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Proposed Sports and Entertainment Centre

Feasibility and Business Case Assessment

City of Greater Sudbury

February 21, 2017

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Contents

1. Introduction

Background

The City of Greater Sudbury (the "City") has been considering a new sports and entertainment facility to replace the Sudbury Community Arena ("SCA"). While having served as viable home for the Sudbury Wolves of the Ontario Hockey League' ("OHL"), as a venue for the staging of a broad range of spectator and community events and shows, in addition to being used by local minor sport organizations, the SCA is estimated to require some $3.8 million in basic upgrades and repairs over the 2013-2023 period. Moreover, it has been reported that the SCA has an estimated probable cost in the range of $50 million to bring it up to current "sports and entertainment complex" standards (i.e., to make it comparable to newer buildings which have been developed in markets such as St. Catharines, Moncton, Kingston, Windsor and Sault Ste. Marie).

A new multi-purpose Sports and Entertainment Centre ("SEC") has been endorsed by Greater Sudbury City Council as one of its four priority projects. In support of this recommendation, the City retained PricewaterhouseCoopers Real Estate Inc. ("PwC") to prepare a feasibility and business case assessment for a new sports and entertainment complex. This study is to include the following elements:

- A "Feasibility Study", the purpose of which is to assess and make recommendations on the needs, including anticipated costs and benefits, of an SEC; and
- A "Business Case" assessment, the purpose of which is to identify the specifications that can form the basis for a Request for Proposals document for the procurement phase of a new multi-purpose SEC.

By completing a feasibility and business case assessment for a new SEC, it is anticipated that the City would be placed in a better position to evaluate its merit, and determine a go-forward strategy to determine its location and procurement process.

Scope of Review

The scope of PwC's review included the following tasks:

- Held a preliminary meeting with City of Greater Sudbury officials to acquire background information;
- Completed a review of the Greater Sudbury market from a demographic and socio-economic perspective;
- Researched and obtained information on the operations of various mid-sized spectator facilities across Ontario and other Canadian markets;
- Researched and reviewed socio-economic data profiling other Ontario markets with OHL teams;
- Evaluated the potential "supportable" size of a new SEC in Sudbury;
- Identified the various design components and building areas which should be included within a new SEC;
- Identified location criteria for use in selecting a location for the SEC;
- Developed an estimate of potential costs for the SEC;
- Evaluated opportunities for business partnerships and government support;
- Identified a projected utilization and programming schedule;
- Developed a 10-year proforma operating budget for the Facility; and
- Evaluated the economic and social benefits of a proposed SEC.

Restrictions and Limitations

The intended use of this Report is an examination of the Greater Sudbury market and its ability to support a new Sports and Entertainment Centre. In completing aspects of this Study, PwC relied upon certain information provided in confidence which cannot be wholly disclosed.

The reader should note that the Study utilizes various assumptions (some of which are included in Appendix B) which are based on a set of economic conditions and / or possible courses of action that are reasonable and appropriate in PwC's judgment, are consistent with the purpose of this assignment, but which may not materialize as set out therein. These hypotheses represent plausible circumstances, but need not be, and may not be fully supported.

Since future events are not subject to precise projections, some assumptions will not materialize in the exact form presented by our analysis. In addition, other unanticipated events and circumstances will occur that will influence the future outcome and performance of a Sports and Entertainment Centre in Greater Sudbury. Therefore, actual results achieved in future operating periods will vary from the analysis of prospective market and financial conditions set out therein. While there is no recourse to predicting these matters with certainty apart from informed and reasoned judgments, it must be stated that future events will lead to variations in the building's operational performance which could materially alter results.

PwC does not warrant that actual results achieved will be the same, in whole or in part, as those shown in the Projection. The Projection is based on hypotheses and there is a significant risk that actual results will vary from the results projected.

This Report has been prepared at the request of the City of Greater Sudbury for advice and use in evaluating the feasibility and business case for a new Sports and Entertainment Centre. This Report has been commissioned to provide the City with input as it determines an appropriate go forward strategy; our Report is not intended to be used for any other purpose.

We do not assume any responsibility or liability for losses incurred by the City, its employees or by any other parties as a result of the circulation, publication, reproduction or use of this Report contrary to the provisions of the preceding paragraph.

We reserve the right to review all calculations included or referred to in our Report and if we consider it necessary, to revise our Report in the light of any information which becomes known to us after the date of this Report.

2. Market Overview

Introduction

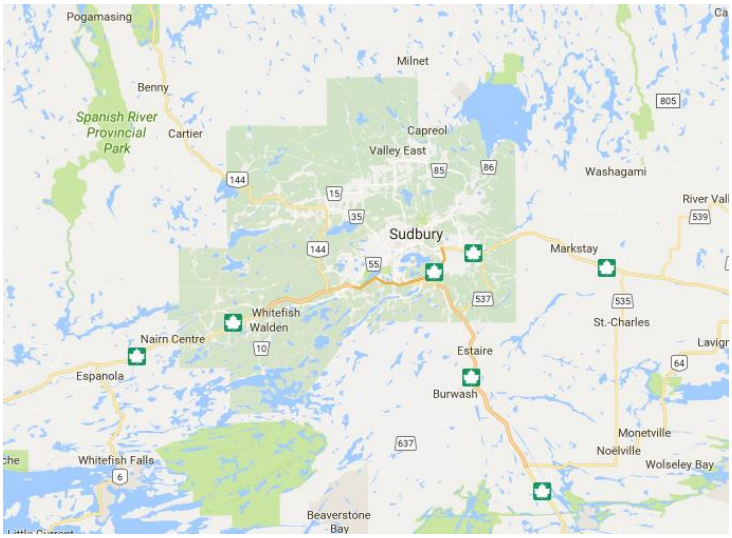
Greater Sudbury was established in 1883 as part of the westward expansion of the Canadian Pacific Railway. Shortly after the Sudbury section of the rail line was completed in 1884, rich minerals embedded in the geological formation known as the Sudbury Basin were discovered. This discovery was soon followed by mining activity, with the earliest mines being established in Copper Cliff (in 1886) and Blezard (in 1889).

Over time, Greater Sudbury evolved into a world-class mining centre; mining companies located in Greater Sudbury now employ approximately 6,000 people and support a 300-company mining supply and service sector cluster that employs a further 10,000 people. The City has since diversified significantly and currently serves as a regional centre in northern Ontario for financial and business services, tourism, health care and research, education and government. With a market area that stretches from the Quebec border west to the eastern shore of Lake Superior and north to the James and Hudson's Bay coastlines, some 550,000 live in the area. Greater Sudbury is the largest city, both in terms of geographic area and population, in Northern Ontario.

Figure 1
Greater Sudbury's Location

Source: City of Greater Sudbury

Figure 2
Map of the Greater Sudbury Area



Source: Google Maps

Demographic profile

Population

Between 2001 and 2016, the number of people living within the City of Greater Sudbury increased by 4.1%, from a census population of approximately 155,200 in 2001 to over 161,500 in 2016 (see Figure 3, following). Over this same period, the population living in the Greater Sudbury CMA increased by almost 6.0%, from 155,600 in 2001 to almost 164,700 in 2016. With a total annual growth rate over this period of 0.3% per year (compound annual growth rate, "CAGR") in the City and 0.4% per year in the CMA, the City continued a 30-year tend of positive population growth (compared to the period between 1971 and 1986 when the City's population declined).

Figure 3
Population Growth in the City of Greater Sudbury and Greater Sudbury CMA, 2001-2016

Census Year	City of Greater Sudbury		Greater Sudbury CMA	
	Population	*% Increase*	*Population*	*% Increase*
2001	155,219	--	155,601	--
2006	157,857	1.7%	158,258	1.7%
2011	160,274	1.5%	163,067	3.0%
2016	161,531	0.8%	164,689	1.0%

Source: Statistics Canada, Census of Canada (various years)

Over the coming years, Greater Sudbury's population is projected to continue to increase. According to a 2013 forecast prepared for the City of Greater Sudbury by Hemson Consulting, the population of Greater Sudbury is projected to grow to some 176,800 persons by 2036 (although it should be noted that 2016 Census population for Greater Sudbury was some 8,700 people fewer than projected). This compares to a 2015 forecast prepared by the Ontario Ministry of Finance which estimated that while Greater Sudbury's population would continue to grow in the short to medium term, its population would peak in approximately 2027 (at 165,900) before declining to approximately 164,000 in 2041.

Figure 4
Population Projections for Greater Sudbury, 2011-2041

Year	2013 City of Greater Sudbury Projection		2015 Ontario Ministry of Finance Projection	
2001	161,100		161,100	
2006	163,800	1.7%	163,800	1.7%
2011	166,300	1.5%	166,300	1.5%
2016	169,000	1.6%	164,690	-1.0%
2021	171,800	1.7%	165,571	0.5%
2026	174,400	1.5%	165,874	0.2%
2031	175,900	0.9%	165,679	-0.1%
2036	176,800	0.5%	164,967	-0.4%
2041	--		163,957	-0.6%
Growth 2011 - 2036	10,500	6.3%	-1,333	-0.8%

Source: City of Greater Sudbury (Hemson Consulting, 2013), Ontario Ministry of Finance (2015)

Household and discretionary income

Residents of Greater Sudbury enjoy higher household incomes compared to other residents in Northern Ontario. In this regard, households residing in Greater Sudbury are projected to have earned, on average, $82,800 in 2014 while households residing in other major Northern Ontario cities (North Bay, Sault Ste. Marie and Thunder Bay) were projected to have earned, on average, between $72,700 and $74,900 (see Figure 5, following).

Average household incomes are projected to increase by almost 15% between 2012 and 2017, to more than $89,500. Such projected increase is approximately 200 basis points (2.0%) greater than is projected to occur in North Bay, Sault Ste. Marie and Thunder Bay.

Figure 5
Average Household Incomes, Ontario and the Cities of Greater Sudbury, North Bay, Sault Ste. Marie and Thunder Bay, 2012–2017

Year	Greater Sudbury		North Bay		Sault Ste. Marie		Thunder Bay	
	Hhld Income	*% Increase*	*Hhld Income*	*% Increase*	*Hhld Income*	*% Increase*	*Hhld Income*	*% Increase*
2012	$78,249	--	$69,267	--	$70,540	--	$71,350	--
2014	$82,750	5.8%	$72,720	5.0%	$73,999	4.9%	$74,860	4.9%
2017	$89,505	8.2%	$77,909	7.1%	$79,189	7.0%	$80,098	7.0%

Source: Statistics Canada (2011 National Household Survey), FP Markets Canadian Demographics, 2012

Compared to Canadian and Ontario averages, average median Census Family incomes are projected to have been some 11% higher in Greater Sudbury in 2014 (Figure 6, following). Moreover, families in Greater Sudbury are projected to have had higher average incomes compared to families in other Ontario centres including Toronto (16% higher), St. Catharines (22% higher) and London (12% higher), among others. Among the 11 Ontario centres listed in Figure 6, only families living in Ottawa and Oshawa were reported to have had higher average incomes than families living in Greater Sudbury in 2014.

