is eligible for landmark designation.
- Adding private or commercial use to the Seattle Center grounds could be difficult politically unless there is also a strong civic benefit, and should complement, rather than compete with, existing attractions at Seattle Center. Vertical development could also be difficult because it would likely generate resistance from Queen Anne residents whose views of the city could be blocked.
- Future uses of KeyArena should allow it to continue to be an active, multipurpose venue.
- The streets surrounding Seattle Center are being “reknit” and many will change from one-way to two-way streets.

3. Market Analysis: Sports and Entertainment

In this section, we analyze the market for continued sports and entertainment usage of KeyArena. This includes a more detailed analysis of the arena's current tenants, the local and regional competitive environment, an analysis of major indoor professional sports leagues, the results of stakeholder interviews, and an analysis of comparable facilities for the scenarios being evaluated.

CURRENT KEYARENA TENANTS

SEATTLE STORM



The Storm is a WNBA franchise that was founded in 2000 and has played all of its home games at KeyArena. The team was affiliated with the Sonics until they were sold and moved to Oklahoma City, and the Storm was purchased by a local investment group. The WNBA currently has 12 franchises, and nine play in their cities' NBA arena; aside from the Storm, the other two are the Chicago Sky (Allstate Arena in Rosemont) and the Connecticut Sun (Mohegan Sun Arena in Uncasville). The Storm's lease at KeyArena will expire in five years. The team has had many successful years on the court, behind stars such as Sue Bird, Lauren Jackson, and Swin Cash, and has won two league championships.

Representatives of the consulting team met with Storm representatives, who communicated the following:

- The Storm use KeyArena for approximately 30 to 34 days per year; in addition to 17 regular-season games, they also hold one preseason game, four practices, a media day, a select-a-seat event, and the Pac-12 women's basketball tournament.
- The smallest facility that the team would want to play in is approximately 7,500 seats (which is the capacity of KeyArena's lower bowl).
- For Storm games, the upper deck is typically curtained off, but is occasionally used.
- KeyArena is a great venue for basketball, due to its sightlines, acoustics, and proximity of seats to the court. Because of the facility and the team's in-game entertainment, the Storm is consistently voted as having the best home-court advantage in the WNBA.
- Negative issues regarding the facility include the lack of investment in the arena, its technology, and the lack of space for press conferences.

- The team can block out preferred dates within a scheduling window but often is unable to get many of the dates they want because of graduations and the Rollergirls (who know their schedule before the Storm do).

SEATTLE UNIVERSITY



The Seattle University Redhawks men's basketball team also plays its home games at KeyArena. SU basketball has a strong history and was a member of the NCAA's Division I until 1980, when the program was dropped to Division II. In 2009, the program rejoined Division I and played as an independent team for three years, and joined the Western Athletic Conference in 2012. The SU campus is less than 2.5 miles from KeyArena.

In addition to men's basketball, SU also plays one women's game at the arena each year, and holds its undergraduate, graduate, and law school graduations at the facility.

Representatives of the consulting team met with SU athletics representatives, who communicated the following:

- KeyArena provides a recruiting advantage for SU because it is a former NBA arena and is generally a strong venue for basketball.
- Alumni groups that have pregame functions often use the Armory instead of KeyArena because the arena's F&B prices are so high.
- The university is considering a new, smaller on-campus arena.

RAT CITY ROLLERGIRLS



The Rat City Rollergirls are a flat-track roller derby league that has four teams that compete against each other, as well as an All-Star team and a travel team. In 2009, the Rollergirls started competing at KeyArena and Kent's ShoWare Center, after using Magnuson Park since 2004.

The Rollergirls' season at KeyArena consists of eight dates, from January through August, that contain two bouts. (Other, smaller bouts are also held at their practice facility in Shoreline.)

Representatives of the consulting team met with Rollergirls representatives, who communicated the following:

- Average attendance is approximately 3,500 to 4,000 per game, but was previously higher.
- The Rollergirls are the only such team that plays in an arena, and they have the highest attendance.
- The average ticket price is approximately \$15 (or \$17 with ticket fees).
- The Rollergirls have a year-to-year lease at Key.

- While the Kent and Everett arenas are likely better sized for their events, these arenas are more expensive to use and farther from their fans.
- Ideally, the Rollergirls would be able to practice at the same facility where their bouts are held. They practice four times per week, in the early evening, but would have difficulty securing these times at any arena.
- Regarding KeyArena, the Rollergirls would prefer to have more seats closer to the track, and their ideal capacity is in the 4,000 to 5,000 range.

THE COMPETITIVE ENVIRONMENT FOR FACILITIES AND EVENTS

MAJOR INDOOR SPORTS AND ENTERTAINMENT VENUES

SoDo Arena

Since the Sonics left Seattle, there have been efforts to return NBA basketball to the city. The most prominent proposal is from a team led by Chris Hansen, a hedge fund manager who grew up in Seattle.

The Hansen proposal consists of a new, NBA-quality arena that would be built in Seattle's SoDo neighborhood, near Safeco Field and CenturyLink Field. The arena is planned to include approximately 700,000 square feet and have a capacity of 18,500 for basketball, 17,500 for hockey, and 19,000 for concerts. The estimated cost of the facility is \$500 million.

On October 15, 2012, the City of Seattle passed Ordinance 124019 (Council Bill 117609) that authorized the Mayor to execute an agreement between the City, King County, and Hansen's ArenaCo (AC). The MOU is intended to be binding and enforceable, and sets forth the business terms of the Transaction Documents to be negotiated.

Major points of the MOU include the following:

- **Purpose/Description/Term:** To set forth the basic terms of the proposed agreements to build a multipurpose arena designed to host NBA (18,500 seats) and NHL (17,500 seats) teams and other events (19,000 for concerts). Parties anticipate site and construction costs will equal \$500 million. The agreement will expire five years from the effective date or upon the earlier execution of Transaction Documents.
- **Location:** City and County will evaluate the proposed location and one or more alternative sites.
- **Cost Reimbursement:** AC will reimburse City and County (hereafter CC) for development costs up to \$5 million, including up to \$150,000 for a study by City to assess the future of KeyArena or the KeyArena site.
- **Site/Arena Ownership/Ground Lease:** AC will purchase the site and convey it to the City for market price. AC will pay City \$1 million per year as rent under a ground lease. AC will build the arena and lease it to CC (for a nominal amount) under a Lease-Purchase agreement, and CC will sublease it back to AC. CC have right to purchase the arena outright for the principal component

of all lease payments under the Lease-Purchase agreement. CC will pay \$200 million for acquisition of project site and Lease-Purchase agreement payments.

- CC will establish a SoDo transportation infrastructure fund using arena tax revenues to fund improvements in SoDo and to Terminal 46.
- **Arena Use Agreement:** AC will lease the arena from CC for at least 30 years or duration of CC bonds, with 4 options of 5 years each. The annual payments will equal the “Annual Reimbursement Amount,” which is the amount of CC’s bond payments.
- **Financing and Non-Relocation:** Standard public-private financing and non-relocation provisions. Any AC parent company and Chris Hansen personally guarantee payments to the CC.
- **CapEx:** AC must pay for all CapEx expenses and fund a Capital Account with \$2 million per year.
- **Operations:** AC controls and is responsible for all operations cost and expenses.
- **NBA/NHL license agreements:** AC enters into them and names CC as third-party beneficiaries.
- **First-Class Arena:** AC will design arena as a “first-class” arena and conform to Design and Operating Standards.
- **KeyArena Provisions:** Terms concerning KeyArena are set forth in paragraph 17, page 26:
 - AC franchises MAY play their games in Key while arena is being built, and AC will cause improvements to be made to Key which become the property of City.
 - City will establish a KeyArena fund (from KeyArena taxes generated by new NBA/NHL teams playing in Key while arena is being built) for improvements to Key or new Arena, depending on whether Storm wish to sign long-term lease for Key or new Arena. The Parties agree to use reasonable efforts to support WNBA in Seattle.
 - City anticipates concluding a feasibility assessment of operating Key in current configuration or one that would effectively serve Storm within 18 months of effective date.
- **Names:** CC have approval rights over Naming Rights sponsor; AC must use best efforts to use the name SuperSonics for the team.
- **Community:** AC will enter into a Community Benefit Agreement (CBA) with appropriate community organizations, and work with youth and underserved communities and offer 1,500 tickets at under \$20 adjusted by CPI.
- **Economic Impact Study:** AC will reimburse City for costs not to exceed \$200,000 for an economic impact analysis of construction and operation of the arena. The consultant will be selected by CC and approved by AC within 25 days of the Effective Date.
- **Conditions Precedent and Dispute Resolution:** Standard provisions regarding the obligations of the Parties.

Tacoma Dome



The multipurpose Tacoma Dome opened in 1983 and is one of the world’s largest wood domed structures, and is approximately 35 miles south of KeyArena. Owned

and operated by the City of Tacoma's Public Assembly Facilities Department, the facility is highly flexible (65 percent of its seats are moveable) and can be configured for 5,000 seats or 23,000 seats. In addition to the arena, the facility also includes an adjacent exhibit hall, and the arena floor can also accommodate a full-sized football field.

While the Dome does not currently have a full-time sports tenant, it has previously had six – two hockey teams, two soccer teams, one basketball team, and one football team. In addition, the SuperSonics temporarily played at the Dome in 1994-95 while the KeyArena was being renovated. Other major events held at the Dome over the years include the 1990 Goodwill Games, the NCAA Women's Final Four, the United States Figure Skating Championships, and NHL preseason games.



The Dome's primary strength is its size – it is by far the largest indoor sports/entertainment facility in the market. As a result, events that can sell more seats than Key offers will often go to the Dome, unless they would rather be in Seattle proper. In the last two years, its major concerts have included Taylor Swift, Fleetwood Mac, Miley Cyrus, the Eagles, and Katy Perry.

The following table summarizes the Dome's events and attendance for a recent year.

Table 10: Tacoma Dome Events and Attendance

	# of Events	Average Attendance	Total Attendance
Arena Events			
Amateur Sports	4	20,675	82,700
Community Events	12	5,884	70,613
Concerts	14	8,283	115,959
Convention/Meetings	1	1,000	1,000
Exhibit/Consumer	2	3,142	6,283
Family Shows	1	3,984	3,984
Religious	3	29,326	87,977
Other Sports	1	3,557	3,557
Thrill Shows	2	22,737	45,474
Subtotal	40	10,439	417,547
Exhibit Hall Events			
Banquets	3	800	2,400
Community Events	9	1,792	16,126
Concerts	1	1,866	1,866
Convention/Meetings	1	1,000	1,000
Exhibit/Consumer	4	3,197	12,788
Religious	2	1,579	3,157
Other Sports	2	1,012	2,023
Trade Shows	2	1,487	2,973
Subtotal	24	1,764	42,333
Arena & Exhibit Hall Events			
Exhibit/Consumer	3	13,763	41,290
Parking Lot Events			
Trade Shows	2	88	175
Exhibit Hall & Parking Lot Events			
Community Events	1	1,200	1,200
TOTAL	70	7,179	502,545

Source: Tacoma Dome

In recent years, the Dome has generated operating deficits but had previously been profitable (revenues and expenses were generally in the \$6-million range).

ShoWare Center



The ShoWare Center is located in Kent, Washington (approximately 22 miles south of Seattle) and opened in 2009. The City of Kent owns the facility and SMG is its operator. The ShoWare Center is home to the Seattle

Thunderbirds of the Western Hockey League, as well as the Rat City Rollergirls. The facility can seat up to 6,500 attendees for hockey games and up to 7,300 for concerts and other events, and has 20 suites. The arena can also downsize to a half-house or quarter-house configuration. The Kent City Council sold

the naming rights to the venue to VisionOne Inc. in 2008 (\$3.175M, 10 years), and the facility's total construction cost exceeded \$84 million.



In addition to minor-league sports, the arena hosts a significant number of community/civic and business events. Its events and attendance for a recent year are shown below.

Table 11: ShoWare Center Events and Attendance

	# of Performances	Avg. Attendance	Total Attendance
Sporting Events	71	2,311	164,100
Family/Entertainment	24	2,602	62,440
Graduation/Civic	24	2,056	49,332
Concerts	12	2,840	34,080
Business/Trade	51	420	21,413
Total	182	--	331,365

Source: ShoWare Center

In recent years, the arena has experienced operating deficits ranging from \$400,000 to \$700,000, with operating expenses of approximately \$2.5 million.

Xfinity Arena at Everett



Xfinity Arena is located in Everett, Washington (approximately 30 miles north of Seattle) and opened in 2003. The Everett Public Facilities District owns the venue, and Global Spectrum is its operator. Xfinity Arena can hold up to 10,000 attendees for a center-stage concert and more than 8,100 for hockey games. As a result, its capacity is between the ShoWare Center's and KeyArena's. The facility has 20 suites, club seats, and the Arena Grill Restaurant. In addition to the main floor space, Xfinity Arena is also home to the Edward D. Hansen Conference Center and the Comcast Community Ice Rink.



The arena currently has two tenants – the WHL Silvertips and the Tilted Thunder Rail Birds (roller derby). In the past, minor-league lacrosse, football, and basketball teams have played at the arena. In a typical year, the arena also hosts six to ten concerts. The following table summarizes the arena’s attendance by event type for a recent year.

Table 12: Xfinity Arena Attendance

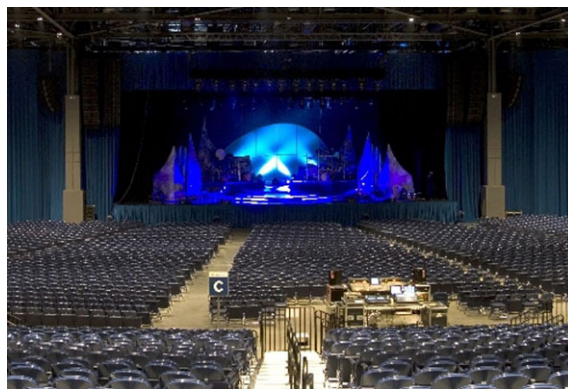
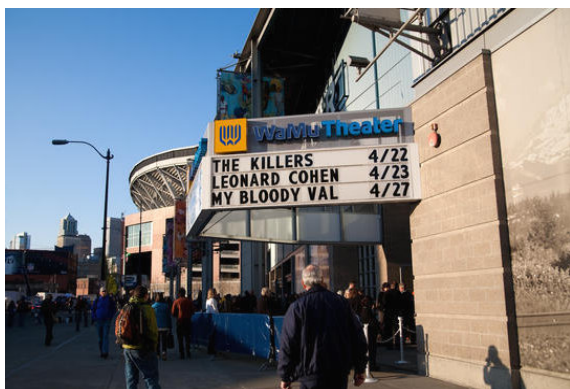
Event Type	Total Attendance
Silvertips (hockey)	173,530
Stealth (lacrosse)	32,156
Concerts	47,884
Other Sporting Events	20,366
Family Shows	86,134
Trade Shows	8,869
Community Events	53,792
Total	422,731

Source: Comcast Arena

WaMu Theater



The WaMu Theater is part of the CenturyLink Field Events Center complex and is a multipurpose venue with no permanent seating. The facility opened in 2006 and is owned by First & Goal (developer/operator of the stadium and owner of the Seahawks) and AEG. For concerts, the theater can accommodate 4,700 reserved seats or 7,200 people for a general admission show.



The theater is a temporary venue within the stadium's Events Center and was built for \$6 million (including \$2 million for acoustics). While the theater setup has few amenities, its acoustics are considered to be excellent. Because the Events Center is heavily used by annual consumer shows, the theater is generally unavailable for events from January through March. In addition, because the Events Center is also used in conjunction with Seahawks games, the theater cannot be booked until the NFL schedule is released in the spring. As a result, it has to turn down many events, which then end up in various venues in the area, including KeyArena. (However, the theater rarely competes directly with Key because of their size difference.)

In addition to concerts, the venue also hosts comedians, corporate and social events, and other events. For entertainment, its niche is concerts that want to be in the city and generally attract a younger demographic for general-admission shows, such as EDM (electronic dance music) and rising stars that cannot yet fill a larger venue. In recent years, the theater has hosted approximately 10 to 15 concerts per year, including major acts such as Jack White, Lorde, the Backstreet Boys, Ed Sheeran, and Macklemore. Its average attendance has been approximately 6,300 per show, with an average ticket price of approximately \$53.

OTHER ENTERTAINMENT FACILITIES (INDOOR AND OUTDOOR)

Local/Regional Amphitheaters

The Seattle region has a strong collection of outdoor music and entertainment venues. While these facilities do not necessarily compete directly with an indoor arena for much of the year, their presence is particularly relevant for summer programming opportunities at an indoor facility, as well as for any potential outdoor venues at the KeyArena site. The primary amphitheaters in the region are described below.

Table 13: Local and Regional Amphitheaters

Name	Location	Distance from KeyArena	Capacity	Promoter
The Gorge	Quincy	161	22,000	Live Nation (Exclusive)
White River Amphitheater	Auburn	29	20,000	Live Nation (Exclusive)
Northwest Concert Center	Puyallup	38	10,400	Non-Exclusive
Marymoor Park	Redmond	15	5,000	AEG (Exclusive)
Mural Amphitheatre	Seattle	0	4,500	Non-Exclusive
Chateau Ste. Michelle Winery	Woodinville	20	4,300	Lakeside Group (Exclusive)
Woodland Park Zoo	Seattle	5	3,800	Bear Concerts (Exclusive)
Mountain View Plaza	Snoqualmie	31	2,500	Mike Moloney Entertainment (Exclusive)

Source: AECOM, Pollstar

- The Gorge and White River Amphitheater are more than twice as large (20,000+ seats) as the next-largest amphitheater in the region, and generally host the highest-rated shows. The Gorge in particular has a national reputation as a concert destination because of its natural setting. In the 2014 season (from May to September), each facility hosted approximately 10 to 12 shows, including major headliners and festivals. Both are exclusively promoted by Live Nation. In 2014, Live Nation announced its intent to expand the Gorge, made possible by a 2013 rezoning of the property. Potential improvements could include permanent bathrooms and other infrastructure improvements, a restaurant, farmer's market, grocery store, outdoor cinema, additional campgrounds, and a zip line.
- Acts at the Gorge command the highest ticket prices in the region (an average of \$90). White River's average ticket price is \$38.
- Aside from the Gorge and White River, the other, smaller venues in the region generally host shows that attract 3,000 to 5,000 attendees in more intimate settings. In some cases, this can lead to higher ticket prices (such as \$55 to \$70 at Marymoor Park and the Chateau Ste. Michelle Winery), despite lower-rated shows.
- Two facilities (the Mural Amphitheatre and Woodland Park) are located within the Seattle city limits, and others are relatively remote from the city. However, the Mural, which is on the Seattle Center campus, does not generally host ticketed events and offers only an open lawn and a basic stage.
- The table above does not include a potential waterfront amphitheater in downtown Seattle, which could be built as part of the broader waterfront redevelopment project.

Smaller Indoor Music/Entertainment Venues (3,000 Seats or Fewer)

There are a number of small clubs and theaters in Seattle that also serve the music and entertainment industries. Because of Seattle's stature in the music industry, many of these venues are nationally-known and attract acts that could potentially play a larger venue (although not necessarily a large arena) but want a more intimate setting. These facilities include Seattle Center's McCaw Hall, the Paramount, Benaroya Hall, the Showbox Market and Showbox SoDo, casinos' theaters, and others. The capacity of

these facilities is less than 3,000. We generally do not expect these facilities to compete directly with any future entertainment use of KeyArena, unless its current capacity is greatly reduced.

Convention and Meetings Facilities

Washington State Convention Center



Washington State
Convention Center
at convention place

The WSCC is the area's largest convention facility and is located in downtown Seattle. The convention center has expanded multiple times and is planning a future expansion. Its current event facilities include:

- 205,000 square feet of dedicated exhibit space (divisible into six halls),
- 45,000 square feet of ballroom space (divisible into four rooms), and
- 57,000 square feet of meeting rooms (as many as 61 rooms).

In 2010, the facility's most recent expansion, the 71,000-square foot Conference Center, was completed. Also in 2010, the facility was purchased from the State and became part of the newly-formed Washington State Convention Center Public Facilities District.



The current plan for the facility's next expansion consists of a new facility one block from the WSCC that would add 310,000 square feet of exhibit space, 60,000 square feet of ballroom space, and 100,000 square feet of meeting space.

In 2013, the WSCC hosted more than 350 events and 410,000 attendees.

Representatives of the consulting team met with WSCC representatives, who communicated the following:

- The convention center occasionally has groups that need 10,000+ seats for speakers. (It can currently host 4,000-5,000 people on-site for a seated event.) Some of its larger events also require the use of off-site facilities such as Benaroya Hall and downtown hotels.
- With the planned expansion, the convention center's needs for other facilities in Seattle are expected to decrease.

CenturyLink Field Events Center

CenturyLink Field's Events Center is adjacent to the stadium and includes the WaMu Theater. The facility is a large multipurpose facility that can host a wide range of events, including concerts, social events, and pre-game events for the Seahawks and Mariners. However, its most common usage is as the city's primary consumer show venue, to complement the WSCC. The facility opened in 1999 and has a total of 325,000 square feet.



In 2013 and 2014, the Events Center hosted an average of approximately 15 public events and 55 event days; nearly all of these events were consumer shows such as the Seattle Boat Show, the Seattle Home Show, and the Seattle Golf & Travel Show. In 2007, the event hosted more than 30 such events.

Washington State Fairgrounds

The Washington State Fairgrounds in Puyallup is the home of the annual **Washington STATE FAIR** state fair as well as many other events throughout the year. While the complex is approximately 35 miles from Seattle, it hosts a number of large events that have a regional draw.



Most relevant to any potential uses of KeyArena is that the Fairgrounds host many large consumer and other public shows, in multiple large indoor venues. In 2013, in addition to events such as animal shows, the circus, and graduations, the complex hosted a limited number of conventions and trade shows and

many consumer/public shows. Examples included shows focused on antiques and collectibles, arts and crafts, RVs, home and garden, and others.

Other Major Meetings Facilities

A number of facilities in Seattle also have significant meeting and convention space, including:

- The Bell Harbor International Conference Center (100,000 square feet),
- The Lynwood Convention Center (34,000 square feet),
- The Meydenbauer Convention Center (Bellevue, 54,000 square feet), and
- Hotels such as the Sheraton Seattle Hotel (75,000 square feet), The Westin Seattle (68,000 square feet), the planned “Stewart Project” at 9th and Stewart that will have 150,000 square feet, and others outside of Seattle.

OTHER STAKEHOLDER FEEDBACK

The following summarizes other feedback that has been received, in addition to what appears above from the arena’s current tenants.

KEYARENA

- Key is the best option in the area for traditional, large (7,000+), higher-end concerts with reserved seats, particularly for shows that want to be in the city. However, it is too expensive for smaller shows and/or GA concerts (facilities such as the WaMu Theater are better options).
- The arena’s primary strength is its downtown location, as many events want to perform downtown and Key is the only large indoor option.
- Since the Sonics left, Key also benefits from having a relatively high number of open dates for touring events (much of the Storm’s season is during the summer, when concerts are typically held outside). In the fall, winter, and spring, when the ShoWare Center and Xfinity Arena have hockey games and have to turn down potential events, Key is often available.
- For concerts and basketball in particular, the arena has excellent sightlines and feels intimate.
- Music genres that seem to be more successful at Key are alternative and pop/rock.
- Key’s rental terms are seen as fixed or non-negotiable, and union stagehands are more expensive than non-union labor in Kent, Everett, and Tacoma. Key’s loading limitations that result in extra setup time also add to the cost of putting on a show.
- For many events, Key is simply too expensive, and is considered to be more expensive to use than newer, larger, and better equipped arenas. In addition, the arena will not negotiate lower usage terms for events that have significant economic impacts to the City.
- From a promoter and event’s perspective, Key’s problems include:

- Limited concourse space,
 - Limited points of sale,
 - Subpar backstage facilities,
 - Difficult loading.
 - Lack of a rigging grid on the entire roof,
 - Outdated and/or lacking technology and equipment (including lack of wi-fi which is considered essential),
 - The loss of seats in the south end zone for hockey and football, and
 - Difficulty in hosting flat-floor shows because the event floor is 35 feet below ground level.
- In the future, Key will be expected to continue to support the Seattle Center financially and help to subsidize the operations of the rest of the campus.
 - The lack of nearby hotels and parking/access difficulty can hurt its ability to host certain events.

LOCAL AND REGIONAL FACILITIES AND EVENTS

- In general, the Seattle area is a very competitive market for venues, including arenas, amphitheaters, theaters, and casino venues.
- For smaller shows (approximately 3,000 seats or less), casinos are difficult to compete with because they can afford to lose money on a show itself and profit from gaming and hotel rooms.
- Because of the inventory of venues and casino dynamic, venues' profit margins are decreasing because their offers to events have to be so competitive.
- The ShoWare Center and Xfinity Arena generally compete with other venues on price. They attempt to offer promoters the best deal in the region, even if they have to lose money on a show (because hosting shows helps to sell suites and sponsorships).
- In general, country and hard rock shows are typically most successful at the suburban arenas.
- Family shows will play back-to-back nights at Kent and Everett because they are served by two different suburban markets, despite being in the same overall market. This dynamic does not apply to other event types.
- The amphitheater market is very competitive in the Seattle area and people prefer to see shows outdoors in the summer. However, the two main amphitheaters have significant negatives – the Gorge is too far from the population base, and White River is very difficult to get to and from.

- Multiple promoters do not perceive a need for an additional outdoor amphitheater in the market, either at Seattle Center or on the waterfront, due to the competitiveness of this segment of the market. However, an outdoor venue within the city for major concerts does not exist, particularly since the end of Summer Nights at the Pier, at Piers 62 and 63.
- A second large arena in Seattle (should a new SoDo arena be built) is not expected to be viable. However, if a new arena is not built in SoDo, Seattle will still need a large arena.
- Some see a need for a mid-sized arena in Seattle. Should the SoDo arena be built, it will presumably have cut-down capabilities. However, otherwise, the city does not offer an indoor venue in this size range, and it could be preferable to the facilities in Kent and Everett for certain event types. A smaller arena in Seattle that would compete more directly with Kent and Everett would be expected to take many events from those arenas.
- Promoters have indicated that there could be a need for a 5,000- to 7,000-seat theater, similar to Los Angeles' downtown Nokia Theater. Seattle does not currently have a venue in this size range, and there are many more events in this size range than for large arenas. However, this type of venue (while it would be different in many ways from WaMu Theater) would compete directly with WaMu.

COMPARABLE FACILITIES

In this section, we analyze the characteristics of venues that are similar in many ways to the potential sports and entertainment-based options for the future use of KeyArena. These arena types include the following:

- Large, secondary arenas without major professional sports,
- Mid-sized, secondary arenas,
- Large, primary civic arenas without major professional sports,
- Large, primary arenas with major professional sports (NBA and/or NHL), and
- Theaters.

LARGE, SECONDARY ARENAS WITHOUT MAJOR PROFESSIONAL SPORTS

There are a limited number of facilities across the country that are the secondary arenas in a market but are in the size range of KeyArena. In most cases, there will not be a second arena in the same size range as a market's NBA or NHL arena, unless a market has both teams and they do not share a facility (for example, multiple arenas in the New York City market and two in the Phoenix/Glendale and Minneapolis/St. Paul markets). Many facilities that become a secondary large arena due to the construction of a new facility close or are repurposed. Examples include the Izod Center outside of New

York City (which is planned to close in the coming years) and the Pyramid in Memphis (which is becoming a Bass Pro).

However, two existing examples of successful large, secondary arenas are the Allstate Arena in Rosemont, Illinois (suburban Chicago; the United Center is the market's primary arena) and the Forum in Inglewood, California (Los Angeles). The Forum, which previously hosted the Lakers and Kings before the Staples Center opened, was recently renovated as a music and entertainment-focused venue.

Allstate Arena Rosemont, IL (Chicago)

Opened 1980; since renovated

\$20M construction cost

Funding: 100% public

Capacity: 16,700 (hockey), 17,500 (basketball), 18,500 (concerts)

City-owned and -operated

Naming Rights: \$1.5M/year

Tenants: DePaul University (through 2016), AHL Wolves, WNBA Sky



Historical Events and Attendance:

	2009	2010	2011	2012	2013
# of Events	130	166	157	165	139
Total Attendance	904,336	960,623	1,013,190	957,542	789,917

Premium Seating:

- Suites: 48

Financial:

- Operating Revenues: approx. \$16M
- Operating Expenses: approx. \$14M



The Forum Presented by Chase Inglewood, CA (Los Angeles)

Reopened 2014

\$100M renovation cost

307,000 SF

Funding: 82% private

Capacity: 17,500

Owned/operated by MSG

Tenants: None



Events Since Reopening in January 2014:

- 6 grand opening concerts from the Eagles
- Other concerts include Justin Timberlake, Kings of Leon, Backstreet Boys, Aerosmith, Arcade Fire, Tom Petty & the Heartbreakers, and Fleetwood Mac
- Other events include freestyle wrestling World Cup, a Latino music festival, boxing, comedy, and MTV Video Music Awards

Premium Seating:

- 14 private boxes
- Senate Seats

Other Amenities:

- Dedicated almost exclusively to music and entertainment
- 8,000 SF of hospitality offerings
- 40,000 SF terrace



MID-SIZED SECONDARY ARENAS

While it is uncommon for markets to have two large arenas, many large metro areas have multiple arenas in various size ranges in order to avoid direct competition and provide options for events with different arena needs. In some cases, this arena is a university facility that also hosts non-university events. In this section, we analyze two mid-sized arenas that are smaller complements to their market's primary arena: the BankUnited Center in Miami and Portland's Veterans Memorial Coliseum.

BankUnited Center Coral Gables, FL

Opened 2003
 \$48M construction cost
 200,000 SF
 Funding: 100% University of Miami donations
 Capacity: 8,000 (basketball)
 Owned by university; managed by Global Spectrum
 Tenants: University of Miami basketball

Premium Seating:
 • 25 suites

Other Amenities:
 • Practice facility
 • 25,000 SF convention/banquet facilities



Annual Event Demand:

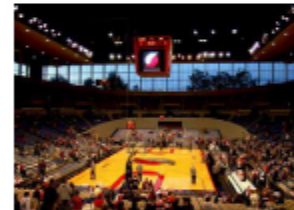
University Events	
Men's Basketball	16
Women's Basketball	15
Other Univ. Events	10
Subtotal	41
Non-University Events	
Concerts	18
Family Shows	6
Other Events	10
Subtotal	34
Total # of Events	75

- University has priority usage and cannot schedule events on the day before basketball games or the day of UM baseball games



Veterans Memorial Coliseum Portland, OR

Opened 1960
 \$32M renovation plan pending
 Capacity: 10,400 (hockey), 12,900 (basketball), 13,000 (concerts)
 Owned by City, operated by AEG
 Tenants: WHL Winterhawks (shared with Moda Center)



Historical Operations:

	09-10	10-11	11-12	12-13	13-14
# of Events	139	131	136	109	114
Total Attendance	389,983	403,173	407,957	359,995	383,919
Net Operating Income (\$000s)	(\$343)	(\$85)	(\$144)	(\$259)	\$73

2013-14 events included:

- 19 Winterhawks games
- 3 concerts
- 6 Sesame Street Live performances
- 11 graduations
- Other sports/competitions (robotics, cheer/dance, and state cheer, wrestling, and dance/drill championships)



LARGE, PRIMARY CIVIC ARENAS WITHOUT MAJOR PROFESSIONAL SPORTS

There are a number of large arenas (15,000+ seats) across the country that do not have an NBA or NHL tenant. Some of these facilities had previously hosted major professional sports, or were designed to accommodate them. For this arena type, we focus on two facilities: the Sprint Center in Kansas City and the BOK Center in Tulsa. The Sprint Center was built “NBA/NHL-ready”; the BOK Center has the seating capacity for an NBA or NHL team but has WNBA and minor-league football and hockey tenants.

Sprint Center Kansas City, MO

Opened 2007
 \$276M construction cost
 657,000 SF
 Funding: 77% public
 Capacity: 17,500 (hockey),
 19,000 (basketball), 19,300
 (concerts)
 City-owned, operated by AEG
 Naming Rights: \$2.5M/year
 Tenants: None



2013-14 Ticketed Events:

Concerts	28
Sporting Events	10
Family Shows	25
Entertainment	15
Other Events	1
Total	79

Premium Seating:

- 72 Suites

Other Amenities:

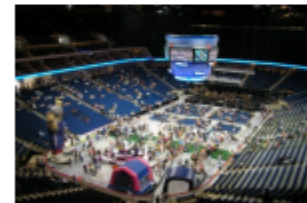
- Multiple clubs and lounges
- College Basketball Hall of Fame and College Basketball Experience
- Located within Power & Light entertainment district

- Approx. 108 total events, 1.1 million attendees per year
- Host of Big 12 men's basketball tournament
- Has hosted CBE Classic basketball tournament, NCAA volleyball Final Four, NBA and NHL preseason games



BOK Center Tulsa, OK

Opened 2008
 \$198M construction cost
 565,000 SF
 Funding: 90% public
 Capacity: 17,100 (hockey), 17,800
 (basketball), 19,200 (concerts)
 City/Authority-owned; managed by SMG
 Naming Rights: \$550,000/year
 Tenants: WNBA Shock, AFL Talons,
 CHL Oilers



Historical Operations:

Premium Seating:

- 45 suites
- 20 Loge Boxes
- 680 Club Seats

- **Events:** average of 170 per year
- **Attendance:** average of 678,000 per year
- **Net Operating Income:** average of \$1.5M per year
- Events have included NBA exhibition games, college basketball games and the Conference USA tournament, NCAA men's basketball tournament,

Other Amenities:

- High level of finishes and offerings, including exterior design, wide seats, light displays, and scoreboard



LARGE, PRIMARY ARENAS WITH MAJOR PROFESSIONAL (OR COLLEGIATE) SPORTS

Compared to some of the other arena types analyzed in this section, there are many more examples of large arenas that host major professional sports; by definition, there is one in every NBA and NHL market. We focus on three such facilities: the Amway Center in Orlando (one of the newest NBA arenas), Bridgestone Arena in Nashville (an NHL arena in a very strong music market), and the KFC Yum! Center in Louisville. While the KFC Yum! Center hosts a collegiate tenant (the University of Louisville), it is larger than most NBA/NHL arenas and the UofL outdraws most NBA and NHL teams. With the exception of having a shorter schedule than an NBA or NHL team, the UofL is similar to a professional tenant.

Amway Center Orlando, FL

Opened 2010
 \$380M construction cost
 800,000 SF
 Funding: 87% public, 13% team
 Capacity: 17,400 (hockey), 18,800 (basketball), 16,500 (concert)
 City-owned and –operated
 Naming Rights: \$4M/year
 Tenants: NBA Magic, AFL Predators, ECHL Solar Bears

Premium Seating:

- Suites: 60
- Loge Boxes: 68
- Club Seats: 1,428

Other Amenities:

- 120-ft. tower/observation deck
- Clubs, restaurants, banquet rooms
- Practice court
- Team store



2012-13 Events and Attendance:

	# of Events	Avg. Atten.	Total Atten.
NBA Games	45	13,441	604,845
AFL Games	9	5,879	52,911
ECHL Games	36	4,755	171,180
Concerts	25	10,617	265,425
Family Shows	26	6,279	163,254
Community Events	15	3,177	47,655
Conventions/Other Events	53	398	21,094
Total	209		1,326,364

Financial (including adjacent garage):

- Operating Revenues: approx. \$18M
- Operating Expenses: approx. \$18M



Bridgestone Arena Nashville, TN

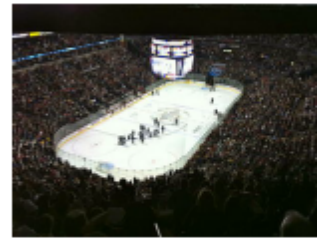
Opened 1996; since renovated
 \$144M construction cost
 1 million SF
 Funding: 100% public
 Capacity: 17,100 (hockey), 19,400 (basketball), 18,500 (concert)
 Owned by City/County Authority;
 Managed by team entity
 Tenant: NHL Predators

Premium Seating:

- Suites: 72
- Club Seats: 1,800

Other Amenities:

- 22-story tower and outdoor event space
- Restaurant and lounge
- Rehearsal hall
- Meeting rooms
- Connected to convention center



2013-14 Ticketed Events:

Predators	43	<ul style="list-style-type: none"> • Annual attendance 1.0-1.4 million • Special events include SEC tournament, NCAA women's Final Four, CMA Awards, CMT Music Awards, national figure skating and gymnastics championships
Concerts	40	
Family Shows	20	
Other Sports	12	
Other Events	9	
Total	124	

Financial:

- Operating Revenues: approx. \$9M
- Operating Expenses: approx. \$15M



KFC Yum! Center Louisville, KY

Opened 2010

\$250M construction cost

722,000 SF

Funding: 100% public (63% from city/
county and TIF, 37% from arena
revenues)

Capacity: 22,100 (basketball), 17,500
(concerts)

Owned by Louisville Arena Authority;
managed by AEG

Naming Rights: \$1.4M/year

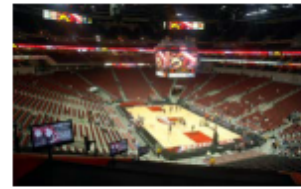
Tenant: NCAA Univ. of Louisville

Premium Seating:

- Suites: 72
- Loge Boxes: 70
- Club Seats: 2,000

Other Amenities:

- 1.5-acre plaza and 15,000-SF lobby
- Clubs, restaurants, bars, meeting rooms
- Practice court
- Team store



2012-13 Events:

UofL Men's Basketball	21
UofL Women's Basketball	17
UofL Women's Volleyball	13
Concerts	22
Family Shows	18
Sporting Events	8
Meetings/Banquets	28
Other Events	11
Total	138

Source: KFC Yum! Center

Financial:

- Operating Revenues: approx. \$13.3M
- Operating Expenses: approx. \$11.2M



THEATERS

There are theaters of various sizes in large and small markets across the country, and many markets have multiple theaters, performing arts centers, and other similar facilities. Seattle currently has two major theater venues – McCaw Hall, which is on the Seattle Center campus, and downtown’s Benaroya Hall. Both facilities offer a wide range of programming, including opera, ballet, popular music, live theater, family shows, and others. Below, we profile two successful theaters in other markets – the Nokia Theatre in Los Angeles and the Bellco Theatre in Denver.

Nokia Theatre L.A. Live Los Angeles, CA

Opened 2007
 \$120M construction cost
 250,000 SF
 7,100 seats
 Naming rights: undisclosed
 Owned and operated by AEG

Offerings and Amenities:

- 12 luxury boxes and VIP lounge
- Part of L.A. Live (Staples Center, LA Convention Center, hotels, Club Nokia L.A. Live, movie theater, retail and office space)
- The largest indoor stage in Southern California and one of the largest in the US



Historical Operations:

- Hosts approximately 120 events per year
- 2014: 70+ ticketed events
- Recent years: 4,800 average attendance; \$67 average ticket price
- Events include concerts, performances, awards shows, family shows, corporate events, product launches, speakers, and others
- Major events have included the American Music Awards, the Primetime Emmy Awards, the MTV Video Music Awards, the Peoples Choice Awards, BET Awards, and the ESPY Awards

NOKIA
 Theatre
 L.A. LIVE

Bellco Theatre Denver, CO

Opened 2005
 Naming rights: \$250,000/year (original contract was for \$600,000/year)
 5,100 seats
 Owned by City/County of Denver, managed by SMG

Offerings and Amenities:

- Part of Colorado Convention Center in downtown Denver
- Can be configured for a smaller show (3,700 seats) through curtaining off the upper level



Historical Operations:

- Approximately 50 events per year
- Events include concerts, speakers, comedians, graduations, family shows, theater, and others
- Recent years: approximately 3,000 average attendance, \$59 average ticket price

BELLCO
 THEATRE

4. NBA and NHL Overview

NATIONAL BASKETBALL ASSOCIATION



The Basketball Association of America (BAA) came into existence in 1946. Three years later, the league merged with the National Basketball League (NBL), forming what is known today as the National Basketball Association (NBA).

Originally, the NBA consisted of 17 teams. In 1950 the league contracted to 11 teams, and in 1954 the league contracted again to eight teams. In the midst of this transition, several of the smaller market franchises relocated to larger markets. The NBA currently comprises 30 franchises, as well as a development league (D League), NBA China, and several media-based entities.

The locations of the NBA's franchises are shown below.

Figure 1: NBA Team Map



CURRENT NBA ARENAS

This section reviews current NBA facilities and their characteristics such as capacity, tenants, attendance, financing, construction cost, ownership and management, and premium seating.