Figure 6
Median Census Family Income, 2010–2014

	2010	2011	2012	2013	2014
Canada	69,860	72,240	74,540	76,550	78,870
Ontario	71,540	73,290	74,890	76,510	78,790
Ottawa–Gatineau (Ont. part)	94,700	97,010	98,110	101,070	102,020
Kingston	77,140	79,140	80,800	82,950	84,750
Oshawa	82,270	84,070	86,160	87,400	89,430
Toronto	68,110	69,740	71,210	72,830	75,270
Hamilton	76,730	78,520	80,400	82,290	84,980
St. Catharines–Niagara	65,900	67,230	68,410	69,500	71,830
Kitchener-Cambridge-Waterloo	77,040	79,020	80,570	82,160	84,380
London	71,840	73,500	74,760	75,980	78,050
Windsor	69,480	70,560	72,220	73,440	76,260
Greater Sudbury	**76,710**	**82,220**	**85,440**	**86,080**	**87,450**
Thunder Bay	75,640	78,610	80,680	82,690	84,350

Source: Statistics Canada, CANSIM, table 111-0009

While residents of Greater Sudbury have higher average annual household incomes compared to other residents of Northern Ontario, on average, residents of Greater Sudbury also enjoy higher disposable incomes. In this regard, Greater Sudbury residents generally have over $21,300 available for discretionary purchases, including for entertainment and related purchases. These estimates compare to residents of other Norther Ontario communities like North Bay, Sault Ste. Marie and Thunder Bay who generally have between $18,800 and $19,400 available for discretionary purposes. Like Greater Sudbury, each have approximately 26% of their incomes available for discretionary purposes.

Economic profile

The economy of Greater Sudbury has been dominated by the mining industry for much of the city's history. As an important mining centre, Sudbury's long history of expertise in the minerals sectors has also spawned a dynamic mining technologies sector. As noted above, mining companies located in Greater Sudbury now employ approximately 6,000 people and support a 300-company mining supply and service sector cluster that employs a further 10,000 people.

Figure 7
Average Household Income and Spending Capacity, Greater Sudbury and Select Northern Ontario Cities, 2014

	2014 Average Household Income	Discretionary Income	
		Total	*% of Hhld income*
Greater Sudbury	**$82,750**	**$21,321**	**25.8%**
North Bay	$72,720	$18,755	25.8%
Sault Ste. Marie	$73,999	$19,379	26.2%
Thunder Bay	$74,860	$19,277	25.8%

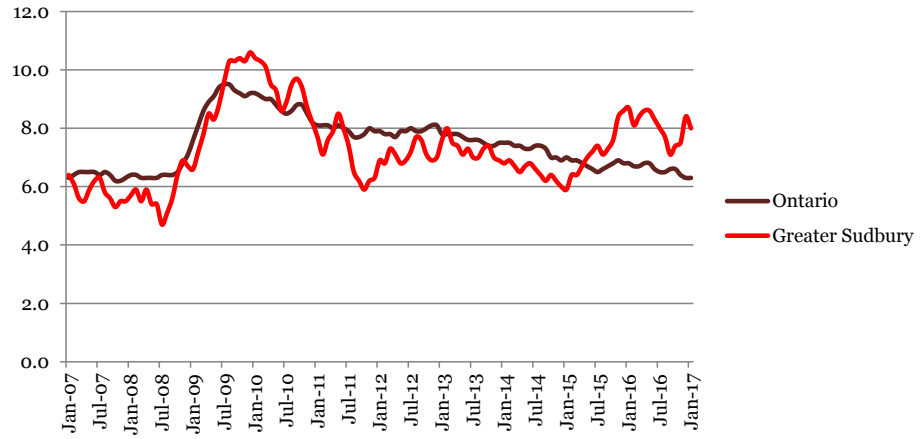
Source: FP Markets Canadian Demographics, 2012

In recent years, the city's economy has diversified and the city has become positioned as a regional service centre for much of Northeastern Ontario, including in a number of sectors such as finance, business, retail trade, health care, education, government, film and television production and science and technology research. With respect to science and technology research, Greater Sudbury has evolved into a centre of innovation and applied research in many fields, including mining technology, environmental restoration, specialized product development, health care and astrophysics research. In addition, a number of post-secondary institutions, including Laurentian University, Cambrian College and College Boréal, play an active role by participating in many innovative partnerships and community-based initiatives. In addition to a number of successful land reclamation activities, Sudbury has also gained international recognition as the site of the Sudbury Neutrino Observatory, a unique research facility.

The City's labour force profile has diversified significantly over the last three decades. Currently, it is estimated that there are almost 8,000 businesses employing some 43,700 full-time workers in such sectors as health, government, education, retail, manufacturing, recreation, food services, construction, and financial services.

Greater Sudbury, as at January 2017, had a lower labour participation rate (63.2%) as well as a higher unemployment rate (8.0%) compared to provincial averages (65.0% and 6.3% respectively), a trend that has existed since approximately mid-2015. Between approximately 2009 and 2015, unemployment rates in Greater Sudbury tended to be slightly lower, on average, compared to provincial averages. Greater Sudbury's labour participation and unemployment rates are also lower / higher than the corresponding Canadian averages (65.8% and 6.8%).

Figure 8
Unemployment Rate, Greater Sudbury, January 2007 to January 2017



Source: Statistics Canada, Labour Force Survey

Major employers in the Greater Sudbury region are housed in a variety of industries, and include Vale and Glencore (mining), Canada Revenue Agency's Tax Services, Canadian Blood Services, Health Sciences North, Science North, City of Greater Sudbury, Laurentian University, various local school boards, Cambrian College, College Boréal, TeleTech, Bayshore Home Health, Leuschen Transportation and Extendicare.

Some 11,700 individual businesses (almost 7,300 without employees and more than 4,400 with employees) have been identified by the City of Greater Sudbury in 21 separate industry classifications as of December 2014. As noted in Figure 9, following, such industry classifications include agriculture, mining, utilities, construction, manufacturing, wholesale and retail trade, transportation and warehousing, finance, real estate, professional services, management, administrative support, education, health care, arts, accommodation, public administration and other services.

Figure 9
Number of Business Establishments in Greater Sudbury, by Industry Classification, 2014

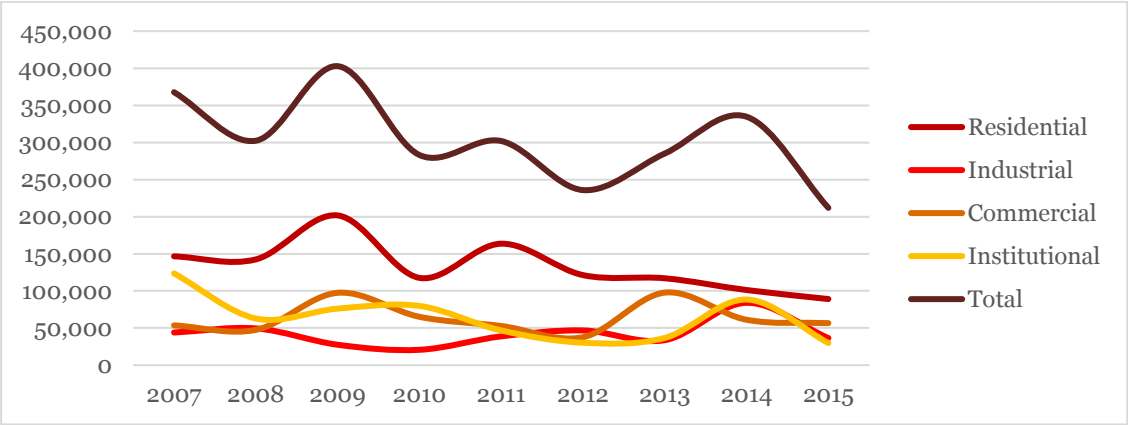
	Number of Business Establishments	
	With Employees	Without Employees
Agriculture, Forestry, Fishing and Hunting	32	72
Mining, Quarrying, and Oil & Gas Extraction	47	65
Utilities	4	10
Construction	530	601
Manufacturing	177	90
Wholesale Trade	247	141
Retail Trade	658	366
Transportation and Warehousing	114	211
Information and Cultural Industries	33	63
Finance and Insurance	162	473
Real Estate and Rental and Leasing	209	2,175
Professional, Scientific and Technical Services	373	640
Management of Companies and Enterprises	35	274
Administrative Support, Waste Management and Remediation Services	194	161
Educational Services	50	57
Health Care and Social Services	582	395
Arts, Entertainment and Recreation	82	96
Accommodation and Food Services	321	122
Other Services (except Public Administration)	411	344
Public Administration	6	1
Unclassified	166	911
	4,433	**7,268**

Source: City of Greater Sudbury, from Statistics Canada (Canadian Business Patterns)

Investments in new facilities have fluctuated over the 2007 to 2015 period, peaking at some $402 million in 2009 and registering a low of $212 million in 2015. The total number and value of building permits issued through the first six months of 2016 (942 for $145 million) were both higher compared to the first six months of 2015 (836 and $84.5 million).

The Conference Board of Canada projects that Greater Sudbury's economy will expand by approximately 0.6 percent in 2016 and by a further 1.2 percent per year between 2017 and 2020, due in part to projected moderate improvement in commodity prices. The near-term GDP growth is expected to fuel a corresponding increase in total employment and per capita income. The medium term outlook is also for modest growth in the construction sector (where the proposed SEC is noted by the Conference Board of Canada as being a positive development) and the services sector. The wholesale and retail trade sectors are expected to remain above their long-term averages.

Figure 10
Value of Building Permits Issued, Greater Sudbury, 2007 – 2016



Source: Conference Board of Canada

Other pertinent aspects of the Conference Board of Canada's outlook for Greater Sudbury, summarized in Figure 11, following, include:

- total employment is projected to expand by some 0.2% per year (CAGR) between 2015 and 2020 from an estimated 82,000 people in 2015 to more than 83,000 by 2020;
- the region's unemployment rate is projected to decline from an average rate of roughly 8.5% in 2016 to an average of 6.8% by 2020 (as noted above, Greater Sudbury's unemployment rate in January 2017 was reported as being 8.0%);
- personal per capita income is projected to increase by 2.5% per year (CAGR) between 2015 and 2020, reaching more than $51,400 per person;
- as a result of increases in both population and incomes, retail sales are projected to increase by 2.3% per year (CAGR) between 2015 and 2020, increasing by almost $240 million to more than $2.2 billion; and
- inflation is projected to be relatively moderate, fluctuating between 1.9% and 2.3% per year between 2015 and 2020.

Figure 11
Economic Outlook, Greater Sudbury, 2013 - 2020

Economic Indicators	2013	2014	2015	2016f	2017f	2018f	2019f	2020f
Real GDP at basic prices (2007 $ millions)	8,251	8,214	8,147	8,196	8,296	8,399	8,507	8,611
percentage change	*-0.6*	*-0.5*	*-0.8*	*0.6*	*1.2*	*1.2*	*1.3*	*1.2*
Total employment (000s)	83	83	82	83	84	83	83	83
percentage change	*2.9*	*-0.4*	*-0.7*	*0.8*	*1.0*	*-1.1*	*0.4*	*0.0*
Unemployment Rate	7.3	6.5	7.4	8.5	7.5	7.2	6.8	6.8
Personal income per capita ($)	44,445	44,526	45,427	46,464	47,631	48,530	50,040	51,428
percentage change	*0.5*	*0.2*	*2.0*	*2.3*	*2.5*	*1.9*	*3.1*	*2.8*
Population (000s)	166	165	165	165	164	164	164	164
percentage change	*0.1*	*-0.2*	*0.3*	*-0.2*	*-0.1*	*-0.1*	*-0.1*	*-0.1*
Total housing starts	431	271	247	226	344	349	381	412
Retail sales ($ millions)	1,896	1,924	1,968	1,988	2,046	2,099	2,158	2,207
percentage change	*-0.6*	*1.5*	*2.3*	*1.0*	*2.9*	*2.6*	*2.8*	*2.3*
CPI (2002 = 1.0)	1.230	1.259	1.274	1.299	1.328	1.355	1.383	1.412
percentage change	*1.1*	*2.3*	*1.2*	*1.9*	*2.3*	*2.0*	*2.1*	*2.1*

Source: Conference Board of Canada

Summary

The City of Greater Sudbury has a population of more than 161,500 people (2016 Census), a regional population of almost 164,700 people within the Greater Sudbury CMA (2016 Census) and a market area of some 550,000 people in an area that stretches from the Quebec border west to the eastern shore of Lake Superior and north to the James and Hudson's Bay coastlines. The region has demonstrated stable population levels and projections are that the area will continue to grow, albeit slightly, for a least the next 10 years. With average household and disposable incomes higher than in other major population centres in Northern Ontario, combined with its large trade area and projection of increasing incomes, there exists the ability of the local and broader regional market to support a broad range of entertainment events.

3. Ontario Hockey League

About the Ontario Hockey League

The Ontario Hockey League ("OHL") is one of three leagues playing Major Junior A (Tier I) hockey in Canada; the other two leagues are the Quebec Major Junior Hockey League ("QMJHL") and the Western Hockey League ("WHL"). Together these three leagues comprise the Canadian Hockey League and annually play for the Memorial Cup (recognizing Canadian junior hockey supremacy).

While junior hockey has existed in various forms since the late 1800's, the OHL and its predecessor league names have existed since approximately 1933 when the Ontario Hockey Association split its junior division into "A" and "B" divisions. In 1970, the Junior A level was divided into two more levels, Tier I (Major Junior A) and Tier II (Minor Junior A). In 1974, the Major Junior A division became known as the Ontario Major Junior Hockey League and in 1980 became known as the Ontario Hockey League.

Currently, there are 20 teams playing in the OHL, with 17 franchises based in Ontario, and three teams in the United States (including two teams in Michigan and one team in Pennsylvania). Teams are divided into two conferences based mostly on geography; the Eastern Conference comprising two five-team divisions and the Western Conference also comprising two divisions of five teams. On average, OHL teams attracted some 4,155 fans per game (2015/16 season).

Figure 12
Location of Ontario Hockey League Franchises

Source: Ontario Hockey League

Together, CHL teams combine to produce a significant proportion of players drafted into the National Hockey League, with the OHL having historically produced between 12% and 23% of all players drafted annually since the 2000 entry draft. In comparison, the 18-team QMJHL has historically produced between 6% and 15% of all NHL draft choices, while the 22-team WHL has historically produced between 11% and 21% of all NHL draft choices.

Figure 13
Source of NHL Draftees, 2000 - 2016

Year	Total Picks in Draft	WHL	OHL	QMJHL	CHL Total	NCAA	High School	International	Other
2000	293	14.0%	13.3%	7.2%	34.5%	11.9%	2.4%	42.0%	9.2%
2001	289	15.6%	14.2%	9.0%	38.8%	8.3%	2.8%	41.2%	9.0%
2002	290	14.8%	12.1%	7.9%	34.8%	14.1%	2.1%	37.9%	11.0%
2003	292	14.0%	15.1%	13.0%	42.1%	7.9%	3.4%	31.8%	14.7%
2004	291	15.1%	14.4%	9.3%	38.8%	9.6%	6.2%	30.2%	15.1%
2005	230	18.7%	18.7%	10.0%	47.4%	5.6%	7.8%	21.7%	17.4%
2006	213	11.2%	13.6%	11.7%	36.5%	8.4%	8.9%	29.5%	16.4%
2007	211	17.5%	16.6%	11.8%	45.9%	3.8%	6.6%	17.0%	26.5%
2008	211	17.5%	21.8%	12.8%	52.1%	4.2%	7.1%	18.5%	18.0%
2009	210	14.8%	21.4%	11.0%	47.2%	3.3%	9.0%	19.5%	21.0%
2010	210	20.5%	20.0%	10.5%	51.0%	4.3%	10.0%	18.6%	16.2%
2011	210	15.7%	21.9%	10.5%	48.1%	5.2%	8.6%	22.9%	15.2%
2012	211	15.2%	22.7%	9.0%	46.9%	4.7%	9.5%	19.9%	19.0%
2013	211	15.6%	17.5%	14.7%	47.9%	3.3%	7.1%	21.8%	19.9%
2014	210	17.1%	19.0%	8.1%	44.3%	2.4%	7.1%	24.8%	21.4%
2015	211	16.6%	15.2%	14.2%	46.0%	4.3%	6.6%	25.6%	17.5%
2016	211	16.1%	22.7%	6.6%	45.5%	6.2%	2.4%	26.5%	19.4%

"Other" includes Canadian and American Tier 2 Junior "A" and Junior "B" leagues, various minor pro leagues (AHL, IHL, ECHL), the United States Hockey League ("USHL") and other leagues not listed.

Source: Toronto Star, National Hockey League

Together, the CHL produces, on average 35% to 50% of all players drafted into the NHL, with this proportion having stayed between 45% and 50% of all NHL draftees in recent years. In contrast, the proportion of U.S. college players has declined while the proportion of players being drafted from Europe and other leagues have stayed relatively the same or increased slightly.

As noted above, teams in the CHL play for the MasterCard Memorial Cup, a season-ending tournament in which the champions from each of the OHL, QMJHL and WHL plus the team from the host city, play to be recognized as the champion of Canadian junior hockey. The location of MasterCard Memorial Cup alternates between each of the three leagues each year; Figure 14, following, provides a listing of centres which have hosted the MasterCard Memorial Cup since 2006.

It is noteworthy that venues which have hosted the Memorial Cup have had seating capacities as small as 4,550 seats to as large as 16,300 seats, with the average being slightly over 8,200 seats. Fully one-third of venues hosting the past 12 Memorial Cups were buildings with less than 6,000 seats, while one-third of venues had seating capacities of between 6,000 and 7,500 seats. The remaining one-third of venues were buildings with in excess of 9,000 seats (including two venues which formerly housed National Hockey League teams).

Figure 14
Memorial Cup Host Cities, 2006 - 2016

Year	City	Building				2016 Population	
		Name	Year	Seats	Capacity	City	CA / CMA
2006	Moncton	Moncton Coliseum	1973	6,450	6,900	71,889	144,810
2007	Vancouver	Pacific Coliseum	1968	16,281	16,281	631,486	2,463,431
2008	Kitchener	Memorial Auditorium	1951	7,131	7,469	233,222	523,894
2009	Rimouski	Colisee de Rimouski	1966	4,415	5,062	48,664	55,349
2010	Brandon	Keystone Centre	1973	5,102	5,702	48,859	58,003
2011	Mississauga	Hershey Centre	1998	5,420	5,520	721,599	5,928,040
2012	Shawinigan	Centre Gervais Auto	2008	4,350	4,550	49,349	54,181
2013	Saskatoon	Credit Union Centre	1988	15,195	15,195	246,376	295,095
2014	London	Budweiser Gardens	2002	9,046	9,046	383,822	494,069
2015	Quebec	Colisee Pepsi	1950	15,176	15,176	531,902	800,295
2016	Red Deer	ENMAX Centrium	1991	6,000	6,702	100,418	100,418
2017	Windsor	WFCU Centre	2008	6,500	6,500	217,188	329,144

Source: QMJHL, OHL, WHL

Attendance

Figure 15, following, details average season attendance for each OHL team since the 2006-07 season. Over this period, average attendance at all games has generally increased, growing from 3,915 fans per game to over 4,155 fans per game. This growth in attendance continues a trend which started in the early 2000's when during the 2000-01 season, average attendance at all games was approximately 3,275 per game.

Three franchises generally lead the league in average attendance. In each instance, London (averaging a near sell-out of just over 9,000 fans per game), Kitchener (also averaging a near sell-out of approximately 7,000 fans per game over the past ten full seasons) and Ottawa (6,725) play out of the league's largest facilities (Budweiser Gardens 9,100 seats, the Kitchener Memorial Auditorium which has been expanded to over 7,100 seats, and the 9,500-seat TD Place Arena in Ottawa).

Of the remaining 17 teams, five have averaged between 4,000 and 5,000 fans per game (Windsor, Oshawa, Niagara, Sault Ste. Marie and Guelph, all of whom play out of newer facilities), while eight additional teams have averaged between 3,000 and 4,000 fans per game (Sudbury, Hamilton, Saginaw, Erie, Barrie, North Bay, Sarnia and Kingston). All other teams (Flint, Peterborough, Owen Sound and Mississauga) have averaged fewer than 3,000 fans per game over the past 10 seasons.

In comparison to the other Major Junior hockey leagues in Canada, the OHL has consistently lagged the WHL but has been ahead of the QMJHL in terms of average per game attendance. Whereas the QMJHL has generally averaged in the range of 3,500 fans per game, the OHL has consistently averaged 4,000 fans per game. This compares to teams in the WHL who average some 4,600 fans per game.

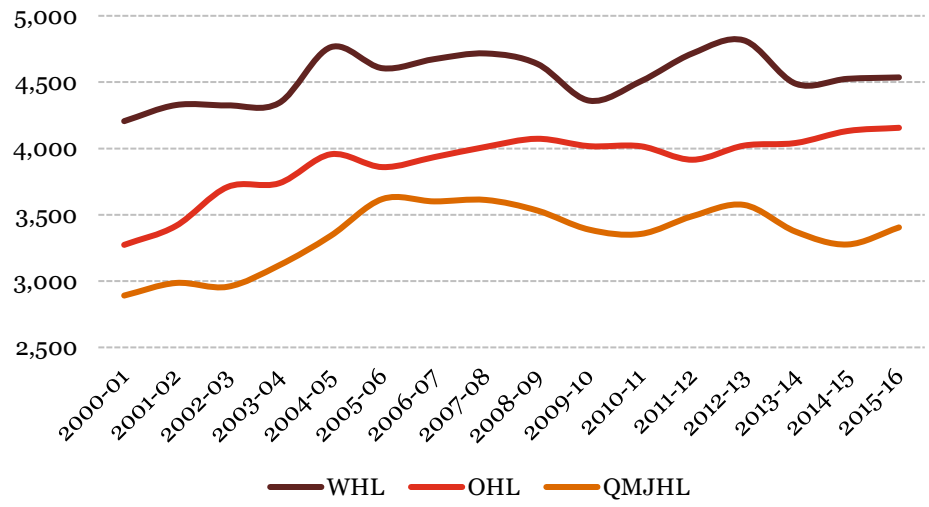
Additionally, average per game attendance in the OHL has increased by some 27% overall between the 2000-01 and 2015-16 seasons, while average attendance grew by 18% in the QMJHL and by just 8% in the WHL over this same period. Appendix A provides a summary of annual attendance for teams playing in the OHL, QMJHL and WHL since the 2000-01 season.