NBA Arenas' Tenants, Age, Attendance and Capacity

Table 14 : NBA Arena Characteristics and Attendance

Team	Other Tenants	Venue	City	Year Originally Built	Avg. Atten., '13-14	Perm. Basketball Capacity	Utilization
Atlanta Hawks	WNBA	Philips Arena	Atlanta	1999	14,339	18,118	79%
Boston Celtics	NHL	TD Garden	Boston	1995	18,107	18,624	97%
Brooklyn Nets	--	Barclays Center	Brooklyn	2012	17,251	17,732	97%
Charlotte Bobcats	--	Time Warner Cable Arena	Charlotte	2005	15,518	19,077	81%
Chicago Bulls	NHL	United Center	Chicago	1994	21,716	20,917	104%
Cleveland Cavaliers	AHL, AFL	Quicken Loans Arena	Cleveland	1994	17,329	20,562	84%
Dallas Mavericks	NHL, AFL	American Airlines Center	Dallas	2001	19,950	19,200	104%
Denver Nuggets	NHL	Pepsi Center	Denver	1999	16,899	19,155	88%
Detroit Pistons	--	Palace of Auburn Hills	Auburn Hills	1988	15,005	22,076	68%
Golden State Warriors	--	Oracle Arena	Oakland	1966	19,596	19,596	100%
Houston Rockets	AHL	Toyota Center	Houston	2003	18,123	18,023	101%
Indiana Pacers	WNBA	Conseco Fieldhouse	Indianapolis	1999	17,501	18,165	96%
LA Clippers	NBA, NHL, WNBA	Staples Center	Los Angeles	1999	19,212	19,079	101%
LA Lakers	NBA, NHL, WNBA	Staples Center	Los Angeles	1999	18,828	19,079	99%
Memphis Grizzlies	--	FedEx Forum	Memphis	2004	16,718	18,119	92%
Miami Heat	--	American Airlines Arena	Miami	1999	19,781	19,600	101%
Milwaukee Bucks	AFL, AHL	BMO Harris Bradley Center	Milwaukee	1988	13,487	18,717	72%
Minnesota Timberwolves	WNBA	Target Center	Minneapolis	1990	14,564	19,356	75%
New Orleans Pelicans	AFL	Smoothie King Center	New Orleans	1999	16,390	17,003	96%
New York Knicks	NHL, WNBA	Madison Square Garden	New York	1968	19,812	19,812	100%
Oklahoma City Thunder	--	Chesapeake Energy Arena	Oklahoma City	2002	18,203	18,203	100%
Orlando Magic	--	Amway Center	Orlando	2010	16,245	18,846	86%
Philadelphia 76ers	NHL, AFL	Wells Fargo Center	Philadelphia	1996	13,869	20,328	68%
Phoenix Suns	WNBA, AFL	US Airways Center	Phoenix	1992	15,871	18,422	86%
Portland Trail Blazers	WHL	Moda Center	Portland	1995	19,746	19,980	99%
Sacramento Kings	WNBA	Sleep Train Arena	Sacramento	1988	16,291	17,317	94%
San Antonio Spurs	WNBA, AFL	AT&T Center	San Antonio	2002	18,415	18,581	99%
Toronto Raptors	NHL	Air Canada Centre	Toronto	1999	18,252	19,800	92%
Utah Jazz	WNBA, AFL	EnergySolutions Arena	Salt Lake City	1991	18,175	19,911	91%
Washington Wizards	NHL, WNBA	Verizon Center	Washington DC	1997	17,026	20,308	84%
AVERAGE				1996	17,407	19,125	91%

Source: AECOM research

- **Tenants** – Twenty-two NBA franchises currently share an arena with another professional franchise (primarily NHL teams, although one arena is shared by two NBA teams). The majority of other tenants at NBA arenas are WNBA, minor-league hockey, and Arena Football League teams.
- **Attendance** – For the 2013-14 NBA season, an average of more than 19,000 fans attended games. Average attendance ranged between 13,500 and 21,700 fans.
- **Capacity** – The basketball capacity at NBA venues ranges between 17,000 and more than 22,000. The average capacity of NBA arenas is approximately 19,100.
- **Utilization** – NBA utilization rates (attendance as a percent of capacity) for the 2013-14 season ranged between 68 percent and more than 100 percent (due to standing room-only seating that is not considered in the permanent seating capacity). The average utilization rate for the past season was 91 percent, not including standing-room only tickets.

NBA Arena Funding

Table 15: NBA Arena Funding

Team	Venue	City	Year Built	Project Cost		Funding	
				Nominal (\$M)	Real, \$2014 (\$M)	%Public	%Private
Atlanta Hawks	Philips Arena	Atlanta	1999	\$214	\$304	29%	71%
Boston Celtics	TD Garden	Boston	1995	\$160	\$248	0%	100%
Brooklyn Nets	Barclays Center	Brooklyn	2012	\$800	\$823	36%	64%
Charlotte Bobcats	Time Warner Cable Arena	Charlotte	2005	\$200	\$242	50%	50%
Chicago Bulls	United Center	Chicago	1994	\$175	\$279	9%	91%
Cleveland Cavaliers	Quicken Loans Arena	Cleveland	1994	\$155	\$247	95%	5%
Dallas Mavericks	American Airlines Center	Dallas	2001	\$420	\$560	30%	70%
Denver Nuggets	Pepsi Center	Denver	1999	\$187	\$265	0%	100%
Detroit Pistons	Palace of Auburn Hills	Auburn Hills	1988	\$80	\$160	0%	100%
Golden State Warriors	Oracle Arena	Oakland	1966	\$25	\$182	100%	0%
Houston Rockets	Toyota Center	Houston	2003	\$175	\$225	100%	0%
Indiana Pacers	Conseco Fieldhouse	Indianapolis	1999	\$183	\$260	43%	57%
LA Clippers	Staples Center	Los Angeles	1999	\$375	\$532	0%	100%
LA Lakers	Staples Center	Los Angeles	1999	\$375	\$532	0%	100%
Memphis Grizzlies	FedEx Forum	Memphis	2004	\$250	\$313	100%	0%
Miami Heat	American Airlines Arena	Miami	1999	\$213	\$302	16%	84%
Milwaukee Bucks	BMO Harris Bradley Center	Milwaukee	1988	\$90	\$180	36%	64%
Minnesota Timberwolves	Target Center	Minneapolis	1990	\$117	\$212	72%	28%
New Orleans Hornets	Smoothie King Center	New Orleans	1999	\$110	\$156	100%	0%
New York Knicks	Madison Square Garden	New York	1968	\$123	\$835	100%	0%
Oklahoma City Thunder	Chesapeake Energy Arena	Oklahoma City	2002	\$250	\$328	100%	0%
Orlando Magic	Amway Center	Orlando	2010	\$380	\$412	84%	16%
Philadelphia 76ers	Wells Fargo Center	Philadelphia	1996	\$206	\$310	0%	100%
Phoenix Suns	US Airways Center	Phoenix	1992	\$90	\$152	39%	61%
Portland Trail Blazers	Moda Center	Portland	1995	\$262	\$406	13%	87%
Sacramento Kings	Sleep Train Arena	Sacramento	1988	\$40	\$80	0%	100%
San Antonio Spurs	AT&T Center	San Antonio	2002	\$186	\$244	79%	21%
Toronto Raptors	Air Canada Centre	Toronto	1999	\$240	\$340	0%	100%
Utah Jazz	EnergySolutions Arena	Salt Lake City	1991	\$94	\$163	21%	79%
Washington Wizards	Verizon Center	Washington DC	1997	\$260	\$383	23%	77%
AVERAGE			1996	\$209	\$315	44%	56%

Source: AECOM research

- Total Project Cost** – In real dollars, NBA venues cost between \$80 million and \$835 million to construct. In real dollars, the average project cost is \$315 million. (These figures only consider the arenas' original construction, and not any renovations.) However, the newest NBA arenas, in Orlando and Brooklyn, cost \$380 million and \$800 million, respectively.
- Funding Sources** – The public sector, on average, has paid 44 percent of the arenas' cost and the private sector has paid 56 percent of total arena costs.

NBA Arena Ownership and Management

Table 16: NBA Arena Ownership and Management

Team	Venue	Owner	Manager		
			Public Owner	Private Manager for Public Owner	Team-Related Entity
Atlanta Hawks	Philips Arena	Public			x
Boston Celtics	TD Garden	Private			x
Brooklyn Nets	Barclays Center	Private			x
Charlotte Bobcats	Time Warner Cable Arena	Public			x
Chicago Bulls	United Center	Private			x
Cleveland Cavaliers	Quicken Loans Arena	Public			x
Dallas Mavericks	American Airlines Center	Public			x
Denver Nuggets	Pepsi Center	Private			x
Detroit Pistons	Palace of Auburn Hills	Private			x
Golden State Warriors	Oracle Arena	Public		x	
Houston Rockets	Toyota Center	Public			x
Indiana Pacers	Conseco Fieldhouse	Public		x	
LA Clippers	Staples Center	Private			x
LA Lakers	Staples Center	Private			x
Memphis Grizzlies	FedEx Forum	Public			x
Miami Heat	American Airlines Arena	Public			x
Milwaukee Bucks	BMO Harris Bradley Center	Public	x		
Minnesota Timberwolves	Target Center	Public		x	
New Orleans Hornets	Smoothie King Center	Public		x	
New York Knicks	Madison Square Garden	Private			x
Oklahoma City Thunder	Chesapeake Energy Arena	Public		x	
Orlando Magic	Amway Center	Public	x		
Philadelphia 76ers	Wells Fargo Center	Private			x
Phoenix Suns	US Airways Center	Public			x
Portland Trail Blazers	Moda Center	Private			x
Sacramento Kings	Sleep Train Arena	Private			x
San Antonio Spurs	AT&T Center	Public			x
Toronto Raptors	Air Canada Centre	Private			x
Utah Jazz	EnergySolutions Arena	Private			x
Washington Wizards	Verizon Center	Private			x

Source: AECOM research

- Of the 29 NBA arenas, 16 are publicly owned and 13 are owned by team-related and other private entities.
- Of the publicly-owned arenas, seven are managed by the public agency or a private management company that was hired by the public sector and is not affiliated with an arena tenant. The remaining facilities are operated directly by the team.

POTENTIAL EXPANSION AND RELOCATION

Seattle can obtain an NBA franchise in two different ways: through league expansion from its current 30 teams, or if a current franchise relocates.

Potential NBA Expansion

The current likelihood of the NBA pursuing expansion, at least in the short term, is extremely limited. Earlier this year, new commissioner Adam Silver, who recently took over for David Stern, reiterated that the NBA currently has no plans to expand. For several reasons, the NBA is expected to avoid expansion:

- Despite the new collective bargaining agreement (CBA), many teams still struggle financially, particularly in smaller markets. Because any new franchise would likely be a smaller-market team (as the top markets are already occupied), it could likely face problems related to being able to generate competitive levels of revenue. However, Seattle is an exception in that it had successfully supported an NBA team for many years.
- Product dilution is also a concern. As with other professional leagues that have expanded in recent decades, not only have many teams struggled financially, but the on-court product has been diluted due to the addition of more players. If anything, it has been suggested that leagues contract rather than expand, to improve the product and focus on their strongest markets.
- Realignment is also a consideration. As the NBA currently has 30 franchises, the addition of one would cause an unbalanced schedule, with a different number of teams in the Western and Eastern conferences. A better expansion solution in this regard would be to add an even number of teams; however, two new NBA teams are even less likely than one.
- Despite new television contracts that will guarantee all teams more money beginning in 2016, this could lead to labor problems when the current CBA with players expires, which could be as soon as 2017. The possibility of a strike or lockout would complicate the ability of the league to expand.

In late 2014, when the league signed a new television deal that significantly increased the league's revenues, many believed that it increased the possibility of the league's pursuit of expansion and the enormous expansion fee that would be paid by a new team.

Potential NBA Relocation

The probability for an NBA franchise to relocate is presumably greater than that of expansion. However, there currently is no team that is actively and publicly planning to move. The most recent attempt in the NBA that was a legitimate threat to move was from the Sacramento Kings, who would have presumably moved to a new arena in Seattle but are now committed to Sacramento due to new ownership that is partnering with the city on a new arena (which is currently under construction). In recent years, the New Orleans Hornets and Milwaukee Bucks were in a similar position, but a change in ownership and a \$50-million arena renovation led to the team signing a long-term lease in New Orleans, and the Bucks have new owners that appear committed to a new arena in Milwaukee.

Potential Destinations

According to reports, multiple cities (aside from Seattle) are potentially viable and/or willing markets, as described below.

Las Vegas

Major professional sports leagues have resisted placing a franchise in the city due to the presence of legalized sports gaming, but have not avoided Las Vegas altogether. For example, the NBA's largest summer league is held in Las Vegas, as was its 2007 All-Star Game. In 2014, two arenas that could potentially accommodate major professional sports broke ground on the Las Vegas Strip. The first, led by MGM Resorts and AEG, is a \$375-million, 20,000-seat arena that is planned to open in 2016. The other facility, which had its groundbreaking in October, is a \$690-million, 22,000-seat retractable roof arena that would be part of a \$1.4-billion development with a hotel. As of March 2015, financing for the arena had not yet been finalized.

Both facilities are expected to attempt to secure a franchise from either the NBA and/or NHL. (In late 2014, MGM confirmed that it has had preliminary discussions with a group associated with bringing an NHL team to Las Vegas).

Kansas City

The Kansas City MSA is home to more than two million residents and is home to the Chiefs (NFL), Royals (MLB), Missouri Mavericks (CHL), Command (AFL) and Sporting KC (MLS). The Sprint Center, located in downtown Kansas City, opened in 2007. The arena was designed to host the NBA and/or NHL, but despite not having a major professional sports franchise, it has enjoyed tremendous success in hosting other events. In recent years, a number of NBA and NHL teams (such as the Los Angeles Clippers, Pittsburgh Penguins, New York Islanders, and Nashville Predators) have flirted with moving to the Sprint Center, although the teams were often seeking leverage with their hometowns as much as anything else.

Despite the potential for the arena's owner, AEG, to be more profitable without sharing revenue with an NBA or NHL tenant (depending on whether it owns the team) and losing more than 40 prime dates for other events, the Sprint Center will continue to be considered as a potential destination for any struggling NBA and NHL teams.

Anaheim

When the Kings were on the verge of leaving Sacramento, one potential contender was Anaheim, whose Honda Center is undergoing a \$20-million renovation that would make it more attractive for NBA use. The private company that owns the Ducks and manages the arena has the stated goal of attracting an NBA team to the facility. However, obstacles for the relocation to Anaheim exist, particularly when considering geography and current media contracts. The Lakers and Clippers are already in the Los Angeles market, and Anaheim is well within their territory.

Virginia Beach

In Virginia Beach, the city is working with a private development group to build an arena that could potentially host major professional sports.

Recent and Upcoming Arena Plans

This section highlights some of the planned or potential new NBA arena projects and renovation projects that are either under construction, under review, or in the pipeline (in addition to what was described above). This will further define expectations for a state-of-the-art facility in the NBA.

Sacramento Kings

After many years of failed attempts, the Sacramento Kings are currently building a new arena in partnership with the city. The approximately \$450-million, 18,500-seat arena will be located in downtown Sacramento and is expected to open in 2016. Approximately \$260 million of the arena's cost will be funded by the city, and \$190 million will be contributed by the team's new ownership group.

Milwaukee Bucks

As of earlier this year, new ownership of the Bucks hired an architect to design a new arena in downtown Milwaukee to replace the BMO Harris Bradley Center. However, a public-private funding plan has not yet been determined. It is generally thought that the team will remain in Milwaukee but this will depend on a funding plan.

The Golden State Warriors and San Francisco

In recent years, the Warriors have been actively trying to relocate from Oakland to San Francisco. Initial plans to build a new arena on San Francisco's Piers 30-32 were scrapped when estimated costs nearly doubled, and the team purchased property in Mission Bay. The team's goal is to be in the new arena in 2018.

The San Antonio Spurs and AT&T Center

In 2008, Bexar County voters approved plans to commit more than \$400 million in tax revenues to riverfront and sports and entertainment projects; the Spurs' AT&T Center received approximately \$100 million for renovations. The facility's upgrades are expected to focus on improving premium seating amenities, VIP clubs, and other high-end revenue components.

The Minnesota Timberwolves and the Target Center

The Minneapolis City Council recently approved an agreement to renovate the Target Center, which is one of the NBA's oldest arenas. The \$97-million project, which will include nearly \$50 million in public funds, will address the arena's exterior, new clubs and other public spaces, and other improvements. Construction could be completed by late 2016.

The Charlotte Bobcats and Time Warner Cable Arena

In 2014, the Bobcats and the Charlotte Regional Visitors Authority submitted a list of \$42 million of arena renovations to the City of Charlotte. The arena is less than ten years old; however, requested renovations include suite and restaurant improvements, back-of-house and support facilities, technology, and others. According to the team's lease, the city is responsible for making various improvements to maintain its status as among the NBA's most modern and to ensure the team's revenue-generating ability. As of late 2013, the City appeared willing to invest \$27.5 million in capital improvements, as well as \$600,000 per year for ten years for ongoing maintenance.

NBA TEAM OPERATIONS

The following section examines financial estimates for NBA franchises. Compiled by *Forbes*, the following table illustrates franchises valuations, revenues, and operating income for the 2013-2014 season.

However, these valuations only take the team into account and do not analyze any teams as a part of a larger entertainment and/or real estate entity, as some are. In addition, while these estimates are made for private companies without full data, they can be useful in comparing the relative financial position of teams.

- **Team Valuations** – During the 2013-2014 season, the average NBA team was valued at more than \$1.1 billion, from an average of approximately \$630 million the year before. Values ranged between \$600 million (Milwaukee Bucks) and \$2.6 billion (Los Angeles Lakers). In general, valuations increased significantly in 2014, primarily due to the league's new \$24-billion media contract. The nearly 75-percent increase in average team value is the largest annual change since *Forbes* began tracking team values in 1998.
- **Revenues and Operating Income** – Revenue and operating income in the NBA varied greatly. Operating income ranged from a net loss of nearly \$100 million (Brooklyn) to a net gain of more than \$100 million (Los Angeles Lakers). The average team generated a net gain of \$23 million.

Table 17: NBA Franchise Financial Metrics

Rank	Team	Current Value (\$mil)	1-Yr Value Change (%)	Revenue (\$mil)	Operating Income (\$mil)
1	Los Angeles Lakers	\$2,600	93%	\$293	\$104
2	New York Knicks	\$2,500	79%	\$278	\$53
3	Chicago Bulls	\$2,000	100%	\$201	\$65
4	Boston Celtics	\$1,700	94%	\$173	\$55
5	Los Angeles Clippers	\$1,600	178%	\$146	\$20
6	Brooklyn Nets	\$1,500	92%	\$212	(\$99)
7	Golden State Warriors	\$1,300	73%	\$168	\$45
8	Houston Rockets	\$1,250	61%	\$175	\$38
9	Miami Heat	\$1,175	53%	\$188	\$13
10	Dallas Mavericks	\$1,150	50%	\$168	\$30
League Average		\$1,106	74%	\$160	\$23
11	San Antonio Spurs	\$1,000	52%	\$172	\$41
12	Portland Trail Blazers	\$940	60%	\$153	\$12
13	Oklahoma City Thunder	\$930	58%	\$152	\$31
14	Toronto Raptors	\$920	77%	\$151	\$18
15	Cleveland Cavaliers	\$915	78%	\$149	\$21
16	Phoenix Suns	\$910	61%	\$145	\$28
17	Washington Wizards	\$900	86%	\$143	\$10
18	Orlando Magic	\$875	56%	\$143	\$21
19	Denver Nuggets	\$855	73%	\$136	\$14
20	Utah Jazz	\$850	62%	\$142	\$33
21	Indiana Pacers	\$830	75%	\$139	\$25
22	Atlanta Hawks	\$825	94%	\$133	\$15
23	Detroit Pistons	\$810	80%	\$144	\$18
24	Sacramento Kings	\$800	45%	\$125	\$9
25	Memphis Grizzlies	\$750	66%	\$135	\$11
26	Charlotte Hornets	\$725	77%	\$130	\$1
27	Philadelphia 76ers	\$700	49%	\$125	\$24
28	New Orleans Pelicans	\$650	55%	\$131	\$19
29	Minnesota Timberwolves	\$625	45%	\$128	\$7
30	Milwaukee Bucks	\$600	48%	\$110	\$12

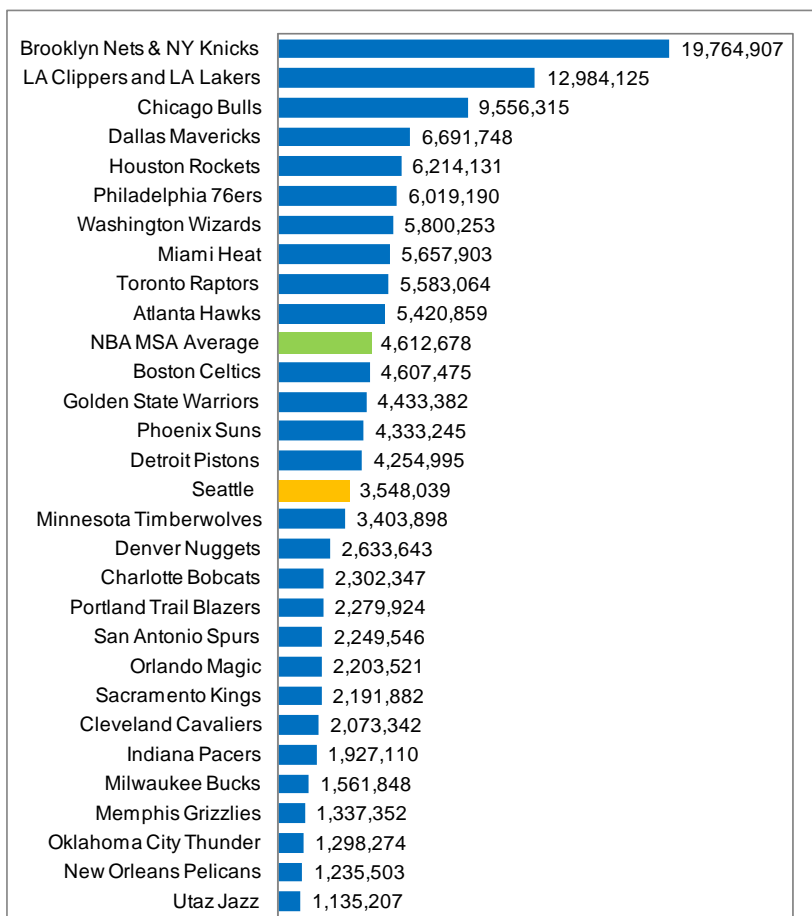
Source: Forbes

NBA MARKET ANALYSIS

At the city and MSA level, several demographic metrics were analyzed for Seattle and existing league markets (there are 30 teams in 28 markets, with two teams in New York and Los Angeles). The following charts compare Seattle with the current NBA markets.

Metro Areas

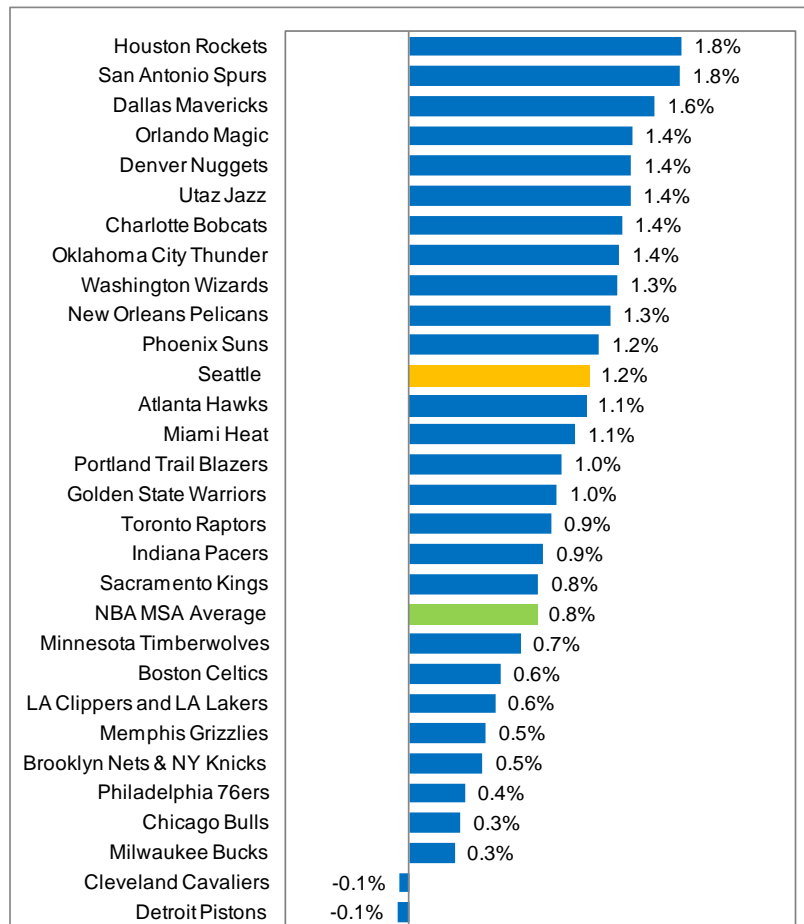
Figure 2: MSA Population by NBA Team



Source: ESRI

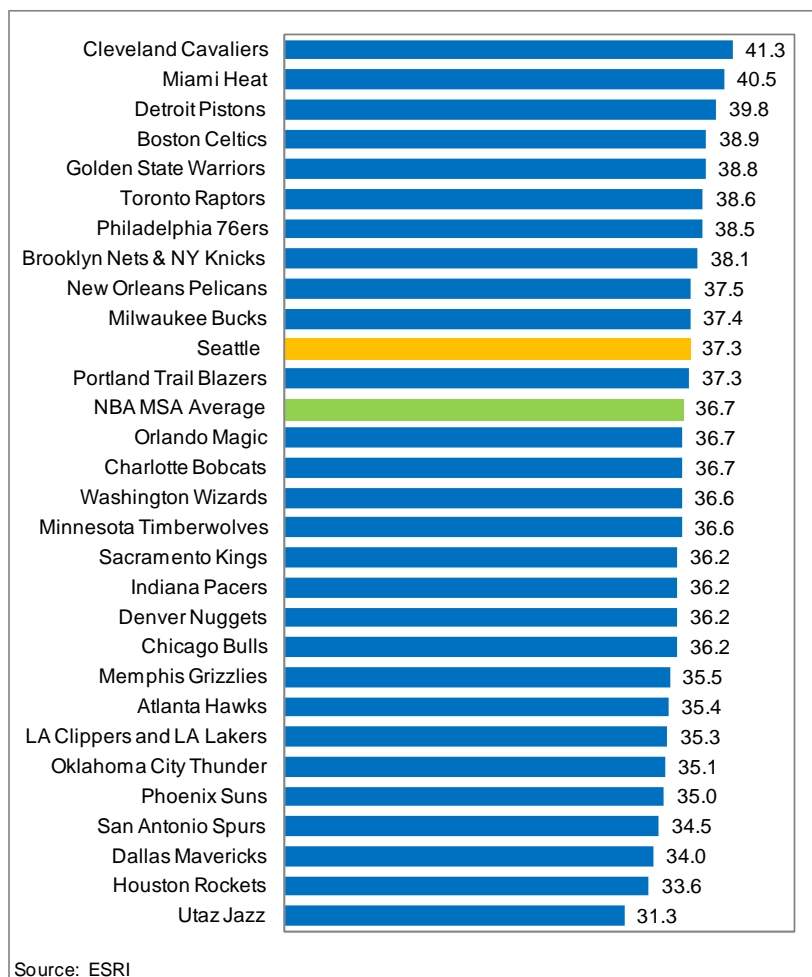
The average MSA population was 4.6 million in 2013. However, the median population was 3.8 million, as the average is skewed by New York and Los Angeles. Seattle’s population was 3.5 million.

Figure 3: 2013-18 Population Growth in NBA MSAs

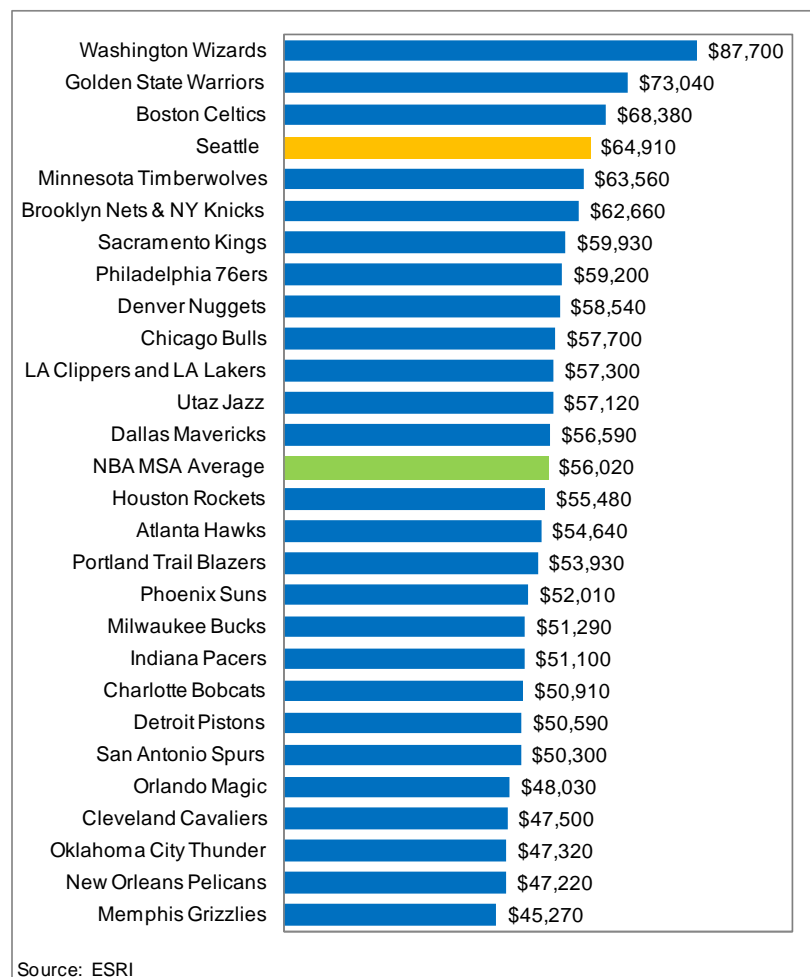


Source: ESRI

Population levels in NBA MSAs are expected to grow at an average annual rate of 0.8 percent through 2018. The Seattle MSA is projected to grow at a faster-than-average rate (1.2 percent annually).

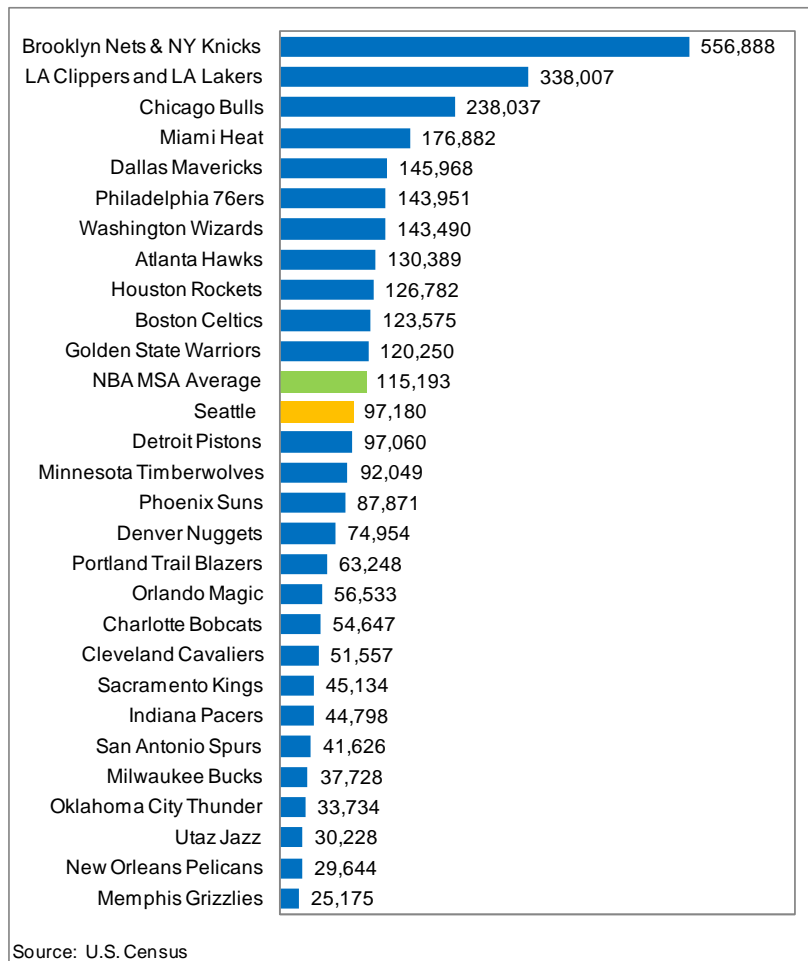
Figure 4: 2013 Median Age in NBA MSAs

The median age in the Seattle MSA was 37.3 in 2013, which was slightly older than the than the NBA median of 36.7.

Figure 5: 2013 Median Household Income in NBA MSAs (US)

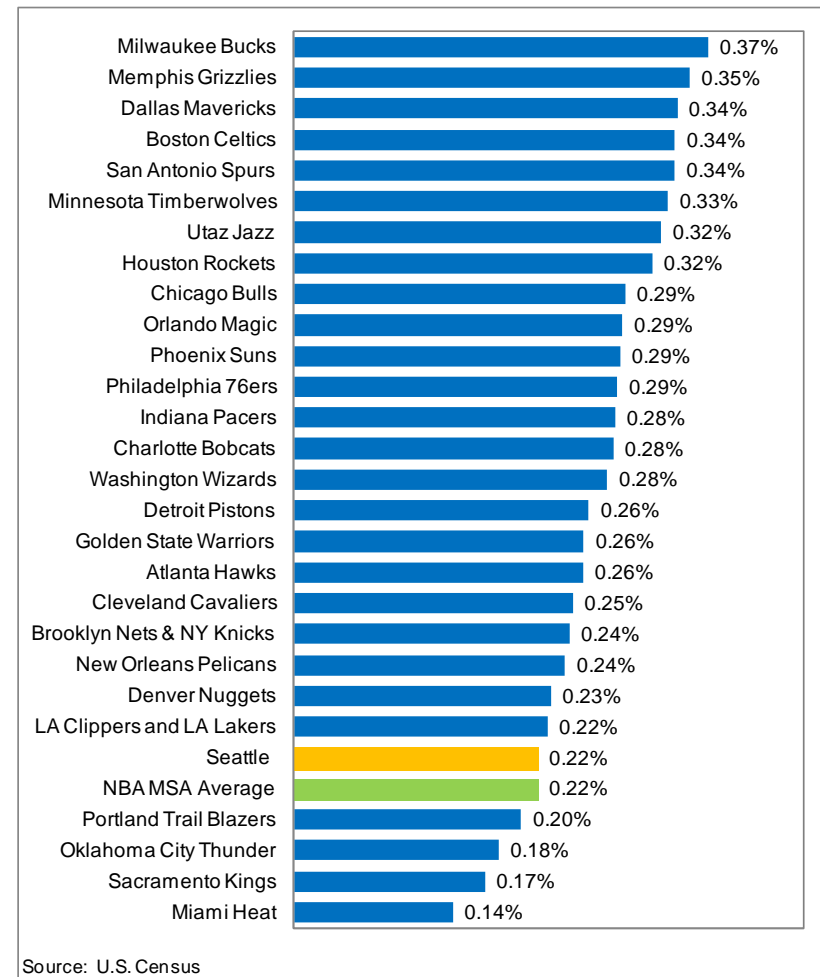
In 2013, the median household income in the Seattle MSA was the fourth-highest among NBA MSAs and nearly \$9,000 more per household than the NBA median. Only Washington, San Francisco/Oakland, and Boston had higher incomes.

Figure 6: 2012 Number of Firms in NBA MSAs (US)



On average, MSAs in the NBA have nearly 115,200 firms. The Seattle MSA is just below the average with 97,180.

Figure 7: 2011 Share of Firms with More than 500 Jobs (US)

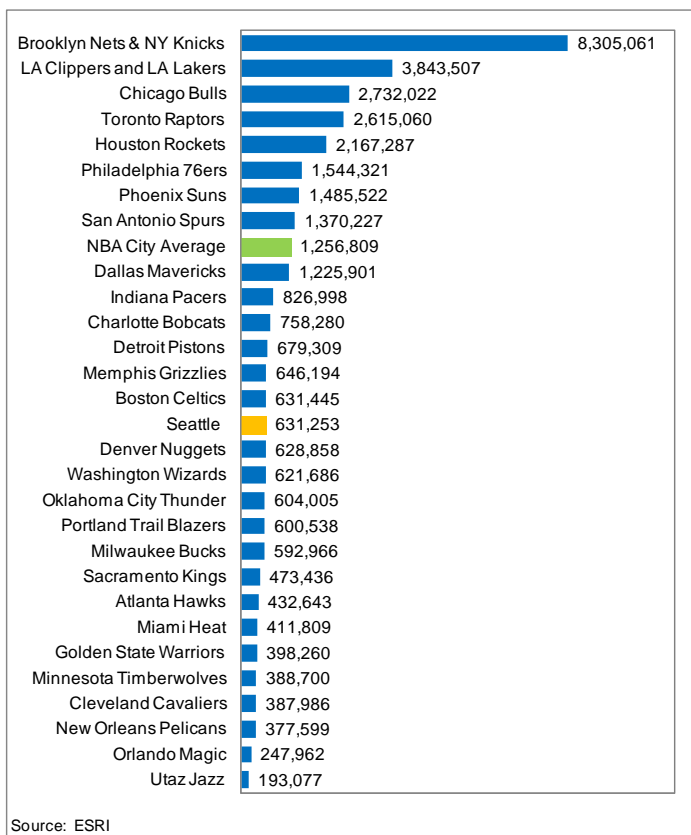


On average, nearly one-quarter of one percent the firms in MSAs with an NBA team (and Seattle) have more than 500 employees.

Cities

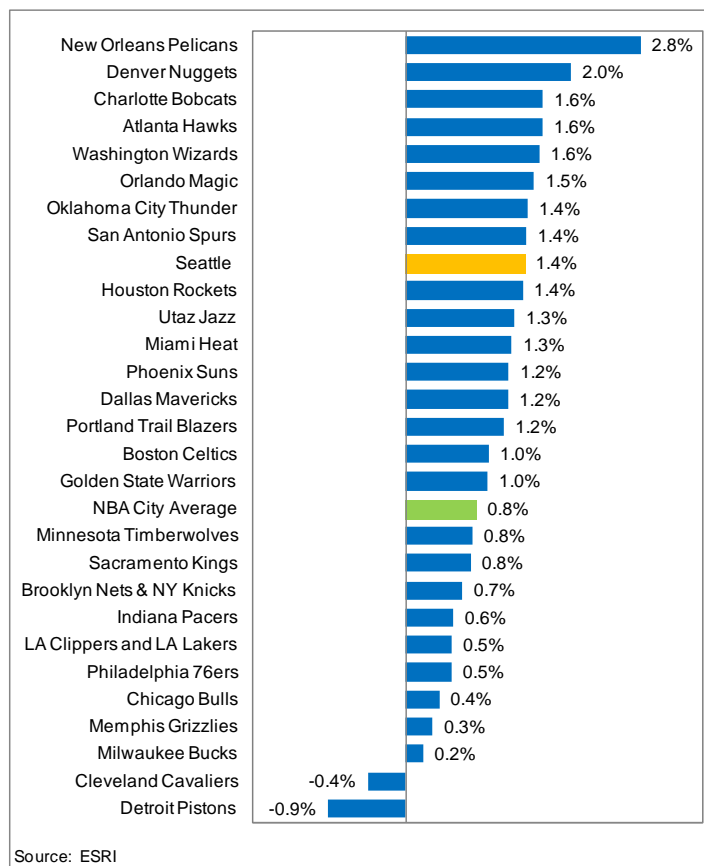
On the following pages, similar data was analyzed at the city level for markets with NBA teams.

Figure 8: 2013 City Population by NBA Team



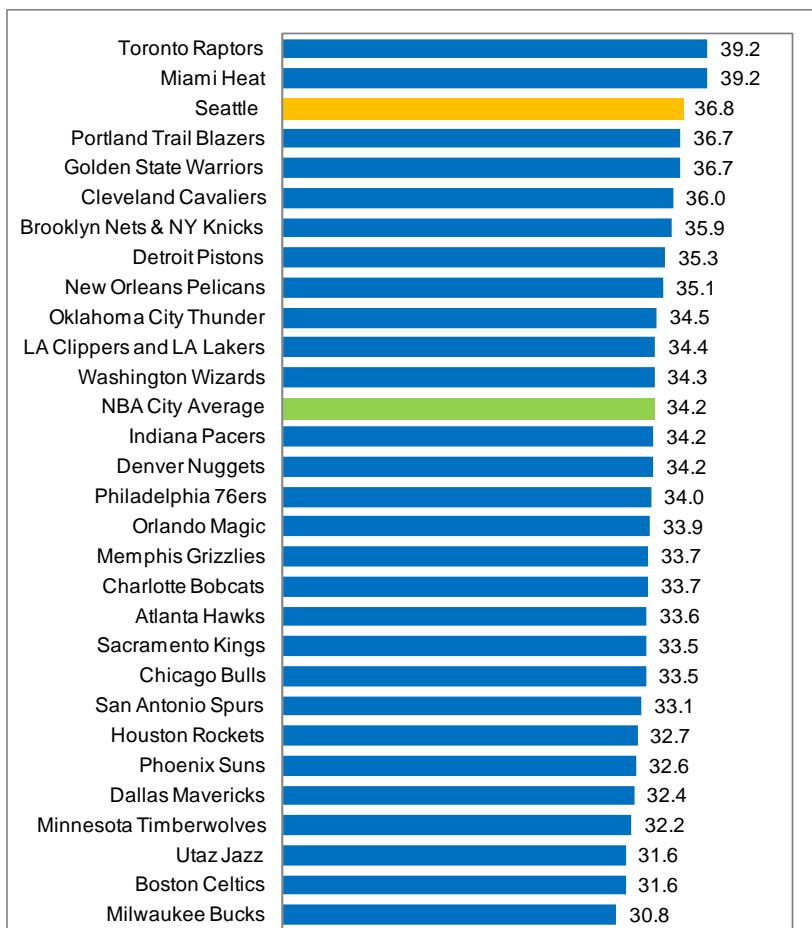
The population of the City of Seattle is well below the league average of nearly 1.3 million. However, this average is skewed by New York City; not including the Knicks and Nets, the average NBA market has less than one million residents.

Figure 9: 2013-18 Population Growth in NBA Cities (US)



The city's population is projected to grow nearly twice the rate of the league average of 0.8 percent per year from 2013 through 2018.

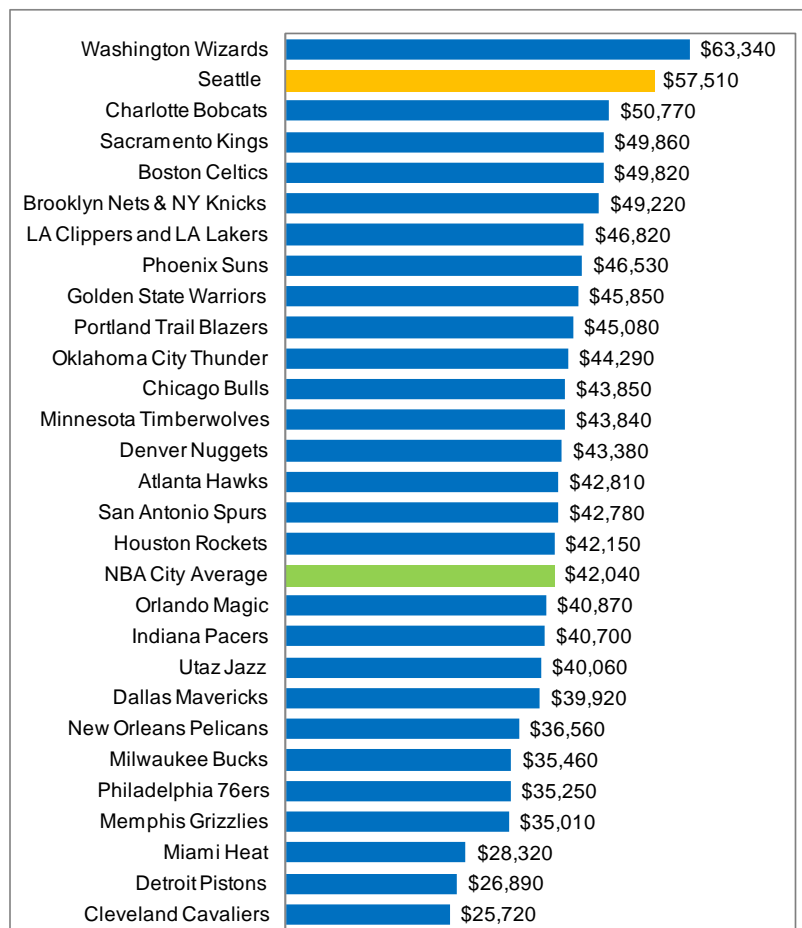
Figure 10: 2013 Median Age in NBA Cities



Source: ESRI

The median age of the Seattle population is 36.8, compared to the league average of 34.2. Only Toronto and Miami have older populations than Seattle.