Figure 15
Average per Game Attendance, Ontario Hockey League, 2010-11 through 2015-16 Seasons

Team	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Average Attendance		
							10/11 - 15/16	05/06 - 15/16	00/01 - 15/16
Barrie	3,422.6	3,655.3	3,731.4	3,729.4	3,741.0	3,830.0	3,685.0	3,684.3	3,713.9
Belleville	2,644.9	2,493.9	2,550.8	2,339.6	2,545.0	---	2,514.9	2,645.8	2,763.6
Brampton	1,885.9	1,986.4	2,191.1	--	--	--	2,021.1	2,297.4	2,321.6
Erie	3,476.1	2,854.9	3,115.1	4,429.1	4,947.0	4,481.0	3,883.9	3,783.7	3,875.7
Flint	--	--	--	--	--	2,984.0	2,984.0	2,984.0	2,984.0
Guelph	3,934.9	3,871.1	4,265.5	4,326.4	4,507.0	4,232.0	4,189.5	4,148.3	3,957.0
Hamilton	--	--	--	--	--	3,844.0	3,844.0	3,844.0	3,844.0
Kingston	2,874.7	2,546.5	3,438.6	3,794.5	3,963.0	4,130.0	3,457.9	3,065.2	2,767.1
Kitchener	6,375.8	6,364.6	7,212.2	7,056.3	6,992.0	7,012.0	6,835.5	6,490.6	6,184.0
London	8,954.0	8,953.1	8,991.2	9,017.9	8,977.0	9,013.0	8,984.4	9,006.2	8,226.7
Mississauga	3,101.9	2,458.2	2,337.2	2,592.7	2,906.0	3,025.0	2,736.8	2,583.7	2,678.3
Niagara / St. Catharines	2,913.2	2,982.0	3,046.3	2,989.5	--	--	2,982.7	2,940.0	2,940.0
	--	--	--	--	4,328.0	4,557.0	4,442.5	4,442.5	4,442.5
North Bay	--	--	--	3,365.8	3,447.0	3,327.0	3,379.9	3,379.9	2,967.5
Oshawa	4,222.5	4,383.5	4,760.4	4,860.3	5,248.0	5,353.0	4,804.6	4,580.2	4,060.2
Ottawa	7,204.7	6,506.8	--	--	3,604.0	3,484.0	5,199.9	6,726.4	7,456.1
	--	--	5,615.2	4,305.4	--	--	4,960.3	4,960.3	4,960.3
Owen Sound	2,722.0	2,871.1	3,058.0	2,951.7	2,951.0	2,839.0	2,898.8	2,750.6	2,692.0
Peterborough	2,725.9	2,537.3	2,541.9	2,511.7	2,485.0	2,573.0	2,562.5	2,815.7	2,804.7
Plymouth	2,729.5	2,656.7	2,850.4	2,478.4	2,388.0	--	2,620.6	2,614.7	2,761.4
Saginaw	3,916.6	3,774.3	3,683.8	3,711.1	3,555.0	3,354.0	3,665.8	3,805.2	3,881.2
Sarnia	3,045.9	3,465.8	3,282.5	3,019.3	2,877.0	3,122.0	3,135.4	3,285.8	3,522.1
Sault Ste. Marie	4,487.8	4,315.7	4,148.8	4,261.9	4,366.0	4,071.0	4,275.2	4,283.8	3,870.4
Sudbury	3,443.6	3,762.4	3,915.3	3,793.2	3,729.0	3,108.0	3,625.3	3,910.2	3,877.8
Toronto	--	--	--	--	--	--		1,086.8	1,170.0
Windsor	6,250.3	5,858.5	5,691.1	5,306.3	5,067.0	4,775.0	5,491.4	4,852.6	4,291.0
OHL Average	**4,016.6**	**3,914.9**	**4,021.3**	**4,041.0**	**4,131.2**	**4,155.7**	**4,046.8**	**4,016.1**	**3,891.8**

Source: League attendance web site, individual QMJHL teams, Quebec Major Junior Hockey League.

Figure 16
Comparison of Average per Game Attendance, OHL, QMJHL and WHL – 2000-01 through 2015-16 Season



Source: "League Attendance" web sites

A significant reason for the large jumps in average attendance in the OHL can be traced directly to the opening of new, larger arenas / multi-purpose spectator arenas. For example, in the OHL, average attendance increased dramatically during 2002-03 season due mainly to the London Knights moving into the 9,000-seat John Labatt Centre (now Budweiser Gardens) part-way through the season, and the North Bay Centennials moving to Saginaw Michigan for the start of that season (where the franchise went from attracting 2,400 fans per game in North Bay to more than 4,000 per game in Saginaw). Additional year-over-year increases in average attendance can similarly be traced to the opening of new and larger venues and greater on-ice success of teams playing within those buildings, including Oshawa (in 2005), Sault Ste. Marie (in 2006), Kingston and Windsor (both in 2008) and St. Catharines (in 2014, and who went from averaging just under 3,000 fans per game to more than 4,400).

In the WHL, the Moose Jaw Warriors moved into the new Mosaic Place Arena for the start of the 2011-12 season and saw their average attendance increase by 1,500 fans per game from 2,275 to almost 3,775 fans per game (an increase of 66%). Average attendance in the WHL was also buoyed by the relocation of the Chilliwack Bruins to Victoria BC in 2011-12 (where attendance increased from 3,950 fans per game in Chilliwack to 5,200 fans per game in Victoria).

Figure 17, following, summaries the various arenas and sports and entertainment centres in each of the 60 Canadian-based CHL franchise markets (20 OHL markets, 18 QMJHL franchise markets and 22 WHL markets). Of note:

- Arena facilities in the QMJHL are generally older and have smaller seating capacities compared to venues in the OHL and WHL. In this regard, the average arena in the QMJHL was built in 1978 and has a fixed seating capacity of approximately 5,400. This compares to the OHL, where the average building was constructed in 1985 and has almost 6,300 fixed seats, and to the WHL, where the average building was constructed in 1989 and contains 8,150 fixed seats;
- The OHL has proportionally more newer arenas compared to the WHL and QMJHL; conversely, more QMJHL franchises play in buildings built prior to 1970 (seven) than in the OHL (six) or WHL (two);
- An equivalent proportion of franchises in the OHL (10 of 20) and WHL (12 of 22) play in "modern" buildings (i.e., built after 1990) than in the QMJHL (six); and
- 75% of OHL teams play in buildings with a least 4,500 seats. This compares to the WHL where 86% of franchises play in buildings with at least 4,500 seat and just 44% of QMJHL teams.

Figure 17
Canadian Hockey League Arenas and Capacities

	OHL	WHL	QMJHL
Average Building Construction	**1985**	**1989**	**1978**
# built prior to 1960	4	0	4
# built between 1960 and 1970	2	2	3
# built between 1970 and 1980	1	5	3
# built between 1980 and 1990	3	3	2
# built between 1990 and 2000	3	6	3
# built after 2000	7	6	3
Average Fixed-Seating Capacity	**6,261**	**8,143**	**5,379**
# with less than 3,000 seats	0	0	0
# with between 3,000 and 4,500 seats	5	3	10
# with between 4,500 and 6,000 seats	9	7	4
# with between 6,000 and 7,500 seats	3	5	2
# with more than 7,500 seats	3	7	2

Source: PwC based on information derived from various "league attendance" web sites, the QMJHL, the OHL, the WHL and various CHL team / venue web sites.

New facilities

In the past number of years, a number of Canadian cities have developed new sports and entertainment centres / arenas. In most instances, these facilities contain many of the same amenities which have been included within much larger NHL buildings, including luxury suites, club seat areas, restaurants, retail outlets, enhanced food and beverage / concession areas, larger concourses, wider seating, better advertising positions and opportunities, etc. The main impact of these enhancements has been to (a) enhance the in-game experience of fans and thereby serve to increase average attendance, (b) provide greater revenue generating opportunities for both the arena and the lead tenant / hockey team, and (c) broaden the range of other events (concerts, family shows, other sporting events, etc.) which can be booked into the venue.

Canadian CHL cities which have developed new venues since 1990 are summarized below:

Ontario Hockey League

- Barrie (2016 population of 141,400) – 4,095-seat Barrie Molson Centre (1996);
- Sarnia (2016 population of 71,600) – 4,118-seat Sarnia Sports and Entertainment Centre, now Progressive Auto Sales Arena (formerly RBC Centre) (1998);
- Brampton (2016 population of 593,600) – 4,800-seat Powerade Centre (1998);
- Mississauga (2016 population of 721,600) – 5,420-seat Hershey Centre (1998);
- Guelph (2016 population of 131,800) – 4,715-seat Sleeman Centre (2000);
- London (2016 population of 383,800) – 9,046-seat John Labatt Centre (2002);
- Sault Ste. Marie (2016 population of 73,400) – 4,817-seat Essar Centre (2005);
- Oshawa (2016 population of 159,500) – 5,180-seat General Motors Centre (2006);
- Kingston (2016 population of 123,800) – 5,380-seat K-Rock Centre (2008);
- Windsor (2016 population of 217,200) – 6,500-seat WFCU Centre (2008); and
- St. Catharines (2016 population of 133,100) – 5,400-seat Meridian Centre (2014).

Quebec Major Junior Hockey League

- Charlottetown (2016 population of 36,100) – 3,690-seat Eastlink Centre (1990);
- Saint John (2016 population of 67,600) – 6,297-seat Harbour Station (1993);
- Bathurst (2016 population of 11,900) – 3,162-K.C. Irving Regional Centre (1996);
- St. John's (2016 population of 108,900) – 6,287-seat Mile One Arena (2001);
- Shawinigan (2016 population of 49,300) – 4,350-seat Centre Gervais Auto (2008);
- Blainville-Boisbriand (2016 population of 83,700) – 3,269-seat Centre d'Excellence Sports Rousseau (2009); and
- Moncton (2016 population of 71,900) – 7,500-seat Downtown Moncton Events Centre (to open in 2018).

Western Hockey League

- Red Deer (2016 population of 100,400) – 6,000-seat Enmax Centrium (opened in 1991);
- Kamloops (2016 population of 90,300) – 5,464-seat Interior Savings Centre (1993);
- Prince George (2016 population of 74,000) – 5,582-seat CN Centre (1995);
- Kelowna (2016 population of 127,400) – 5,507-seat Prospera Place (1999);
- Kootenay (2016 population in Cranbrook of 20,000) – 4,264-seat Cranbrook Recreation Complex (2000);
- Victoria (2016 population of 85,800) – 7,006-seat Save-on-Foods Memorial Centre (2003);
- Chilliwack (2016 population of 83,800) – 5,000-seat Prospera Centre (2004);
- Moose Jaw (2016 population of 33,900) – 4,414-seat Mosaic Place (2011); and
- Medicine Hat (2016 population of 63,300) – the 6,127-seat Canalta Centre (2015).

Images of the interiors and exteriors of some of these newer buildings are included in Figures 18 through 31, following.