Figure 11: 2013 Median Household Income in NBA Cities (US)



Source: ESRI

The median household income in Seattle would be the second highest in the NBA, at \$57,510; only Washington D.C. is higher. The median for the league was considerably lower at \$42,040.

NATIONAL HOCKEY LEAGUE



Upon the collapse of the National Hockey Association, the National Hockey League (NHL) formed in 1917. By 1924 the NHL expanded into the United States with the inauguration of the Boston Bruins, and by 1947 the Stanley Cup trustees granted the NHL with exclusive rights to compete for the Stanley Cup.

During World War II, the NHL contracted to six teams (known today as the “Original Six”). In 1967 and 1974 the NHL added six new expansion teams (totaling 18). The NHL thwarted an upstart professional hockey league, the World Hockey Association (1972-1979), in the 1970s, and absorbed WHA teams as a result. Since 1991, the league has expanded from 21 teams to 30 teams.

Gary Bettman became commissioner of the NHL in 1993 and oversaw the NHL’s expansion into non-traditional, American markets – specifically in the Sun Belt and the Southwest. In addition to expansion, several franchises relocated during the 1990s. These franchises (Minnesota, Quebec, Winnipeg, and Hartford) relocated from traditional, Northern markets to more unconventional and untested markets for hockey. Since the relocation, two of these markets that lost teams have since regained franchises (Minnesota and Winnipeg).

Despite three labor stoppages since 1994 and controversy surrounding the expansion and relocation of several teams, the NHL is currently in a relatively stable financial position and is experiencing growing popularity and increasing franchise values. This appreciation is attributed to increasing revenue from a newly-structured television deal with NBC (a 10-year deal worth \$2 billion), the advent of the NHL Winter Classic, and an increase in demand for sponsorships and merchandise.

The following map shows the location of the NHL’s franchises.

Figure 12: NHL Team Map



CURRENT NHL ARENAS

This section reviews current NHL facilities with regard to capacity, tenants, attendance, funding, construction cost, and premium seating. (The New York Islanders will move from Nassau Coliseum to the Barclays Center in 2015, but this section only considers their current arena.)

NHL Arenas' Tenants, Age, Attendance and Capacity

- **Tenants** – Fifteen NHL franchises share an arena with another professional franchise, nine of which are NBA franchises. Most of the other tenants are WNBA, minor league hockey, and Arena Football League teams.
- **Attendance** – For the 2013-14 NHL season, an average of 17,600 fans attended each game. Average attendance for each franchise ranged between 13,800 and 22,600 fans.
- **Capacity** – The capacity of NHL venues ranges between 15,000 and more than 21,200. The average capacity of NHL arenas is 18,400.
- **Utilization** – NHL utilization rates (attendance as a percent of capacity) for the 2013-14 season ranged between 73 percent and 115 percent. The average utilization rate for the season was 95 percent.

Table 18: NHL Arena Characteristics

Team	Other Tenants	Venue	City	Year Built	Avg. Atten. '12-13	Perm. Hockey Capacity	Utilization
Anaheim Mighty Ducks	--	Honda Center	Anaheim	1993	16,469	17,174	96%
Arizona Coyotes	--	Gila River Arena	Glendale	2003	13,775	19,000	73%
Boston Bruins	NBA	TD Garden	Boston	1995	17,565	17,565	100%
Buffalo Sabres	--	HSBC Arena	Buffalo	1996	18,579	19,070	97%
Calgary Flames	WHL	Scotiabank Saddledome	Calgary	1983	19,302	19,289	100%
Carolina Hurricanes	--	RBC Center	Raleigh	1999	15,483	18,680	83%
Chicago Blackhawks	NBA	United Center	Chicago	1994	22,623	19,717	115%
Colorado Avalanche	NBA	Pepsi Center	Denver	1999	16,295	18,007	90%
Columbus Blue Jackets	--	Nationwide Arena	Columbus	2000	14,698	18,144	81%
Dallas Stars	NBA, AFL	American Airlines Center	Dallas	2001	14,658	18,532	79%
Detroit Red Wings	--	Joe Louis Arena	Detroit	1979	22,149	20,066	110%
Edmonton Oilers	WHL	Rexall Place	Edmonton	1974	16,828	16,389	103%
Florida Panthers	--	BankAtlantic Center	Sunrise	1998	14,177	19,250	74%
Los Angeles Kings	NBA (2), WNBA	Staples Center	Los Angeles	1999	19,017	18,997	100%
Minnesota Wild	--	Xcel Energy Arena	St. Paul	2000	18,505	17,954	103%
Montreal Canadiens	--	Bell Centre	Montreal	1996	21,273	21,273	100%
Nashville Predators	--	Bridgestone Arena	Nashville	1996	16,600	17,113	97%
New Jersey Devils	--	Prudential Center	Newark	2007	15,257	17,625	87%
New York Islanders	--	Nassau Coliseum	Uniondale	1972	14,740	16,170	91%
New York Rangers	NBA, WNBA	Madison Square Garden	New York	1968	18,006	18,006	100%
Ottawa Senators	--	Canadian Tire Centre	Ottawa	1996	18,108	19,153	95%
Philadelphia Flyers	NBA	Wells Fargo Center	Philadelphia	1996	19,839	19,537	102%
Pittsburgh Penguins	AFL	Consol Energy Center	Pittsburgh	2010	18,618	18,387	101%
San Jose Sharks	AFL	SAP Center at San Jose	San Jose	1993	17,133	17,562	98%
St. Louis Blues	--	Scottrade Center	St. Louis	1994	17,025	19,150	89%
Tampa Bay Lightning	AFL	Tampa Bay Times Forum	Tampa	1996	18,612	19,204	97%
Toronto Maple Leafs	NBA	Air Canada Centre	Toronto	1999	19,446	18,819	103%
Vancouver Canucks	--	Rogers Arena	Vancouver	1995	19,770	19,700	100%
Washington Capitals	NBA, WNBA	Verizon Center	Washington DC	1997	18,054	18,506	98%
Winnipeg Jets	WHL	MTS Centre	Winnipeg	2004	15,004	15,004	100%
AVERAGE				1994	17,587	18,435	95%

Source: AECOM research

NHL Arena Funding

Table 19: NHL Arena Funding

Team	Venue	City	Year Built	Project Cost		Funding	
				Nominal (\$M)	Real, \$2014 (\$M)	% Public	% Private
Anaheim Mighty Ducks	Honda Center	Anaheim	1993	\$123	\$201	100%	0%
Arizona Coyotes	Gila River Arena	Glendale	2003	\$220	\$283	82%	18%
Boston Bruins	TD Garden	Boston	1995	\$160	\$248	0%	100%
Buffalo Sabres	HSBC Arena	Buffalo	1996	\$128	\$192	44%	56%
Calgary Flames	Scotiabank Saddledome	Calgary	1983	\$166	\$394	100%	0%
Carolina Hurricanes	RBC Center	Raleigh	1999	\$158	\$224	84%	16%
Chicago Blackhawks	United Center	Chicago	1994	\$175	\$279	9%	91%
Colorado Avalanche	Pepsi Center	Denver	1999	\$160	\$227	0%	100%
Columbus Blue Jackets	Nationwide Arena	Columbus	2000	\$150	\$206	0%	100%
Dallas Stars	American Airlines Center	Dallas	2001	\$420	\$560	30%	70%
Detroit Red Wings	Joe Louis Arena	Detroit	1979	\$57	\$186	100%	0%
Edmonton Oilers	Rexall Place	Edmonton	1974	\$64	\$308	100%	0%
Florida Panthers	BankAtlantic Center	Sunrise	1998	\$212	\$307	87%	13%
LA Kings	Staples Center	Los Angeles	1999	\$375	\$532	0%	100%
Minnesota Wild	Xcel Energy Arena	St. Paul	2000	\$130	\$178	74%	26%
Montreal Canadiens	Bell Centre	Montreal	1996	\$199	\$299	0%	100%
Nashville Predators	Bridgestone Arena	Nashville	1996	\$144	\$217	100%	0%
New Jersey Devils	Prudential Center	Newark	2007	\$375	\$427	56%	44%
New York Islanders	Nassau Coliseum	Uniondale	1972	\$31	\$177	100%	0%
New York Rangers	Madison Square Garden	New York	1968	\$123	\$835	100%	0%
Ottawa Senators	Canadian Tire Centre	Ottawa	1996	\$125	\$188	0%	100%
Philadelphia Flyers	Wells Fargo Center	Philadelphia	1996	\$210	\$316	11%	89%
Pittsburgh Penguins	Consol Energy Center	Pittsburgh	2010	\$321	\$348	32%	68%
San Jose Sharks	SAP Center at San Jose	San Jose	1993	\$163	\$266	82%	18%
St. Louis Blues	Scottrade Center	St. Louis	1994	\$135	\$215	46%	54%
Tampa Bay Lightning	Tampa Bay Times Forum	Tampa	1996	\$139	\$209	62%	38%
Toronto Maple Leafs	Air Canada Centre	Toronto	1999	\$250	\$355	0%	100%
Vancouver Canucks	Rogers Arena	Vancouver	1995	\$145	\$224	0%	100%
Washington Capitals	Verizon Center	Washington DC	1997	\$260	\$383	23%	77%
Winnipeg Jets	MTS Centre	Winnipeg	2004	\$180	\$225	70%	30%
AVERAGE			1994	\$183	\$292	50%	50%

Source: AECOM research

- Total Project Cost** – In real dollars, reported costs for NHL venues range from \$177 million to \$835 million (although cost comparisons are often difficult to make due to local cost levels and other factors). In real dollars, the average project cost is \$292 million. The two newest NHL arenas, in Newark and Pittsburgh, cost \$375 million and \$321 million, respectively.
- Funding Sources** – The public sector, on average, has paid 50 percent of the arena cost and the private sector has paid 50 percent of the total arena cost.

NHL Arena Ownership and Management

Table 20: NHL Arena Ownership and Management

Team	Venue	Owner	Manager		
			Public Owner	Private Manager for Public Owner	Team-Related Entity
Anaheim Mighty Ducks	Honda Center	Public			x
Arizona Coyotes	Gila River Arena	Public		x	
Boston Bruins	TD Garden	Private			x
Buffalo Sabres	HSBC Arena	Public			x
Calgary Flames	Scotiabank Saddledome	Public			x
Carolina Hurricanes	RBC Center	Public			x
Chicago Blackhawks	United Center	Private			x
Colorado Avalanche	Pepsi Center	Private			x
Columbus Blue Jackets*	Nationwide Arena	Public	x	x	x
Dallas Stars	American Airlines Center	Public			x
Detroit Red Wings	Joe Louis Arena	Public			x
Edmonton Oilers	Rexall Place	Public	x		
Florida Panthers	BankAtlantic Center	Public		x	
LA Kings	Staples Center	Private			x
Minnesota Wild	Xcel Energy Arena	Public			x
Montreal Canadiens	Bell Centre	Private			x
Nashville Predators	Bridgestone Arena	Public			x
New Jersey Devils	Prudential Center	Public		x	
New York Islanders	Nassau Coliseum	Public		x	
New York Rangers	Madison Square Garden	Private			x
Ottawa Senators	Canadian Tire Centre	Private			x
Philadelphia Flyers	Wells Fargo Center	Private			x
Pittsburgh Penguins	Consol Enegy Center	Public		x	
San Jose Sharks	SAP Center at San Jose	Public			x
St. Louis Blues	Scottrade Center	Public			x
Tampa Bay Lightning	Tampa Bay Times Forum	Public			x
Toronto Maple Leafs	Air Canada Centre	Private			x
Vancouver Canucks	Rogers Arena	Private			x
Washington Capitals	Verizon Center	Private			x
Winnipeg Jets	MTS Centre	Private			x

*Nationwide Arena is operated by a combination of public and private groups (including the Blue Jackets).

Source: AECOM research

- Of the 30 NHL arenas, 18 are publicly owned and 12 are owned by team-related and other private entities.
- Of the publicly-owned arenas, seven are managed by the public agency or a private management company that was hired by the public sector and is not affiliated with an arena tenant. The remaining 23 facilities are operated directly by the team. This does not include Nationwide Arena, which is managed by a combination of the Blue Jackets, the Franklin County Convention Facilities Authority, Ohio State University, and the Nationwide Mutual Insurance Company.

POTENTIAL EXPANSION AND RELOCATION

Potential NHL Expansion

The NHL's expansion into non-traditional markets throughout the last 25 years has achieved varying levels of success on and off the ice. Franchises such as San Jose and Anaheim draw well and consistently make the playoffs. On the other hand, the Atlanta Thrashers, after just 12 seasons in Atlanta, have already relocated (to Winnipeg) while others continue to struggle financially (e.g. Arizona, Tampa Bay, Nashville, and Columbus).

Similar to the NBA, due to factors such as the struggle of many teams in subpar markets and a fear of further dilution, expansion has not been considered to be a realistic possibility. Commissioner Bettman recently acknowledged interest from groups in cities such as Las Vegas, Seattle and its suburbs, Kansas City, and Quebec City. However, he said that expansion is not a serious consideration. Other observers have noted that the league's new alignment, which has two fewer teams in the Western Conference than the East, provides for the addition of two new western markets, which can be provided from relocation of existing franchises.

Potential NHL Relocation

In the NHL, there are currently no franchises that are imminent threats to relocate. In the last couple of years, both the New York Islanders and Arizona Coyotes were legitimate candidates for relocation, but the Islanders agreed to move from Long Island to Brooklyn's new Barclays Center, and in 2013, the Coyotes committed to its Jobing.com Arena in Glendale for 15 years. (However, had the Glendale City Council not approved the team's new lease, it reportedly would have moved to Seattle and played at KeyArena until the new SoDo arena was built.)

Potential Destinations

Several locations continue to surface as potential destinations for a new or relocated NHL franchise. These destinations most prominently include the Seattle area, Kansas City, and Las Vegas in the US, and Quebec City in Canada.

Seattle, Kansas City, and Las Vegas are also potential NBA destinations (although AEG, which owns Kansas City's Sprint Center, says it is not a candidate for a team), and both are described in the NBA analysis. However, in Las Vegas, a prospective NHL ownership group has begun taking refundable deposits on season tickets. In the case of Seattle, the City and King County have offered to contribute significantly more towards construction should the arena attract an NHL team in addition to an NBA team.

Suburban Seattle

Two Seattle suburbs – Bellevue and Tukwila – have been the focus of other local efforts to bring an NHL franchise to the area. According to reports, potential sites and team ownership groups in both cities have been identified, although it is thought that a new arena at either location would primarily have to rely on private funding due to an inability of either city to significantly contribute to this type and scale of

development. In addition, should a Seattle franchise be an expansion team, ownership would also have to pay an expansion fee (of approximately \$400 to \$500 million, according to reports) to the NHL.

Most recently, a potential developer/team owner has identified its interest in a specific site in Tukwila (at West Valley Highway and I-405) for a privately-funded facility that could be operational as soon as the fall of 2017.

Quebec City

Quebec is a former NHL market (the Nordiques became the Phoenix Coyotes in 1995) that is preparing to regain a franchise. Two years ago, Quebec City's mayor announced that construction of a new \$400-million arena (Quebecor Arena) and ground was broken that September; the facility is currently under construction. The facility is planned to be completed in 2015. The 18,500-seat arena will be located near downtown and would be managed by media company Quebecor, which also plans to own the facility's hockey tenant. Quebecor is also paying \$63.5 million for arena naming rights (\$33 million if a team isn't secured).

The city's current arena, Colisée Pepsi, is the former home of the Nordiques but is not considered to be NHL-ready, although the city recently approved \$7 million in renovations.

Potential/Upcoming Arena Plans

This section highlights some of the potential and upcoming new NHL arena projects and renovation projects. This will further define expectations for a state-of-the-art facility in the NHL.

Detroit Red Wings

Since 1979, the Red Wings have played in Detroit's Joe Louis Arena, which is one of the NHL's oldest facilities. In March, the Detroit City Council approved a final lease with the team for Joe Louis Arena, which cleared the way for a new arena.

The new arena will anchor a downtown entertainment district. Development of the \$450-million, 18,000-seat arena will include retail and office space. According to current plans, the project will receive \$285 million in public funding, with the remaining \$365 million being provided by Olympia Entertainment, which is a division of the company that owns the Red Wings.

Edmonton – Rogers Place

In late 2011, Edmonton's city council approved development of a new downtown arena to replace the Oilers' Rexall Place, which, aside from Madison Square Garden (which just completed a \$1-billion renovation), is the oldest arena in the NHL. The 18,641-seat arena will be known as Rogers Place, following the purchase of naming rights by Rogers Communications. The development will also include a community ice rink, a winter garden, and public transit improvements.

Funding for the nearly \$600-million development is being provided by the following sources: \$279 million from incremental taxes generated on-site, \$125 million from a ticket surcharge, \$128 million from lease payments from the team, \$24 million from the team, and an additional \$25 million from other public sources.

Construction for the new arena began in March 2014, and the Oilers plan to begin playing in Rogers Place for the 2016-17 season.

NHL TEAM OPERATIONS

The following section examines operating revenues and expenditures for NHL franchises, according to *Forbes*. The table below illustrates franchises valuations, revenues, and operating income for the 2013-2014 season. These valuations only take the teams into account and do not analyze them as a piece of a larger entertainment and/or real estate entity, as some are.

Table 21: NHL Franchise Financial Metrics

Rank	Team	Current Value (\$mil)	1-Yr Value Change (%)	Revenue (\$mil)	Operating Income (\$mil)
1	Toronto Maple Leafs	\$1,300	13%	\$190	\$71
2	New York Rangers	\$1,100	29%	\$217	\$84
3	Montreal Canadiens	\$1,000	29%	\$187	\$60
4	Chicago Blackhawks	\$825	32%	\$172	\$50
5	Vancouver Canucks	\$800	14%	\$154	\$47
6	Boston Bruins	\$750	25%	\$164	\$35
7	Philadelphia Flyers	\$625	25%	\$136	\$11
8	Los Angeles Kings	\$580	29%	\$146	\$21
9	Detroit Red Wings	\$570	21%	\$134	\$15
10	Pittsburgh Penguins	\$565	18%	\$141	\$22
11	Washington Capitals	\$500	21%	\$117	\$13
	League Average	\$490	19%	\$123	\$15
12	Edmonton Oilers	\$475	19%	\$119	\$25
13	Calgary Flames	\$451	7%	\$122	\$22
14	San Jose Sharks	\$425	5%	\$117	\$6
15	Dallas Stars	\$420	26%	\$113	\$4
16	Ottawa Senators	\$400	5%	\$117	\$23
17	Minnesota Wild	\$370	12%	\$111	(\$5)
18	Anaheim Ducks	\$365	22%	\$107	(\$4)
19	Colorado Avalanche	\$360	7%	\$104	\$8
20	Winnipeg Jets	\$358	5%	\$102	\$3
21	New Jersey Devils	\$330	3%	\$111	(\$2)
22	New York Islanders	\$300	54%	\$83	(\$3)
23	Buffalo Sabres	\$288	15%	\$103	\$4
24	Nashville Predators	\$250	22%	\$98	\$2
25	St Louis Blues	\$235	27%	\$98	(\$7)
26	Tampa Bay Lightning	\$230	28%	\$97	(\$12)
27	Arizona Coyotes	\$225	12%	\$80	(\$5)
28	Carolina Hurricanes	\$220	18%	\$91	(\$14)
29	Columbus Blue Jackets	\$200	14%	\$86	(\$6)
30	Florida Panthers	\$190	-21%	\$83	(\$16)

Source: *Forbes*

- **Team Valuation** – The average NHL team’s value is \$490 million. The Toronto Maple Leafs led the NHL at \$1.3 billion, while the Florida Panthers rank last (\$190 million). Similar to the NBA but to a lesser extent, franchise values have increased significantly in recent years due to factors such as increasing media revenues, growing league popularity, and current labor peace; just three seasons earlier, the average NHL franchise was valued at \$241 million.
- **Total Revenue** – Total revenue for NHL franchises ranged between \$80 million (Arizona Coyotes) and \$217 million (New York Rangers) during the 2013-2014 season. On average, NHL teams generated roughly \$123 million during the last fully-completed season.
- **Operating Income** – Operating incomes in the NHL ranged between a net loss of \$16 million (Florida) to a net gain of \$84 million (New York Rangers). On average, NHL teams recorded a \$15 million net gain for the 2013-2014 season, according to *Forbes*. However, based on these figures, ten teams (one-third of the league) was not profitable.

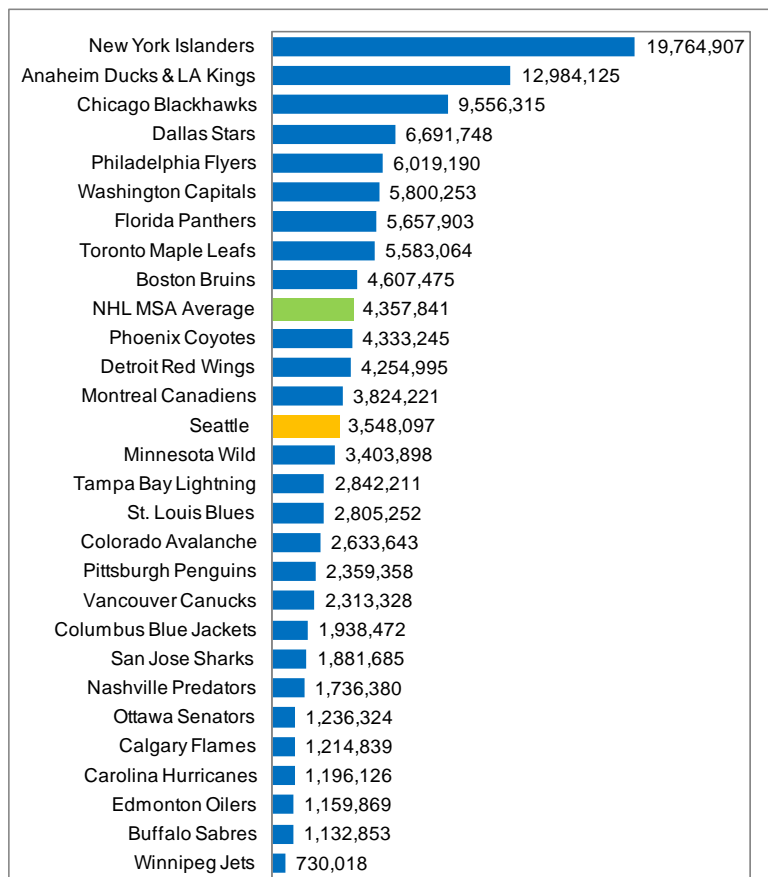
Compared to the NBA, NHL franchises are generally less profitable. In the NBA, only one team reportedly lost money last season, and the average team earned a \$23-million profit; in the NHL, 10 teams lost money, with an average profit of \$15 million. In general, despite the NHL’s more recent financial stability, disparity in wealth is evident at the franchise level. Many teams located in major American markets and Canadian cities thrive, while many of the remaining franchises suffer mightily. Many of these less financially stable franchises often require public subsidies in order to stay solvent.

NHL MARKET ANALYSIS

Similar to the NBA, we compared various demographic characteristics of Seattle to those of the 27 NHL markets that host 30 teams. The following charts compare Seattle with the current NHL markets.

Metro Areas

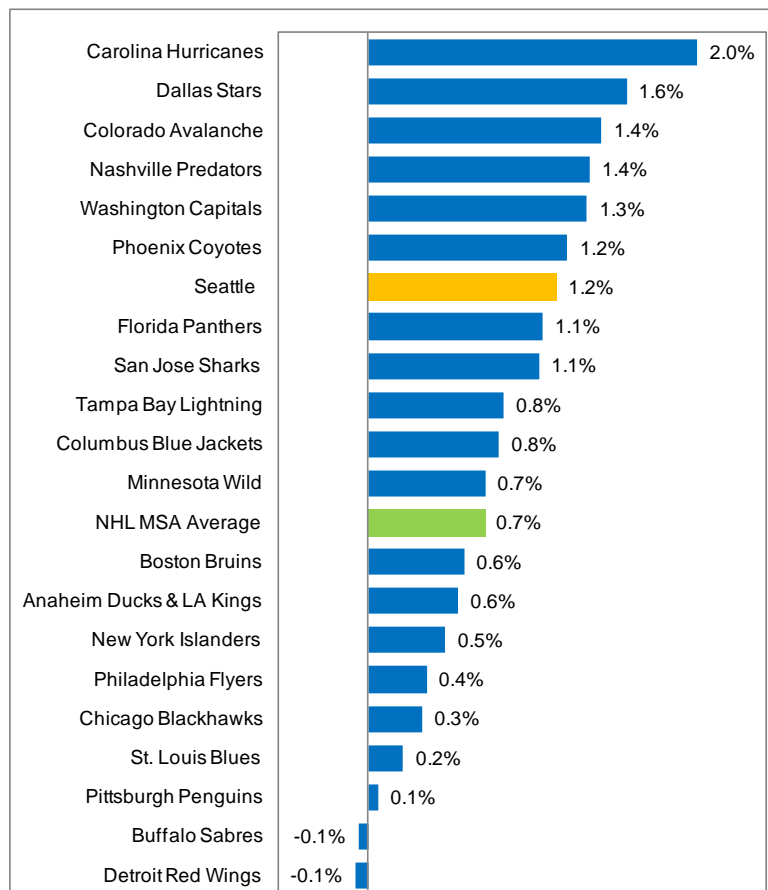
Figure 13: 2013 MSA Population by NHL Team



Source: ESRI

The average population for MSAs with NHL teams was 4.3 million in 2013. However, this average is skewed by New York and Los Angeles; the median market population is just 2.8 million. The population in the Seattle MSA was 3.5 million.

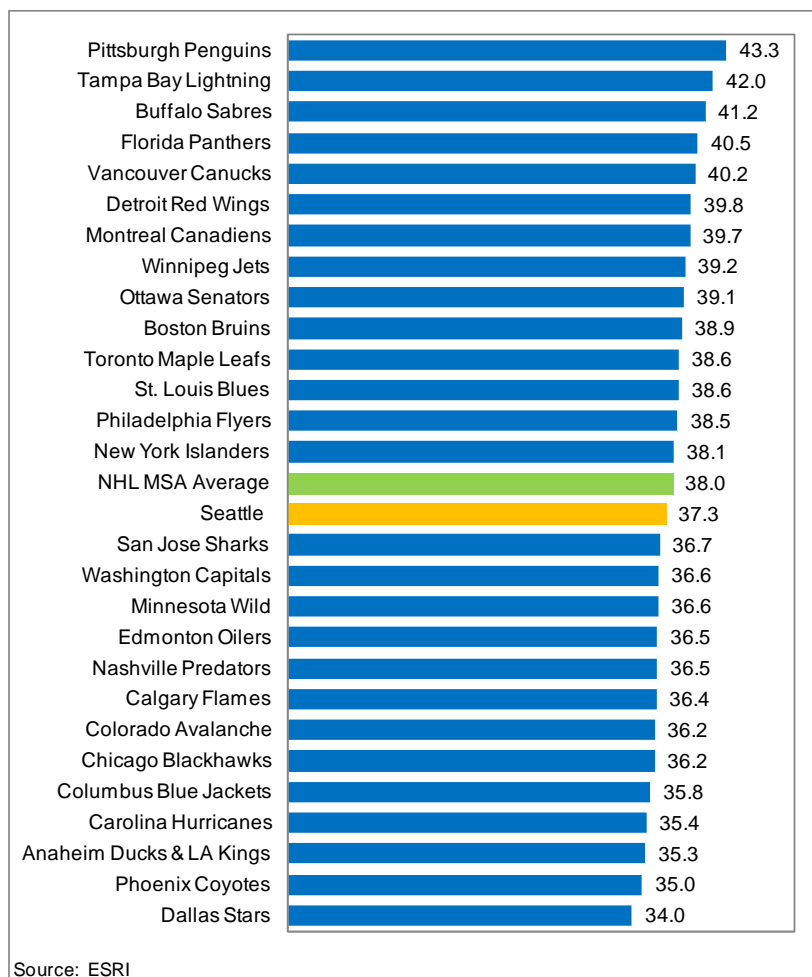
Figure 14: 2013-18 Population Growth in NHL MSAs (US)



Source: ESRI

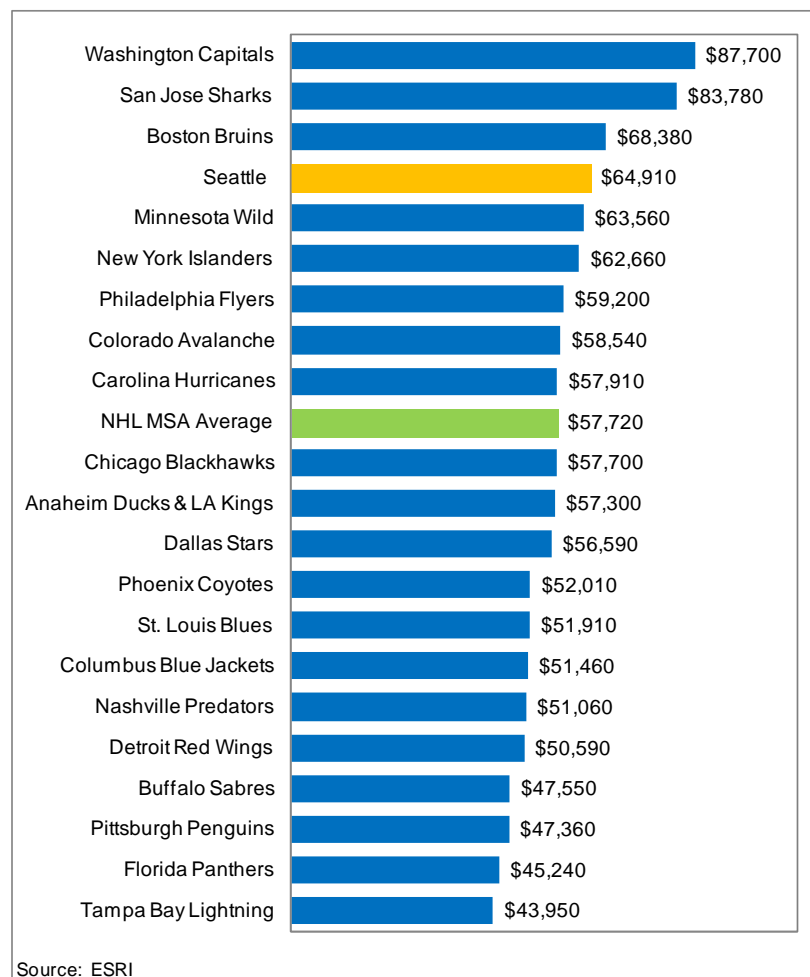
Population in NHL MSAs US is expected to increase by 0.7 percent through 2018, but 1.2 percent per year in the Seattle MSA. Similar data is not available for Canadian cities.

Figure 15: 2013 Median Age in NHL MSAs



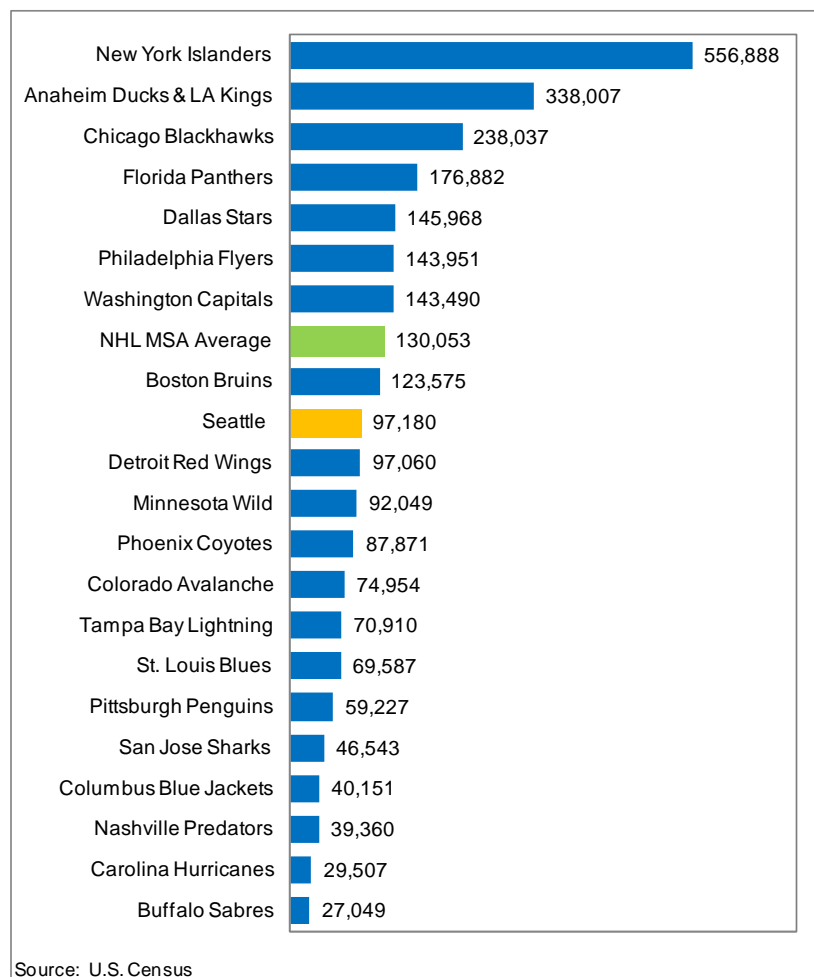
The median age of MSAs with NHL teams is 38, which is slightly older than the median age in the Seattle MSA (37.3).

Figure 16: 2013 Median Household Income in NHL MSAs (US)



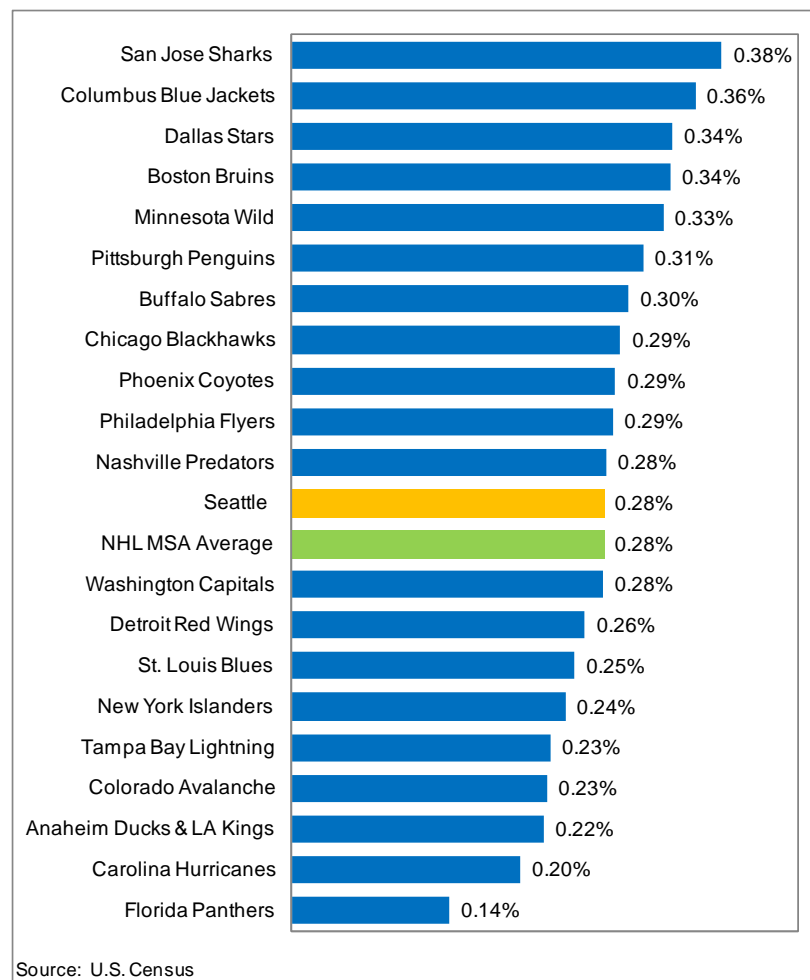
In 2013, the median household income for US-based NHL markets was approximately \$57,700. Seattle would have the league's fourth-highest income, behind only Washington, San Jose, and Boston.

Figure 17: 2012 Number of Firms in NHL MSAs (US)



With 97,180 firms in the Seattle MSA, its corporate market is smaller than the league average of 130,000 (for US markets only). However, not including New York, the league average decreases to 108,000, and the league median is just 90,000.

Figure 18: 2012 Share of Firms with More than 500 Jobs (US)

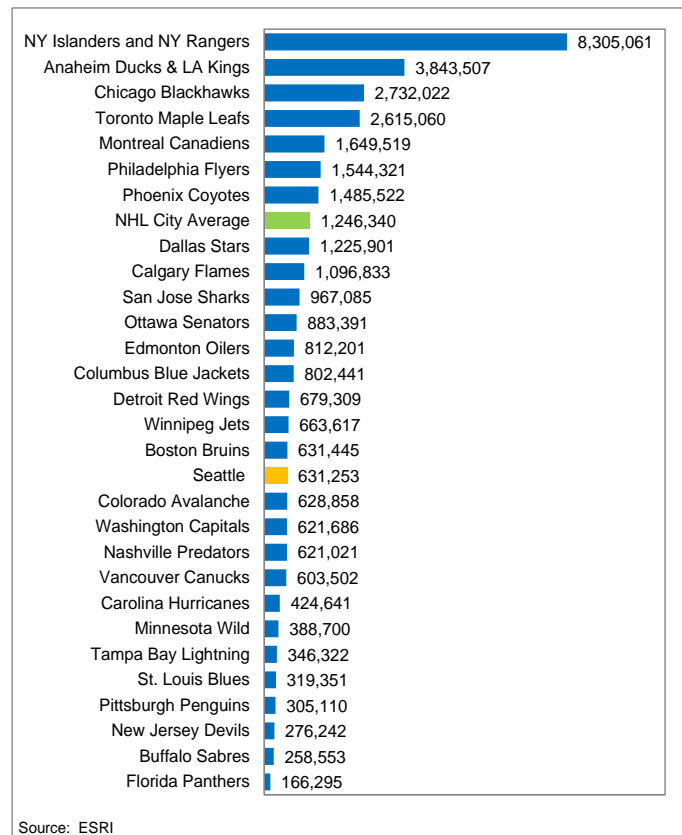


The share of firms with more than 500 employees in the Seattle MSA was equal to the average for all NHL MSA markets. The largest share was in the San Jose MSA.

Cities

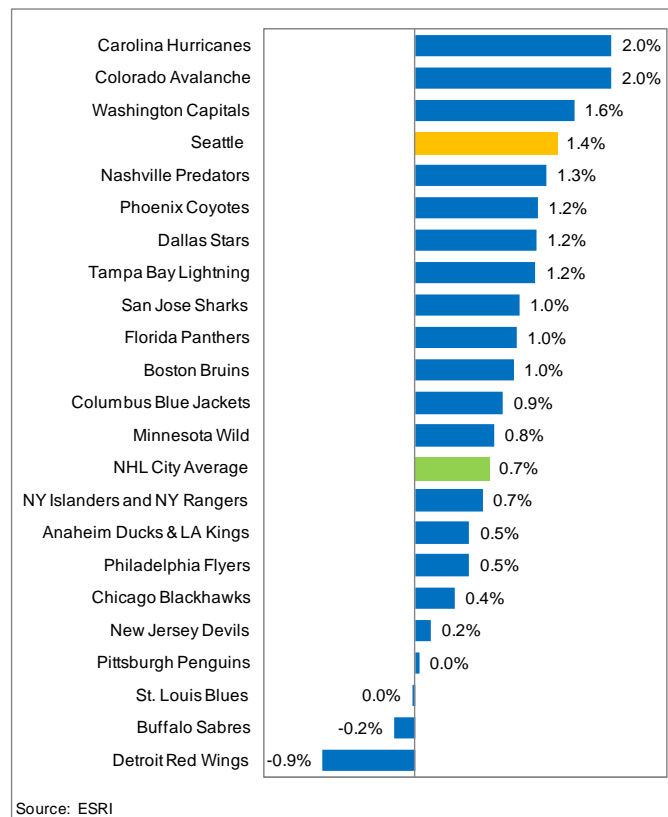
On the following pages, similar data was analyzed at the city level for markets with NHL teams.

Figure 19: 2013 City Population by NHL Team



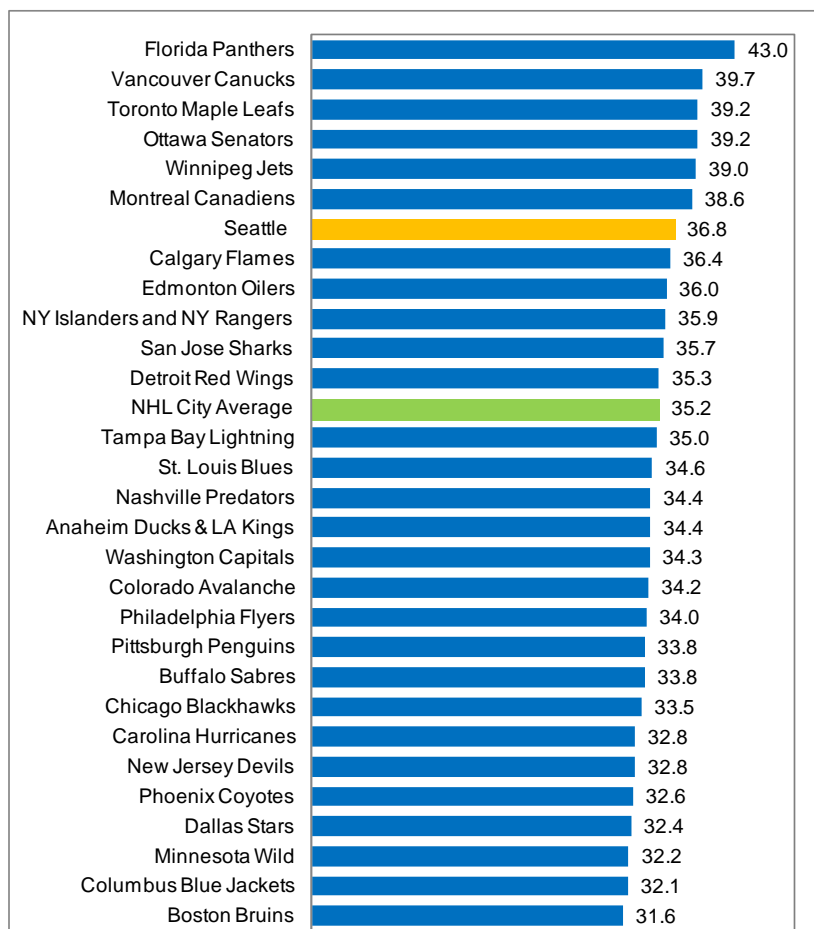
The population in Seattle is approximately half of the NHL average of 1.2 million. However, the league median is 671,000, which is just six percent larger than Seattle.

Figure 20: 2013-18 Population Growth in NHL Cities (US)



The city population is projected to experience strong growth through 2018 (1.4 percent annually). The league average for US-based teams is expected to be 0.7 percent per year over the same period.

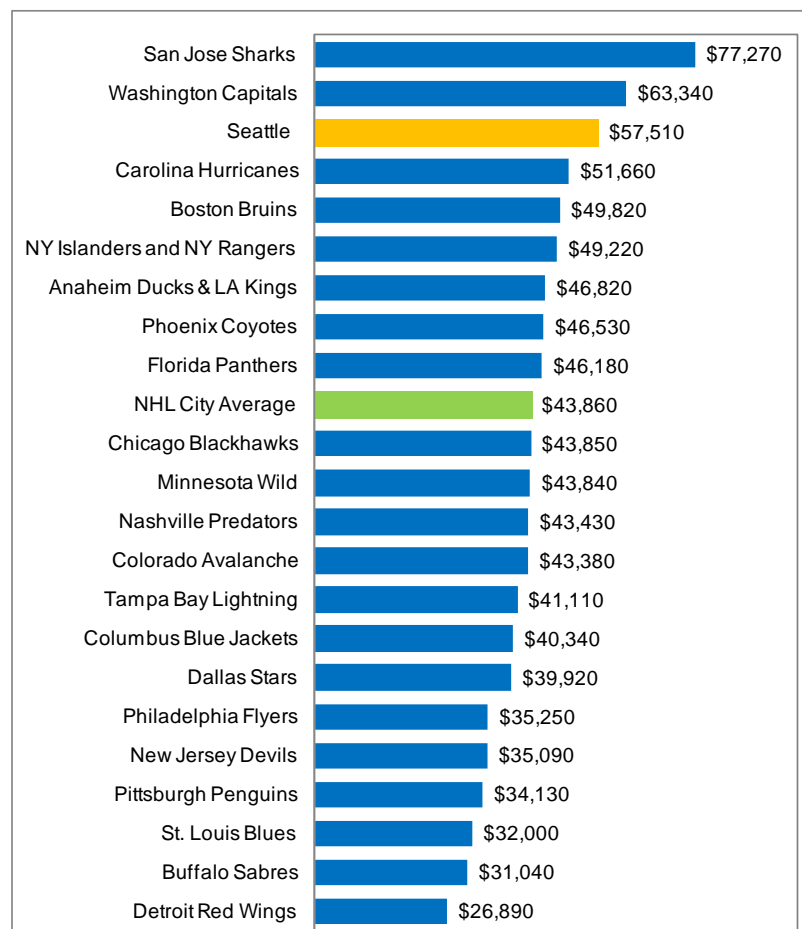
Figure 21: 2013 Median Age in NHL Cities



Source: ESRI

The City of Seattle had a median age of 36.8 in 2013, which was more than a year older than the average NHL city, which had a median age of 35.2.

Figure 22: 2013 Median Household Income in NHL Cities (US)



Source: ESRI

Only two current NHL markets (San Jose and Washington) had higher median household income than Seattle in 2013. The leaguewide average for US-based teams was approximately \$43,900.

5. Other Potential Entertainment Uses

As part of our assignment, we evaluated the potential for KeyArena to be repurposed for attractions and entertainment uses other than sports and entertainment, characterized as “Scenario D.” In order to evaluate the market potential for such uses, we conducted the following tasks:

- Assessed the size, growth, demographics, and characteristics of available resident and tourist markets;
- Examined the local competitive market for attractions of all types;
- Conducted case studies of other arena repurpose projects; and
- Evaluated entertainment and attraction alternatives according to the development criteria for KeyArena and the mission of Seattle Center.

REVIEW OF AVAILABLE MARKETS

The size and characteristics of the resident and tourist markets from which attractions of all types draw attendance are important factors in determining potential audience demand. As part of this study, AECOM analyzed resident and visitor volume estimates in the Seattle region and also collected basic data on resident demographics and tourism characteristics.

This section summarizes the size and major characteristics of the available markets and is divided into the following sections:

- Overview of the resident market,
- Key characteristics of the visitor market, and
- Analysis and summary of all available markets.

RESIDENT MARKET

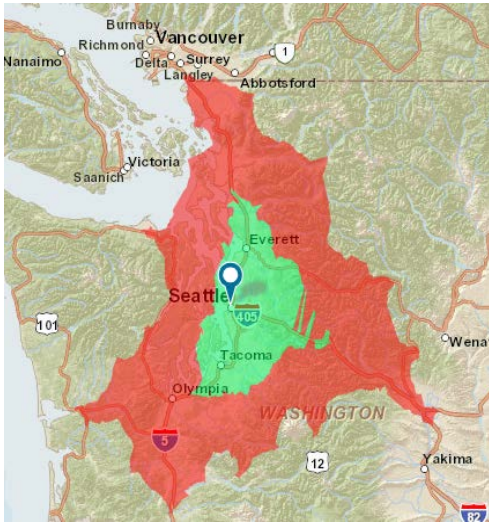
Visitation to attractions of all types has a direct relationship to market proximity. For the purposes of this study, AECOM has divided the resident market for potential entertainment uses at Seattle Center into two market segments—primary and secondary. Residents travelling from farther than the secondary market generally stay overnight and are included as part of the overnight visitor market.

We divided the resident market into two segments based the following drive time metrics:

- Primary market – 60 minutes from Seattle Center.

- Secondary market – Between 60 and 120 minutes from Seattle Center.

Figure 23: Map of Resident Market Segments for Seattle Center

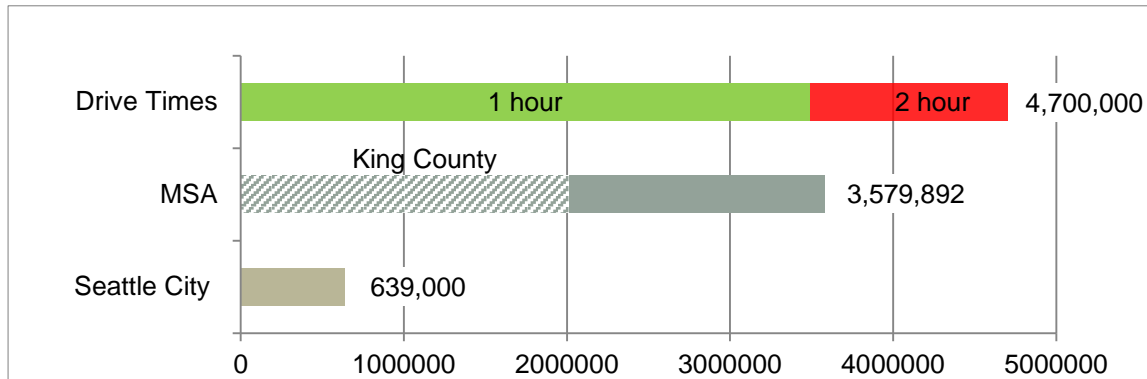


Source: ESRI

Resident Market Size and Growth

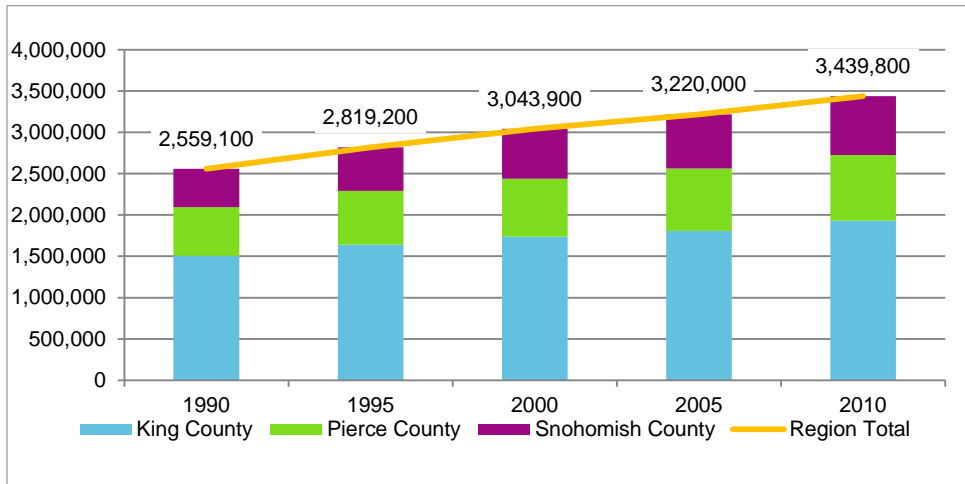
The total resident market population is 4.7 million, with the majority, almost 75 percent, living in the closer-in primary market, with only 25 percent of the population located in the secondary market. As shown below, the primary market is roughly the size of the Seattle Metropolitan Statistical Area (MSA).

Figure 24: Comparison of Available Resident Market to Seattle MSA and King County Population



The resident market has undergone rapid growth in the last 20 years, from 2.6 million in 1990 to 3.5 million in 2010, and is expected to grow more modestly in the future.

Figure 25: Historic Population Growth by County



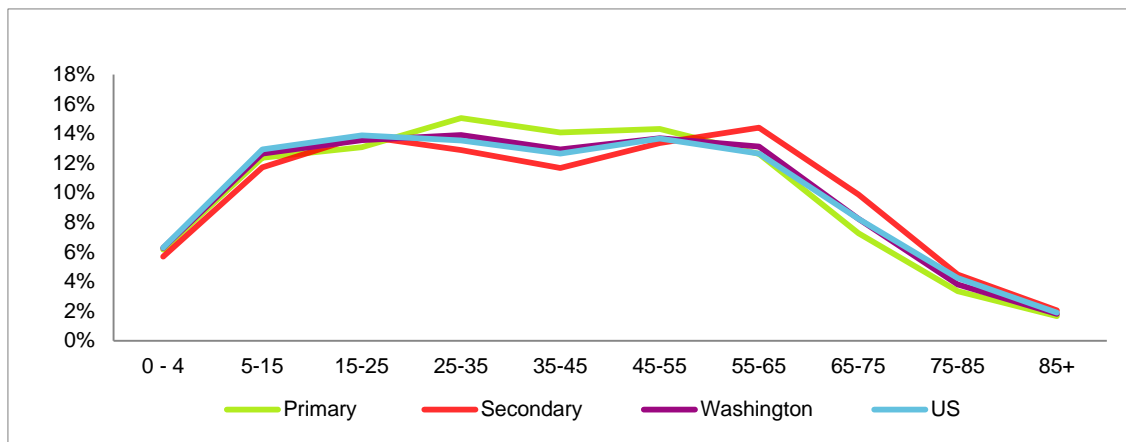
Resident Market Demographics

Age, income, and education level are all important market considerations in evaluating the potential for attractions. Generally speaking, major mass-market entertainment uses prefer to be located around large family populations, while higher income and education demographics favor cultural attractions.

Age

The Seattle resident market generally mirrors trends in the United States with respect to age. The primary market has a slightly younger population with a relatively higher population between the ages of 25 and 54. The secondary market has a greater population over the age of 65.

Figure 26: Seattle Resident Market Age Profile, 2014

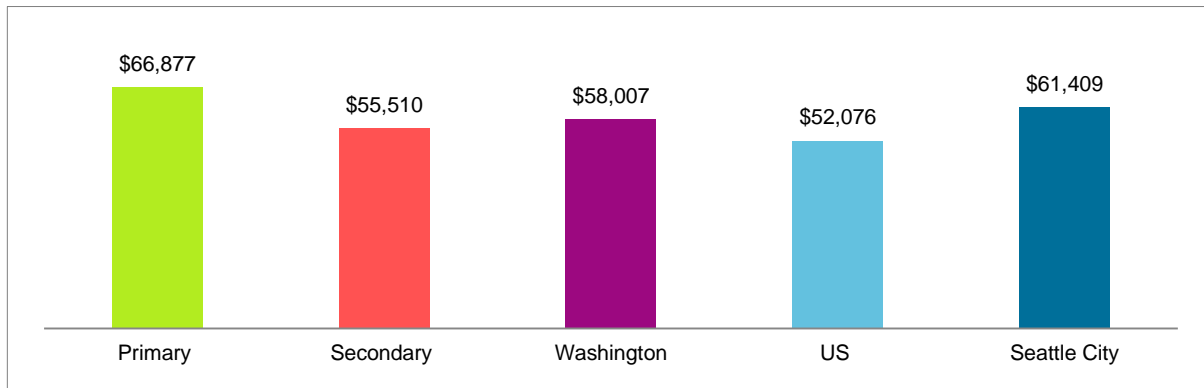


Source: ESRI, AECOM

Income

As shown below, the Seattle region has high income levels relative to the state of Washington and the United States. The primary market has the highest income levels, with a median household income of nearly \$67,000 compared to \$58,000 for Washington and just over \$52,000 for the United States. (The median citywide income differs from the amount shown in Figures 11 and 22 because of the use of different years' data.)

Figure 27: Seattle Resident Market Median Household Income Comparisons, 2014

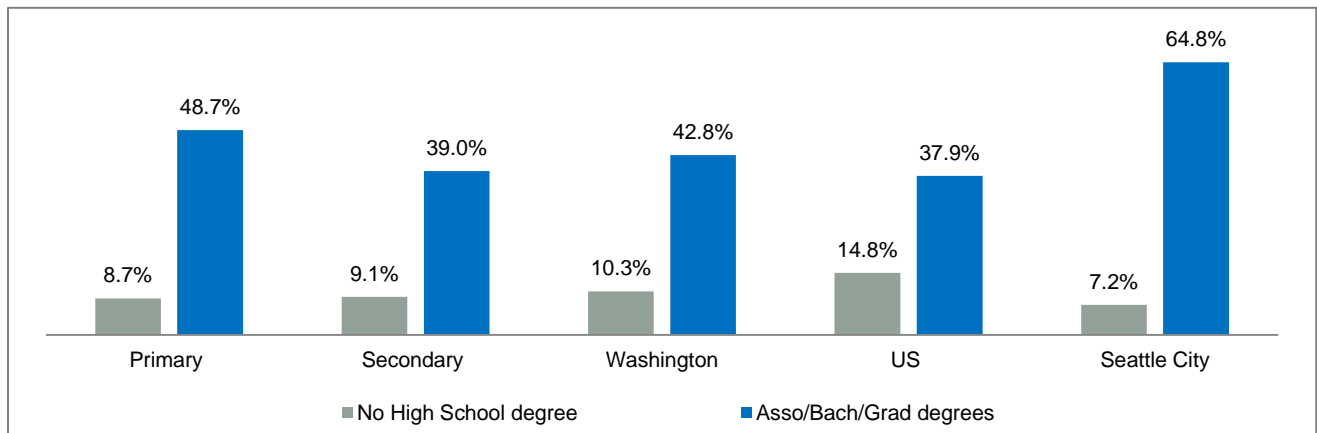


Source: ESRI, AECOM

Education

Educational attainment is very high in the Seattle market, with 49 percent of the primary market holding college and advanced degrees, compared to 43 percent and 38 percent in Washington and the United States, respectively.

Figure 28: Seattle Resident Market Educational Attainment (age 25+), 2014



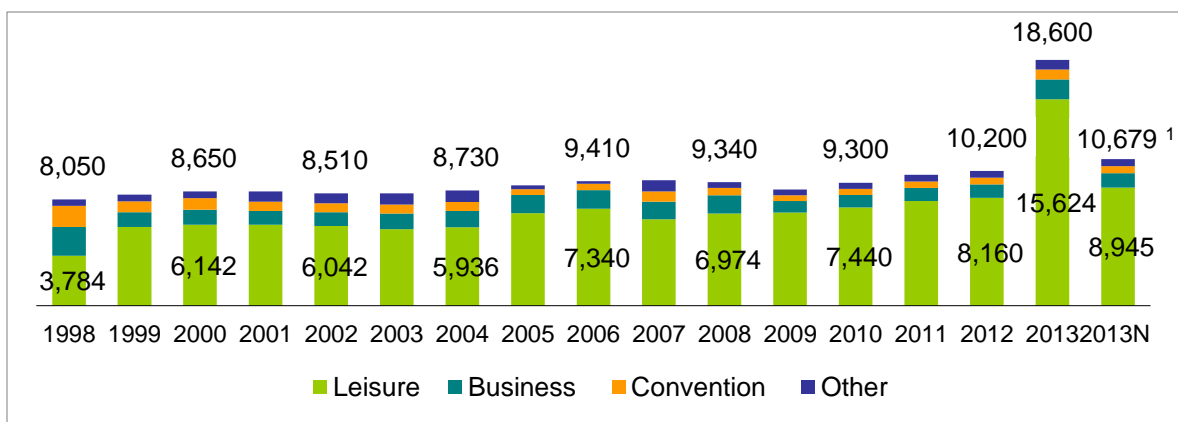
Source: ESRI, AECOM

TOURIST MARKET

Tourism has been very strong in Seattle, with overnight leisure visitors, the primary market for attractions, more than doubling over the past 15 years. The current estimate of overnight visitors is 18.6 million. It should be noted that Visit Seattle just recently revised its methodology for estimating the number of visitors to Seattle, which resulted in a higher estimate. The new method is intended to more accurately count those visiting friends and relatives (the VFR market).

As shown in the figure below, tourism has grown steadily over the years, with a slight decrease in 2009 during the recession. Since then tourism has continued to grow and surpassed levels prior to the recession.

Figure 29: Total Overnight Visitors to Seattle, 1998-2013



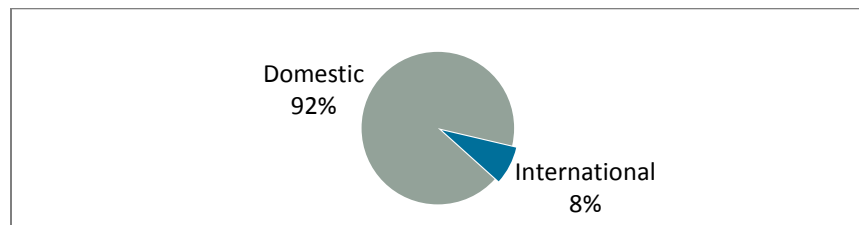
This is our internal estimate of a “normalized” 2013 number using the previous methodology, for comparison purposes only.

Source: Visit Seattle, AECOM

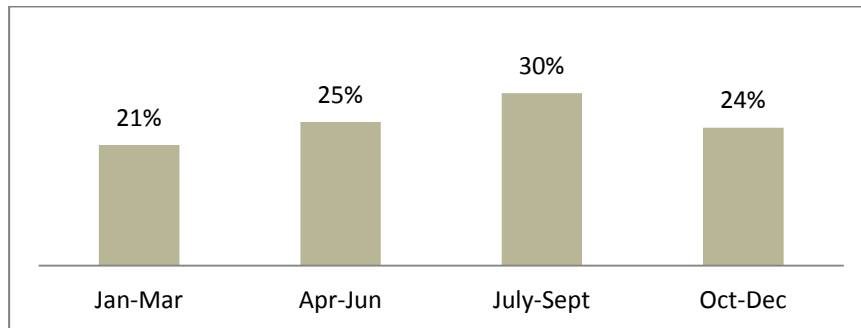
A few important characteristics related to overall tourism and shown in the following figures include:

- Leisure visitors account for 84 percent of total visitation, which is a positive factor for attractions.
- Approximately 92 percent of visitors were domestic travelers, with a relatively small but growing number of international tourists.
- There is significant peaking during summer months, in part due to weather in the winter and a largely domestic tourist market.

Figure 30: Total Visitors by Origin, 2013



Source: Visit Seattle

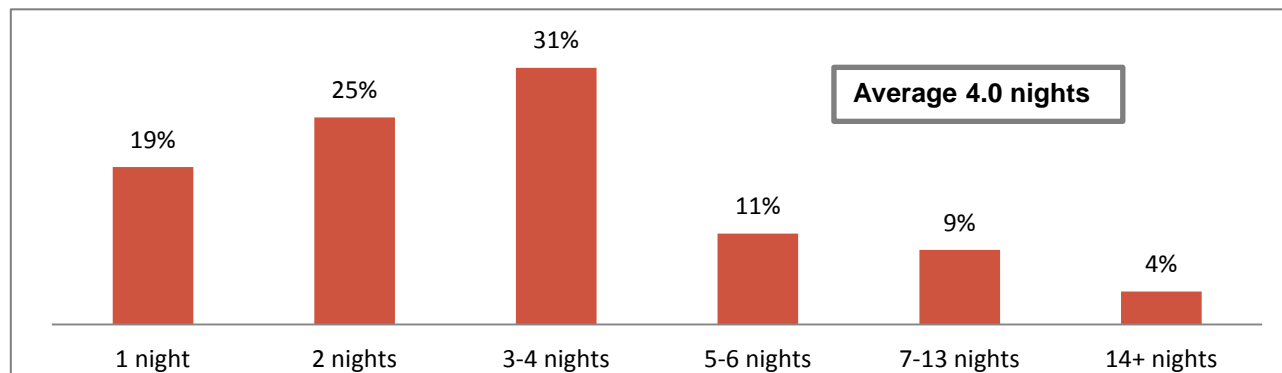
Figure 31: Overnight Visitors Season of Trip, 2013

Source: Visit Seattle

Seattle Tourism Visitor Profile

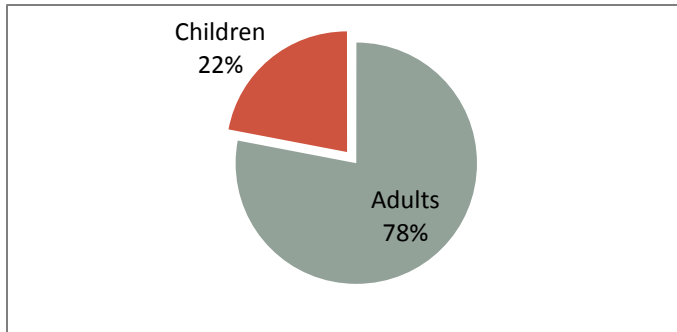
Key characteristics of the Seattle tourist market are as follows:

- Overnight visitors stay on average of four nights.
- People visiting friends and relatives represent 52 percent of the total, with 33 percent staying in a friend's dwelling.
- The average party size is 2.6 people, which indicates that Seattle is not a major market for family visitors.
- Overnight visitors to Seattle are primarily adults (78 percent), the majority of whom do not have children under the age of 18 in their household.
- Over 60 percent of Seattle's overnight tourists have college degrees or more education.
- Income levels among visitors are strong, with nearly 25 percent of all visitors with household incomes greater than \$100,000.
- After Washington, the greatest source markets for domestic overnight tourism to Seattle are California (16 percent), Oregon (12 percent), and New York (5 percent).
- Shopping, dining, and visiting landmarks and historic sites are the most popular activity.

Figure 32: Overnight Visitors Length of Stay, 2013

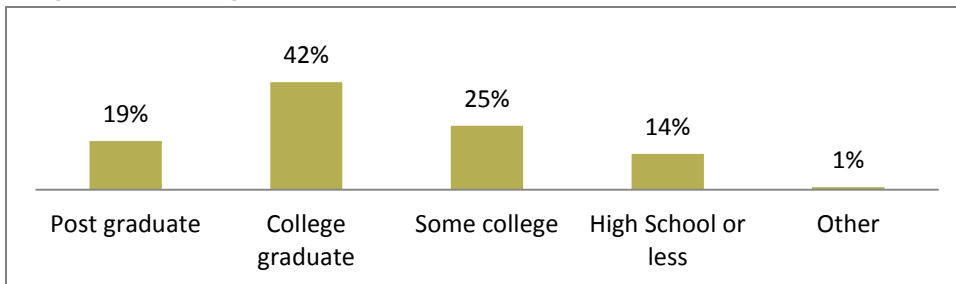
Source: Visit Seattle

Figure 33: Visitor Composition, 2013



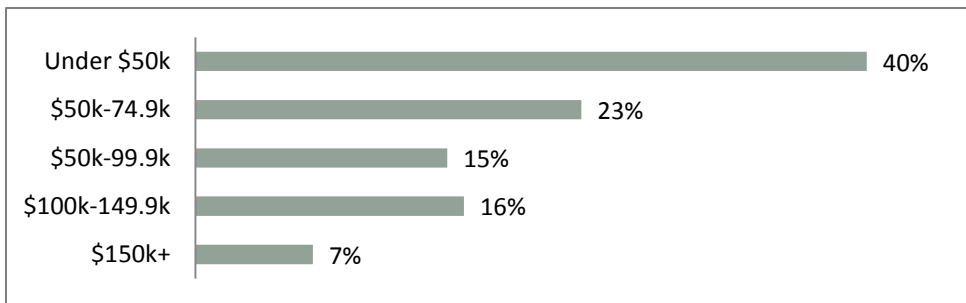
Source: Visit Seattle

Figure 34: Overnight Visitors Educational Attainment, 2013



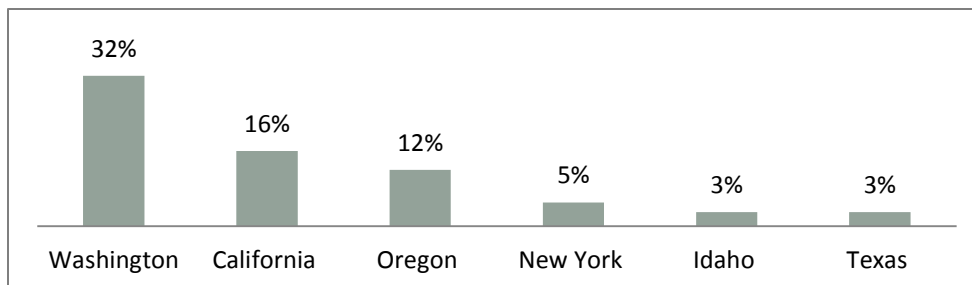
Source: Visit Seattle

Figure 35: Overnight Visitors Household Income, 2013

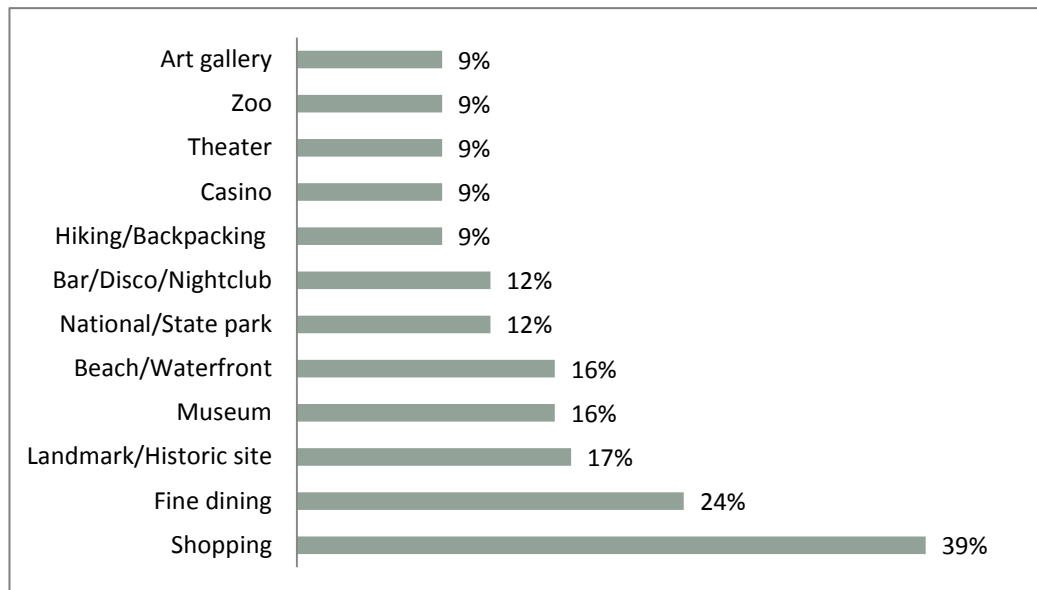


Source: Visit Seattle

Figure 36: Overnight Visitors State of Origin, 2013



Source: Visit Seattle

Figure 37: Activities and Experiences, 2013

Source: Visit Seattle

SUMMARY OF AVAILABLE MARKETS

Size and Growth

Overall, the Seattle resident and tourist markets are large and growing. The resident market has a population of 4.75 million and is expected to grow to over 5 million by 2020, with most of this population located in the primary market of up to a one-hour drive time to Seattle Center. The overnight leisure tourist market is very large at 16 million visitors, and is projected to grow to over 17 million by 2020. In total, the size of the available market for a potential attraction at Seattle Center is 20.8 million, growing to 22.3 million by 2020.

Table 22: Summary of Available Markets

Summary of Available Markets	2010	2015	2020
Resident Market			
Primary Market (0-1 hr)	3,352,000	3,531,000	3,750,000
Secondary Market (1-2 hr)	1,186,000	1,219,000	1,257,000
Total Resident Market	4,538,000	4,750,000	5,007,000
Overnight Leisure Tourists ¹	7,440,000	16,096,000	17,340,000
Total Available Markets	11,978,000	20,846,000	22,347,000

Source: Visit Seattle, Longwoods Travel USA, ESRI, AECOM

¹Methodology for counting overnight visitors changed in 2013

Summary of Key Characteristics and Implications for Attraction Potential

Overall, the resident and tourist markets in Seattle are of very high quality and very favorable for attraction potential. Specifically:

- The resident market is large, with steady growth.
- The primary market within a 30-minute drive to Seattle Center includes the majority of the population, which is positive since they are closer in and generally more likely to attend an attraction at Seattle Center.
- The primary market includes a young, professional demographic.
- The resident market overall has relatively high income and very high education levels compared to national averages. Attendance at cultural attractions tends to be correlated with high education and income levels, and attractions of all types benefit from increased discretionary income.
- The tourist market is very large and growing, with a large percentage of leisure visitors.
- The length of stay is fairly long, which is favorable as it allows tourists to have time to visit attractions beyond the “must-see” attractions.
- Tourists to Seattle tend to be highly educated with fairly high incomes.
- The tourist market exhibits strong peaking in the summer months, which is challenging for attractions since they often need to build larger visitor experience areas to accommodate peaking.

EVALUATION OF SEATTLE ATTRACTIONS MARKET

AECOM reviewed key attendance, financial, and operations metrics for the following attractions in the Seattle market:

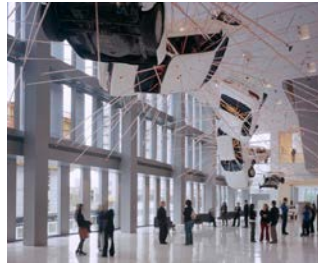
Major Attractions

- Space Needle
- Woodland Park Zoo
- Pacific Science Center
- Seattle Aquarium
- Wild Waves Theme Park



Mid-Tier Attractions

- Chihuly Garden and Glass
- EMP
- Museum of Flight
- Seattle Art Museum
- Seattle Great Wheel
- Sky View Observatory
- UW Botanic Gardens



Specialty Museums

- Olympic Sculpture Park
- Future of Flight Aviation Center & Boeing Tour
- Museum of History and Industry
- Seattle Children's Museum
- Burke Museum of Natural History and Culture

Key findings related to the Seattle attractions market are as follows:

- Overall, Seattle has a very strong existing attractions market with a wide array of product offerings. The market has multiple view attractions, an aquarium, zoo, garden attractions, many high quality museums and cultural attractions, specialty industry attractions unique to Seattle and a combination water and amusement park. In addition, the Pike Place Market, boat cruises, and other waterfront activities generate high levels of visitation.
- The attractions in Seattle exhibit strong attendance, with major attractions reporting over one million visitors annually.

-
- Penetration rates of both resident and tourist markets are very healthy, with resident market penetration rates averaging around five percent and tourist market penetration rates averaging two percent and going as high as six percent, which is very strong for a tourist market as large as Seattle's.
 - Pricing is extremely strong for attractions in Seattle, likely due to the large market of tourists who are less price sensitive, high incomes in the resident market, and high quality attractions.

Table 23: Seattle Attractions Characteristics and Performance Metrics

	2013	Admission Rates			Square Feet		Visitors per ESF	Visitor Origin		Penetration Rate	
	Attendance ¹	Adult	Senior	Child	Gross	Exhibit		Resident	Tourist	Resident	Tourist
Major Attractions											
Space Needle	1,193,000	\$21.00	\$20.00	\$14.00	n/a	n/a	n/a	22%	78%	5.6%	6.0%
Woodland Park Zoo	1,139,000	\$18.75	\$18.75	\$11.75	92 acres	n/a	n/a	20%	80%	4.8%	5.8%
Pacific Science Center	1,000,000	\$19.50	\$17.50	\$14.50	166,993	66,616	15.0	70%	30%	14.8%	1.9%
Seattle Aquarium	803,000	\$21.95	\$21.95	\$14.95	108,940	35,101	22.9	14%	86%	2.4%	4.4%
Wild Waves Theme Park ³	n/a	\$34.99	\$29.99	\$29.99	70 acres	n/a	n/a	n/a	n/a	n/a	n/a
Mid Tier											
Chihuly Garden and Glass	572,000	\$21.00	\$19.00	\$14.00	27,000	19,000	30.1	25%	75%	3.0%	2.7%
EMP	559,000	\$23.00	\$20.00	\$17.00	140,000	37,000	15.1	55%	45%	6.5%	1.6%
Seattle Great Wheel	500,000e	\$13.00	\$11.00	\$8.50	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Museum of Flight	458,000	\$19.00	\$19.00	\$11.00	n/a	178,000	2.6	40%	60%	3.9%	1.8%
Seattle Art Museum	315,000	\$19.50	\$17.50	\$12.50	n/a	70,000	4.5	75%	25%	5.0%	0.5%
SkyView Observatory	200,000e	\$12.50	\$9.00	\$9.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a
UW Botanic Gardens	n/a	Free	Free	Free	230 acres	n/a	n/a	n/a	n/a	n/a	n/a
Specialty Museums²											
Olympic Sculpture Park	270,000	Free	Free	Free	9 acres	n/a	n/a	75%	25%	4.3%	0.4%
Future of Flight Aviation Center & Boeing Tour	248,000	\$10.00	\$10.00	\$10.00	73,000	28,000	8.9	45%	65%	2.4%	1.0%
Museum of History and Industry	215,000	\$17.00	\$15.00	Free	50,000	40,000	5.4	44%	56%	2.0%	0.8%
Seattle Children's Museum	175,000	\$8.25	\$7.25	\$8.25	32,000	22,000	8.0	58%	42%	2.2%	0.5%
Burke Museum of Natural History and Culture	102,000	\$10.00	\$8.00	\$7.50	70,402	18,984	5.4	75%	25%	1.6%	0.2%
Overall Average	542,231	\$17.96	\$16.26	\$13.07	83,542	51,470	11.8	48%	53%	4.5%	2.1%
Overall Median	458,000	\$19.00	\$17.50	\$12.13	71,701	36,051	8.4	45%	56%	3.9%	1.6%

1 / Excludes rental and fundraising attendance.

2 / Excludes specialty museums with attendance less than 100,000.

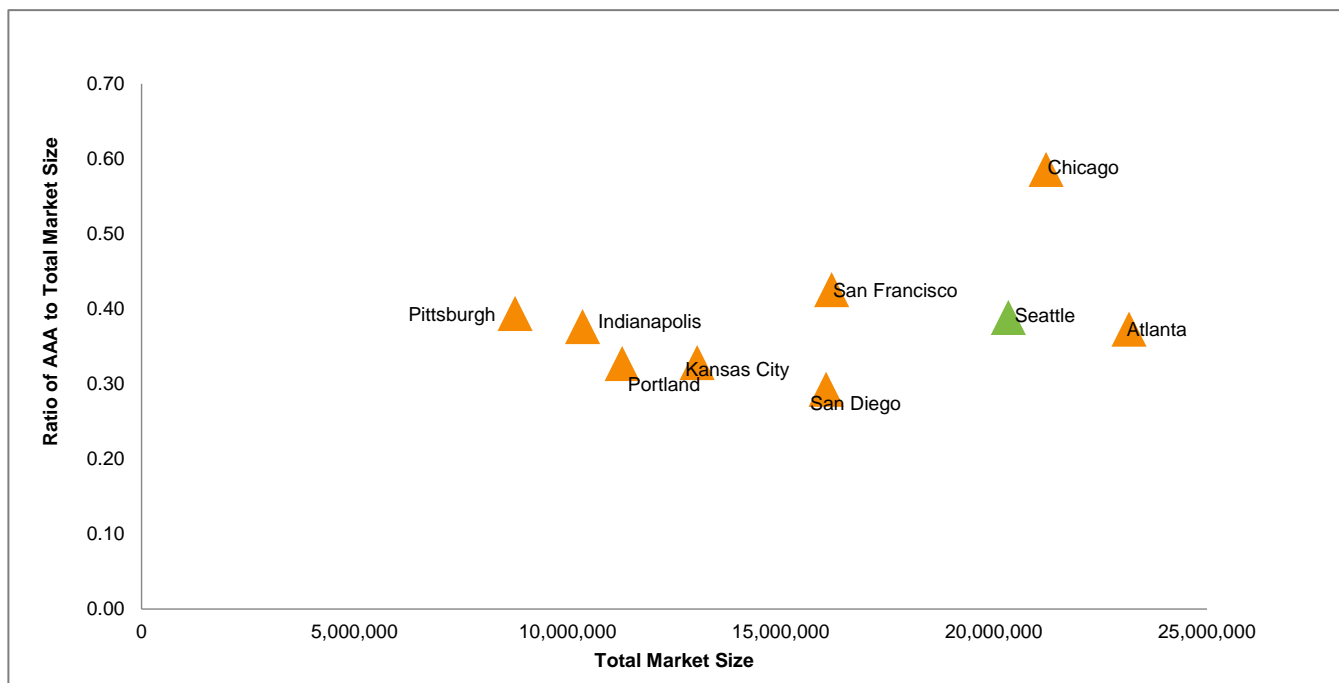
3 / Winter discounted pricing.

Source: Official Museum Directory, Individual Institutions, AECOM

AGGREGATE ATTRACTION ATTENDANCE

Aggregate attraction attendance is a metric that AECOM uses to evaluate attractions in different cities relative to market size. The ratio is useful in assessing the market potential for additional attractions in a given market and to understand if markets are under or over supplied. As shown in the figure below, Seattle performs relatively well and appears to be adequately supplied, but may have some limited capacity for additional attractions as long as they are appropriate for the market.

Figure 38: Aggregate Attraction Attendance per Capita by Market



Source: AECOM

ARENA REUSE PROJECTS

As part of our analysis, AECOM examined a number of arena and stadium reuse projects, collecting information on original uses, development costs and reuse developments. We examined the following former arenas:

- Wachovia Spectrum, Philadelphia, Pennsylvania – demolished and replaced with a retail, dining, and entertainment venue; hotel currently planned.
- Civic Arena, Pittsburgh, Pennsylvania – currently vacant; plans to demolish and develop a mixed-use project with affordable and market rate housing, retail, and office space.
- Montreal Forum, Montreal, Quebec – reused for AMC Theaters and retail.
- Memphis Pyramid, Memphis, Tennessee – reused for a Bass Pro Shop, retail, and hotel.
- Maple Leaf Gardens, Toronto, Ontario – redeveloped into a smaller arena with retail and parking.

- Houston Astrodome, Houston, Texas – currently vacant, will be used for parking.
- Arsenal Stadium, London – reused for housing and a public park.
- Las Arenas, Barcelona, Spain – reused for a shopping mall.
- The Summit, Houston, Texas – reused for a “megachurch.”

CASE STUDIES

Case studies of key arenas examined as part of this study are provided below.

Wachovia Spectrum, Philadelphia, PA

Wachovia Spectrum opened in 1967 with a capacity of over 18,000 seats and was built for a total cost of \$50 million. This former home to both NBA and NHL teams was closed in 2009 due to the building of an adjacent arena and demolished in 2011. The site has been redeveloped and now includes XFINITY Live!, a retail, dining and entertainment, and dining center adjacent to the Wells Fargo Center. A 300-room hotel is also planned for the site.



Civic Arena, Pittsburgh, PA



The Civic Arena in Pittsburgh opened in 1961 and was subsequently renovated twice (1986 and 1993). It included a total 170,000 square feet and 18,039 seats, built for a total cost of \$22 million. Prior to closing in 2010, the facility was host to the Pittsburgh Penguins (NHL). After demolition in 2012, the site was

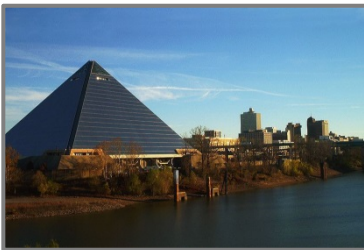
converted into a multi-purpose sports and entertainment area, with planned redevelopment to include housing, affordable and market rate, as well as retail and office space.

Montreal Forum, Quebec

The Montreal Forum, home to the Quebec Canadiens, was opened in 1924 and renovated twice, in 1949 and 1968. It included 18,575 seats, built at a cost of \$1.5 million (\$20.5 million in 2014\$). In 1997, the facility was designated as a National Historic Site of Canada. In redevelopment, the interior has been reconfigured to include AMC Theaters and retail shopping. Center Ice was also recreated in the new interior as well as a memorial to the original arena.