Figure 18
Save-on-Foods Memorial Centre, Victoria BC (2003)

Figure 19
Prospera Centre, Chilliwack BC (2004)

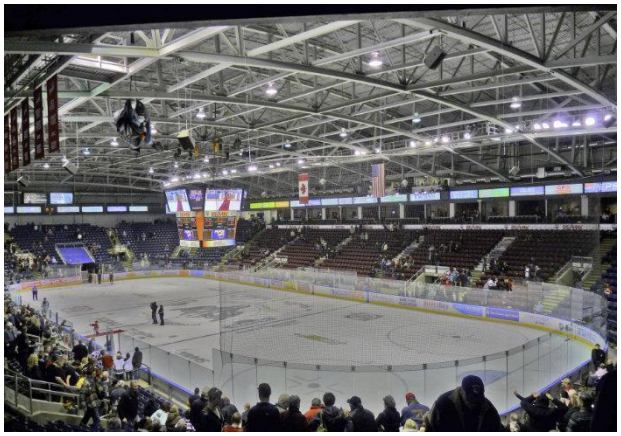


Figure 20
Mosaic Place, Moose Jaw SK (2011)

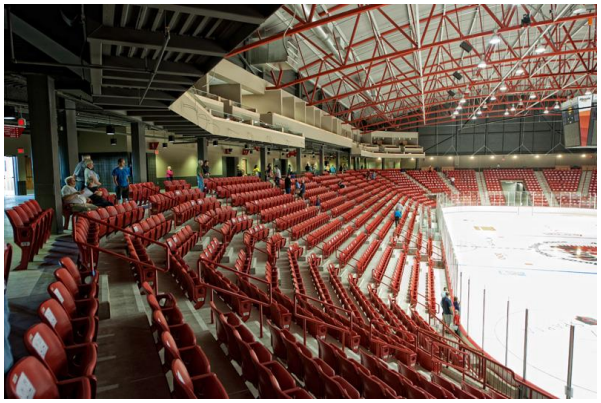


Figure 21
Canalta Centre, Medicine Hat AB (2015)

Figure 22
Sleeman Centre, Guelph ON (2000)

Figure 23
Budweiser Gardens, London ON (2002)

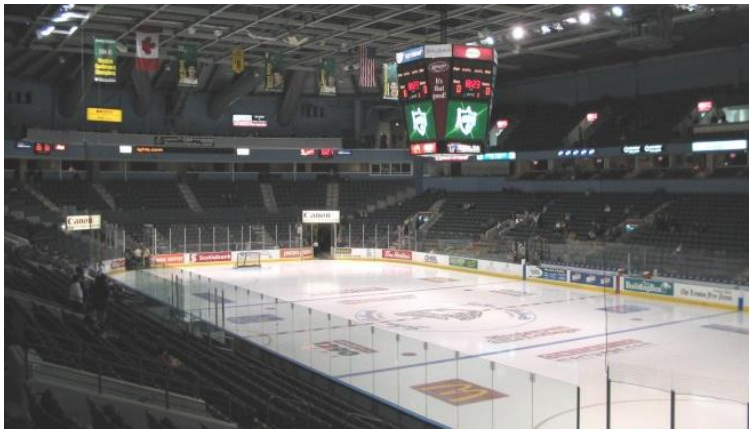


Figure 24
Essar Centre, Sault Ste. Marie ON (2006)

Figure 25
Rogers K-Rock Centre, Kingston ON (2008)

Figure 26
WFCU Centre, Windsor ON (2008)

Figure 27
Meridian Centre, St. Catharines ON (2014)

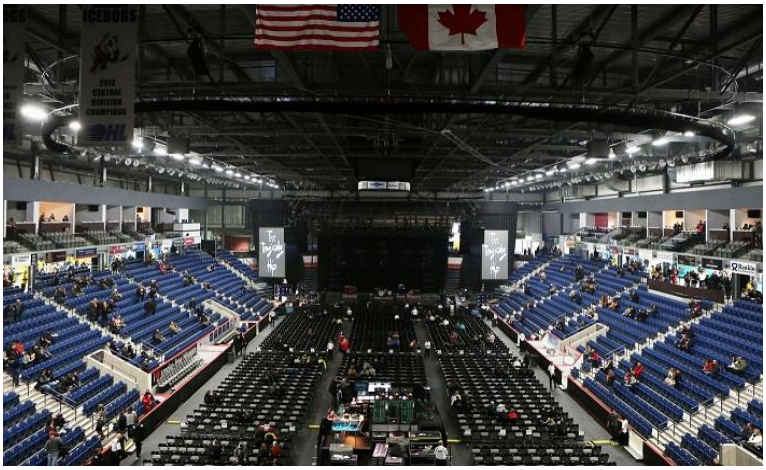


Figure 28
Mile One Arena, St. John's NL (2001)

Figure 29
Centre Gervais Auto, Shawinigan QC (2008)

Figure 30
Centre d'Excellence Sports Rousseau, Blainville-Boisbriand QC (2008)

Figure 31
Downtown Moncton Centre, Moncton NB (2018)

Attendance spikes in new facilities

As noted above, a number of CHL teams were able to experience increased attendance upon relocating into newer facilities. In most instances, increases in average per game attendance occurred immediately prior to moving into the new venue and has endured for some time. For example:

- Prior to moving into the John Labatt Centre (now Budweiser Gardens) in 2002, the London Knights generally attracted 3,500 to 4,000 fans per game. Since moving into the new facility, the team has averaged more than 9,000 per game since the 2004-05 season. This increase of more than 135% has been sustained over the past 15 years.
- Prior to relocating to the WFCU Centre in Windsor ON, the Windsor Spitfires averaged slightly less than 3,050 fans per game between the 2000-01 season and the 2007-08 season. Since moving into the new facility, the team has averaged almost 5,550 fans per game, an increase of 2,500 fans per game, or approximately 80%.
- The Sault Ste. Marie Greyhounds moved into the Essar Centre at the start of the 2006-07 season and saw their average attendance increase from 3,050 fans per game to almost 4,400 fans per game and increase of almost 45%.

- The Moose Jaw Warriors relocated to Mosaic Place in 2011 and realized an increase in attendance of 1,300 fans per game (58% increase), from approximately 2,275 fans per game (average between 2000-02 and 2010-11) to almost 3,600 per game (average between 2011-12 and 2015-16).
- The Shawinigan Cataracts moved into the new Centre Gervais Auto in 2008 and realized an increase in attendance of 875 fans per game (40%), from 2,225 fans per game to approximately 3,100 fans per game since the start of the 2008-09 season. After peaking in the 2011-12 season, average attendance fell by more than 25% over the following two seasons before rebounding back to 2011-12 levels.
- After continually selling out their previous building, the Medicine Hat Tigers realized a first year bump in attendance of approximately 6%, from 4,000 fans per game to more than 4,200 per game.
- Finally, the Niagara Ice Dogs averaged approximately 2,940 fans per game in their previous building; upon moving into the Median Centre in 2014, the team has averaged from than 4,400 fans per game, and increase of almost 50%.

Figure 32, following, summarizes the average attendance, pre- and post-opening of their new arena / sports and entertainment centre, of a number of CHL franchises. On average, teams relocating into a new building have realized a "bump" in average attendance in the range of 65% to 70%, and have been able to sustain this level of attraction for approximately six years on average.

Figure 32
Impact on Attendance of Moving into a new Arena / Sports and Entertainment Centre, various CHL Franchises

CHL Franchise	Opening Date of New Building	Average Attendance			Average Attendance in last 2 years
		Pre-Move	Post-Move	Increase	
Western Hockey League					
Moose Jaw	2011	2,273.2	3,517.8	54.7%	3,322.0
Ontario Hockey League					
London	2002	3,776.8	8,862.3	134.7%	8,995.0
Oshawa	2005	2,916.3	4,736.8	62.4%	5,300.5
Sault Ste. Marie	2006	3,050.8	4,362.1	43.0%	4,218.5
Kingston	2008	2,194.0	3,340.2	52.2%	4,046.5
Windsor	2008	3,045.7	5,536.2	81.8%	4,921.0
Quebec Major Junior Hockey League					
Shawinigan	2008	2,226.2	3,065.9	37.7%	2,978.0

Note: While a number of other new buildings have opened in recent years, they opened with a new hockey tenant. For example, the Centre d'Excellence Sport Rousseau in Blainville-Boisbriand QC opened the same year as the Blainville-Boisbriand Armada relocated from Verdun QC in 2009 (previously the team was the Montreal Junior Hockey Club). Similarly, the Save-on-Foods Memorial Centre in Victoria BC opened prior to the establishment of the WHL Victoria Royals (who relocated from Chilliwack BC); previously the Save-on-Foods Memorial Centre housed the Victoria Salmon Kings on the ECHL.

Source: PwC based on information derived from various "league attendance" web sites, the QMJHL, the OHL, the WHL and various CHL team / venue web sites.

Summary

The Ontario Hockey League is an established Major Junior A (Tier 1) hockey league, with its teams comprised of 16 to 20 year old players hoping for future NHL stardom. League attendance across the OHL has increased substantially since the 2000-01 season, growing from some 3,200 fans per game to approximately 4,150 in the most recently completed 2015-16 season. A significant reason for this increase in attendance is the construction of new state-of-the-art venues.

Teams playing within new facilities have witnessed a spike in average per game attendance, in some cases lasting for an extended period of time (i.e., greater than 10 years), in other instances lasting only a few seasons. While a number of factors will impact attendance, including quality of the on-ice product (i.e., is the team winning), seating capacities, building amenities and location, and general economic conditions, the presence of a new building will serve to help drive attendance.

4. Sudbury Community Arena

Introduction

The Sudbury Community Arena ("SCA") is the main spectator arena facility in the City of Greater Sudbury. Located in the city's downtown core, the SCA was built in 1951 and includes 4,470 fixed seats and a total capacity of some 5,186 spectators.

Home to the Sudbury Wolves of the OHL, the venue was designed primarily as a hockey venue. In addition to some 40 Sudbury Wolves home games per season, the SCA has also hosted concerts, curling events (including the Tim Hortons' Brier and Scott Tournament of Hearts), Canada Day and Remembrance Day celebrations, as well as other hockey events and flat floor trade and consumer shows and meetings.

While some 65 years old, the SCA has been periodically retrofitted to update some of its features. However, according to a January 2013 Arena Renewal Report, the SCA was then in immediate need of some $2.375 million in repairs; an additional $1.450 million was identified as also being required in the following five year period.

SCA operations

Over the past seven years (i.e., 2009 through 2015), the SCA has generated, on average, operating revenue of between $680,000 and $1.333 million from various sources including rent from the Sudbury Wolves and other events staged in the SCA, from the sale of concessions, ticket surcharges, box office revenue surcharges and ice rentals. In operating the building, the SCA has incurred, on average, expenses ranging between $1.376 million and $1.633 million, including expenses related to facility staffing, utilities, operations (including maintenance and repair), insurance and capital reserves. On a net basis, the SCA generates a net loss from operations ranging between $280,000 and almost $700,000 (see Figure 33, following).

The amount of operating revenue generated by the SCA is highly dependent upon the number of events held in the venue and on the number of tickets sold for those events. As can be inferred from Figure 33, declines in revenue attributable to events impact income received from ticket surcharges and box office revenues. The combined impact from a reduction in non-OHL events staged at the SCA in 2015 compared to prior years, is concluded to partially explain the drop in revenue (compared to 2014 and prior years) and the increase in net operating loss.

The operations of the SCA compares with the operations of other sports and entertainment / arena venues in Ontario, including the Essar Centre (Sault Ste. Marie), the Rogers K-Rock Centre (Kingston) and the Meridian Centre (St. Catharines). Figure 34, following provides a breakdown of operating revenue, operating costs and net operating obligations associated with these three venues compared with the operations of the SCA.

Based on the foregoing, it is worth noting the following:

- While it is useful to understand the net obligations associated with the operations of each venue, the terms and conditions associated with the use of the venue by its respective lead tenant (as defined in its facility lease) must also be understood (for example, the SCA generates no amount of revenue from advertising, sponsorships and suites compared to other venues; the Sudbury Wolves also pay significantly less in rent compared to OHL tenants in newer buildings).
- The operations of the Meridian Centre and Rogers K-Rock Centre are noted as having been negatively impacted by the low Canadian dollar (which impacts the ability to secure American touring artists). In addition, it is noted that the Meridian Centre is located in a highly competitive market which includes competitive venues in Buffalo New York, Hamilton and Toronto.