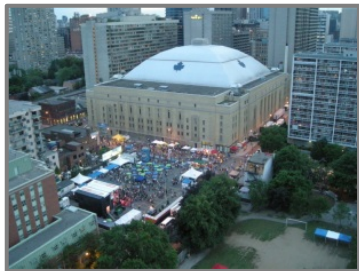


Memphis Pyramid, Tennessee



The Memphis Pyramid was built in 1991 to attract a professional basketball team to the Memphis area. It was used occasionally by the Memphis Grizzlies (NBA) and college teams until 2004, when it was largely abandoned as a sports facility. As an arena, the Pyramid included 220,000 square feet and 20,142 seats, built at a cost of \$22 million (\$175 million [2014\$]). Construction to redevelop the facility began in 2012, and a Bass Pro Superstore opened in December 2014 in addition to a hotel, restaurants, and parking.

Maple Leaf Gardens, Toronto



Maple Leaf Gardens opened in 1931 with 16,382 seats built at a total cost of \$1.5 million (\$22.5 million [2014\$]). It was renovated in 2004 and in 2009. Named a National Historic Site of Canada in 2007, the rink was redeveloped to include less seating on the main level to be shared between minor teams and Ryerson University. The lower level was developed into a retail shopping center and underground parking.

Houston Astrodome, Texas

The Houston Astrodome was opened in 1965 and was the world's first multi-purpose domed sports stadium. Renovated in 1988, the Astrodome sits on 9.5 acres and includes nearly 63,000 seats. The total development cost was \$35 million (\$262,000,000 [2014\$]). Original grass turf at the Astrodome was replaced by an artificial turf, which was then dubbed "AstroTurf". In the aftermath of Hurricane Katrina in 2005, the Astrodome was used as a refugee camp and the building was condemned for violation of fire code in 2008. A referendum to renovate the stadium failed in 2013 and the current facility remains partially demolished. Once fully removed, the site will be used for parking.



SPORTS FACILITY REUSE PROJECTS KEY FINDINGS

There are several lessons that can be learned from the arena reuse case studies:

- Many no-longer functional arenas have been demolished, and those that have been repurposed are primarily located outside the United States, in Canada and Europe.
- Redeveloped uses include mixed-use developments with some entertainment functions.

- The vast majority of arena redevelopment or reuse projects involve a mix of private real estate (i.e. residential, retail, office) along with entertainment uses.

There are a number of challenges associated with reuse of arenas, including:

- It is generally very costly to bring arenas to a suitable condition where they can be used for alternatives use. This is typically the result of significant deferred maintenance, older buildings, and scale and design issues.
- Purpose-built facilities such as arenas are challenging and expensive to adapt for other uses.
- Arenas are expensive to operate and maintain and require a mix of uses in addition to entertainment for feasible economics, many of which may not be compatible with Seattle Center's mission and the goals for the KeyArena site. Many times, the cost to operate them offsets any positive revenue that can be generated, which is why they are often torn down to allow for new, mixed use entertainment projects.

EVALUATION OF ENTERTAINMENT AND ATTRACTION ALTERNATIVES

In order to identify attractions for further investigation, we first conducted a preliminary evaluation of a large number of attraction types. Key assumptions in developing the list of attractions are as follows:

- Redevelopment scenarios do not need to accommodate existing tenants.
- Private real estate uses are only possible under certain conditions where they are tied to other public, related uses, and not preferable.
- The KeyArena structure is not on the historic register, but there is a strong preference not to demolish it.
- The KeyArena site footprint is 130,000 square feet, with 353,000 existing square feet (up to 645,000 square feet including total floor plate at each elevation). It is large enough to accommodate the vast majority of attractions that we evaluated.

We used the following process to develop a short list of attractions for market evaluation. This process included:

- Develop broad list of attraction types.
- Review according to high level evaluation criteria to assess consistency with Seattle Center goals and suitability for the market.
- Removed attractions that were determined to meet the evaluation criteria sufficiently but already exist in the market.
- For the remaining attraction types, review key attendance, operating, and market metrics.

The list of attractions developed for the preliminary evaluation and the usable space in KeyArena are shown is shown in the figures below.

Figure 39: Potential Attraction Concepts for Evaluation

Potential Use	Sub-Type	Potential Use	Sub-Type
Adventure/Sports Park	Large Outdoor	Garden Attraction	Indoor/Outdoor
	Indoor / Outdoor Complex		
Amusement Park	Regional Theme Park	RD&E	n/a
	Small/Medium		
Aquarium/ Marine Life	Large Nonprofit	Indoor Specialty Attractions	Edutainment
	Small / Medium Commercial		IP-Based Attractions
	Marine Life Outdoor		Tourist-Oriented Indoor Entertainment
Corporate Attractions	Large	Tower/Wheel	Large
	Small/Medium		
Museums/ Cultural Centers	Large Museums	Waterpark	Outdoor
	Specialty Museums /Cultural Centers		Indoor/Resort
	Performing Arts	Zoo/Live Animal Attractions	Nonprofit Zoo
	Large Commercial		
Indoor Performance/Circus Attractions	n/a	Eatertainment	Large
	Performance Cars		
Driving Experience	Racing Go-karts	STEM Center	n/a
		Education Use	n/a
FEC	Indoor/Outdoor	Film Studio/ Sound Stages	n/a

Figure 40: Estimate of Available SF for KeyArena Reuse

Level	Usable Floor Plate	
	Existing SF	at Each Elevation
Event Level Subtotal	64,000	73,800
Lower Concourse	38,000	99,900
Main Concourse	60,000	123,200
Suite Level	70,000	147,600
Upper Concourse	31,000	109,200
Upper Mezzanine	4,000	90,900
Seating Bowl	86,000	n/a
Total Assignable SF	353,000	644,600

Source: AECOM

INITIAL SCREENING PROCESS

AECOM evaluated the potential attractiveness of each attraction concept for alignment with Seattle Center and the City's goals, using the following five categories and questions:

- Consistent with Seattle Center purpose statement: to “[create] exceptional events, experiences and environments that delight and inspire the human spirit to build stronger communities,”
- Contribution to overall vitality of Seattle Center,

- Appeal to both residents and tourists,
- Public access, and
- Financial viability.

We developed a scoring matrix for each criteria on a scale from 1 to 5, which 1 being the least compatible and 5 being the most compatible.

Figure 41: Scoring for Initial Concepts

Criteria	1	2	3	4	5
Consistent with SC Purpose Statement	Not At All	Weak	No Effect / Not Applicable	Good	Very strong
Financial Viability	Requires Operating Subsidy	Break Even; Requires Periodic Subsidy	Break Even, no Periodic Subsidy	Positive Net Revenue	Significant Positive Net Revenue
Contribution to Overall Vitality of Seattle Center	Does not attract public	Attracts limited numbers, dedicated visits	Attracts some visitors	Brings significant visitation, some spending at SC	Generates significant visitation with much crossover
Appeal to Residents & Tourists	Niche	Limited Appeal	One market only	Good Appeal	Resident & Tourists
Public Access	Private, no public access	Private, limited public access	Not intended for public use	Public access with fees	Public access with no/limited fees

We then went through and evaluated each of the attraction types by these criteria and ranked them. After the screening process, there were 11 attraction concepts that sufficiently met most criteria.

Table 24: Results of Screening Process (1 of 2)

Use Type	Sub-Type	Consistent with SC Purpose Statement	Financial Viability	Contribution to Overall Vitality of SC	Appeal to Residents & Tourists	Public Access	Initial Screening: Combined Score
Key Arena		4	3	4	2	4	17
Adventure/Sports Park	Large Outdoor	5	4	5	5	4	23
Adventure/Sports Park	Indoor / Outdoor Complex	5	3	5	5	4	22
Amusement Park	Regional Theme Park	3	5	4	3	3	18
Amusement Park	Small/Medium	3	3	3	1	4	14
Aquarium/ Marine Life	Large Nonprofit	5	1	5	5	4	20
Aquarium/ Marine Life	Small / Medium Commerical	4	3	3	2	3	15
Aquarium/ Marine Life	Marine Life Outdoor	4	4	4	4	3	19
Corporate Attractions	Large	4	3	5	3	3	18
Corporate Attractions	Small/Medium	3	2	4	3	3	15
Museums/ Cultural Centers	Large Museums	5	1	5	5	4	20
Museums/ Cultural Centers	Specialty Museums /Cultural Centers	4	1	4	4	4	17
Museums/ Cultural Centers	Performing Arts	5	1	4	2	4	16
Indoor Performance /Circus Attractions	n/a	4	4	4	5	4	21
Driving Experience	Performance Cars	2	4	3	4	2	15
Driving Experience	Racing Go-karts	2	3	2	1	3	11
Family Entertainment Center	Indoor/Outdoor	2	3	2	1	3	11
Garden Entertainment Attraction	Indoor/Outdoor	5	2	5	5	4	21

Table 25: Results of Screening Process (2 of 2)

Use Type	Sub-Type	Consistent with SC Purpose Statement	Financial Viability	Contribution to Overall Vitality of SC	Appeal to Residents & Tourists	Public Access	Initial Screening: Combined Score
Key Arena		4	3	4	2	4	17
Retail, Dining & Entertainment (RDE)	n/a	4	5	5	4	5	23
Specialty Attractions	Edutainment	5	4	5	5	4	23
Specialty Attractions	IP-Based Attractions	3	5	4	5	3	20
Specialty Attractions	Tourist-Oriented Indoor Entertainment	1	3	2	1	3	10
Tower/Wheel	Large	4	5	5	3	4	21
Waterpark	Outdoor	3	4	4	2	4	17
Waterpark	Indoor/Resort	3	4	5	4	4	20
Zoo/Live Animal Attractions	Nonprofit Zoo	5	1	5	4	4	19
Zoo/Live Animal Attractions	Large Commerical	3	5	4	5	2	19
Zoo/Live Animal Attractions	Small/Medium	2	3	2	2	3	12
Eatertainment Attraction/Destination	Large	5	3	5	5	5	23
STEM / Maker Center	n/a	5	3	3	3	3	17
Education Use	n/a	4	2	4	2	5	17
Film Studio/ Sound Stages	n/a	1	2	1	1	1	6

Of those, there were several that already exist in the local market or that would not fit within the KeyArena facility and were removed. The uses that were left for market evaluation are shown in the figure below.

Figure 42: Evaluation of Potential Attraction Concepts

High Scoring Attraction Concepts	Removed for Local Market Crossover or Scale	Attraction Concepts Remaining for Market Evaluation
Indoor Adventure or Sports Park Dinner Theater / Performance Attraction Retail, Dining, & Entertainment Specialty Indoor Attraction-Edutainment Specialty Indoor Attraction- IP Based Indoor Waterpark STEM Large Outdoor Adventure Park Large Aquarium Large Museum Garden Entertainment Attraction Tower/Wheel	Large Outdoor Adventure Park Large Aquarium Large Museum Garden Entertainment Attraction Tower/Wheel Indoor Waterpark	Indoor Adventure or Sports Park Dinner Theater / Performance Attraction Retail, Dining, & Entertainment Specialty Indoor Attraction-Edutainment Specialty Indoor Attraction- IP Based STEM

PROFILES OF POTENTIAL USES

For the remaining attraction concepts remaining, AECOM developed attraction profiles, highlighting the following information typical for each attraction type:

- Attendance and pricing,
- Resident-tourist mix,
- Size and scale requirements,
- Typical investment,
- Surrounding uses,
- Business model / financial characteristics, and
- Examples in the United States and/or internationally.

Indoor Adventure Sports Park

Definition

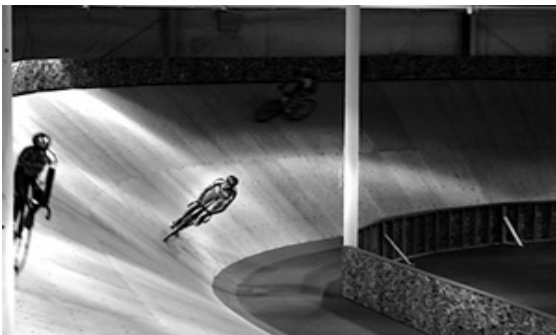
- Relatively new attraction type combining a number of concepts
- Includes: surf, white water racing course, rock-climbing, ice-climbing, trampoline park, jet boat racing, indoor ski attractions, zip lines, Velodrome, recreational ice rink

Examples

- National: Kelly Slater Surf Experience (pending), Vans Skate Park in Huntington Beach, CA; Ray's MTB (Cleveland), LA Velodrome, Boulder Indoor Cycling Center
- International: Costa Rica Zip Line and Canopy Tours (Various), Ski Dubai (indoor)
- General: Rock climbing, trampoline, gyms, combination

Key Operating Characteristics

Market Requirements	Medium to large size local resident and/or tourist market
Visitor Profile	Target market is typically young adult professionals and outdoor enthusiasts(20s, 30s, 40s).
Length of Stay	2 hours
Size	2-5 acres for outdoor components, 10,000-50,000 SF for indoor sports facilities
Attendance	Attendance less than 300,000 but varies widely
Capital Investment	Investment for most is less than \$10 million, but as high as \$100 million
Typical Location / Adjacent Uses	Urban/ suburban, resorts, varied, like to be around visitor serving uses
Business Model & Financial Characteristics	Commercial, but anchor uses



Indoor Dinner Performance Attraction

Definition

- Themed dinner performance facilities

Examples

- Teatro ZinZanni (Seattle / San Francisco)
- Australian Outback Spectacular (Gold Coast)
- Pirate's Dinner Adventure (FL and CA)
- Cirque du Soleil
- Immersive theater experiences

Key Operating Characteristics

Market Requirements	Large resident and tourist markets, or tourist markets
Visitor Profile	Mix of residents and tourists, and/or just tourists
Length of Stay	1-2 hours
Size	20,000-40,000 SF, plus parking
Attendance	Greater than 100,000
Capital Investment	\$10 - \$20 million
Typical Location / Adjacent Uses	Urban and tourist destinations
Business Model & Financial Characteristics	Commercial, destinations, anchor attractions



Retail, Dining & Entertainment

Definition

- Retail, dining & entertainment centers have co-located shops, restaurants, and other leisure activities

Examples

- Local/Regional: Pike's Place Market
- National: Gilley's Dallas, Pier 39, Navy Pier, Seaport Village, Third Street Promenade, Eataly, Ferry Building

Key Operating Characteristics

Market Requirements	Large on-site blended tourist and resident market or very strong location in dense urban market
Visitor Profile	All ages, majority between 20 and 50
Length of Stay	Under 2 hours
Size	50,000 - 300,000 SF
Attendance	20 visitors per square foot
Capital Investment	\$150 - \$300 per SF (varies widely)
Typical Location / Adjacent Uses	Urban, tourist destinations, or adjacent to major attraction
Business Model & Financial Characteristics	Commercially viable, but cross subsidize internally



Edutainment Attraction

Definition

- A themed indoor education focused attraction
- Examples include FlyOver Canada, Sega Orbi, and National Geographic /Smithsonian, WonderWorks
- Gates Foundation math experience
- A unifying theme or idea creates a unique environment in contrast to a typical mall
- Wide variety of scale & quality, customer bases and nearby activities

Examples: BBC / Sega Orbi

Overview / Definition

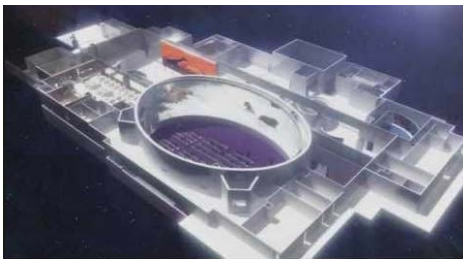
- A Sega-BBC Earth joint venture that features BBC's library of content to deliver technologically advanced, nature related experiences
- High tech experiences including 4D theatre, RFID tags, and experiential audio-visual presentations

Key Metrics

- Developed by Sega using licensed BBC Earth content
- Located in Yokohama, Japan
- Opened in 2013
- 51,000 SF
- Target audience is all ages
- Estimated attendance is 1 million based on opening month attendance

Key Operating Characteristics

Market Requirements	Medium size local resident and/or tourist market
Visitor Profile	Depends on product, families with children / kids
Length of Stay	Varies
Size	Anywhere from 15,000-100,000 SF
Attendance	300,000-900,000
Capital Investment	\$2-\$35 million
Typical Location/ Adjacent Uses	Typically located in large retail centers
Business Model & Financial Characteristics	Typical margins are 10-15 percent after reinvestment and franchise fees. Depends on product



Examples: FlyOver Canada

Overview / Definition

- 30-minute virtual flight ride experience (divided into three equal segments- ride is 10 minutes) with film of Canada.
- Off-season themed content potential
- Based on Disney experience “Soarin’ Over California”.
- Located at Canada Place pier in former Imax theater.

Key Metrics

- Opened in June
- Attendance unknown, likely under 500,000
- Capacity constrained during peak time by film length and theater seats (currently 60 seats).
- Visitors are evenly split between residents and tourists, but are expected to include more tourists during stable year
- Year round operation
- Admission is \$20
- Requires approximately 10,000 square feet
- Investment of \$16 million in Vancouver
- Prefer to be in entertainment zone, co-located with other entertainment destinations or attraction



IP-Based Attraction

Definition

- An Intellectual Property (IP)-based attraction or exhibit which incorporates elements of existing branded characters or concepts
- Leveraging a known brand can be advantageous
- Risks include high initial expense and potential expiration of rights

Examples

- Angry Birds
- Legoland Discovery Centers
- Disney Quest

Legoland Discovery Center

Overview / Definition

- Developed by Merlin Entertainments (UK) with Lego intellectual property
- Features interactive exhibits and rides in indoor experience

Key Metrics

- Locations in Atlanta, Boston, Chicago, Dallas, Kansas City, Westchester (UK), Toronto, Berlin, Oberhausen (Germany), Tokyo, Yokohama (Japan)
- Development cost from \$10-\$20 million
- 30,000-45,000 SF
- Target age group from 2 to 12 years
- Attendance of approximately 400,000
- Adult admission from \$11 to \$23
- Revenues of \$6 to \$11 million
- Typically located as a mall anchor

Key Operating Characteristics

Market Requirements	Large local resident and/or tourist market
Visitor Profile	All ages, families, groups
Length of Stay	1-3 hours
Size	10,000- 50,000 SF
Attendance	250,000- 750,000
Capital Investment	\$10-\$35M
Typical Location / Adjacent Uses	Shopping centers, high traffic areas
Business Model & Financial Characteristics	Commercial attractions



STEM / Maker Center

Examples

- Maker Marts/ Facilities/ Support Organizations
- SFMADE, a non-profit organization and public/private partnership to support San Francisco's manufacturing
- Makers Market- online shopping destination for emerging makers
- Pop-up stores/fairs nationwide
- Torpedo Factory, (VA)- residency programs, retail, classes, and facilities
- Incubators for Technology and Local Manufacturing
- Y Combinator (San Francisco)
- National Robotics Training Center (South Carolina)
- Local examples:
 - Makerhaus-10,000 square feet of studio/shop space featuring classes and membership access
 - Makers' Mercantile- craft retail, meeting space, classrooms, and bakery
 - TechStars (four national locations including Seattle)



Potential Development Combinations

It may be possible to combine some of these attraction concepts with private real estate in order to maximize financial viability. Examples generally include an entertainment anchor plus a supporting commercial use and could include:

- A nature or environment themed edutainment attraction plus specialty retail and themed dining;
- Indoor adventure park plus a sports retailer, sports bar, and dining; and
- A STEM /Maker center with technology oriented office space, dining, and specialty retail.

SUMMARY OF MARKET ANALYSIS FOR SCENARIO D

Major findings from AECOM's market analysis for Scenario D include the following:

- **Available Markets** – Seattle resident and tourist markets are large and high quality. The majority of the resident market population is within a one-hour drive (i.e. the primary market), which is favorable. Income and education levels for residents and tourists are very strong, and tourism has experienced steady growth. The tourist market is comprised of primarily leisure tourists, including a large number of people visiting friends and relatives. There is significant peaking of tourists in the summer, which may result in larger than typical visitor areas for attractions to accommodate seasonality patterns.
- **Existing Seattle Attractions** – Seattle has a large number of visitor attractions, ranging from major “must-see” attractions such as the Space Needle that draw over one million visitors annually to many specialty museums that attract under 100,000 visitors per year. Overall, attractions in Seattle perform very well, with strong attendance, resident, and tourist market penetration rates. The pricing at Seattle attractions is particularly strong, with pricing at even mid-tier and specialty attractions relatively higher than other similar markets. Seattle has a broad range of attractions as well, with most major product types represented. A review of aggregate attractions attendance compared to market size compared to other cities indicates that Seattle is generally well-supplied with respect to attractions. In order for a new attraction to perform well, it would need to have a strong concept suitable for the market and be well-located.
- **Arena Reuse** – We examined a number of arenas that are no longer used for sports or entertainment. Most that are no longer used have been torn down and replaced with mixed-use entertainment or commercial projects. A few facilities have been re-purposed with a mix of private real estate uses and entertainment, but there are no examples of repurposed arena facilities that have been repurposed without some type of market-rate real estate development. Generally speaking, purpose-built facilities such as arenas do not work well for attractions, as the cost to maintain and operate the facilities often cannot be supported by an attraction. While there is no shortage of entertainment concepts, entertainment uses and attractions typically serve as anchors for attracting visitors and their spending, and the value is captured through surrounding

real estate uses. It is our understanding that such uses may be incompatible with current goals for Seattle Center and the KeyArena facility. Furthermore, the cost to develop other uses within arenas is often prohibitive due to deferred maintenance issue and building suitability challenges.

- **Potential Entertainment Concepts** – There are a number of entertainment concepts that may be suitable for the KeyArena site from a mission and high-level market perspective. We evaluated a large number of attraction concepts for compatibility with the Seattle Center purpose, ability to attraction residents and visitors and contribute to the overall vitality of Seattle Center, public access, and financial viability. We eliminated attractions which are well-represented in the Seattle market or would not fit in the KeyArena facility. Concepts which met these criteria included: an indoor sports adventure park, a high tech edutainment attraction, an IP-based attraction, a STEM or “maker” center, and a dinner theater attraction.
- **Summary** – As described previously, the Seattle market is well supplied with attractions and entertainment venues. While there could be potential for well-located attractions that are suitable to the market, the challenge in locating within the existing KeyArena facility is likely to be financial viability, which is explored further in upcoming sections.

6. Physical Analysis

SCENARIO A – MAINTAIN KEYARENA

Scenario A assumes that KeyArena remains as a suitable entertainment venue for sporting events and concerts, but that it would maintain the status quo of not having an NBA or NHL franchise as a primary tenant. The two scenarios described earlier are as follows:

SCENARIO A1 – SODO ARENA IS BUILT

“In a configuration that is suitable for its current basketball tenants and comparable sporting events as well as for concerts, family shows, and other events suited to the “full bowl” layout. This scenario assumes that the SoDo arena is built and that KeyArena would serve as a “secondary” arena in the market.”

In this scenario we would recommend that an interior renovation is undertaken to upgrade the amenities and finishes within KeyArena but that no major reconfigurations of spaces or seating bowl modifications are made to the arena. Given that it would remain as the “secondary” large indoor venue in the city, the finishes and amenities in the facility should be of a high quality but with note taken that they are being installed in a venue that is not the primary indoor entertainment venue in the city.

SCENARIO A2 – SODO ARENA IS NOT BUILT

“Similar to scenario A1, but assume that the SoDo arena is not built in the next decade and that KeyArena remains as the city’s “primary” large arena venue. This also assumes that any improvements to KeyArena will not bring it up to NBA or NHL standards.”

In this scenario, we would recommend similarly to A1 that an interior renovation is undertaken to upgrade the amenities and finishes within KeyArena to a level that is indicative of the “primary” large arena venue in the city. Additionally, the modifications – while not structural or bowl-modifying – would need to include fan experience and revenue-generating spaces such as an integrated restaurant, sports bar, and potentially retail space. These are all expectations of the future arena, and are non-existent currently.

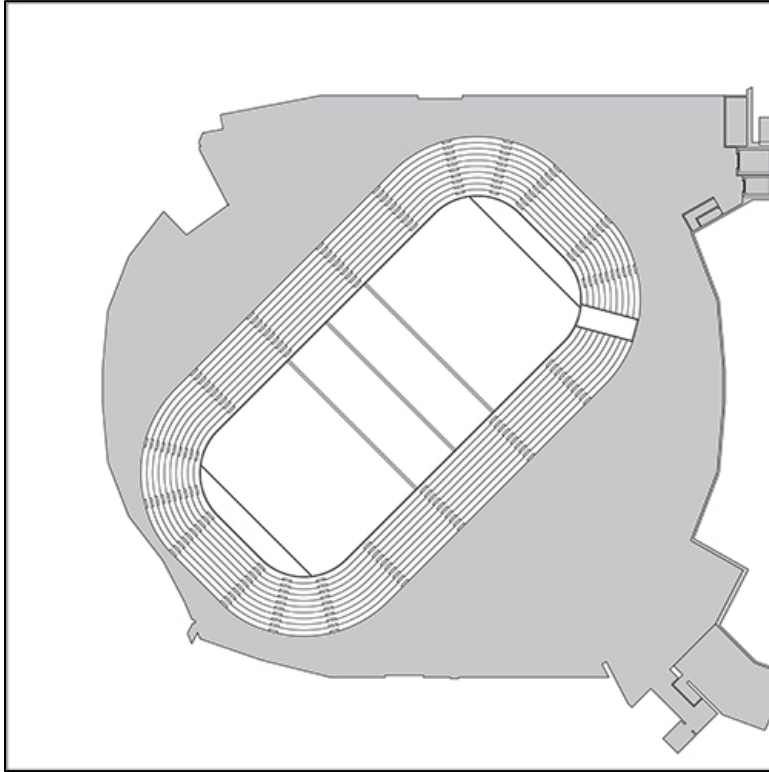
SCENARIO B – WITH MAJOR PROFESSIONAL TENANT; NO NEW ARENA IN SEATTLE

“Scenario B assumes that no new arena is built in the city for a major professional sports tenant(s) in the next decade, and that KeyArena is renovated in such a way that it would be able to host a major professional sports tenant(s).”

The underlying assumption, at least initially, was that this may not be feasible. Upon further investigation, and a new generation of NBA/NHL facilities that are being designed and constructed currently, the special requirements and seating capacities necessary to sustain these franchises have come down in size. Until recent years, and as outlined in the previous study of KeyArena for the NBA, the assumed square footage necessary for an NBA-style arena was well into the 800,000-square foot range. This would have required major additions and modifications to KeyArena, under which the costs outweighed the benefits, and a new arena made sense financially. Recent NBA/NHL venues such as the one in Sacramento, currently under design, have gotten the square footage for arena-based activities into the high 600,000-square foot range. This is a much more attainable solution for KeyArena with minor additions to the facility. The one caveat to this is that while KeyArena's current seating bowl is acceptable to NBA standards with minor modifications and premium amenity alterations, the current seating bowl has never been NHL-ready.

Based on the assumption that an NHL franchise is more likely to be relocated or acquired to play in Seattle in the next decade than an NBA team, we outlined the parameters for the facility redesign based upon an acceptable NHL configuration, which could be modified into an NBA arena fairly easily. The diagrams that follow outline two new possible seating bowl reconfigurations that occur within the existing footprint and roof structure of KeyArena. We have outlined the available square footage on each level based upon the bowl reconfiguration and based upon the available square footage on each floor plate of the arena. Modifications to the annex building on the south side will be necessary to accommodate non-gameday functions of the arena such as storage, operations, maintenance, and food service prep and storage. Through a reconfiguration of this annex, connections can be made at all levels to the arena.

SCENARIO B – OPTION 1: EVENT LEVEL

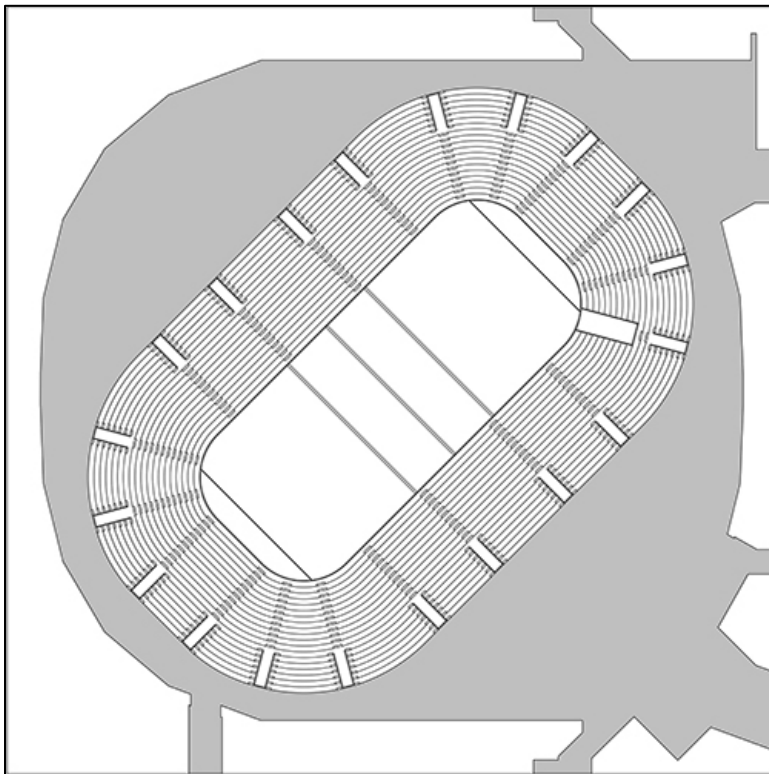


Seating Bowl - 33,349 sf (includes ice/floor)
 Remaining GSF on Event Level - 41,100
 Includes: Press, Home Team, Visiting Team, Aux Locker Rooms, Officials, Relative's Lounge, event level club (courtside club) and Owner's Lounge

Auxiliary Building (40,000 sq ft on two levels) would house: Event Personnel & Staff, Maintenance Shops & Janitor Facilities, Storage, Main Kitchen, and Commissary

Building to be connected to the building at Event and Mezzanine Levels and will also include replacement of the 2 existing floors at Premium Levels and Upper concourse.

SCENARIO B – OPTION 1: MEZZANINE LEVEL



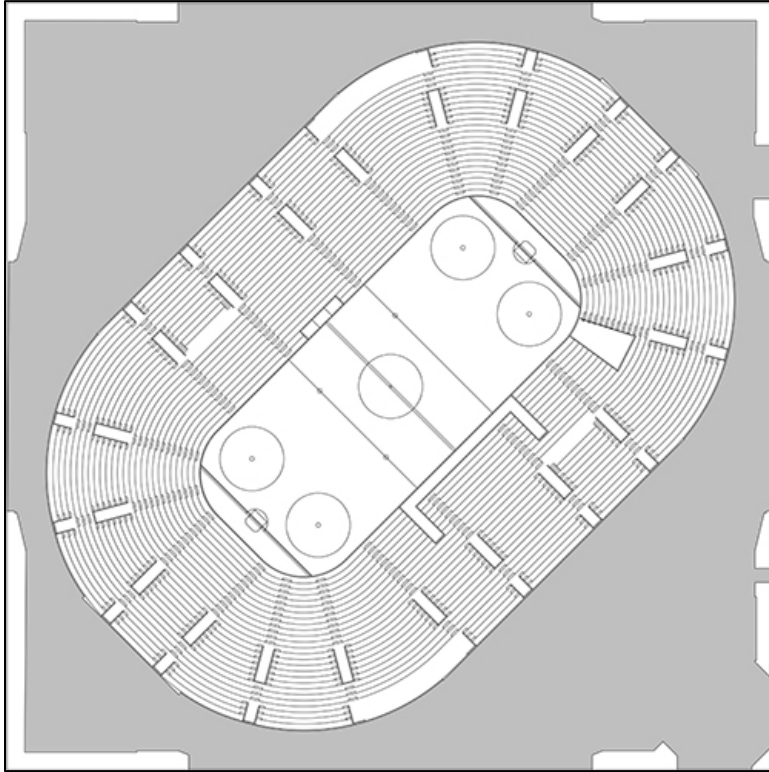
Seating Bowl is 52,542 sq ft of space (some duplicated from below retractable seats and includes ice/floor area)

Remaining usable square footage is 45,638 sq ft

The elements that will be located on this level include: Concourse, Public Restrooms, VIP Entrance Lobby, Employee Check-in, Security Check-in, Police, Fire Command, Retail, Mechanical, Electrical, and concessions.

Additionally there will be a mezzanine level club at this level as well to service seats located within the lower bowl who have food & beverage options.

SCENARIO B – OPTION 1: MAIN CONCOURSE

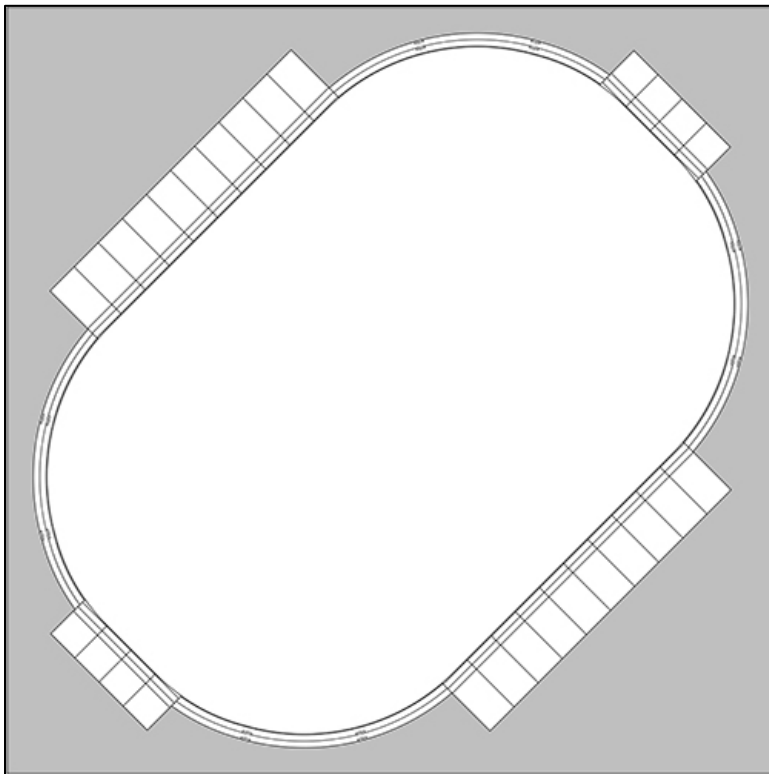


The seating bowl and ice/floor account for 70,511 square feet of floor plate

There is 53,307 square feet left to allocate to the main concourse services. These will be comprised of concourses, public restrooms, main team store, and auxiliary team store, guest services, day of event future sales, first aid, 2 restaurants (accessible from outside and inside the arena), a stand-alone bar (only accessible on event days), and concessions for the general patrons.

There will need to be a portion of the restaurants that extend outside of the perimeter of the arena's edges currently. Approximately 12,000 square feet of new space will be needed for an extension of the concourses and the inclusion of these restaurants.

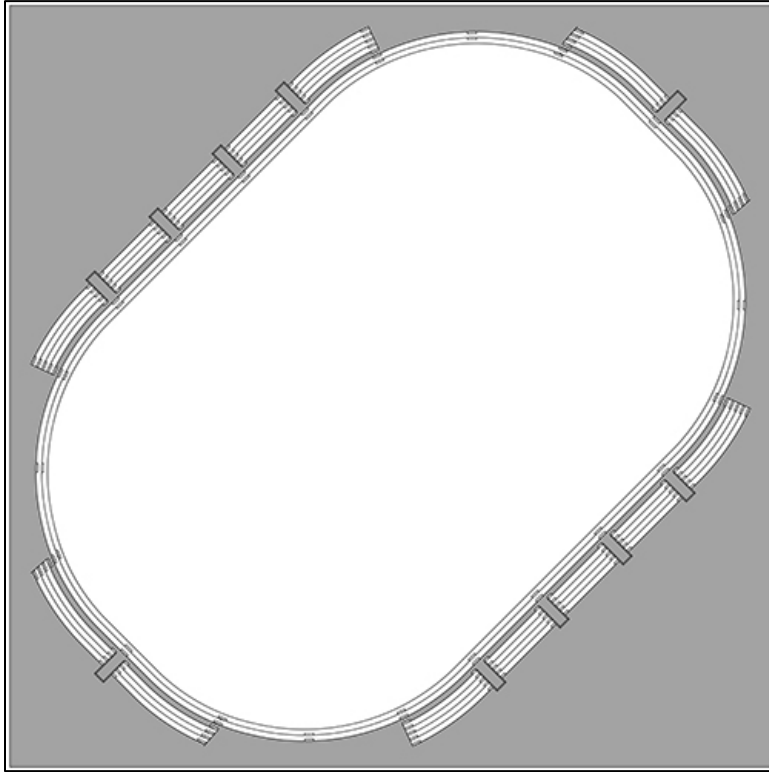
SCENARIO B – OPTION 1: PREMIUM LEVEL



The usable footprint of this level is 59,096 square feet.

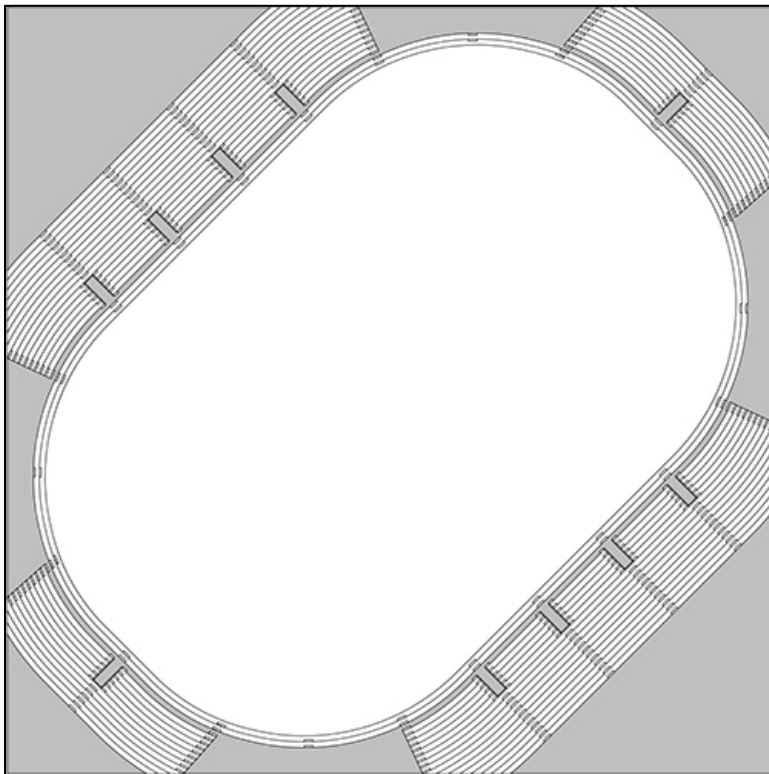
12,519 square feet of this is used for the premium loge box seating or the writing press (if necessary)
20,150 square feet of this is necessary for the suites and entertainment area associated with them.

The remaining space is utilized for circulation and potential openings to the lower levels of mechanical spaces to service the upper concourse level.

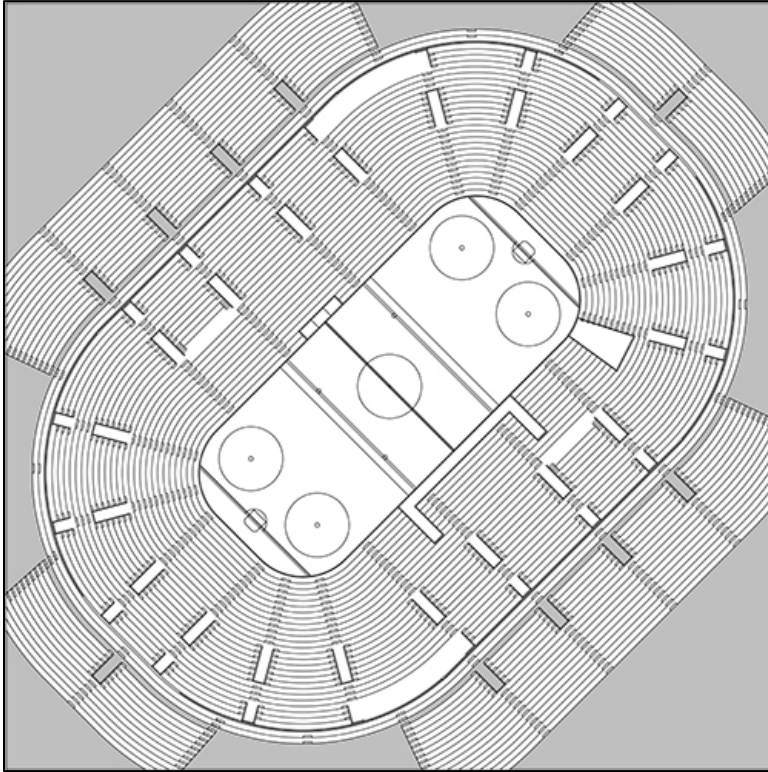
SCENARIO B – OPTION 1: UPPER CONCOURSE

The upper concourse usable floor plate is 70,868 square feet

The seating bowl takes up approximately 14,496 square feet of this, leaving the remaining 56,372 square feet to be comprised of loge box entertainment spaces, general concourses, restrooms, concessions, first aid, lost & found/guest services, and retail. Additional space for mechanical distribution rooms has been allocated on the floor as well.

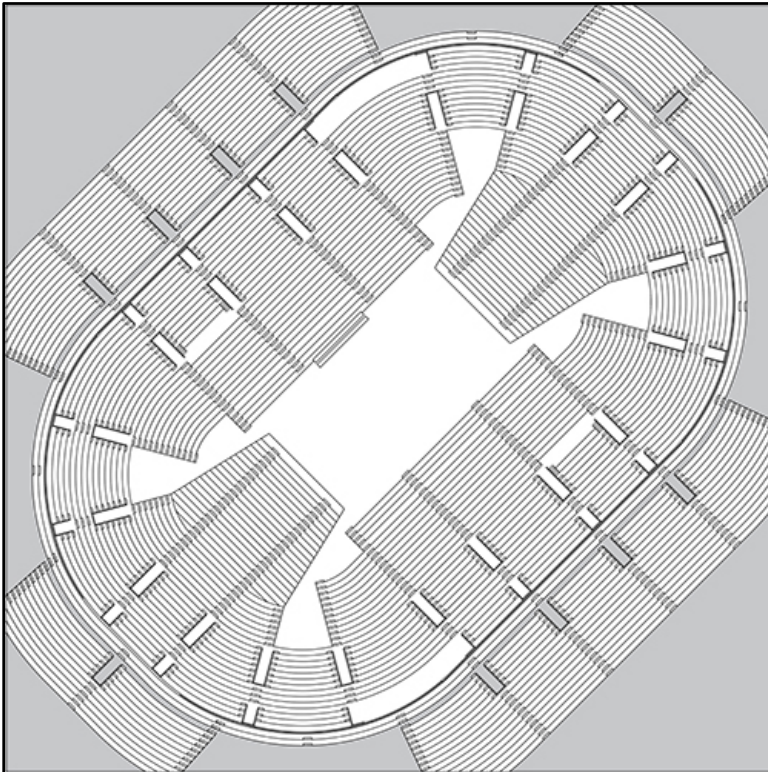
SCENARIO B – OPTION 1: UPPER BOWL

SCENARIO B – OPTION 1: SEATING DIAGRAM - HOCKEY



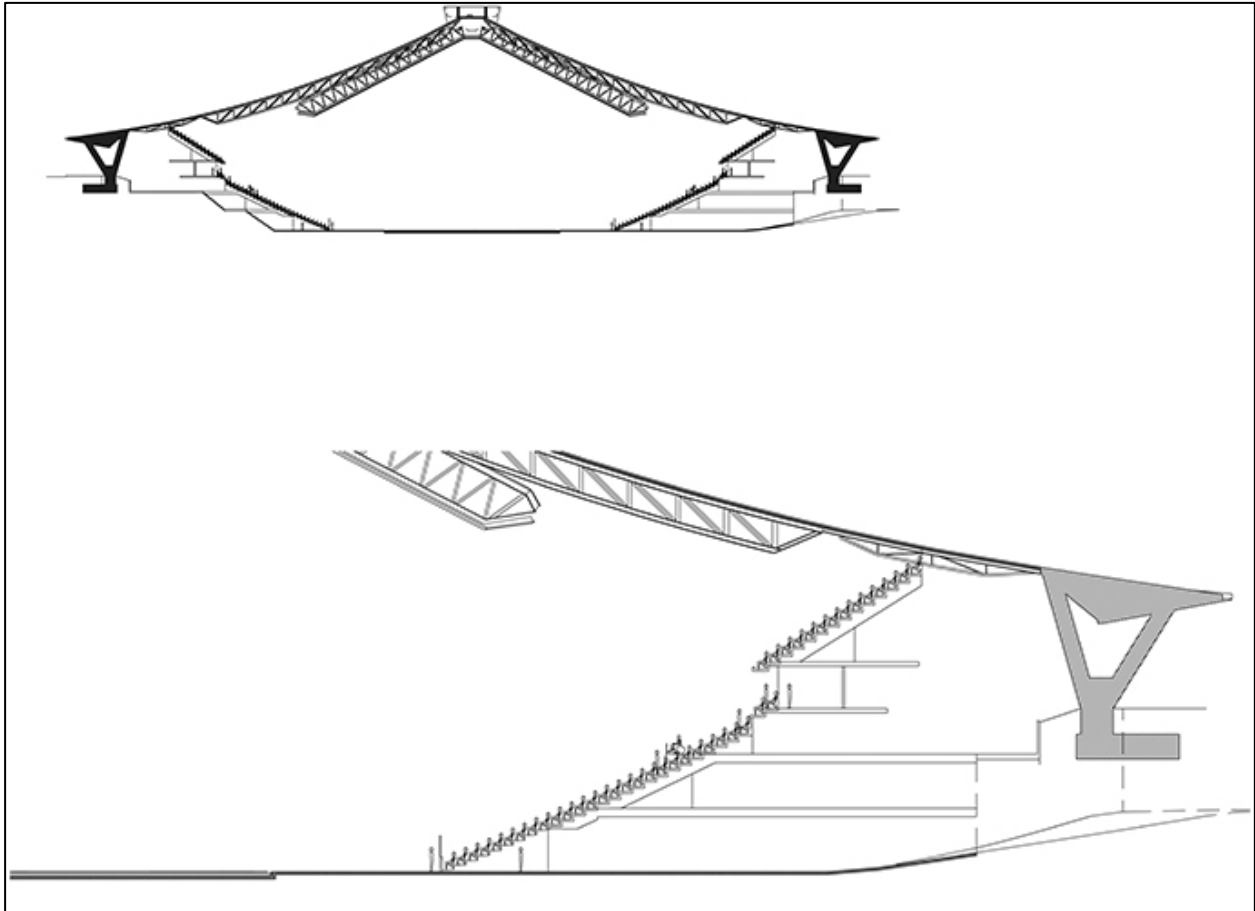
The seat counts for this option are as follows:
 9,025 19" lower bowl seats (some of which may be allocated to club seats served from the mezzanine level club)
 114 lower bowl ADA & companion positions
 560 suite seats (20 per suite @ 28 suites)
 552 loge box seats (configured in groups of 4 or 6)
 6600 19" upper bowl seats
 88 upper bowl ADA & companion positions
 Total Seating Capacity for Hockey of 16,939 seats

SCENARIO B – OPTION 1: SEATING DIAGRAM - BASKETBALL

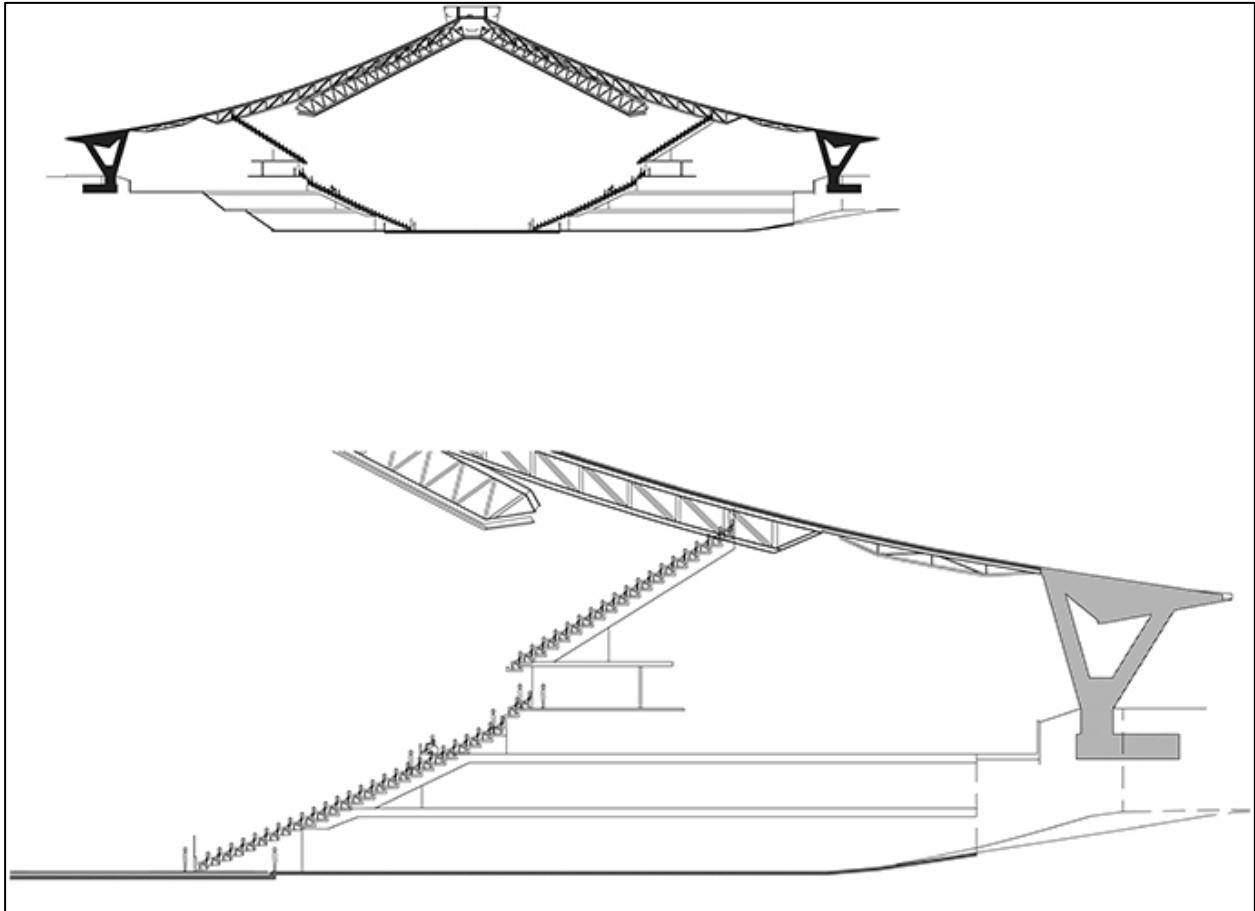


The seat counts for this option are as follows:
 10,413 19" lower bowl seats (some of which may be allocated to club seats served from the mezzanine level club)
 126 lower bowl ADA & companion positions
 560 suite seats (20 per suite @ 28 suites)
 552 loge box seats (configured in groups of 4 or 6)
 6600 19" upper bowl seats
 88 upper bowl ADA & companion positions
 Total Seating Capacity for Basketball of 18,339 seats

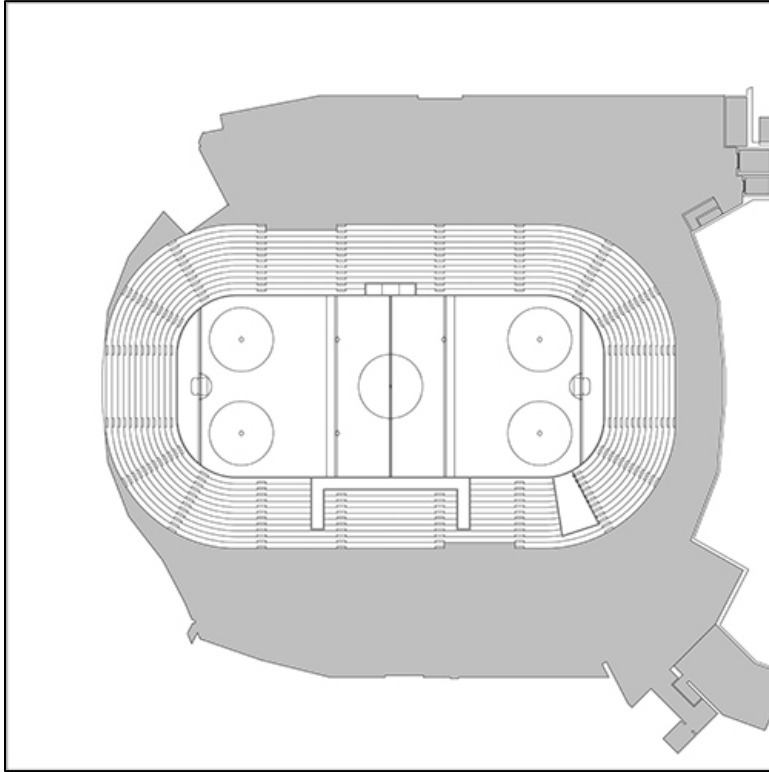
SCENARIO B – OPTION 1: LONGITUDINAL SECTION



SCENARIO B – OPTION 1: TRANVERSAL SECTION



SCENARIO B – OPTION 2: EVENT LEVEL

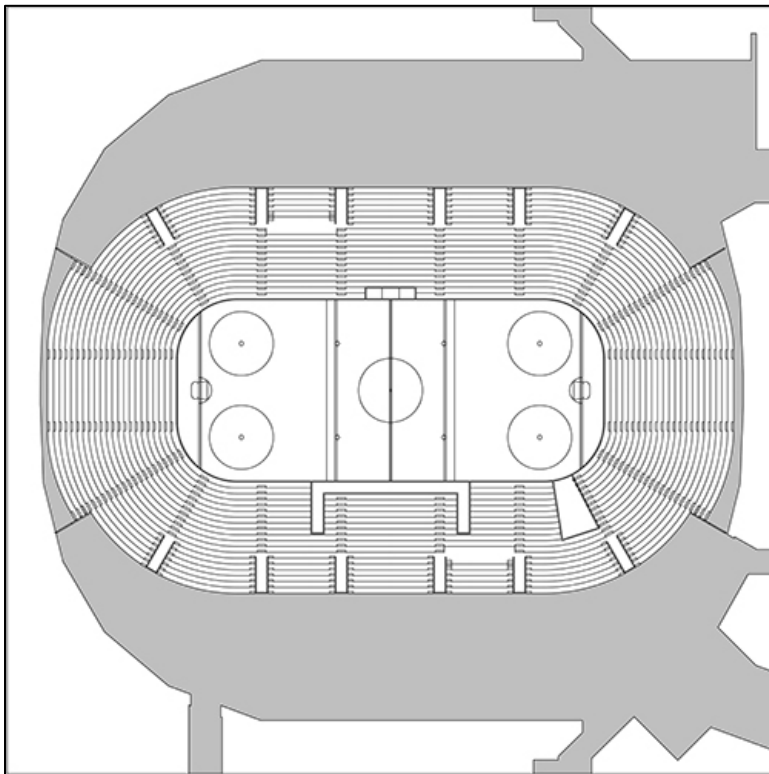


Seating Bowl - 33,349 sf (includes ice/floor)

Remaining GSF on Event Level - 41,100
Includes: Press, Home Team, Visiting Team, Aux Locker Rooms, Officials, Relative's Lounge, event level club (courtside club) and Owner's Lounge
Auxiliary Building (40,000 sq ft on two levels) would house: Event Personnel & Staff, maintenance Shops & Janitor Facilities, Storage, Main Kitchen, and Commissary

Building to be connected to the building at Event and Mezzanine Levels and will also include replacement of the 2 existing floors at Premium Levels and Upper concourse.

SCENARIO B – OPTION 2: MEZZANINE LEVEL

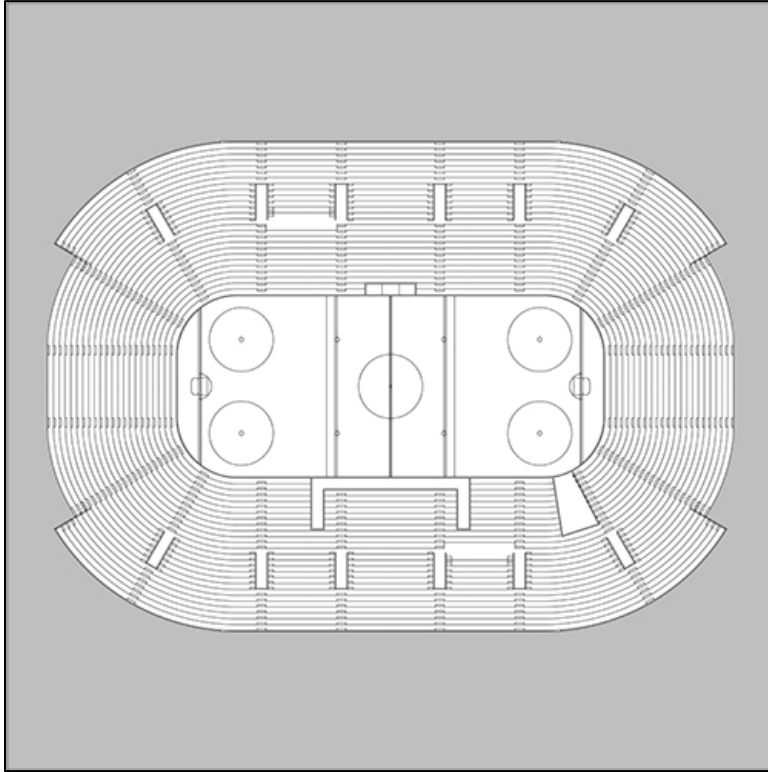


Seating Bowl is 52,542 sq ft of space (some duplicated from below retractable seats and includes ice/floor area)

Remaining usable square footage is 45,638 sq ft

The elements that will be located on this level include: Concourse, Public Restrooms, VIP Entrance Lobby, Employee Check-in, Security Check-in, Police, Fire Command, Retail, Mechanical, Electrical, and concessions. Additionally there will be a mezzanine level club at this level as well to service seats located within the lower bowl who have food & beverage options.

SCENARIO B – OPTION 2: MAIN CONCOURSE

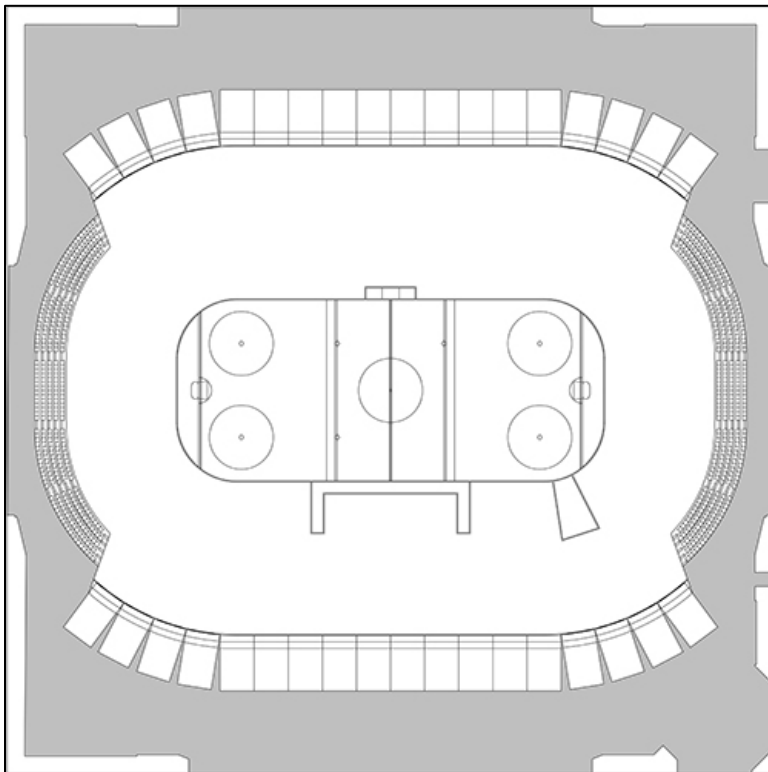


The seating bowl and ice/floor account for 70,511 square feet of floor plate
There is 53,307 square feet left to allocate to the main concourse services.

These will be comprised of: concourses, public restrooms, main team store, and auxiliary team store, guest services, day of event future sales, first aid, 2 restaurants (accessible from outside and inside the arena), a stand-alone bar (only accessible on event days), and concessions for the general patrons.

There will need to be a portion of the restaurants that extend outside of the perimeter of the arena's edges currently. Approximately 12,000 square feet of new space will be needed for an extension of the concourses and the inclusion of these restaurants.

SCENARIO B – OPTION 2: PREMIUM LEVEL

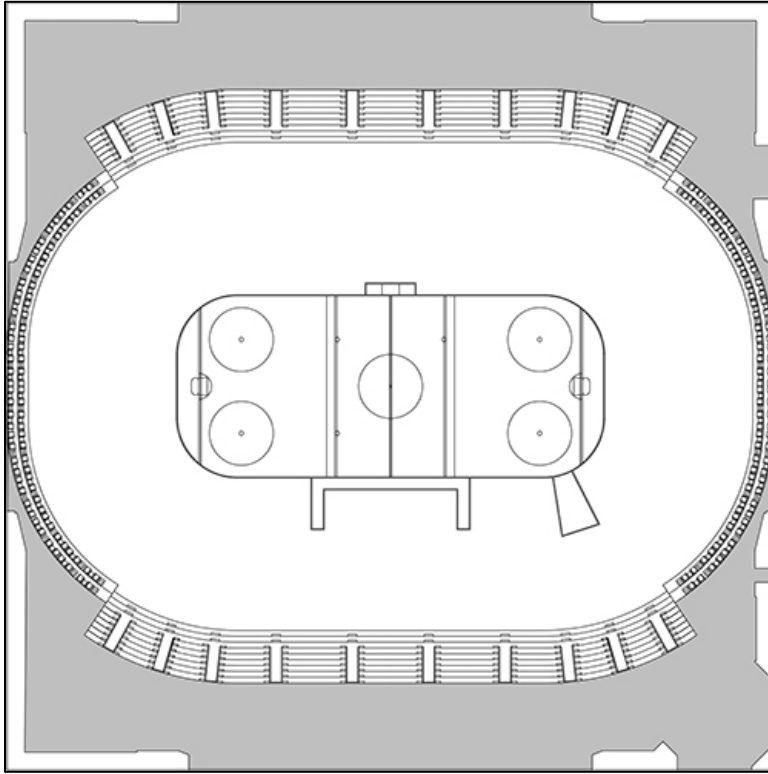


The usable footprint of this level is 59,096 square feet.

15,327 square feet of this is used for the premium loge box seating or the writing press (if necessary)
25,090 square feet of this is necessary for the suites and entertainment area associated with them.
The remaining space is utilized for circulation and potential openings to the lower levels of mechanical spaces to service the upper concourse level.

There is the potential that some expansion to the arena occurs at this level on the north and south of the building behind the club seats. There exists a need for entertainment space for the loge lounge seats on the upper concourse level in this location as well. The potential space is approximately 3,500 square feet on either side for a total of 7,000 square feet on this level and an additional 3-4,000 square feet above on the upper concourse level. This would additionally provide covered entrances to the arena for both of these entrances.

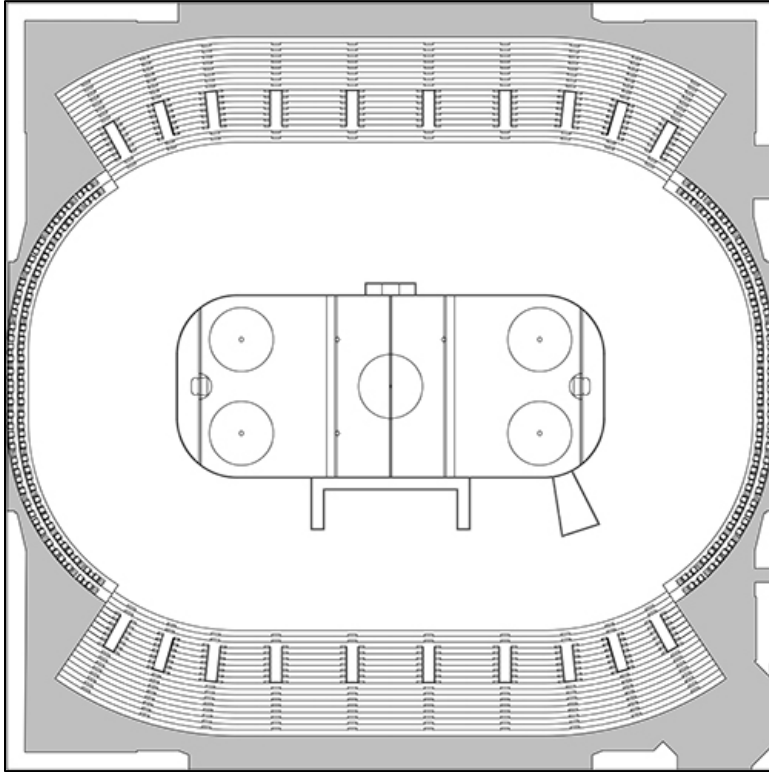
SCENARIO B – OPTION 2: UPPER CONCOURSE



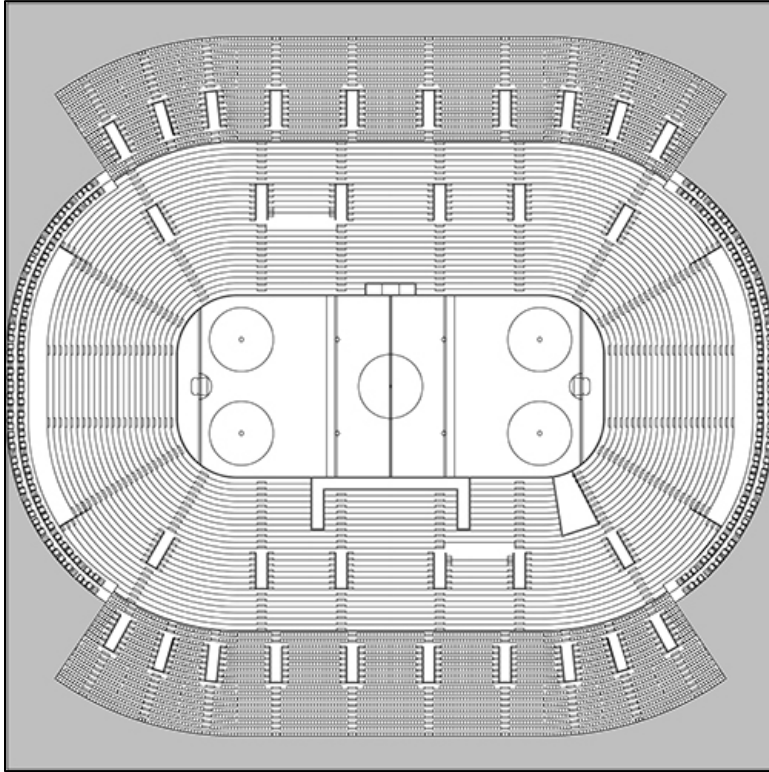
The upper concourse usable floor plate is 70,868 square feet. The seating bowl takes up approximately 14,496 square feet of this, leaving the remaining 56,372 square feet to be comprised of loge box, entertainment spaces, general concourses, restrooms, concessions, first aid, lost & found/guest services, and retail. Additional space for mechanical distribution rooms has been allocated on the floor as well.

There is the potential that some expansion to the arena occurs at this level on the north and south of the building behind the club seats. There exists a need for entertainment space for the loge lounge seats on the upper concourse level in this location. The potential space is approximately 3,500 square feet on either side for a total of 7,000 square feet on the level below and an additional 3-4,000 square feet above on this level. This would additionally provide covered entrances to the arena for both of these entrances.

SCENARIO B – OPTION 2: UPPER BOWL

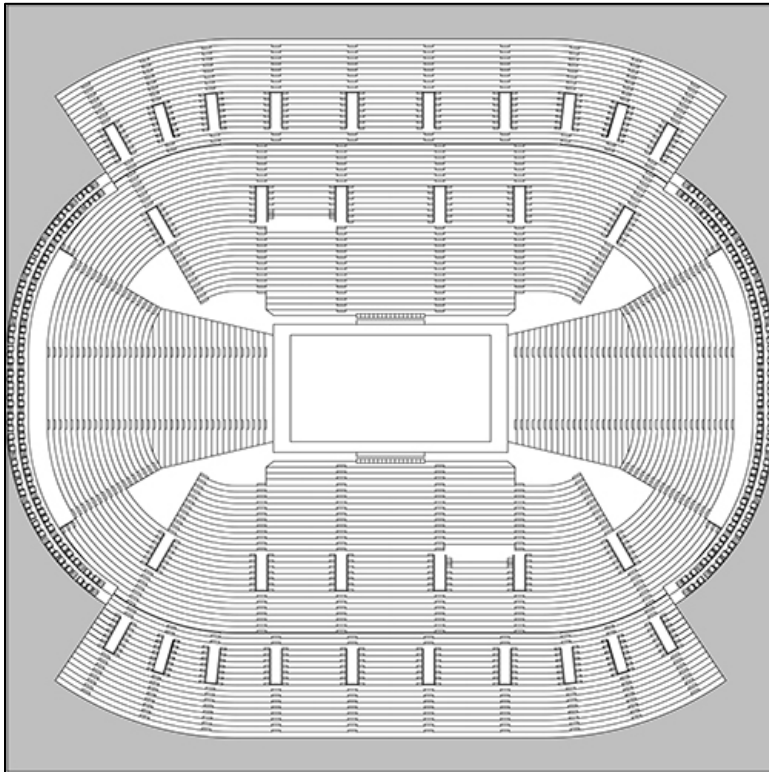


SCENARIO B – OPTION 2: SEATING DIAGRAM HOCKEY



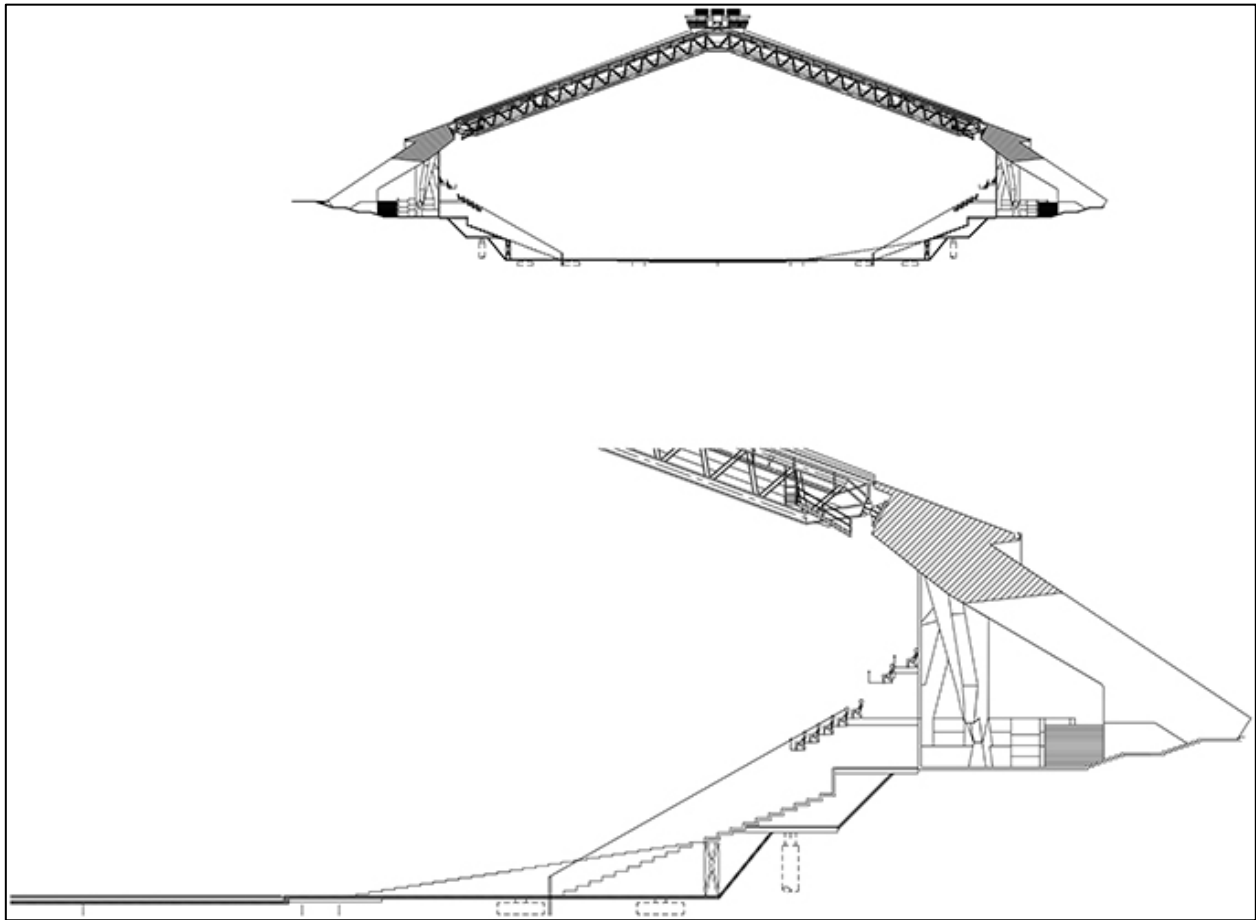
The seat counts for this option are as follows:
 9,207 19" lower bowl seats (some of which may be allocated to club seats served from the mezzanine level club)
 116 lower bowl ADA & companion positions
 720 suite seats (20 per suite @ 28 suites)
 160 loge box seats (configured in groups of 4 or 6)
 696 24" club seats
 5010 19" upper bowl seats inclusive of 36 upper bowl ADA & companion positions
 Total Seating Capacity for Hockey of 15,909 seats

SCENARIO B – OPTION 2: SEATING DIAGRAM BASKETBALL

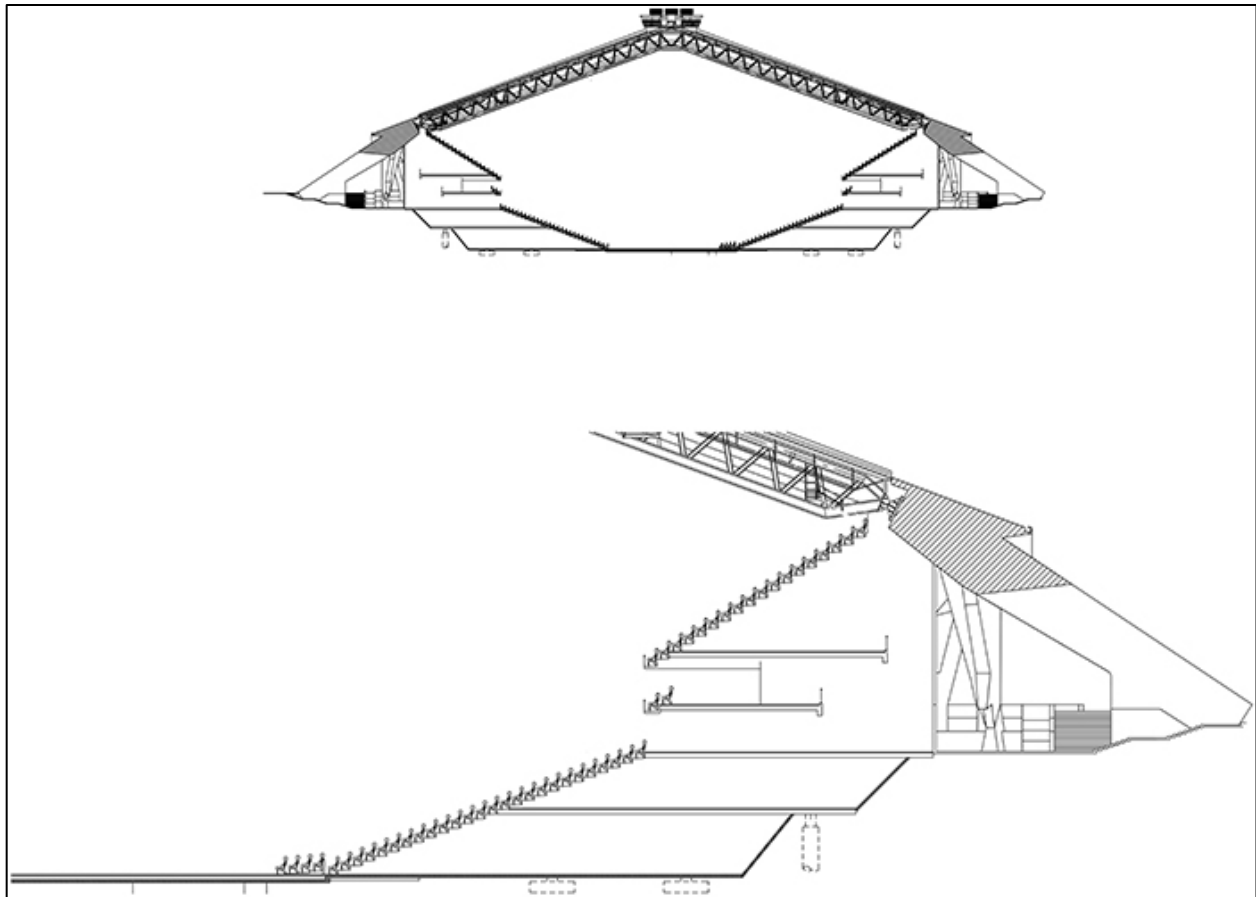


The seat counts for this option are as follows:
 10,413 19" lower bowl seats (some of which may be allocated to club seats served from the mezzanine level club)
 128 lower bowl ADA & companion positions
 720 suite seats (20 per suite @ 28 suites)
 160 loge box seats (configured in groups of 4 or 6)
 696 24" club seats
 5010 19" upper bowl seats inclusive of 36 upper bowl ADA & companion positions
 Total Seating Capacity for Basketball of 17,127 seats

SCENARIO B – OPTION 2: LONGITUDINAL SECTION



SCENARIO B – OPTION 2: TRANSVERSAL SECTION



SCENARIO C – REPURPOSE AS AN ENTERTAINMENT VENUE

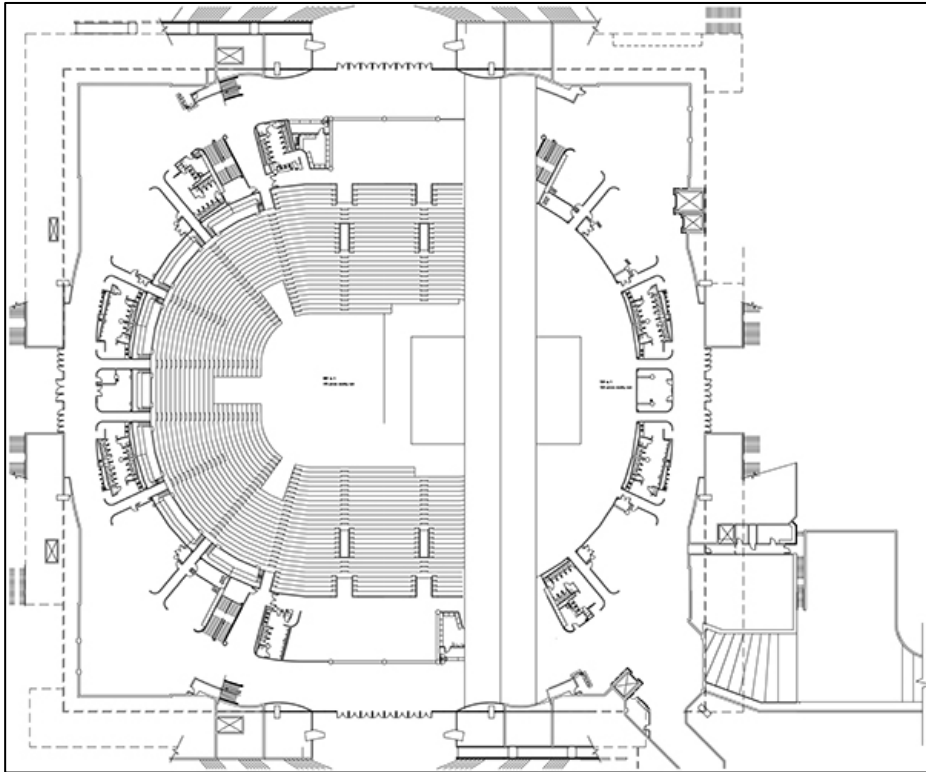
“Scenario C would repurpose KeyArena in a manner that maintains the facility as an entertainment venue but not one that would necessarily serve the WNBA, college basketball, or other current tenants requiring a ‘full bowl’ configuration.”

The concept developed here entails utilizing the current seating bowl and premium offerings as much as possible, but in the simplistic description “splitting” the arena into two venues. This would offer the opportunity for numerous additional events than the facility currently handles, but also as two new venue sizes. The diagrams depicted on the following pages reflect venues of approximately 12,000 seats and 3,000 seats. Both venues would be comprised of permanent seats, premium suite offerings and standing room or floor seats. While the intent of this scenario is to downsize the “arena” portion of the facility, this configuration still allows for use by smaller sports and entertainment events that require a typical arena floor size and associated amenities.

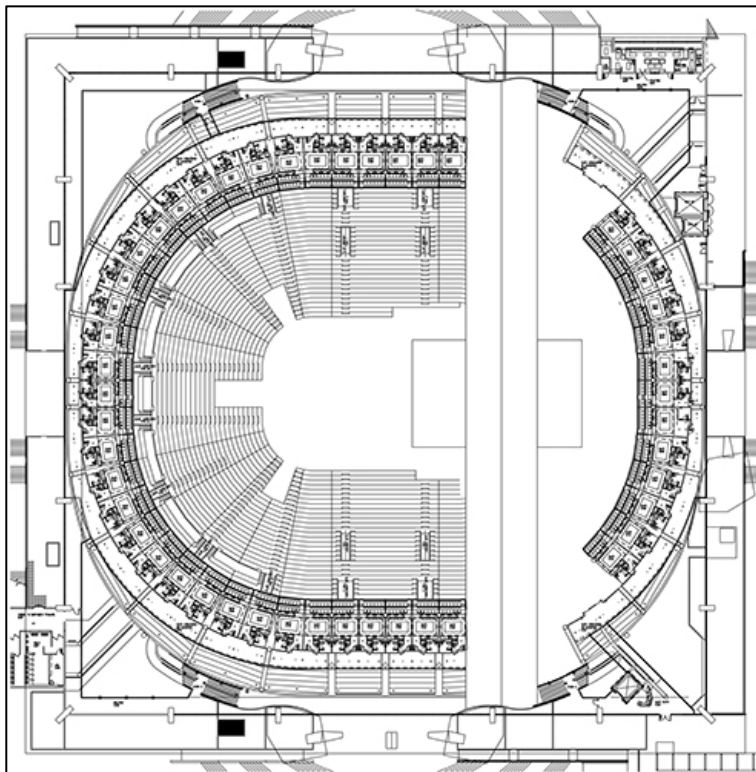
The modifications to the facility would entail creating a dividing wall/backstage system that would acoustically separate the two venues so that simultaneous events could occur. As depicted in the section, we envision the smaller venue’s stage actually occurring at the elevation of the existing Main Concourse level with a service/load-in/load-out space being located underneath accessible via the current truck ramp. This space would service the large venue at the same elevation, but the smaller venue via service elevators to the event floor elevation at the Main Concourse.

The modifications to the seating bowl are absolutely feasible, but require a surgical demolition in order to maintain the sections that we envision remaining. There will be a premium to these modifications, as well as a secondary mechanical system isolated from the larger venue to control the smaller venue. While there are these costs in addition to the acoustical wall, and the new floor slab, the remainder of the facility in essence remains as is, or is renovated along the lines of either A1 or A2 from a finishes standpoint.