Figure 33
Sudbury Community Arena Operating Statement, 2009 – 2015

	2009	2010	2011	2012	2013	2014	2015
Revenue							
Lead Tenant (OHL Team)	$28,243	$32,007	$20,985	$28,647	$34,307	$39,524	$17,843
Other Events	$291,273	$265,607	$272,159	$330,429	$293,216	$246,698	$101,749
Net Concession Revenue and Novelties	$186,833	$182,096	$182,585	$198,312	$219,627	$196,438	$186,909
Net Merchandise Revenue	$0	$0	$0	$0	$0	$0	$0
Net Advertising	$0	$0	$0	$0	$0	$0	$0
Sponsorships	$0	$0	$0	$0	$0	$0	$0
Suites License Revenue	$0	$0	$0	$0	$0	$0	$0
Club Seats License Revenue	$0	$0	$0	$0	$0	$0	$0
Ticket Surcharge	$89,515	$56,395	$107,178	$155,678	$181,376	$79,907	$51,671
Box Office Revenue	$353,013	$288,470	$271,093	$326,384	$343,275	$268,555	$76,989
Ice Rental Revenue	$259,163	$245,820	$272,131	$246,074	$250,596	$247,638	$238,006
Contribution from Reserve	$0	$16,000	$24,000	$27,781	$10,192	$8,000	$8,000
Total Revenue	**$1,208,041**	**$1,086,396**	**$1,150,132**	**$1,313,306**	**$1,332,590**	**$1,086,760**	**$681,166**
Facility Expenses							
Personnel Costs	$633,034	$672,553	$640,521	$654,682	$722,155	$676,202	$668,813
Utilities	$436,418	$328,289	$348,228	$337,050	$357,148	$414,513	$401,261
Operations, Maintenance, Repairs	$437,217	$291,107	$410,304	$470,038	$470,955	$383,624	$229,846
Marketing	$0	$0	$0	$0	$0	$0	$0
Insurance (Property Taxes)	$3,437	$3,082	$2,960	$2,848	$2,704	$2,609	$0
Other Misc Expenses (Internal Recoveries)	$40,180	$39,688	$36,474	$42,179	$46,406	$50,026	$31,442
Capital Reserve (Contribution to Capital)	$28,000	$61,500	$33,900	$88,900	$33,900	$33,900	$45,200
Management Fee	$0	$0	$0	$0	$0	$0	$0
Total Expenses	**$1,578,286**	**$1,396,219**	**$1,472,387**	**$1,595,697**	**$1,633,267**	**$1,560,874**	**$1,376,561**
Net Operating Income	**-$370,245**	**-$309,822**	**-$322,255**	**-$282,391**	**-$300,677**	**-$474,114**	**-$695,395**

Source: City of Greater Sudbury

Figure 34
Comparison of Net Operations, Sudbury Community Arena and Select Ontario Sports and Entertainment Centres

	Sudbury Community Arena		Essar Centre		Rogers K-Rock Centre		Meridian Centre	
	2014	2015	2015	2016	2015	2016	2015	2016
Gross Revenue	1,086,800	681,200	1,623,300	1,632,600	2,547,300	2,978,400	n/a	3,218,300
Operating Expenses	1,560,900	1,376,600	2,154,100	2,224,700	1,970,100	2,220,800	n/a	3,649,200
Net Operations	**(474,100)**	**(695,400)**	**(530,800)**	**(592,100)**	**577,200**	**757,600**	**(735,000)**	**(430,900)**

Source: City of Greater Sudbury, City of Sault. Ste. Marie, City of Kingston, City of St. Catharines

Sudbury Community Arena programming

Sudbury Wolves

As noted above, the Sudbury Wolves play their home games in the SCA. Over the past 16 seasons (i.e., since the 2000-01 season), the Wolves have attracted an average attendance of almost 3,900 fans game. Average yearly attendance has ranged from a low of approximately 3,100 fans per game during the most recently completed 2015-16 season, to a high of 4,600 fans per game during the 2005-06 season. With the exception of those two seasons, the Wolves have consistently attracted in the range of 3,700 to 3,900 fans per game per season (see Figure 35, following), and generally have ranked toward the middle of the league in terms of overall attendance.

Figure 35
Sudbury Wolves Attendance, 2000-01 to 2015-16 season

Sesaon	Average Attendance
2000-01	4,057.5
2001-02	3,851.0
2002-03	3,465.1
2003-04	3,397.6
2004-05	4,261.4
2005-06	4,610.4
2006-07	4,467.1
2007-08	4,162.1
2008-09	4,198.2
2009-10	3,822.8
2010-11	3,443.6
2011-12	3,762.4
2012-13	3,915.3
2013-14	3,793.2
2014-15	3,729.0
2015-16	3,108.0
Average Attendance Since:	
2000-01	3,877.8
2005-06	3,910.2
2010-11	3,625.3

Source: Ontario Hockey League

Spectator Events

According to information provided by the City, the SCA has annually been booked between 59 and 63 days per year (Figure 36, following). This booking activity includes home games of the Sudbury Wolves (approximately 38 to 40 per year) concerts, family shows (including shows with multiple performances each day), other sporting events, trade and consumer shows (including meetings and conventions), and various community events (including Remembrance Day and Canada Day activities).

Figure 36
Event Days / Booking Days, Sudbury Community Arena, 2012 to 2015

User / Tenant	2012		2013		2014		2015	
	Annual Number of Event Days	Average Attendance	Annual Number of Event Days	Average Attendance	Annual Number of Event Days	Average Attendance	Annual Number of Event Days	Average Attendance
Lead Tenant (OHL Team)	39	n/a	38	3,848	39	3,710	38	3,322
Concerts	6	n/a	11	3,372	9	2,576	2	3,631
Family Shows	2	n/a	2	1,410	0	0	2	2,680
Other Sports	1	n/a	1	4,000	0	0	0	0
Other Entertainment	6	n/a	3	1,936	3	1,782	3	1,037
Trade & Consumer Shows / Day Rentals	8	n/a	8	2,201	9	4,023	8	3,366
Total	**62**	**n/a**	**63**	**213,544**	**60**	**196,900**	**53**	**156,304**

Source: City of Greater Sudbury

Concerts which have been booked into the SCA over the past five years have included a broad range of artists in various genres. It is noteworthy that many of these same acts are booked in other mid-sized sports and entertainment venues, including venues like the Essar Centre (Sault Ste. Marie) and Rogers K-Rock Centre (Kingston). Events which been staged at the SCA since 2012 are summarized in Figure 37, following.

Figure 37
Events Staged at the Sudbury Community Arena, 2010 - 2016

	2012	2013	2014	2015	2016
Events	23	20	21	14	20
Event Days	19	16	17	10	17
Performances	Canada Day Home Show Remembrance Day Watchtower Convention Alan Jackson Bryan Adams Celebration on Ice Cesar Millan Harlem Globetrotters Hedley John Fogerty John Mellancamp Johnny Reid Mamma Mia MMA Monster Trucks River dance Russell Peters Steve Martin (LOL)	Canada Day Home Show Remembrance Day Watchtower Convention Beauty and the Beast Billy Talent Blue Rodeo Cheech and Chong (LOL) Eric Church KISS Marianas Trench Marilyn Manson Monster Trucks Motley Cure Rick Mercer (LOL) The Tragically Hip	Canada Day Home Show Remembrance Day Watchtower Convention Band Perry Brad Paisley Charley Pride Chicago City & Colour George Thorogood Harlem Globetrotters Hedley Home Hardware Jann Arden John Fogerty Larry the Cable Guy (LOL) Stars of SNL (LOL)	Canada Day Home Show Remembrance Day Watchtower Convention Bill Engvall (LOL) Dean Brody & Paul Brandt Jim Jefferies (LOL) Monster Truck Spectacular One Republic President's Choice SuperDogs	Canada Day Home Show Remembrance Day Bill Burr (LOL) Gord Bamford & Joe Nichols Graphic Con Hedley Home Hardware Contractor Show Jeff Dunham Jeremy Hotz (LOL) Johnny Reid Mariana's Trench Moscow Stars on Ice Price is Right Live The Next Step Dancers Theresa Caputo Live Trailer Park Boys (LOL)

Source: City of Greater Sudbury

In comparison with other venues, the SCA attracts a similar range events as do venues like the Essar Centre, Rogers K-Rock Centre and Median Centre; however, these venues have tended to attract a greater number of total events, including spectator events that can take advantage of more modern facilities (Figure 38, following). For example:

- During both 2012 and 2013, the Essar Centre hosted 134 and 109 total event days, including a higher number of concerts and other sporting events. The Essar Centre has also proven more successful in gaining higher levels of utilization through the use of the facility for tournaments and for other minor tenants (in this instance, the Soo Thunderbirds, a Tier II Junior A team).
- The Rogers K-Rock Centre has generally hosted in excess of 100 total event days, with events programmed into the facility including trade and consumer shows, conventions, national figure skating championships, family shows and fundraisers.
- While the Meridian Centre was more limited it its ability to secure spectator events (as noted previously, it is located and operates within a highly competitive market which includes competitive venues located in Buffalo New York, Hamilton and Toronto), its event profile includes a National Basketball League of Canada franchise, home games for Brock University's basketball and hockey teams, figure skating competitions, IIHF hockey championships, NHL pre-season games, as well as a number of concerts and community events.

Summary

The Sudbury Community Arena has been relatively successful in attracting a broad range of events, including concerts, family shows, other sporting events, other entertainment and various trade and consumer shows into the venue. In comparison with newer venues, it would appear, however, that the SCA attracts fewer total events, including "special events" like concerts, family shows and other sporting events, spectator events that can take advantage of more modern facilities.

From a financial perspective, the net operating loss sustained by the SCA is comparable to that realized in Sault Ste. Marie and St. Catharines; it is however, more than is realized in other markets including Kingston (which has historically generated an operating surplus).

Figure 38
Event Profile, Sudbury Community Arena and Select Ontario Sports and Entertainment Centres

	Sudbury Community Arena		Essar Centre		Rogers K-Rock Centre		Meridian Centre
	2014	2015	2012	2013	2015	2016	2016
OHL Hockey	38	39	41	39	n/a	n/a	+/- 40
Basketball	--	--	--	--	--	--	+/- 30
Concerts	2	9	17	7	n/a	n/a	5
Other Sports	0	0	31	35	n/a	n/a	+/- 20
Family Shows	2	0	--	--	n/a	n/a	2
Trade & Consumer Shows	8	9	25	12	n/a	n/a	n/a
Other	3	3	20	16	n/a	n/a	n/a
Community Use	--	--	--	--	n/a	n/a	n/a
Net Operations	**53**	**60**	**134**	**109**	**96**	**108**	**+/- 95**

Notes: Most recent information from the City of Sault Ste. Marie is 2013. "Other" includes hockey tournaments. "Other Sports" include Soo Thunderbird home games. Excluding these users, the number of events secured by the Essar Centre was 89 in 2012 and 60 in 2013.

For Meridian Centre, "Other Sports" includes assumptions for NBLC Niagara River Lions home games (basketball), IIHF Women's U18 Hockey Championships, Brock University Basketball and Hockey games, Skate Niagara competition, NHL preseason game

Source: City of Greater Sudbury, City of Sault Ste. Marie, City of Kingston, City of St. Catharines

5. Assessment of Supportable Building Size

This Report has provided a socio-economic profile of the Greater Sudbury area, profiled the current operations of the SCA and other similar venues in Ontario, and presented information on various Canadian markets which host a Major Junior A (Tier 1) franchise (whether in the OHL, QMJHL or WHL). Based on this review, an assessment of the Greater Sudbury market to support a larger venue was undertaken, concentrating on:

- Potential attendance; and
- Supportable building size.