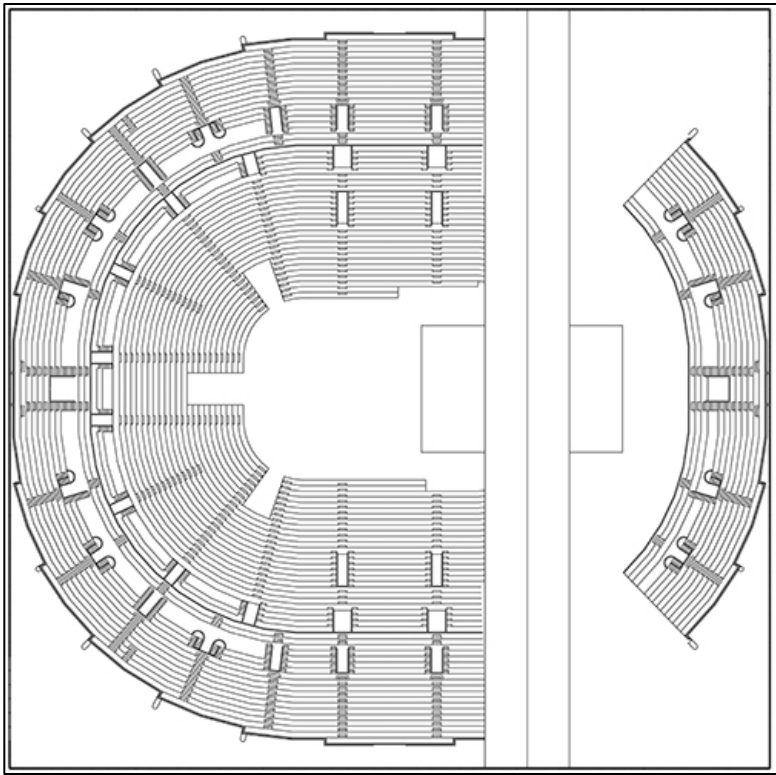
SCENARIO C – SPLIT VENUE: MAIN CONCOURSE / LOWER BOWL



SCENARIO C – SPLIT VENUE: PREMIUM LEVEL



SCENARIO C – SPLIT VENUE: UPPER BOWL



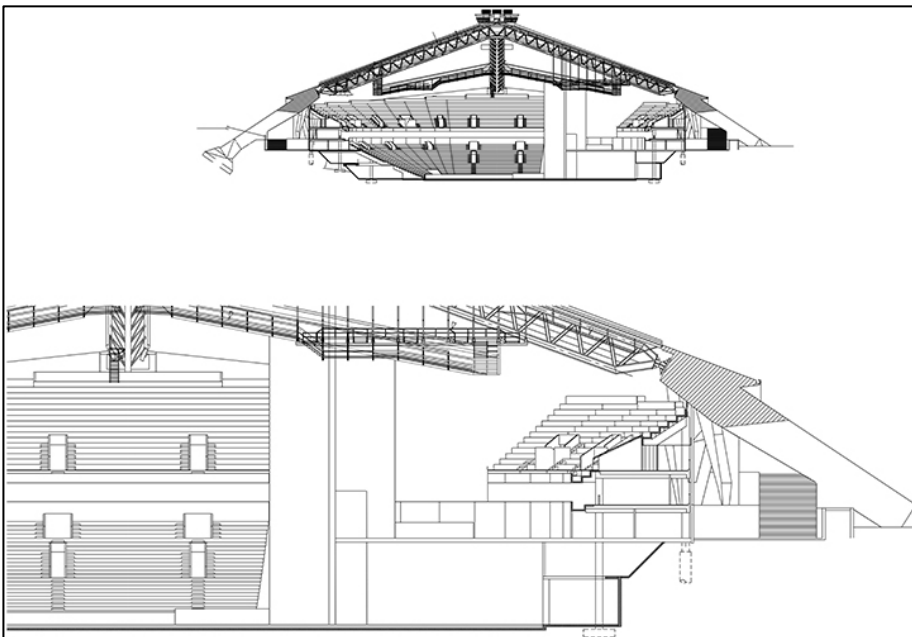
Seating Capacities:

Larger Venue - 60' x 30' stage 5' off of the floor (event level)
 35 Suites - 700 seats
 978 standing room floor seats
 Bowl Seats - 10,200

Total Venue = 11,878 seats

Smaller Venue - 25' x 60' stage 5' off of the floor (main concourse level)
 13 Suites - 260 seats
 1,032 standing Room Floor Seats
 Upper Bowl Seats - 19" Chairs 1,613
 Total Venue = 2,905 seats

SCENARIO C – SPLIT VENUE: LONGITUDINAL SECTION



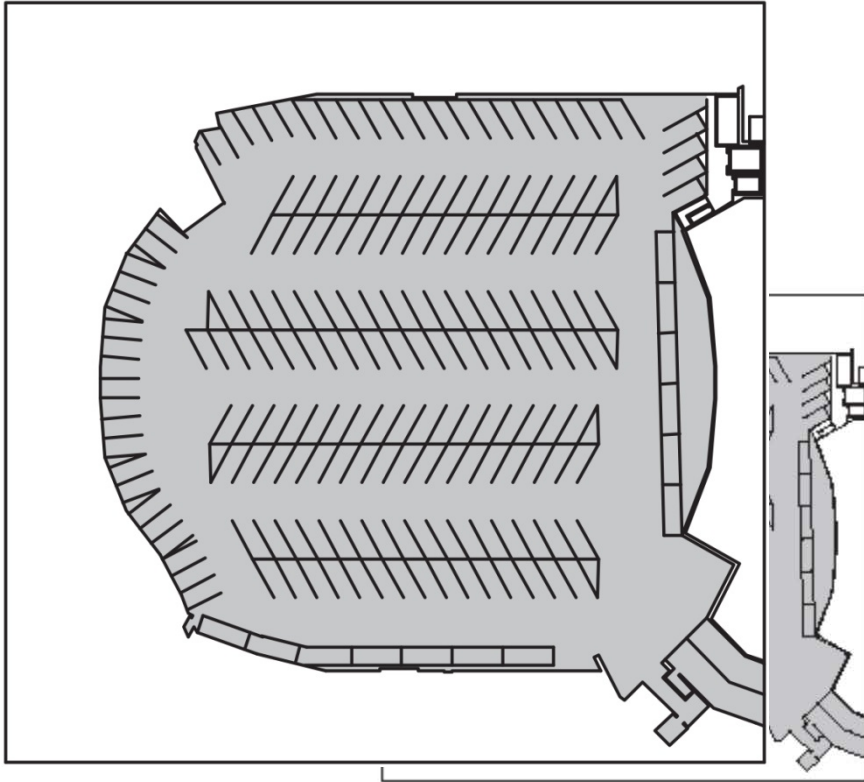
SCENARIO D – OTHER USER GROUPS

“Scenario D does not accommodate any of the existing tenants of KeyArena, but instead evaluates the other options for the reuse of KeyArena. This scenario explores other approaches to repurposing the KeyArena site that would be financially feasible for the City, draw visitors to the Seattle Center, and offer consistency with Seattle Center’s purpose statement, which is to ‘create exceptional events, experiences, and environments that delight and inspire the human spirit to build stronger communities.’ The options described in the report vary greatly in size and spatial/technical requirements and thus an exercise in special availability was undertaken rather than specific designs for each opportunity.”

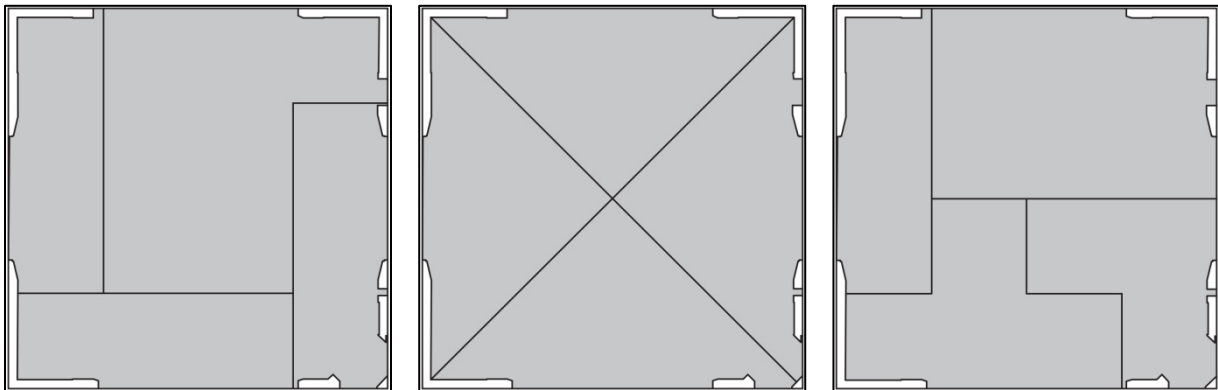
The facility is 360' x 360' in a perfect square and the floor plates are rather well-defined. If we were to vacate the seating bowl in the facility and fill in the floor plates for usable space we are left with the following available space on each level:

- Event Level – 74,000 square feet
- Mezzanine Level – 98,000 square feet
- Main Concourse – 123,000 square feet
- Premium Level – 123,000 square feet
- Upper Concourse – minimal built square footage as we would expect this level to be primary mechanical, electrical and service, although if the right tenant needed it space could be accommodated at this level.

The following page shows various configurations of the site’s footprint for various potential uses, including as a parking garage and multiple ways to subdivide the footprint for multiple users.



SCENARIO D – OTHER USER GROUPS: FLOOR PLAN LAYOUT OPTIONS



ESTIMATED COSTS

The following table summarizes estimated costs for each scenario. We also estimate demolition costs for the existing facility. These estimates consider local cost factors.

Table 26: Estimated Project Costs (\$000s)

	Scenario A1	Scenario A2	Scenario B1/B2	Scenario C	Scenario D	Demolition
Recommended Construction Budget	\$ 80,398	\$ 120,006	\$ 228,006	\$ 119,817	\$ 80,945	\$ 5,393
Soft Costs - 25%	20,099	30,001	57,002	29,954	20,236	1,348
Recommended Project Budget	\$ 100,497	\$ 150,007	\$ 285,008	\$ 149,771	\$ 101,181	\$ 6,742

Source: AECOM

As the table shows, estimated costs for the Scenario A options are approximately \$100 million to \$150 million, and Scenario B costs are \$285 million. Costs for Scenario C and D are approximately \$150 million and \$101 million, respectively. In addition, for any scenarios that could require a demolition of the arena, associated costs are estimated to be \$6.7 million.

7. Financial Analysis

In this section, we present the results of our forecasts of facility operations under the various scenarios. This includes projections of annual usage and all relevant operating revenues and expenses, based on the facility assumptions summarized in the previous section.

As previously described, the scenarios are:

- **Scenario A1:** a new SoDo area is built and Key becomes the secondary large arena in Seattle, and is improved from current conditions.
- **Scenario A2:** Key remains as Seattle's primary large arena (a new SoDo arena is not built), but any improvements will not allow it to host NBA or NHL tenants.
- **Scenario B1:** Key is renovated in such a way that it can accommodate NBA or NHL tenants, and remains as Seattle's primary large arena. In Scenario B1, we assume that the arena's only major professional tenant is an NHL franchise.
- **Scenario B2:** is similar to B1, with the addition of an NBA tenant.
- **Scenario C:** Key is renovated in such a way that it remains as an entertainment venue but not one that would serve its "full-bowl" tenants. This assumes that the SoDo arena is built.
- **Scenario D:** Key is repurposed as a non-sports/entertainment venue but continues to fulfill Seattle Center's purpose statement.

*Sports/
entertain-
ment*

*Repurposed
scenario*

Because Scenarios A through C generally involve KeyArena remaining as some sort of sports and entertainment venue, projections for these scenarios are shown together. Following these projections, we show the results of our Scenario D projections.

SCENARIOS A THROUGH C – SPORTS/ENTERTAINMENT OPTIONS

The following subsection shows side-by-side the results of our forecasts for the four sports/entertainment renovation scenarios for KeyArena and their underlying assumptions, and highlights major differences between the scenarios. (All scenarios further assume that no other large arena for professional sports is built in the Seattle market.)

Events and Attendance, and Differences between Scenarios

The following tables summarize the forecasted event and attendance demand for KeyArena under the four sports/entertainment scenarios. Regarding Key's current and potential future tenants, we make the following assumptions:

- **Major Professional Sports:** we assume that an NHL team would be the only major professional tenant in Scenario B1; in Scenario B2, we assume both NHL and NBA tenants.
- **Storm:** would remain a tenant in Scenarios A2 and B only. In Scenario A1 – with a new NBA arena in Seattle – we assume that the Storm would play in the new facility, primarily to maximize connections with the NBA franchise. It is physically possible for the Storm to play in the arena under Scenario C; however, we assume they do not.
- **Rollergirls:** would remain a tenant in Scenarios A1 and A2 only. Should Key be reconfigured into an NHL-quality arena, we assume that the Rollergirls would likely relocate to a smaller, less expensive venue.
- **Seattle University:** would remain a tenant in Scenarios A2, B, and C. If a new NBA arena is built in SoDo, we assume that the university would prefer to play there rather than the city's secondary arena, as it would provide a strong recruiting advantage. (However, the university has plans to build an on-campus arena in the future and could potentially vacate Key within the ten-year projection period.) Similar to the Storm, SU could potentially play

In general, under Scenario A1, the arena would likely lose many events that it currently hosts to the new NBA arena. Scenario A2 is most similar to Key's current position as Seattle's primary large indoor arena, but improvements would allow it to host slightly more events than it has in recent years. In Scenarios B1 and B2, the addition of an NHL and NBA franchises and their schedule would increase overall usage of Key, but would likely hurt event demand in other categories due to the decreased availability of prime dates throughout much of the year, including the indoor concert season. In Scenario C, we assume that the two venues within the arena would host a range of events that are generally smaller than full-arena events.

Major differences in event levels are primarily due to the assumed presence of the SoDo arena in Scenarios A1 and C (which would decrease Key's usage) and the presence of an NHL team in Scenario B (which would increase Key's overall usage).

Table 27: Projected Annual Events, Scenarios A-C

	Scenario A1	Scenario A2	Scenario B1	Scenario B2	Scenario C
NBA	0	0	0	45	0
NHL	0	0	45	45	0
Storm	0	18	18	18	0
Rollergirls	8	8	0	0	0
Seattle University	0	16	16	16	16
Concerts	8	22	18	15	20
Family Shows	2	4	4	2	4
Other Entertainment	6	10	8	4	10
Other Sports	6	10	10	6	8
Graduations	6	8	6	2	8
Other - Private	4	4	4	2	10
Other - Major/Public	4	8	6	2	4
Total	44	108	135	157	80

Source: AECOM

Table 28: Projected Average Paid Attendance, Scenarios A-C

	Scenario A1	Scenario A2	Scenario B1	Scenario B2	Scenario C
NBA	0	0	0	16,000	0
NHL	0	0	15,000	15,000	0
Storm	0	4,000	4,000	4,000	0
Rollergirls	2,800	2,800	0	0	0
Seattle University	0	1,500	1,500	1,500	1,500
Concerts	5,000	11,000	11,000	11,000	3,000
Family Shows	3,000	3,500	3,500	3,500	2,500
Other Entertainment	3,000	4,750	4,750	4,750	3,000
Other Sports	4,000	6,000	6,000	6,000	5,000
Graduations	4,500	4,500	8,000	12,000	8,000
Other - Private	300	300	300	300	1,000
Other - Major/Public	6,000	6,000	6,000	6,000	6,000

Source: AECOM

Table 29: Projected Total Paid Attendance, Scenarios A-C

	Scenario A1	Scenario A2	Scenario B1	Scenario B2	Scenario C
NBA	0	0	0	720,000	0
NHL	0	0	675,000	675,000	0
Storm	0	72,000	72,000	72,000	0
Rollergirls	22,400	22,400	0	0	0
Seattle University	0	24,000	24,000	24,000	24,000
Concerts	40,000	242,000	198,000	165,000	60,000
Family Shows	6,000	14,000	14,000	7,000	10,000
Other Entertainment	18,000	47,500	38,000	19,000	30,000
Other Sports	24,000	60,000	60,000	36,000	40,000
Graduations	27,000	36,000	48,000	24,000	64,000
Other - Private	1,200	1,200	1,200	600	10,000
Other - Major/Public	24,000	48,000	36,000	12,000	24,000
Total	162,600	567,100	1,166,200	1,754,600	262,000

Source: AECOM

The attendance figures above show paid attendance, and actual (turnstile) attendance will potentially differ; turnstile attendee will generate in-arena revenues such as concessions. The table below shows the assumed ratio of turnstile to paid attendance, based on the characteristics of past KeyArena events and events at other similar facilities. These assumptions apply to all scenarios.

Table 30: Turnstile to Paid Attendance, Scenarios A-C

	GA	Premium
NBA	95.0%	75.0%
NHL	95.0%	75.0%
Storm	100.0%	75.0%
Rollergirls	110.0%	75.0%
Seattle University	100.0%	75.0%
Concerts	105.0%	90.0%
Family Shows	105.0%	90.0%
Other Entertainment	110.0%	90.0%
Other Sports	110.0%	90.0%
Graduations	100.0%	
Other - Private	100.0%	
Other - Major/Public	100.0%	

Source: AECOM

Financial Projections and Associated Assumptions

The following text describes the individual line items that relate to KeyArena's operations and other assumptions regarding the future scenarios. We then show financial proforma statements for each scenario, based on the assumptions shown in this section.

Revenue and Expense Line Items

Operating Revenues

Rent

Arena rent revenues are generated in various ways. For its current tenants and non-ticketed events, a fixed amount is generally charged per event. For ticketed non-tenant events, rent is typically generated from a facility usage fee (\$2 per ticket for tickets less than \$25; \$4 per ticket for other tickets) and other charges. Rent can also be affected by other terms with event promoters, such as rebates that are paid by the facility, and these vary on an event-by-event basis and can potentially cause net rent paid to the arena to be negative.

In addition to the actual rental fees and the facility usage fee, the rent revenue recognized by the arena is also reduced by a revenue-sharing arrangement with AEG. In general, AEG receives 40 percent of net arena revenues (not including Storm or SU games) above a benchmark, which is currently approximately \$2.1 million.

The three tables below show our assumptions for average general admission ticket prices (premium ticket sales are considered separately), rental rates and types, and facility surcharges by event type. Per-ticket facility surcharges are shown in gross amounts, and the arena retains net revenue after paying associated sales taxes.

Table 31: Average General Admission Ticket Prices, Scenarios A-C

	Avg. Ticket Price				
	Scenario A1	Scenario A2	Scenario B1	Scenario B2	Scenario C
NBA				\$55.00	
NHL			\$60.00	\$60.00	
Storm	\$20.00	\$20.00	\$20.00	\$20.00	
Rollergirls	\$15.75	\$15.75	\$15.75	\$15.75	
Seattle University	\$15.75	\$15.75	\$15.75	\$15.75	\$15.75
Concerts	\$40.00	\$70.00	\$70.00	\$70.00	\$50.00
Family Shows	\$25.00	\$25.00	\$25.00	\$25.00	\$25.00
Other Entertainment	\$20.00	\$25.00	\$25.00	\$25.00	\$25.00
Other Sports	\$45.00	\$65.00	\$65.00	\$65.00	\$25.00
Graduations					
Other - Private					
Other - Major/Public					

Source: AECOM

Table 32: Assumed Rents, Scenarios A-C

	Rent									
	Scenario A1		Scenario A2		Scenario B1		Scenario B2		Scenario C	
	Flat Rate	% of Ticket Sales	Flat Rate	% of Ticket Sales	Flat Rate	% of Ticket Sales	Flat Rate	% of Ticket Sales	Flat Rate	% of Ticket Sales
NBA*							\$4,000,000	--		
NHL*					\$3,000,000	--	\$3,000,000	--		
Storm	\$6,000	--	\$6,000	--	\$7,500	--	\$7,500	--		
Rollergirls	\$8,500	--	\$8,500	--	\$9,000	--	\$9,000	--		
Seattle University	\$19,500	--	\$19,500	--	\$21,000	--	\$21,000	--	\$15,000	--
Concerts	--	-3%	--	-3%	--	-3%	--	-3%	--	-3%
Family Shows	--	5%	--	5%	--	5%	--	5%	--	5%
Other Entertainment	--	5%	--	5%	--	5%	--	5%	--	5%
Other Sports	--	5%	--	5%	--	5%	--	5%	--	5%
Graduations	\$8,500	--	\$8,500	--	\$8,500	--	\$8,500	--	\$7,000	--
Other - Private	\$25,000	--	\$25,000	--	\$25,000	--	\$25,000	--	\$22,500	--
Other - Major/Public	\$25,000	--	\$25,000	--	\$25,000	--	\$25,000	--	\$22,500	--

*Rent is per year, not per event.

Source: AECOM

Table 33: Facility Surcharge, Scenarios A-C

	Facility Surcharge									
	Scenario A1		Scenario A2		Scenario B1		Scenario B2		Scenario C	
	Gross Fee/ Ticket	% to Arena	Gross Fee/ Ticket	% to Arena	Gross Fee/ Ticket	% to Arena	Gross Fee/ Ticket	% to Arena	Gross Fee/ Ticket	% to Arena
NBA							\$4.00	45.3%		
NHL					\$4.00	45.3%	\$4.00	45.3%		
Storm	\$0.00	0.0%	\$0.00	0.0%	\$0.00	0.0%	\$0.00	0.0%		
Rollergirls	\$2.00	90.5%	\$2.00	90.5%	\$2.00	90.5%	\$2.00	90.5%		
Seattle University	\$2.00	90.5%	\$2.00	90.5%	\$2.00	90.5%	\$2.00	90.5%	\$2.00	90.5%
Concerts	\$4.00	90.5%	\$4.00	90.5%	\$4.00	90.5%	\$4.00	90.5%	\$4.00	90.5%
Family Shows	\$2.00	90.5%	\$2.00	90.5%	\$2.00	90.5%	\$2.00	90.5%	\$2.00	90.5%
Other Entertainment	\$2.00	90.5%	\$2.00	90.5%	\$2.00	90.5%	\$2.00	90.5%	\$2.00	90.5%
Other Sports	\$4.00	90.5%	\$4.00	90.5%	\$4.00	90.5%	\$4.00	90.5%	\$4.00	90.5%
Graduations										
Other - Private										
Other - Major/Public										

Source: AECOM

Reimbursements

Many of the arena's expenses associated with an event are passed along to promoters and reimbursed to the arena. Reimbursement of arena expenses from events has consistently averaged 63 percent of total event expenses in recent years. In the future, we assume reimbursement revenue to continue to be 63 percent of event expenses.

Ticketing

KeyArena shares revenue with Ticketmaster from various charges associated with different types of ticket orders. The level of charges is affected by ticket prices, and the arena receives charges over a certain benchmark. The arena's future assumed share of revenues are shown below as a percent of ticket sales, and are based largely on historical revenues collected by Key. (Because the Storm and SU oversee their

own ticketing, the arena does not share in revenues associated with their ticket sales. In addition, we assume that any future NHL or NBA tenant would also retain all revenues from ticketing fees from their events.)

Table 34: Ticketing Fees, Scenario A-C

	Scenario A1	Scenario A2	Scenario B1	Scenario B2	Scenario C
NBA				0%	
NHL			0%	0%	
Storm					
Rollergirls	5%	5%	5%	5%	5%
Seattle University					
Concerts	11%	11%	11%	11%	11%
Family Shows	11%	11%	11%	11%	11%
Other Entertainment	11%	11%	11%	11%	11%
Other Sports	8%	8%	8%	8%	8%
Graduations					
Other - Private					
Other - Major/Public					

Source: AECOM

Concessions

The arena currently receives a commission on gross sales from its food and beverage (F&B) contractor; this sharing, and a relationship with a third-party concessionaire, is assumed in the future. The arena typically retains its net share of F&B revenues. However, the Storm keeps the F&B revenues from its games, and we assume an NHL and NBA franchise would also retain the revenues from its F&B sales. The arena is assumed to retain the F&B revenues from other tenant events, as it currently does.

The two following tables show our assumptions of per-capita attendee spending for both concessions and catering (concessions sales are generated by attendees at concession stands; catering sales are generated by suite attendees only).

Table 35: Per-Capita Concessions Spending, Scenarios A-C

	Concessions									
	Scenario A1		Scenario A2		Scenario B1		Scenario B2		Scenario C	
	Gross Per Cap	%to Arena	Gross Per Cap	%to Arena	Gross Per Cap	%to Arena	Gross Per Cap	%to Arena	Gross Per Cap	%to Arena
NBA							\$12.00	0.0%		
NHL					\$12.00	0.0%	\$12.00	0.0%		
Storm	\$6.50	0.0%	\$6.50	0.0%	\$6.50	0.0%	\$6.50	0.0%		
Rollergirls	\$11.00	30.0%	\$11.00	30.0%	\$11.00	30.0%	\$11.00	30.0%		
Seattle University	\$5.50	30.0%	\$5.50	30.0%	\$5.50	30.0%	\$5.50	30.0%		
Concerts	\$10.00	30.0%	\$10.00	30.0%	\$10.00	30.0%	\$10.00	30.0%	\$10.00	30.0%
Family Shows	\$3.00	30.0%	\$3.00	30.0%	\$3.00	30.0%	\$3.00	30.0%	\$3.00	30.0%
Other Entertainment	\$6.00	30.0%	\$6.00	30.0%	\$6.00	30.0%	\$6.00	30.0%	\$6.00	30.0%
Other Sports	\$11.00	30.0%	\$11.00	30.0%	\$11.00	30.0%	\$11.00	30.0%	\$11.00	30.0%
Graduations	\$0.50	30.0%	\$0.50	30.0%	\$0.50	30.0%	\$0.50	30.0%	\$0.50	30.0%
Other - Private	\$5.00	30.0%	\$5.00	30.0%	\$5.00	30.0%	\$5.00	30.0%	\$5.00	30.0%
Other - Major/Public	\$2.50	30.0%	\$10.00	30.0%	\$10.00	30.0%	\$10.00	30.0%	\$10.00	30.0%

Source: AECOM

Table 36: Per-Capita Catering Spending, Scenarios A-C

	Catering									
	Scenario A1		Scenario A2		Scenario B1		Scenario B2		Scenario C	
	Gross Per Cap	%to Arena	Gross Per Cap	%to Arena	Gross Per Cap	%to Arena	Gross Per Cap	%to Arena	Gross Per Cap	%to Arena
NBA							\$30.00	0.0%		
NHL					\$30.00	0.0%	\$30.00	0.0%		
Storm	\$12.00	0.0%	\$12.00	0.0%	\$12.00	0.0%	\$12.00	0.0%		
Rollergirls	\$15.00	30.0%	\$15.00	30.0%	\$15.00	30.0%	\$15.00	30.0%		
Seattle University	\$12.00	30.0%	\$12.00	30.0%	\$12.00	30.0%	\$12.00	30.0%		
Concerts	\$20.00	30.0%	\$20.00	30.0%	\$20.00	30.0%	\$20.00	30.0%	\$20.00	30.0%
Family Shows	\$10.00	30.0%	\$10.00	30.0%	\$10.00	30.0%	\$10.00	30.0%	\$10.00	30.0%
Other Entertainment	\$0.00	30.0%	\$0.00	30.0%	\$0.00	30.0%	\$0.00	30.0%	\$0.00	30.0%
Other Sports	\$20.00	30.0%	\$20.00	30.0%	\$20.00	30.0%	\$20.00	30.0%	\$20.00	30.0%
Graduations										
Other - Private										
Other - Major/Public										

Source: AECOM

Programs and Novelties

From some events, the arena will share in sales of merchandise and novelties. However, as is currently the case, all current and future sports tenants will retain all revenue from their merchandise sales, with the exception of the Rollergirls, who “buy out” their merchandise sales by paying the arena \$500 per bout.

While some other events currently buy out their merchandise in return for all revenues, most share revenues with the arena; this is a standard arrangement and is assumed to continue in the future scenarios. Key typically receives 20 percent of gross merchandise sales and ten percent of sales of media (such as CDs and DVDs, which comprise a very small share of overall merchandise sales), and then evenly splits this share with its concessionaire. As a result, we assume that the arena retains nine percent of gross sales from non-tenant sports and entertainment events.

Per-attendee sales and sharing percentages are shown below.

Table 37: Per-Capita Program/Novelty Spending, Scenarios A-C

	Merchandise									
	Scenario A1		Scenario A2		Scenario B1		Scenario B2		Scenario C	
	Gross Per Cap	% to Arena	Gross Per Cap	% to Arena	Gross Per Cap	% to Arena	Gross Per Cap	% to Arena	Gross Per Cap	% to Arena
NBA							\$4.00	0.0%		
NHL					\$4.00	0.0%	\$4.00	0.0%		
Storm	\$1.50	0.0%	\$1.50	0.0%	\$1.50	0.0%	\$1.50	0.0%		
Rollergirls	\$500/bout		\$500/bout		\$500/bout		\$500/bout			
Seattle University	\$1.50	0.0%	\$1.50	0.0%	\$1.50	0.0%	\$1.50	0.0%	\$1.50	0.0%
Concerts	\$8.00	9.0%	\$8.00	9.0%	\$8.00	9.0%	\$8.00	9.0%	\$8.00	9.0%
Family Shows	\$1.00	9.0%	\$1.00	9.0%	\$1.00	9.0%	\$1.00	9.0%	\$1.00	9.0%
Other Entertainment	\$6.00	9.0%	\$6.00	9.0%	\$6.00	9.0%	\$6.00	9.0%	\$6.00	9.0%
Other Sports	\$5.00	9.0%	\$5.00	9.0%	\$5.00	9.0%	\$5.00	9.0%	\$5.00	9.0%
Graduations										
Other - Private										
Other - Major/Public										

Source: AECOM

Naming Rights

While the arena's naming-rights contract with KeyBank expired at the end of 2010, the facility continues to be known as KeyArena. Prior to the Sonics' leaving in 2008, KeyBank paid \$1.3 million per year, and then \$300,000 per year through 2010.

In the future, we assume a new naming-rights contract for the arena. According to interviews with facility and industry stakeholders, renewing the contract since 2010 has been difficult because of the uncertainty surrounding the future of the arena and other potential arena development in Seattle. However, we assume that under each future scenario, the certainty of the assumed changes will allow the city to secure a naming-rights partner for the arena that is consistent with contracts for other similar facilities.

For the four future scenarios, we make the following assumptions regarding naming rights:

- Scenario A1:** should the facility become a secondary large arena in Seattle without major professional tenants, we assume that gross annual naming rights revenue will be \$200,000 per year. As previously described in this report, there are few such arenas in the country in this category, and they typically appear in the largest markets.

Allstate Arena in Rosemont, Illinois (near Chicago) receives \$1.5 million per year; however, the arena currently has three professional and collegiate tenants and is in the country's third-largest market. The Izod Center (which is planned to close in the coming years and is located immediately outside of New York City) receives \$750,000 per year, which is decreased from the \$1.4 million per year when the NBA's New Jersey Nets played at the arena.

- Scenario A2:** assuming that KeyArena remains the primary large arena in Seattle and is improved, but is not a venue for major professional sports, we estimate gross annual naming rights to be \$1.2 million. In 2010, a consulting study valued the arena's naming rights at \$1 million in this scenario.

Other similar arenas' naming rights deals include the Sprint Center in Kansas City (\$2.5 million), the BOK Center in Tulsa (\$550,000), CenturyLink Center in Omaha (\$930,000), the Denny Sanford PREMIER Center in Sioux Falls (\$750,000), and the Wells Fargo Arena in Des Moines (\$575,000).

- **Scenario B1:** assuming that the arena hosts a major professional sports tenant and is the only such arena in Seattle, we assume that gross annual naming rights are \$3 million.

Existing deals across the country in this range include the FedEx Forum in Memphis (\$4.5 million), the Amway Center in Orlando (\$4 million), and the CONSOL Energy Center in Pittsburgh (\$4 million). However, we assume that the NHL tenant will retain 100 percent of naming rights revenue in this scenario.

- **Scenario B2:** with both an NHL and NBA tenant (as well as the other tenants), we assume that gross annual naming rights will be \$5 million. For comparison, NHL/NBA arena naming rights contracts in Dallas, Toronto, Philadelphia, Boston, Washington DC, Denver, and Los Angeles range from approximately \$1.5 million to \$6.5 million per year. Similar to Scenario B1, we assume that the major professional sports tenants will retain all naming rights revenues.
- **Scenario C:** this could consist of one or multiple naming rights partnerships, but in this scenario we assume a gross total of \$250,000 per year. In this scenario, the facility is assumed to have one tenant (SU). Across the country, a number of small and mid-sized arenas have naming rights contracts that generate \$100,000 to \$300,000 or more per year (most of which have at least one minor-league and/or collegiate tenant).

Seattle Center owns the rights to sell the arena's naming rights. In each scenario, we assume that annual costs associated with selling naming rights are 10 percent (this could be in the form of Seattle Center's own selling costs or a commission to a third-party marketer), and that the value of a suite is included in the deal and deducted from the naming-rights contract. As a result, net annual revenues to the arena range from zero to \$1.2 million in the first year of the projections (to be inflated in later years).

Premium Seating

Key currently has multiple premium seating options (suites and club seats) that can be purchased on a long-term or event basis. Because of the lack of major concerts or tenants, few suites are currently occupied on a long-term basis. However, the combination of annual and event-based premium seat sales has generated approximately \$1.3 million to \$1.4 million in gross revenues in recent years, and the arena typically retains slightly less than half of the gross revenues, after expenses of AEG (which manages the premium sales).

In general, we assume decreased levels of premium seating but more variety of offerings. In Scenarios A1 and A2, we assume a total of 36 suites and approximately 700 club seats. In Scenario B (with major

professional tenants), we assume 36 suites, approximately 700 club seats, and 160 loge seats. In Scenario C, we assume that the large venue inside the arena would have 35 premium suites, and the small venue would have 13.

We also assume that a portion of available suites will be leased on a per-event basis. Consistent with current lease terms with arena tenants, the arena would retain net premium seating revenues, with the exception of an NHL or NBA franchise, as the team(s) would control all revenues from premium seating in Scenario B. As a result, the arena's annual share of premium seating revenue ranges from zero to approximately \$1 million in the first year of operations (to be inflated in later years).

Sponsorship

Similar to naming rights, the ability of the arena to sell sponsorships has been hurt recently by uncertainty surrounding the future of KeyArena and other potential arena development in Seattle, as potential partners are generally unwilling to make long-term commitments to major partnerships without knowing what will happen with the city's arenas. And the value of these assets will be significantly impacted by Key's uses and the presence or lack of other competing facilities in Seattle.

In the last five years, annual sponsorship revenue has had wide fluctuations, from as little as \$15,000 to more than \$330,000 last year. (Similar to premium seating, sales are managed by AEG and the arena retains a share of gross revenues.) For the four future scenarios, we make the following assumptions, based on past amounts at KeyArena and amounts achieved at other similar facilities across the country.

- **Scenario A1:** gross annual revenues of \$350,000 in 2020.
- **Scenario A2:** gross annual revenues of \$575,000 in 2020.
- **Scenario B1:** gross annual revenues of \$6 million in 2020. In this scenario, we assume that the NHL franchise would have the right to sell most advertising within the arena (which could also involve AEG). We assume that the arena will have the right to sell some advertising and sponsorships outside of the team's inventory, and that it would retain 10 percent of gross revenues.
- **Scenario B2:** rather than \$6 million in gross annual revenues, we assume that the amount increases to \$8 million with the addition of an NBA tenant. All other assumptions from Scenario B1 remain constant.
- **Scenario C:** gross annual revenues of \$350,000 in 2020.

Other Revenues

In recent years, "other" revenues have averaged approximately two percent of all other revenues, and this amount is assumed in all future scenarios. These revenues are typically pass-through revenues that are collected by the arena and paid out to promoters, most often for event advertising.

Operating Expenses

Event Expenses

These expenses represent the direct cost of staging events at the arena, including supplies, labor, technical support, security, and others (and as described above, many of these expenses are reimbursed to the facility). For the future scenarios, per-event expenses are based on past expenses of events at KeyArena, the expected impact of each renovation scenario on event expenses, and the actual expenses of similar events at other arenas. Assumed per-event expenses are summarized below.

Table 38: Per-Event Arena Expenses, Scenarios A-C

	Scenario A1	Scenario A2	Scenario B1	Scenario C
NBA			\$50,000	
NHL			\$50,000	
Storm		\$25,000	\$25,000	
Rollergirls	\$25,000	\$25,000		
Seattle University		\$22,500	\$22,500	\$20,000
Concerts	\$60,000	\$70,000	\$70,000	\$45,000
Family Shows	\$20,000	\$22,500	\$22,500	\$17,500
Other Entertainment	\$75,000	\$85,000	\$85,000	\$65,000
Other Sports	\$40,000	\$50,000	\$50,000	\$40,000
Graduations	\$15,000	\$15,000	\$15,000	\$12,500
Other - Private	\$7,500	\$7,500	\$7,500	\$5,000
Other - Major/Public	\$75,000	\$75,000	\$75,000	\$50,000

Source: AECOM

Non-Event Expenses

These expenses represent expenses that are not directly associated with events, such as cleaning, maintenance, repairs, and management. While these expenses are not identified with individual events per se, they do correlate with the activity in, and usage of, the arena; for example, increased usage would lead to greater cleaning and maintenance expenses. In the last five years, non-event expenses have consistently ranged from approximately 40 percent to 50 percent of total event expenses.

For future scenarios A2, B, and C, we assume that this ratio will be 45 percent. However, for Scenario A1, while non-event expenses are expected to decrease, we assume that they will not necessarily decrease to the extent that event expenses will decrease, as there is a fixed component to these costs. In Scenario A1, we assume that non-event expenses will be 60 percent of event expenses.

Utilities

The arena's utilities expenses are incurred for its gas, water, electricity, and garbage service. Future utilities expenses for the four scenarios are generally based on past expenses at KeyArena, anticipated usage of the arena, and the actual expenses of similar facilities. For the four scenarios, estimated utilities expense in 2020 ranges from approximately \$450,000 to \$3.4 million.

Major Maintenance

The arena has a Major Maintenance Fund that can be used to pay for larger maintenance and improvement projects. In recent years, this expense has ranged from approximately \$70,000 to \$135,000 per year. For the projection period, we assume these expenses will increase incrementally over time, as the renovated facility ages, and vary based on the individual scenarios

Taxes

This category primarily consists of payments of business and occupation (B&O) taxes on the arena's revenues, in addition to smaller amounts of sales tax paid on arena revenues from equipment rentals. In the past, tax expense has consistently been two to three percent of Key's total revenues, and in the future, we assume 2.5 percent per year, which is the recent average.

Financial Proforma Statements

Based on the assumptions described above, projections of all revenues and expenses are shown below for the four scenarios.

Scenario A1

Table 39: Financial Proforma, Scenario A1 (\$000s)

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Operating Revenues (Net)										
Rent	\$699	\$709	\$719	\$730	\$740	\$751	\$762	\$774	\$785	\$797
Reimbursements	1,304	1,337	1,370	1,405	1,440	1,476	1,513	1,551	1,589	1,629
Ticketing	367	377	386	396	406	416	426	437	448	459
Concessions	410	420	430	441	452	464	475	487	499	512
Programs & Novelties	65	66	68	70	71	73	75	77	79	81
Naming Rights	179	183	188	192	197	202	207	212	218	223
Premium Seating	360	369	378	387	397	407	417	428	438	449
Sponsorship	238	223	229	235	240	246	253	259	265	272
Other	72	74	75	77	79	81	83	84	86	88
Total Operating Revenues	\$3,695	\$3,758	\$3,844	\$3,932	\$4,023	\$4,116	\$4,211	\$4,308	\$4,408	\$4,511
Operating Expenses										
Event Expenses	\$2,070	\$2,122	\$2,175	\$2,230	\$2,285	\$2,343	\$2,401	\$2,461	\$2,523	\$2,586
Non-Event Expenses	1,242	1,273	1,305	1,338	1,371	1,406	1,441	1,477	1,514	1,551
Utilities	453	464	475	487	500	512	525	538	551	565
Major Maintenance	57	58	89	91	125	128	164	168	207	212
Taxes	92	94	96	98	101	103	105	108	110	113
Total Operating Expenses	\$3,914	\$4,011	\$4,141	\$4,245	\$4,382	\$4,491	\$4,636	\$4,752	\$4,905	\$5,027
Net Operating Income	(\$219)	(\$254)	(\$297)	(\$312)	(\$359)	(\$375)	(\$425)	(\$443)	(\$496)	(\$516)

Source: AECOM

In this scenario, we assume that the arena would operate at a deficit, primarily due to the loss of many events (and in particular, higher-rated events and tenants) to the new SoDo arena. And because of the decreased usage of the arena, other assets such as sponsorships and premium seating offerings would become less valuable.

Compared to historical levels, we expect annual arena revenues and expenses to decrease. However, revenues are forecasted to decrease more than expenses, which would lead to the operating deficit (beginning at approximately \$220,000 in 2020 and increasing to \$515,000 in 2029).

Scenario A2

Table 40: Financial Proforma, Scenario A2 (\$000s)

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Operating Revenues (Net)										
Rent	\$583	\$578	\$573	\$568	\$563	\$558	\$553	\$547	\$541	\$536
Reimbursements	3,379	3,463	3,550	3,638	3,729	3,823	3,918	4,016	4,117	4,219
Ticketing	2,612	2,677	2,744	2,813	2,883	2,955	3,029	3,105	3,182	3,262
Concessions	1,554	1,593	1,633	1,673	1,715	1,758	1,802	1,847	1,893	1,941
Programs & Novelties	278	284	292	299	306	314	322	330	338	347
Naming Rights	1,177	1,206	1,237	1,267	1,299	1,332	1,365	1,399	1,434	1,470
Premium Seating	992	1,017	1,042	1,068	1,095	1,123	1,151	1,179	1,209	1,239
Sponsorship	358	367	376	385	395	405	415	425	436	447
Other	219	224	229	234	240	245	251	257	263	269
Total Operating Revenues	\$11,150	\$11,409	\$11,675	\$11,947	\$12,226	\$12,512	\$12,805	\$13,106	\$13,414	\$13,729
Operating Expenses										
Event Expenses	\$5,363	\$5,497	\$5,634	\$5,775	\$5,920	\$6,068	\$6,219	\$6,375	\$6,534	\$6,697
Non-Event Expenses	2,413	2,474	2,535	2,599	2,664	2,730	2,799	2,869	2,940	3,014
Utilities	594	609	624	640	656	672	689	706	724	742
Major Maintenance	57	58	89	91	125	128	164	168	207	212
Taxes	279	285	292	299	306	313	320	328	335	343
Total Operating Expenses	\$8,705	\$8,923	\$9,175	\$9,404	\$9,670	\$9,911	\$10,191	\$10,445	\$10,740	\$11,008
Net Operating Income	\$2,445	\$2,487	\$2,500	\$2,543	\$2,556	\$2,601	\$2,614	\$2,660	\$2,673	\$2,721

Source: AECOM

Scenario A2 is the one that is most similar to the current KeyArena, although we assume a wide range of improvements to the facility in the future. In this scenario, forecasted arena usage is similar to recent historical levels, but its revenue-generating features would increase (as would its costs to operate). In a first renovated year of operation, we estimate net operating income of approximately \$2.4 million, compared to a range of approximately \$580,000 to \$1.2 million in Key's last three years.