As was detailed in Figure 15, above, average per game attendance in the OHL was some 4,155 fans per game, league-wide during the 2015-16 season; over the past 16 seasons (i.e., since 2000-01) average per game attendance has generally ranged between 3,200 and 4,200 fans per game. Over the 2010-11 to 2015-16 period, only three teams have average attendances of greater than 5,000 fans per game, with London, Kitchener and Ottawa (who play in the league's largest arenas) consistently leading the league in attendance. Sudbury plays in the 8th largest market in the OHL (as measured by total CA / CMA population) and attracts the 11th largest average attendance. Within the 4,470-seat / 5,186-capacity Sudbury Community Arena, the team has filled approximately 70% of available capacity, on average, since the start of the 2010-11 season (compared to a league-wide average of approximately 72%).

In other Canadian CHL markets across the country, average capacities in venues generally range between 60% to 65% of total building capacity (fixed seats plus standing room) to over 70% (including only fixed seats), the highest of which occurs in the OHL. In some instances, particularly where teams have moved into new venues, total average attendance has surpassed 90% of total seating capacity, a level which has been sustained in some cases in newer, larger buildings for several years.

Given that the CHL team serves as the lead tenant in their respective building and that a significant amount of revenue is dependent upon the team playing in that building (including, for example, suite revenue, advertising and sponsorships, concessions, etc.), constructing a building with a total seating capacity that is supportive of both the team and the building's ability to generate income is paramount. Understanding an ideal building capacity from an entertainment event perspective is also important, noting that the use of the flat floor area will add to the total capacity of the building by approximately 800 to 1,200 seats (depending on the number of partially and fully obstructed seats that would be located beside and behind a stage). In this regard, a common adage in the sports industry is that "empty seats produce empty seats, while sell-outs produce sell-outs", a maxim that favours building capacities being at or slightly smaller than their "supportable size" in order to limit ticket availability to a degree, and thereby cause corporations and individuals to purchase seasons tickets to ensure event access (with more abundant ticket availability caused by a building that is "too large" for the market, there would be less incentive to purchase seasons tickets and force the team and building to rely more on "walk-up" sales).

Building a venue to accommodate a one-off circumstance when an event / game could draw 10,000 / 15,000 / 20,000 fans (for example, to a one-off event involving a marquee artist / player / team or some other special entertainment event), would, in our opinion, be inappropriate. In this instance, it would require that the building incur higher operating costs (including maintenance, heating / cooling, etc.) for a larger volume of space than it otherwise requires. Moreover, with the continual availability of tickets, average attendance could be unnecessarily lowered (there would be no incentive to purchase seasons tickets and potential attendees could decide not to attend an event depending on weather or other circumstances) and could therefore negatively impact building advertising and sponsorships income (given that there would be "less eyes" / "fewer bums in seats" in the building).

In an effort to identify the size of building that could be "supportable" for Greater Sudbury, a review of each Canadian-based CHL team's market penetration was undertaken (i.e., the proportion of a centre's local and broader regional population which attends games). Based on this review (Figure 39, following, for local market penetration rate, and Figure 40 for regional market penetration rate), a number of conclusions can be reached:

- A typical CHL team's local market penetration rate is 4.6%. The team's local market penetration rate will be highly dependent upon the size of its local population. In this regard, smaller centres will tend to have higher local market penetration rates while larger centres will have smaller local market penetration rates.
- The average local market penetration rate in both the QMJHL and WHL is 5.2%, compared to just 3.4% in the OHL.
- The Sudbury Wolves attract the 40th highest proportion of its local population to its games (or conversely the 15th lowest). In this regard, approximately 2.2% of City of Greater Sudbury residents, on average, attend a Wolves' game. In the OHL, Sudbury's rank is 15th (including Brampton and Belleville whose teams have since relocated). Ranking above Sudbury are teams playing in centres with similar local population sizes (including Barrie, Oshawa, Guelph and St. Catharines) as well as larger markets (including London, Kitchener and Windsor). Sudbury ranks only above teams in the largest OHL markets (including Ottawa, Mississauga, Hamilton and Brampton).
- Actual local market penetration rates range from a low of 0.3% (Brampton), 0.4% (Mississauga), 0.6% (Ottawa), 0.7% (Edmonton, Calgary and Hamilton), 0.9% (Gatineau) and 1.0% (Vancouver), to a high of 13.6% (Owen Sound), 13.0% (Acadie-Bathurst), 12.8% (Swift Current), 11.8% (Kootenay), and 10.1% (Moose Jaw). Excluding these outliers, the average local market penetration rate is 4.4%.
- A typical CHL team's regional market penetration rate is 3.3%;
- The average regional market penetration rate in the OHL is 2.3%, and compares to 3.4% in the QMJHL and 4.2% in the WHL.
- Actual regional market penetration rates range from a low of less than 0.1% (for Brampton and Mississauga), 0.1% (for Bainville-Boisbriand), 0.3% (Vancouver), 0.4% (for Ottawa), 0.5% (for Edmonton and Hamilton), 0.6% (for Calgary) and 0.8% (for Gatineau) to a high of 11.5% (Swift Current), 9.8% (Moose Jaw), 9.1% (Owen Sound), 9.0% (Kootenay) and 7.7% (Baie-Comeau). Like local market penetration rates, the larger the urban area the team is located within, the smaller will be the team's regional penetration rate. Excluding these outliers, the average regional market penetration rate is 3.2%.
- The regional market penetration rate for the Sudbury Wolves is 2.2% (30th largest in the CHL).

In Figure 41, following, a number of CHL centres have been highlighted, based on (a) their having local and / or regional population sizes similar to Greater Sudbury, (b) the community is located in an area where it is both a dominant regional centre and is located some distance from other large urban centres, and / or (c) the community recently developed a new sports and entertainment centre. A review of these markets yields the following observations:

- The average local market penetration rate for these markets (excluding Greater Sudbury) is 4.3% while the regional market penetration rate is 3.4%.
- For those markets that have constructed new venues, average per game attendance for their CHL team increased by 43% and 52% over longer-term historical averages, with the average increase in attendance being approximately 48%.
- As noted from the discussion relating to Figure 32, above, the average "bump" in attendance is in the range of 70% across all markets, with this attendance level being sustained for approximately six years.

Based on the foregoing, our opinion is that a new building in the City of Greater Sudbury would be able to support a sustained bump in attendance in the range of 20%, increasing average attendance to approximately 4,350 fans per game. Additionally, it should also be recognized that the identified market potential attendance figure represents average attendance over the course of a season and as such would require a building with a seating capacity in excess of this amount. Assuming a "target" capacity figure of 75%, a building in the range of 5,500 to 6,000 seats would appear to be appropriate, with the target being 5,800 seats.

Figure 39
Canadian Hockey League – Local Market Penetration Rates

	Average Attendance 10/11 - 15/16	Avg Attendance in New Building (since 2000)	Arena Capacity	Average Occupancy 10/11 - 15/16	2016 Population		Market Penetration Rates	
					City	County / CA / CMA	City	County / CA / CMA
Owen Sound	2,898.8	--	3,500	82.8%	21,341	31,820	13.6%	9.1%
Acadie-Bathurst	1,544.0	--	3,524	43.8%	11,897	31,110	13.0%	5.0%
Swift Current	2,128.2	--	3,239	65.7%	16,604	18,536	12.8%	11.5%
Kootenay	2,357.6	2,890.2	4,616	51.1%	20,047	26,083	11.8%	9.0%
Moose Jaw	3,437.2	3,593.7	4,714	72.9%	33,890	35,053	10.1%	9.8%
Baie-Comeau	2,120.9	--	3,042	69.7%	21,536	27,692	9.8%	7.7%
Cape Breton	2,591.8	--	5,042	51.4%	29,904	98,722	8.7%	2.6%
Brandon	3,973.8	--	5,702	69.7%	48,859	58,002	8.1%	6.9%
Rimouski	3,573.8	--	5,062	70.6%	48,664	55,349	7.3%	6.5%
Prince Albert	2,444.6	--	3,366	72.6%	35,926	44,160	6.8%	5.5%
North Bay	3,379.9	--	4,273	79.1%	51,553	70,378	6.6%	4.8%
Medicine Hat	4,046.3	4,248.0	4,006	101.0%	63,260	76,522	6.4%	5.3%
Shawinigan	3,082.2	3,065.9	4,550	67.7%	49,349	54,181	6.2%	5.7%
Moncton	4,415.1		6,900	64.0%	71,889	144,810	6.1%	3.0%
Victoria	5,070.0	5,070.0	7,400	68.5%	85,792	367,770	5.9%	1.4%
Saint John	3,944.0	--	6,488	60.8%	67,575	126,202	5.8%	3.1%
Sault Ste. Marie	4,275.2	4,362.1	4,928	86.8%	73,368	78,159	5.8%	5.5%
Charlottetown / PEI	2,021.7	--	3,717	54.4%	36,094	69,325	5.6%	2.9%
Val-d'Or	1,813.6	--	3,753	48.3%	32,491	33,871	5.6%	5.4%
Victoriaville	2,485.4	--	3,420	72.7%	46,130	49,151	5.4%	5.1%
Red Deer	5,079.2	--	6,702	75.8%	100,418	100,418	5.1%	5.1%
Belleville	2,514.9	--	3,257	77.2%	50,716	103,472	5.0%	2.4%
Rouyn-Noranda	1,970.8	--	3,500	56.3%	42,334	42,334	4.7%	4.7%
Kamloops	4,174.4	--	5,464	76.4%	90,280	103,811	4.6%	4.0%
Sarnia	3,135.4	3,522.1	5,200	60.3%	71,594	96,151	4.4%	3.3%
Kelowna	5,539.4	--	6,007	92.2%	127,380	194,882	4.3%	2.8%
Lethbridge	3,319.3	--	5,479	60.6%	92,729	117,394	3.6%	2.8%
Niagara / St. Catharines	4,442.5	4,442.5	5,264	84.4%	133,113	406,074	3.3%	1.1%
Drummondville	2,467.7	--	4,000	61.7%	75,423	96,118	3.3%	2.6%
Blainville-Boisbriand	2,735.0	2,735.0	3,500	78.1%	83,747	4,098,927	3.3%	0.1%
Guelph	4,189.5	3,957.0	4,981	84.1%	131,794	151,984	3.2%	2.8%
Peterborough	2,562.5	--	4,329	59.2%	81,032	121,721	3.2%	2.1%
Prince George	2,293.3	--	5,971	38.4%	74,003	86,622	3.1%	2.6%
Oshawa	4,804.6	4,736.8	5,637	85.2%	159,458	379,848	3.0%	1.3%
Kitchener	6,835.5	--	7,469	91.5%	233,222	523,894	2.9%	1.3%
Kingston	3,457.9	3,340.2	5,380	64.3%	123,798	161,175	2.8%	2.1%
Barrie	3,685.0	3,713.9	4,195	87.8%	141,434	197,059	2.6%	1.9%
Windsor	5,491.4	5,536.2	6,500	84.5%	217,188	329,144	2.5%	1.7%
London	8,984.4	8,862.3	9,046	99.3%	383,822	494,069	2.3%	1.8%
Sudbury	**3,625.3**	**--**	**5,186**	**69.9%**	**161,531**	**164,689**	**2.2%**	**2.2%**
Quebec	11,376.0	--	17,000	66.9%	531,902	800,296	2.1%	1.4%
Saskatoon	4,963.1	--	15,195	32.7%	246,376	295,095	2.0%	1.7%
Regina	4,206.7	--	6,510	64.6%	215,106	236,481	2.0%	1.8%
Chicoutimi	2,704.1	--	4,724	57.2%	145,949	160,980	1.9%	1.7%
Halifax	7,239.5	--	10,595	68.3%	403,131	403,390	1.8%	1.8%
Sherbrooke	2,762.5	--	4,005	69.0%	161,323	212,105	1.7%	1.3%
Vancouver	6,474.7	--	16,281	39.8%	631,486	2,463,431	1.0%	0.3%
Gatineau / Hull	2,537.7	--	4,000	63.4%	276,245	332,057	0.9%	0.8%
Hamilton	3,844.0	--	17,400	22.1%	536,917	747,545	0.7%	0.5%
Edmonton	6,586.4	--	16,839	39.1%	932,546	1,321,426	0.7%	0.5%
Calgary	8,750.8	--	19,289	45.4%	1,239,220	1,392,609	0.7%	0.6%
Ottawa	5,199.9	--	10,585	49.1%	934,243	1,323,783	0.6%	0.4%
Mississauga	2,736.8	2,678.3	5,520	49.6%	721,599	5,928,040	0.4%	0.0%
Brampton	2,021.1	2,321.6	5,000	40.4%	593,638	5,928,040	0.3%	0.0%