Scenario B1

Table 41: Financial Proforma, Scenario B1 (\$000s)

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Operating Revenues (Net)										
Rent	\$4,112	\$4,180	\$4,249	\$4,321	\$4,394	\$4,469	\$4,546	\$4,625	\$4,706	\$4,788
Reimbursements	4,391	4,501	4,613	4,728	4,847	4,968	5,092	5,219	5,350	5,483
Ticketing	2,076	2,128	2,181	2,235	2,291	2,349	2,407	2,467	2,529	2,592
Concessions	1,278	1,310	1,343	1,376	1,411	1,446	1,482	1,519	1,557	1,596
Programs & Novelties	227	233	239	245	251	257	264	270	277	284
Naming Rights	0	0	0	0	0	0	0	0	0	0
Premium Seating	0	0	0	0	0	0	0	0	0	0
Sponsorship	679	696	713	731	749	768	787	807	827	848
Other	255	261	267	273	279	285	292	298	305	312
Total Operating Revenues	\$13,018	\$13,308	\$13,605	\$13,909	\$14,221	\$14,542	\$14,870	\$15,206	\$15,550	\$15,904
Operating Expenses										
Event Expenses	\$6,969	\$7,144	\$7,322	\$7,505	\$7,693	\$7,885	\$8,082	\$8,285	\$8,492	\$8,704
Non-Event Expenses	3,136	3,215	3,295	3,377	3,462	3,548	3,637	3,728	3,821	3,917
Utilities	2,263	2,319	2,377	2,437	2,498	2,560	2,624	2,690	2,757	2,826
Major Maintenance	57	58	89	91	125	128	164	168	207	212
Taxes	325	333	340	348	356	364	372	380	389	398
Total Operating Expenses	\$12,751	\$13,068	\$13,424	\$13,759	\$14,133	\$14,485	\$14,879	\$15,251	\$15,665	\$16,056
Net Operating Income	\$267	\$239	\$181	\$151	\$89	\$56	(\$10)	(\$45)	(\$115)	(\$153)

Source: AECOM

As previously described, the primary difference between Scenario B and Scenario A2 is the addition of an NHL tenant (and the required physical modifications in order to accommodate major professional sports). In many cases, the arena would generate additional revenues from NHL games; however, we also assume that the NHL team would retain most revenues from its events. In this scenario, the arena's operating expenses would also increase significantly from current levels.

As shown above, we forecast a modest operating profit or deficit each year, ranging from a deficit of approximately \$150,000 to a \$265,000 profit. However, this result would be significantly affected by any contributions towards the renovation project from the NHL franchise; relatively lower capital investment could lead to a greater share of revenues to be retained by Key, and vice versa. It is also possible that the franchise could pay for all renovation costs, take responsibility for overall arena operations, and/or assume all operating risk, in return for guaranteed rent payments to the city. However, in this scenario, we have assumed that the team is a tenant of the arena.

Scenario B2

Table 42: Financial Proforma, Scenario B2 (\$000s)

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Operating Revenues (Net)										
Rent	\$7,753	\$7,896	\$8,043	\$8,193	\$8,347	\$8,505	\$8,667	\$8,834	\$9,004	\$9,178
Reimbursements	5,161	5,290	5,422	5,557	5,696	5,839	5,985	6,134	6,288	6,445
Ticketing	1,610	1,651	1,692	1,734	1,778	1,822	1,868	1,914	1,962	2,011
Concessions	918	941	965	989	1,014	1,039	1,065	1,091	1,119	1,147
Programs & Novelties	173	177	182	186	191	196	201	206	211	216
Naming Rights	0	0	0	0	0	0	0	0	0	0
Premium Seating	0	0	0	0	0	0	0	0	0	0
Sponsorship	905	928	951	975	999	1,024	1,050	1,076	1,103	1,130
Other	330	338	345	353	360	368	377	385	394	403
Total Operating Revenues	\$16,850	\$17,220	\$17,599	\$17,987	\$18,385	\$18,793	\$19,212	\$19,640	\$20,080	\$20,530
Operating Expenses										
Event Expenses	\$8,191	\$8,396	\$8,606	\$8,821	\$9,042	\$9,268	\$9,500	\$9,737	\$9,980	\$10,230
Non-Event Expenses	3,686	3,778	3,873	3,970	4,069	4,171	4,275	4,382	4,491	4,603
Utilities	3,394	3,479	3,566	3,655	3,747	3,840	3,936	4,035	4,136	4,239
Major Maintenance	85	87	119	122	156	160	197	202	241	247
Taxes	421	430	440	450	460	470	480	491	502	513
Total Operating Expenses	\$15,778	\$16,171	\$16,604	\$17,018	\$17,473	\$17,908	\$18,388	\$18,846	\$19,350	\$19,833
Net Operating Income	\$1,072	\$1,049	\$995	\$970	\$912	\$885	\$824	\$794	\$729	\$697

Source: AECOM

The major difference between Scenario B2 and B1 is the addition of an NBA tenant. While this would add another approximately 45 major events per year, this would also likely cause the arena's number of other sports and entertainment events to decrease, due to the loss of available event days. Similar to an NHL franchise, we assume that an NBA franchise would also generally retain its event-related revenues.

As shown above, we estimate that both revenues and expenses would increase relative to Scenario B1, and the NBA team's rent would more than offset the loss of arena revenues from other events. As a result, the facility's net operating income would increase from Scenario B1, to approximately \$1.1 million in 2020, under the assumptions described in this report.

Scenario C

Table 43: Financial Proforma, Scenario C (\$000s)

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Operating Revenues (Net)										
Rent	\$910	\$921	\$932	\$943	\$955	\$967	\$979	\$991	\$1,004	\$1,017
Reimbursements	1,860	1,907	1,955	2,003	2,054	2,105	2,157	2,211	2,267	2,323
Ticketing	531	544	558	572	586	601	616	631	647	663
Concessions	581	596	611	626	642	658	674	691	708	726
Programs & Novelties	94	96	98	101	103	106	108	111	114	117
Naming Rights	235	240	246	253	259	265	272	279	286	293
Premium Seating	586	600	615	631	646	662	679	696	713	731
Sponsorship	218	223	229	235	240	246	253	259	265	272
Other	100	103	105	107	110	112	115	117	120	123
Total Operating Revenues	\$5,114	\$5,230	\$5,349	\$5,470	\$5,595	\$5,722	\$5,853	\$5,988	\$6,125	\$6,266
Operating Expenses										
Event Expenses	\$2,953	\$3,027	\$3,102	\$3,180	\$3,260	\$3,341	\$3,425	\$3,510	\$3,598	\$3,688
Non-Event Expenses	1,329	1,362	1,396	1,431	1,467	1,503	1,541	1,580	1,619	1,660
Utilities	566	580	594	609	624	640	656	672	689	706
Major Maintenance	57	58	89	91	125	128	164	168	207	212
Taxes	128	131	134	137	140	143	146	150	153	157
Total Operating Expenses	\$5,032	\$5,157	\$5,316	\$5,448	\$5,616	\$5,756	\$5,932	\$6,080	\$6,266	\$6,422
Net Operating Income	\$82	\$73	\$33	\$22	(\$21)	(\$33)	(\$79)	(\$92)	(\$141)	(\$157)

Source: AECOM

In this scenario, we assume that the venue would experience a small operating profit or loss on an annual basis. In the first five years, the projected net operating income is never more than \$82,000, and the deficit then increases to approximately \$160,000 in the tenth year.

SCENARIO D – REPURPOSING OPTION

The market analysis for Scenario D concluded with a number of potential attraction concepts which were consistent with the Seattle Center mission statement, could physically fit within KeyArena, had the potential to appeal to both residents and visitors and promote vitality at Seattle Center, and have the potential to generate net positive revenue. All of the concepts were also screened for compatibility with basic market criteria and the existing array of attractions already in the market.

The list of attraction types that suitably met these criteria includes:

- An indoor sports adventure park,
- A high technology edutainment attraction,
- An IP-based attraction,
- A STEM or “maker” center, and
- A dinner theater attraction.

As noted in the market analysis, there is no shortage of attraction ideas or concepts that could potentially meet the criteria for locating at Seattle Center in KeyArena, and if a request for development concepts were issued, a large number of creative concepts would likely be generated.

However, the goal of Seattle Center is for the use in KeyArena to be able to generate enough positive revenue that their contribution to Seattle Center would be similar to the current KeyArena contribution. As such, rather than model a very specific attraction concept, we decided to conduct high level financial analysis on a number of entertainment and attraction concepts to understand the range of possible revenues that may be generated for the City.

Assumptions

There are three very important assumptions in our analysis:

- We assume that the City is not actively managing the attractions, but rather managing a ground lease or more traditional real estate lease with the operator or tenant that, depending on use, is based on rent per square foot or a percentage of revenue. This is different than the current use of KeyArena where the City is actively involved in the management of the entertainment function.
- We have included some commercial uses that are thematically related to each concept. For example, we have included some type of specialty sports retail space along with the adventure park. A velodrome, for example, could include bike repair and sales shops.
- As noted above, the financial analysis shown below has been provided for a wide range of attractions in order to demonstrate the economic implications of reusing KeyArena for an alternative entertainment use.

Results

We examined five potential attraction concepts, combined with some modest commercial retail, restaurant or office use, to understand the range of possible financial outcomes for very different types of attractions. It should be noted that our analysis assumes typical, industry standard business models and does not assume any unique public-private partnerships that may be developed.

Key inputs and results are shown in the table below. As indicated, despite a wide range of inputs, assumptions, sources of revenue, per capita spending estimates, attendance levels, mix of residents and tourists, and other factors, the results are all generally within a similar range. Most of the attractions can generate between \$500,000 and \$1 million in revenue to the City on their own, assuming typical operating costs. However, the cost of maintaining and operating the KeyArena facility in excess of usual operating costs for most attractions offsets most of the income.

Table 44: Preliminary Financial Analysis for Hypothetical Attraction Concepts

Category	Alternative D1	Alternative D2	Alternative D3	Alternative D4	Alternative D5
<u>Attraction Component</u>					
Attraction Description	Edutainment Attraction	Dinner Theater	Sports Adventure Park	STEM/ Incubator Center	Indoor Boutique Theme Park
Description / Examples	Sega Orbi, National Geographic or Smithsonian attraction, FlyOver Experience	Australian Outback Spectacular, Pirate's Dinner Adventure, Cirque du Soleil	Possible mix of: velodrome, rock climbing, ice climbing, surf park, skate park, ropes courses, trampoline, etc.	Incubator space, "maker" space	Indoor theme park: Lego Discovery Center with rides added
Size	60,000 - 70,000 SF	30,000 - 40,000 SF	50,000-75,000 SF indoor 20,000 - 30,000 SF outdoor	25,000 SF	200,000 SF
Annual Attendance	400,000 - 600,000	100,000	400,000-450,000	n/a - not visitor destination	600,000-700,000
Per Capita	\$23 (admission, retail & F&B)	\$80	\$20	n/a	\$30
Gross Revenue	\$12.5 million	\$8 million	\$8.5 million	n/a	\$18 - \$19 million
Operating Margin	20%	20%	25%	n/a	30%
Operating Costs	\$10 million	\$6.4 million	\$6.4 million	n/a	\$13 million
NOI - Attraction	\$2.5 million	\$1.6 million	\$2 million	n/a	\$5 - \$6 million
Potential Revenue to City	5% of gross \$500,000-\$650,000	7% of gross \$500,000 - \$600,000	7% of gross \$600,000	\$100,000	6% of gross \$1.1 million
<u>Additional Components</u>					
Retail	Destination specialty retail	n/a	Sports retailer, bikes shops, etc.	n/a	Included in park operation
F&B	Destination themed restaurant/ event space	n/a	Sports themed restaurants, sports bars, etc.	Cafes, restaurants	Included in park operation
Office	Educational technology, science companies	n/a	n/a	Related "market rate" office space	Included in park operation
Total Size (SF)	30,000 SF	n/a	20,000 SF	25,000	n/a
Average Rent	\$540,000 annually	n/a	\$360,000	\$300,000 - \$400,000	n/a
<u>Total Project</u>					
Total Size (SF)	Approximately 100,000 SF	Up to 40,000 SF	75,000-100,000 SF indoor + 20,000 - 30,000 SF outdoor	50,00 SF	200,000 SF
Total Potential Revenue to City	\$1 million	\$500,000 - \$600,00	\$900,000	\$400,000 - \$500,000	\$0
Cost to Maintain Key Arena	\$800,000 - \$1 million	\$800,000 - \$1 million	\$800,000 - \$1 million	\$800,000 - \$1 million	\$800,000 - \$1 million
Potential Net Revenue to City	Up to \$200,000	Potentially negative	Break even	Negative Net Revenue	Up to \$300,000

Implications

- Attractions are often profitable, but do not typically generate revenues that private real estate or commercial development can. Instead, they tend to act as anchors that enhance and create value in surrounding properties. If the City as landowner does not create real estate opportunities that allow this value to be captured,
- There is market potential for a range of attractions and entertainment venues, but most of them will not maintain the current KeyArena net contribution to Seattle Center.
- We reviewed a wide range of attraction types, from dinner theaters to STEM incubator and educational centers to sports adventure parks and high technology cultural attractions. While the inputs and business models are very different for all of these, with very different attendance estimates, pricing models, and operating margins, the “bottom line” was very consistent. All of the attractions generated between \$500,000 and \$1.2 million of revenue for the City annually, before considering the additional cost of maintaining the KeyArena facility.
- After the cost of operating KeyArena is considered, the net revenue for the City was either negative or very modest, due primarily to the cost of maintaining the arena facility for uses that underutilize the facility. While it may be possible to combine some of these concepts to generate more revenue or develop a strategic partnership with one entity (i.e. the Bass Pro Shops in the Memphis Pyramid), it is our opinion that if sports or concert uses are not viable, these are not likely to fulfill the stated goals and the City may want to consider a broader approach to assessing site opportunities that do not necessarily involve keeping the existing structure.

8. Housing Potential

As part of this assignment, we reviewed several case studies for arenas that were demolished and/or repurposed for mixed use development, including housing. During the course of our stakeholder interviews, several individuals raised questions about the potential for either market rate or workforce housing on the site, should the opportunity arise.

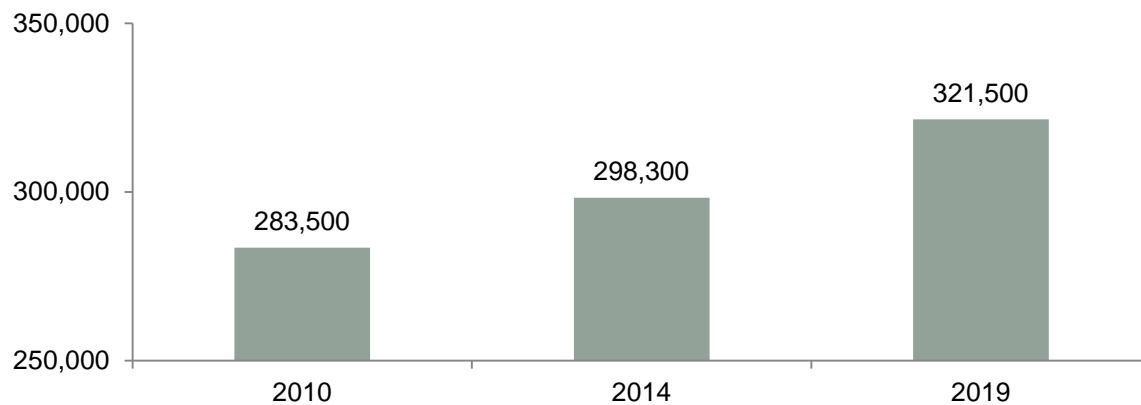
In order to provide context to address the issue of housing potential, we conducted a high-level assessment of market indicators for the housing market in Seattle and in the Seattle Center submarket. It is important to note that this is not a residential demand or feasibility study and is only intended to provide a broad context of housing market performance and issues in Seattle to inform possible options for the KeyArena site.

In this section, we review drivers of demand, supply metrics, and key characteristics of the for-rent and for-sale markets. Next, we discuss other considerations, including the possibility of workforce housing.

DRIVERS OF DEMAND

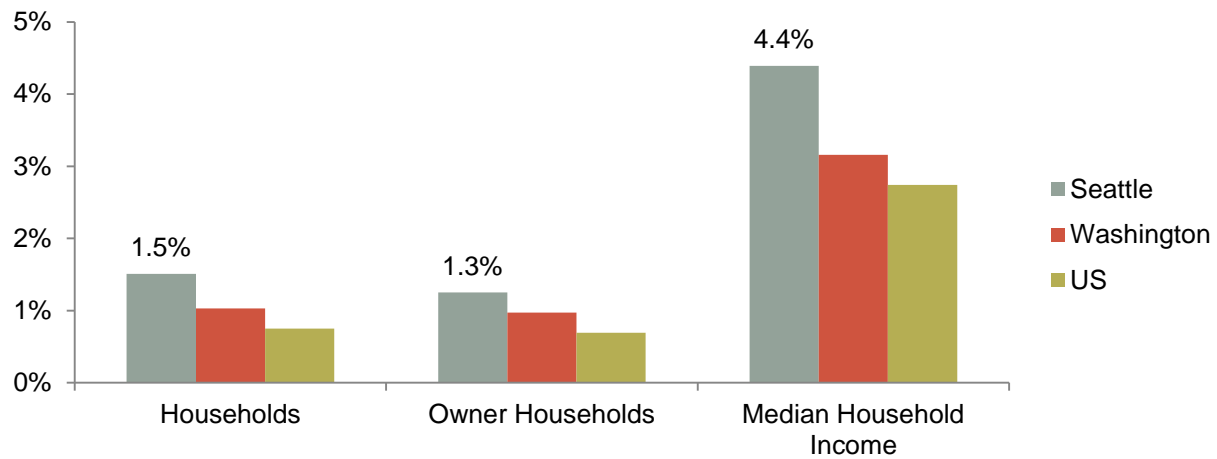
The largest driver of residential demand is household growth. Since 2010, Seattle has added nearly 15,000 households and is expected to add an additional 23,000 through 2019.

Figure 43: Households in Seattle



Source: ESRI

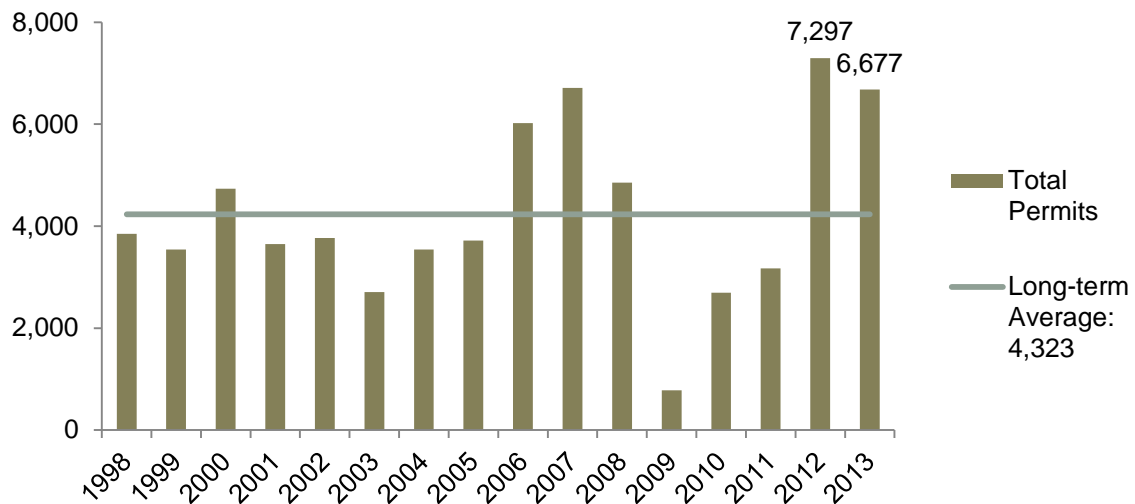
Seattle's growth rates for households, owner households, and median household income are all set to rise faster than rates for the state and the nation. These indicators suggest that Seattle can support growth in the residential market.

Figure 44: Growth Rates, 2014-2019

Source: ESRI

SUPPLY METRICS

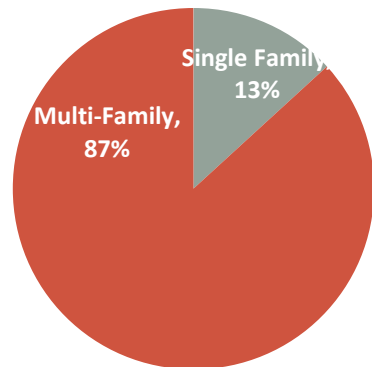
Over the past 15 years, residential permits in the Seattle have fluctuated, particularly during the recession starting in 2009. The long-term average is over 4,000 units per year. Permits obtained in 2012 and 2013 outpace the long-term average, likely in reaction to the depressed levels of permits between 2009 and 2011.

Figure 45: Residential Permits in Seattle, 1998-2013

Source: U.S. Bureau of the Census

Of the residential permits pulled, the vast majority were for multi-family units, as displayed in Figure 46.

Figure 46: Residential Permits by Type in Seattle, 1998-2013

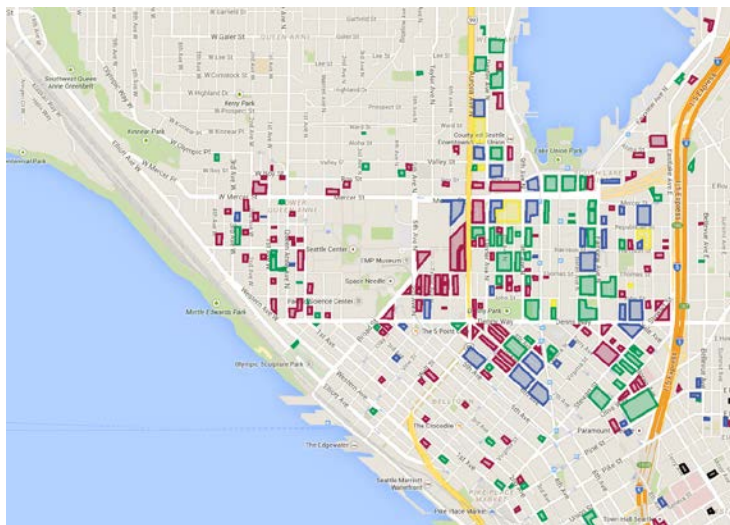


Source: US Bureau of the Census

SUPPLY IN THE STUDY AREA

Supply in downtown Seattle has been very active, especially in 2014. The map in Figure 47 shows the location of development projects in Seattle. Sites in green and blue are residential developments. Out of all developments in downtown, 65 percent of projects include residential units.

Figure 47: Map of Developments in Seattle

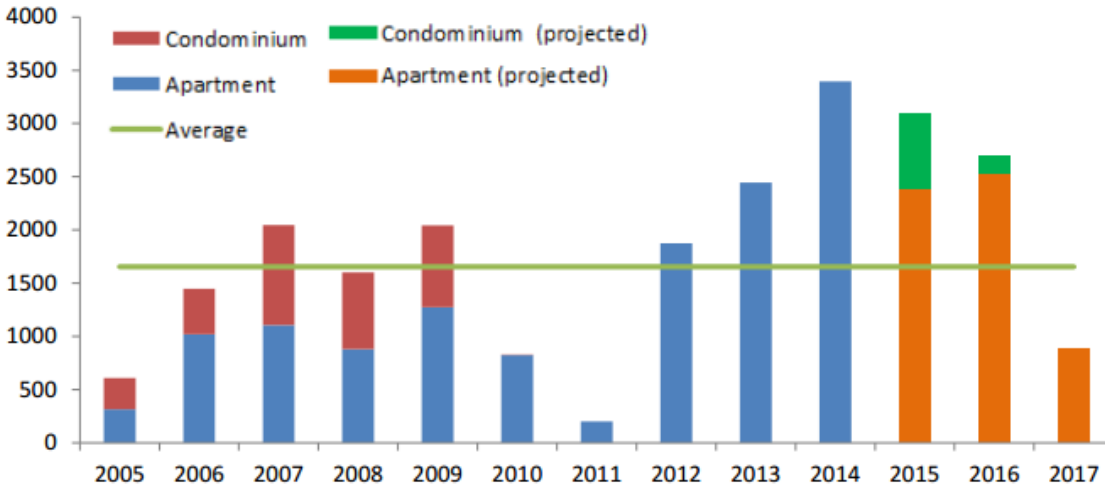


Source: https://www.google.com/maps/d/viewer?mid=z_Uf08eywQjk.k-13ENVDTX1g

TYPE OF RESIDENTIAL UNITS

In downtown in the past 4 years, all of the residential deliveries have been in apartment buildings. For-rent will continue to be favored in the near term, although two condominium projects are slated for completion within the next two years. By the end of last year, there were 5,253 apartment units in 32 projects under construction and 876 condominium units in two projects. Deliveries in 2017 are likely to be higher than displayed as more construction permits are approved.

Figure 48: Historic and Projected Residential Deliveries in Downtown Seattle

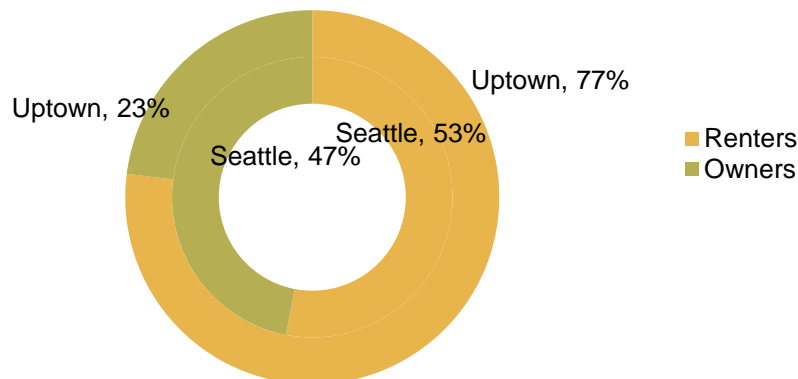


Source: Metropolitan Improvement District and Downtown Seattle Association. "Development Guide, December 2014 Update"

UPTOWN NEIGHBORHOOD

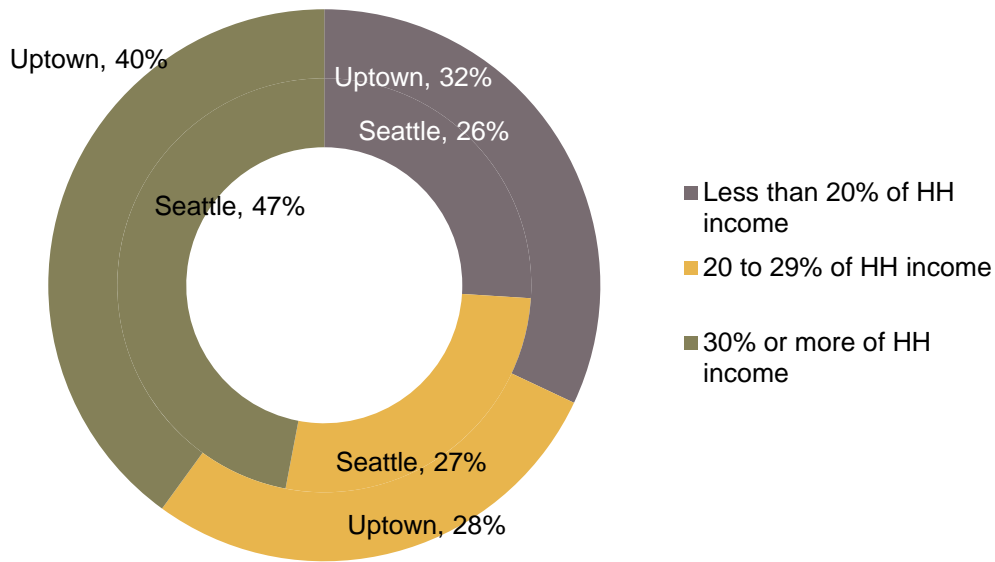
The Uptown neighborhood differs from Seattle in several key ways, including the preponderance of renters, as seen in Figure 49, and the relatively more affordable units, as seen in Figure 50.

Figure 49: Renters vs. Owners, Seattle and Uptown



Source: City of Seattle Office of Housing

Figure 50: Renter's Share of Income for Rent

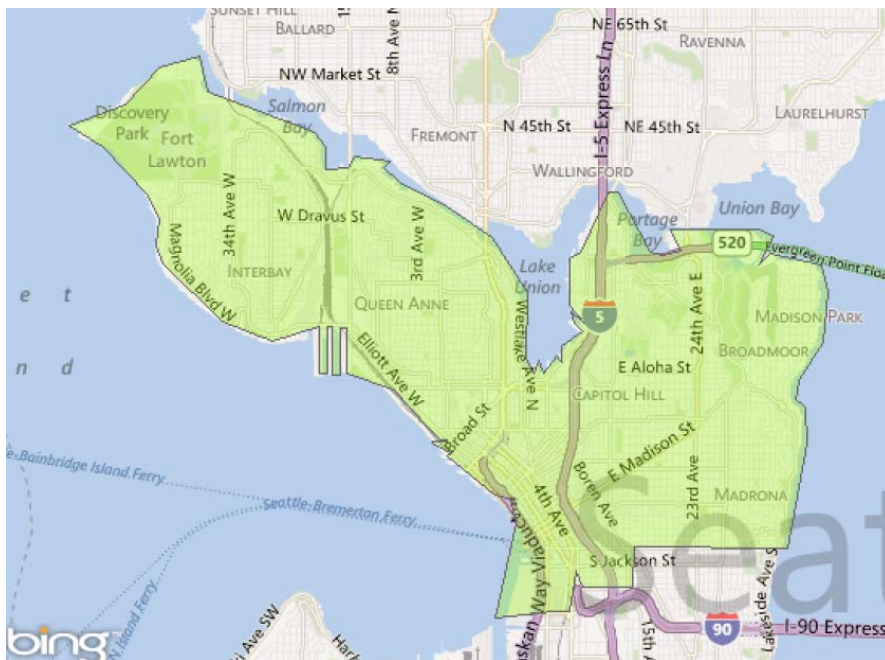


Source: City of Seattle Office of Housing

FOR-RENT MULTI-FAMILY MARKET

The submarket for for-rent multi-family is displayed in Figure 51 below.

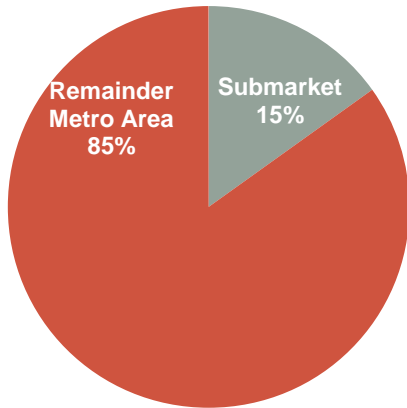
Figure 51: Multi-Family Submarket



Source: REIS

The submarket contains nearly 32,000 apartment units, or 15 percent of the supply of the Seattle metro area, as displayed the figure below.

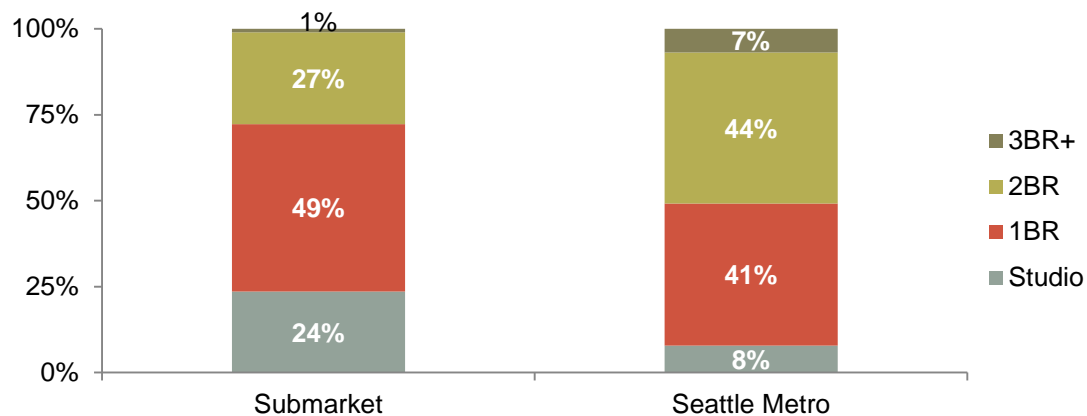
Figure 52: Multi-family Submarket Inventory



Source: REIS

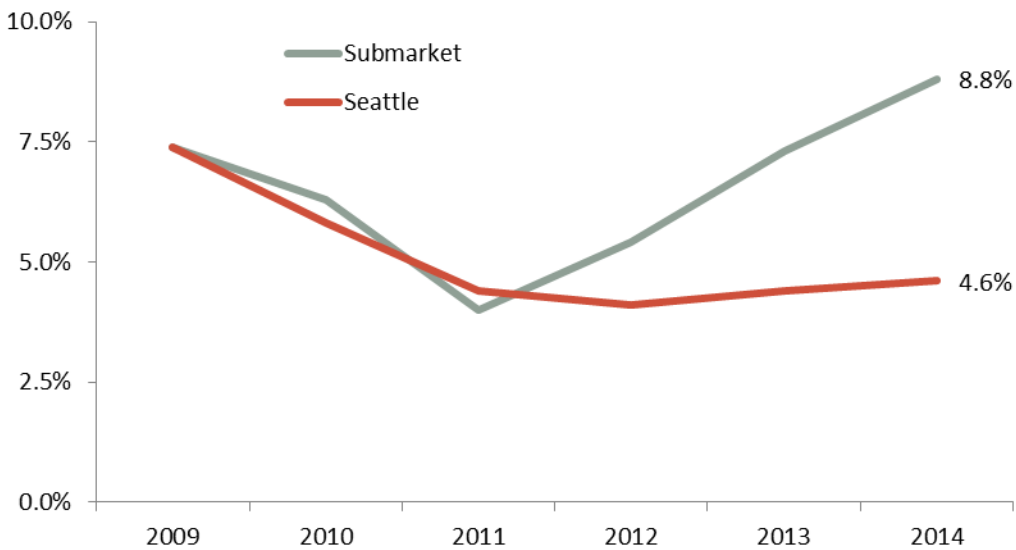
The submarket has a greater number of markedly smaller units than the greater metro area, particularly studios. Per conversations with developers familiar with the Uptown area, Uptown is known as more of a transient neighborhood – where young professionals rent an apartment upon arriving in Seattle and then settle in a different neighborhood.

Figure 53: Multifamily Unit Mix in Submarket and Seattle Metro



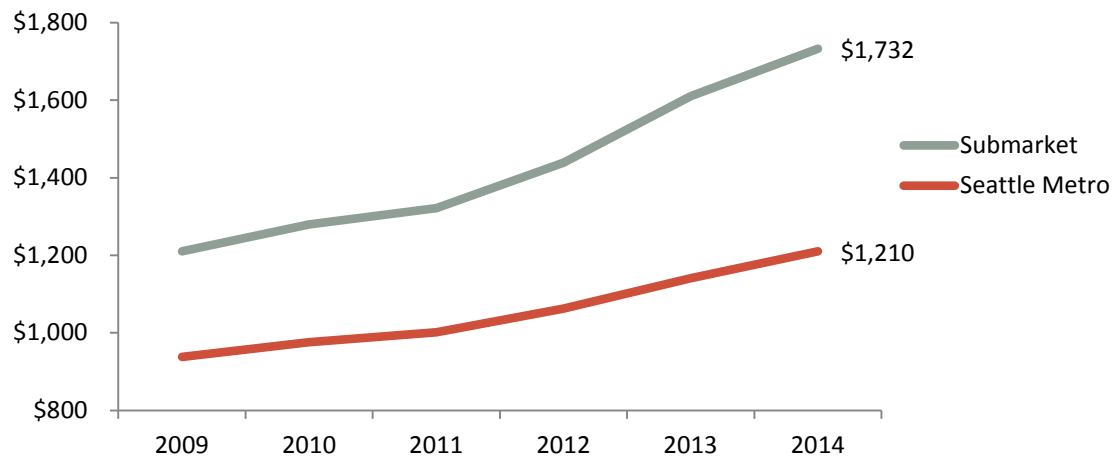
Source: REIS

Over the past six years, vacancy rates in the Seattle metro have been on an overall decline. Vacancy rates in the submarket have spiked in recent years; however, that can be attributed to the volume of new supply in the area, which is still absorbing the new units.

Figure 54: Vacancy Rates

Source: REIS

Rents in the area are approximately 30% higher than the greater metro area and have been increasing at a faster pace as well. The compound annual growth rate for the submarket over the past six years is 7.4 percent, compared to 5.2 percent for the metro area.

Figure 55: Average Rent

Source: REIS

Although vacancy rates in the submarket are currently high, the high and increasing rents indicate that this is a desirable area for housing. Per conversations with brokers, this area was identified as desirable for residential use.

FOR-SALE MULTI-FAMILY MARKET

There has been limited supply within the past few years; however, two condominium buildings are currently under construction in downtown Seattle: Luma condominiums and Insignia.

Luma condominiums are located at the border of the First Hill and Pike/Pine neighborhoods, and the project consists of 168 units in 24 stories. Pricing details are located below in Figure 56. Sales began in April 2015.

Figure 56: Pricing at Luma Condominium Project

Unit Type	Site (SF)	Price Range
Open 1BR, 1BA	602-620	\$350,000-\$400,000
1BR, 1BA	648-1,012	\$400,000-\$800,000
1BR+Den, 1BA	847-1,356	\$450,000-\$600,000
2BR, 2BA	1,322-1,529	\$700,000-\$1,000,000
2BR+Den, 2 BA	1,322-1,529	\$800,000-\$1,000,000+
Penthouses	1,586-1,721	\$1,000,000+

Source: Seattlecondosandlofts.com

Insignia is the second condominium project in downtown Seattle, with a total of 707 units. As of June 2015, 361 condos, or 51 percent, had been sold. The units were listed in September 2013. The average price per square foot is \$700 with prices starting in the \$400,000s. Overall, the price of the condos has increased by approximately 11 percent during the year ending March 2015.

DEVELOPMENT CONDITIONS

We spoke with many developers currently active in the area. General trends based on these conversations are as follows:

MACRO TRENDS

- Technology jobs have fueled recent job growth, including Amazon and Facebook.
- Job growth and resulting migration has pushed rents up. Only within the past few years has Seattle's residential pricing outpaced its income growth.
- Multi-family investors are entering the market, particularly Chinese nationals and domestic institutional investors.
- Permanent financing loan-to-value ratio is approximately 65-75 percent.
- Cap rates are approximately five percent.

SEATTLE TRENDS

- Construction costs vary from \$130 to \$190 per square foot, and for high-rise development are between \$400,000 and \$500,000 per unit.
- Land values for residential development are highly contingent upon zoning, and can range from \$55,000 to \$75,000 per unit for low-rise developments and \$40,000 to \$50,000 per unit for high-rise development. Per square foot land costs can range from \$250 to \$400.
- Parking requirements are lower than 1.0 per unit.
- Overall trends are towards smaller residential units.

UPTOWN TRENDS

- Residents are able to walk to employment downtown.
- Approximately 70% of tenants are from out-of-state.
- Turnover is high, as this is a transitional neighborhood for the apartment units.
- Part of the neighborhood is single-family homes.
- Uptown is currently going through a community visioning process.

WORKFORCE HOUSING

We also had conversations with developers and the City of Seattle about the possibility of workforce housing in Seattle. The following are the highlights of those conversations.

DEMAND IN UPTOWN

- Due to its central location, the Uptown area is a highly desirable area for workforce housing. Positive attributes include transit access, nearby jobs, and amenities.
- Given the recent rental increases, there can be considered unlimited demand for affordable housing.

FINANCING

- Most financing sources for affordable housing target households under 60 percent AMI or 80 to 85 percent AMI. The multifamily tax exempt (MFTE) program provides financing for developments with at least 20 percent of residents at 80 or 85 percent (depending on the unit type) AMI or less. Exemptions last for 12 years and AMI requirement varies by unit type. Incentive zoning offers another financing mechanism, but is not currently available in the Uptown area.

- Due to current financing tools for affordable housing, there has been a challenge in meeting the housing needs of households that are between 60 and 85 percent AMI, which is generally considered one segment of workforce housing.
- Given that the City owns the land that that KeyArena is located, it has the ability to subsidize any housing developments that may occur through reduced or free land cost. This would likely provide an opportunity to create workforce housing, although the feasibility would depend on specific economic factors, land area, number of units, targeted income levels, and other development and policy issues.

CAPACITY ANALYSIS

In order to assess the possible number of units that could be developed on the KeyArena site, AECOM conducted a high level physical capacity analysis based upon similar developments nearby. There are several new apartment buildings near KeyArena, including one that just opened directly opposite the entrance to KeyArena. This development, the Astro apartments, was developed on half a block, with approximately 19 percent studio units (between 465 and 525 square feet), 67 percent one-bedroom units of two types, (between 480 to 785 square feet), and 14 percent two-bedroom units (between 950 and 1,055 square feet). Other apartment buildings near KeyArena include the Elliott Bayview Apartments (luxury apartment homes), Axis apartments (116 units – studio to 3 bedrooms), and EXPO apartments (studio to 2 bedroom).

Using similar height restrictions (although the KeyArena site may allow for an additional story), and assuming that KeyArena encompasses roughly a full block, six-story structures could include the following:

- Approximately 20,000 to 25,000 square feet on the ground floor;
- Five stories of residential apartment units, with between 400 and 500 residential apartment units;
- Parking for approximately 400 to 500 vehicles (less parking is likely possible).
- An extra floor would increase the number of apartment units by between 40 and 50.

It is important to note that these estimates are highly preliminary and not the result of any detailed planning or architectural work, and are not based on any financial feasibility analysis. The purpose of the exercise was to determine a range in number of units that may be possible from a physical perspective.

CONCLUSION

The Seattle housing market has been strong in recent years, and the Seattle Center submarket would generally have potential for market rate housing, particularly for rental products. Seattle has experienced levels of development above the long-term average within the past few years, and that trend is set to continue. The majority of residential products currently under development and planned are rental

apartments, although for-sale products are re-entering the market after a period of dormancy. Increasing rental rates have driven apartment deliveries and vacancies are currently higher than in previous years as new inventory comes into the market.

Housing affordability has declined in Seattle, with 40 percent of Uptown residents spending more than 30 percent of their household income on rent. Housing policies and financing mechanisms available in Seattle have supported development of units for those with approximately 80 to 85 percent AMI, as well as those at under 60 percent AMI. There is currently limited financing available to meet the housing needs of households between 60 and 80 to 85 percent AMI, which is typically considered a segment of workforce housing.

The KeyArena site is centrally located and would be a strong affordable or workforce housing site, and would also have potential for market rate apartments. As the City owns the land, there would be opportunities to serve a range of income levels, depending on a number of development, economic, and policy factors. Housing use on this site would need to be integrated with community preferences and the visioning process of the Uptown area. From a physical capacity perspective, it would be possible to develop between 400 and 500 units, depending on a number of variables related to site, planning, market, and economic factors.