Source: OHL, QMJHL, WHL, individual CHL teams, Statistics Canada, PwC

Figure 40
Canadian Hockey League – Regional Market Penetration Rates

	Average Attendance 10/11 - 15/16	Avg Attendance in New Building (since 2000)	Arena Capacity	Average Occupancy 10/11 - 15/16	2016 Population		Market Penetration Rates	
					City	County / CA / CMA	City	County / CA / CMA
Swift Current	2,128.2	--	3,239	65.7%	16,604	18,536	12.8%	11.5%
Moose Jaw	3,437.2	3,593.7	4,714	72.9%	33,890	35,053	10.1%	9.8%
Owen Sound	2,898.8	--	3,500	82.8%	21,341	31,820	13.6%	9.1%
Kootenay	2,357.6	2,890.2	4,616	51.1%	20,047	26,083	11.8%	9.0%
Baie-Comeau	2,120.9	--	3,042	69.7%	21,536	27,692	9.8%	7.7%
Brandon	3,973.8	--	5,702	69.7%	48,859	58,002	8.1%	6.9%
Rimouski	3,573.8	--	5,062	70.6%	48,664	55,349	7.3%	6.5%
Shawinigan	3,082.2	3,065.9	4,550	67.7%	49,349	54,181	6.2%	5.7%
Prince Albert	2,444.6	--	3,366	72.6%	35,926	44,160	6.8%	5.5%
Sault Ste. Marie	4,275.2	4,362.1	4,928	86.8%	73,368	78,159	5.8%	5.5%
Val-d'Or	1,813.6	--	3,753	48.3%	32,491	33,871	5.6%	5.4%
Medicine Hat	4,046.3	4,248.0	4,006	101.0%	63,260	76,522	6.4%	5.3%
Red Deer	5,079.2	--	6,702	75.8%	100,418	100,418	5.1%	5.1%
Victoriaville	2,485.4	--	3,420	72.7%	46,130	49,151	5.4%	5.1%
Acadie-Bathurst	1,544.0	--	3,524	43.8%	11,897	31,110	13.0%	5.0%
North Bay	3,379.9	--	4,273	79.1%	51,553	70,378	6.6%	4.8%
Rouyn-Noranda	1,970.8	--	3,500	56.3%	42,334	42,334	4.7%	4.7%
Kamloops	4,174.4	--	5,464	76.4%	90,280	103,811	4.6%	4.0%
Sarnia	3,135.4	3,522.1	5,200	60.3%	71,594	96,151	4.4%	3.3%
Saint John	3,944.0	--	6,488	60.8%	67,575	126,202	5.8%	3.1%
Moncton	4,415.1		6,900	64.0%	71,889	144,810	6.1%	3.0%
Charlottetown / PEI	2,021.7	--	3,717	54.4%	36,094	69,325	5.6%	2.9%
Kelowna	5,539.4	--	6,007	92.2%	127,380	194,882	4.3%	2.8%
Lethbridge	3,319.3	--	5,479	60.6%	92,729	117,394	3.6%	2.8%
Guelph	4,189.5	3,957.0	4,981	84.1%	131,794	151,984	3.2%	2.8%
Prince George	2,293.3	--	5,971	38.4%	74,003	86,622	3.1%	2.6%
Cape Breton	2,591.8	--	5,042	51.4%	29,904	98,722	8.7%	2.6%
Drummondville	2,467.7	--	4,000	61.7%	75,423	96,118	3.3%	2.6%
Belleville	2,514.9	--	3,257	77.2%	50,716	103,472	5.0%	2.4%
Sudbury	**3,625.3**	**--**	**5,186**	**69.9%**	**161,531**	**164,689**	**2.2%**	**2.2%**
Kingston	3,457.9	3,340.2	5,380	64.3%	123,798	161,175	2.8%	2.1%
Peterborough	2,562.5	--	4,329	59.2%	81,032	121,721	3.2%	2.1%
Barrie	3,685.0	3,713.9	4,195	87.8%	141,434	197,059	2.6%	1.9%
London	8,984.4	8,862.3	9,046	99.3%	383,822	494,069	2.3%	1.8%
Halifax	7,239.5	--	10,595	68.3%	403,131	403,390	1.8%	1.8%
Regina	4,206.7	--	6,510	64.6%	215,106	236,481	2.0%	1.8%
Saskatoon	4,963.1	--	15,195	32.7%	246,376	295,095	2.0%	1.7%
Chicoutimi	2,704.1	--	4,724	57.2%	145,949	160,980	1.9%	1.7%
Windsor	5,491.4	5,536.2	6,500	84.5%	217,188	329,144	2.5%	1.7%
Quebec	11,376.0	--	17,000	66.9%	531,902	800,296	2.1%	1.4%
Victoria	5,070.0	5,070.0	7,400	68.5%	85,792	367,770	5.9%	1.4%
Kitchener	6,835.5	--	7,469	91.5%	233,222	523,894	2.9%	1.3%
Sherbrooke	2,762.5	--	4,005	69.0%	161,323	212,105	1.7%	1.3%
Oshawa	4,804.6	4,736.8	5,637	85.2%	159,458	379,848	3.0%	1.3%
Niagara / St. Catharines	4,442.5	4,442.5	5,264	84.4%	133,113	406,074	3.3%	1.1%
Gatineau / Hull	2,537.7	--	4,000	63.4%	276,245	332,057	0.9%	0.8%
Calgary	8,750.8	--	19,289	45.4%	1,239,220	1,392,609	0.7%	0.6%
Hamilton	3,844.0	--	17,400	22.1%	536,917	747,545	0.7%	0.5%
Edmonton	6,586.4	--	16,839	39.1%	932,546	1,321,426	0.7%	0.5%
Ottawa	5,199.9	--	10,585	49.1%	934,243	1,323,783	0.6%	0.4%
Vancouver	6,474.7	--	16,281	39.8%	631,486	2,463,431	1.0%	0.3%
Blainville-Boisbriand	2,735.0	2,735.0	3,500	78.1%	83,747	4,098,927	3.3%	0.1%
Mississauga	2,736.8	2,678.3	5,520	49.6%	721,599	5,928,040	0.4%	0.0%
Brampton	2,021.1	2,321.6	5,000	40.4%	593,638	5,928,040	0.3%	0.0%

Source: OHL, QMJHL, WHL, individual CHL teams, Statistics Canada, PwC

Figure 41
Comparison of Selected CHL Markets with Greater Sudbury

	Average Attendance 10/11 - 15/16	Avg Attendance in New Building (since 2000)	Arena Capacity	Average Occupancy 10/11 - 15/16	2016 Population		Market Penetration Rates	
					City	County / CA / CMA	City	County / CA / CMA
Brandon	3,973.8	--	5,702	69.7%	48,859	58,002	8.1%	6.9%
North Bay	3,379.9	--	4,273	79.1%	51,553	70,378	6.6%	4.8%
Sault Ste. Marie	4,275.2	4,362.1	4,928	86.8%	73,368	78,159	5.8%	5.5%
Kamloops	4,174.4	--	5,464	76.4%	90,280	103,811	4.6%	4.0%
Sarnia	3,135.4	3,522.1	5,200	60.3%	71,594	96,151	4.4%	3.3%
Lethbridge	3,319.3	--	5,479	60.6%	92,729	117,394	3.6%	2.8%
Niagara / St. Catharines	4,442.5	4,442.5	5,264	84.4%	133,113	406,074	3.3%	1.1%
Peterborough	2,562.5	--	4,329	59.2%	81,032	121,721	3.2%	2.1%
Prince George	2,293.3	--	5,971	38.4%	74,003	86,622	3.1%	2.6%
Kingston	3,457.9	3,340.2	5,380	64.3%	123,798	161,175	2.8%	2.1%
Sudbury	**3,625.3**	**--**	**5,186**	**69.9%**	**161,531**	**164,689**	**2.2%**	**2.2%**
Chicoutimi	2,704.1	--	4,724	57.2%	145,949	160,980	1.9%	1.7%

Source: OHL, QMJHL, WHL, individual CHL teams, Statistics Canada, PwC

At such a level, the local market penetration rate would increase to 2.7% (between Barrie and Kingston as the 37th highest centre in the CHL in Figure 39, above) while the regional penetration rate would increase to 2.6% (equal to Prince George, Cape Breton and Drummondville as the 26th highest centre in the CHL in Figure 40, above).

While a larger building could be considered, we would argue that a building with in excess of 5,800 seats would be inappropriate. By way of comparison, Figure 42, following, provides a summary of CHL buildings with a total seating capacity in excess of 6,000 seats and the recommended building size for Greater Sudbury (5,800 fixed seats attracting an average attendance of 4,350 fans). The majority of these markets have significantly larger local and regional populations compared to Greater Sudbury and as such are required to attract a much smaller proportion of their local / regional populations to support uses and events at their spectator arena. In addition, the economic and growth prospects of these markets are considered somewhat more robust than is projected in the short to medium term for Greater Sudbury.

It should also be noted that the target attendance figure of 4,350 fans per game represents, in our opinion, an average annual attendance figure; should a new venue with a capacity of some 5,800-fixed seats be developed, it is likely that a team would periodically realize actual attendance at individual games in excess of this average attendance figure. As noted previously, most new facilities realize a "honeymoon" period where attendance is materially higher than historic averages during the arena's initial few years of operation. How long such a "honeymoon period" will last will be directly dependent upon a number of factors, including the on-ice success of the team, the cost versus perceived "value" of attending a game, the state of the local economy, the presence of competing sports and entertainment venues / teams / events, etc. With 5,800 seats, the Sudbury Wolves would need to achieve a sustained increase in the number of fans attending each game of more than 60% to fill the venue.

Finally, with 5,800 fixed seats, it is possible that the total seating capacity for other entertainment, including concerts in an end-stage configuration could be excess of 6,500 (assuming retractable seating and limited "seat kills" behind and beside the stage). Discussions with entertainment promoters and marketers felt a new building which total sizing / capacity in the range of 5,500 to 6,000 seats was in the ideal target range for a market like Greater Sudbury.

Figure 42
Comparison of Selected CHL Markets with 6,000+ seat Venues

	Average Attendance 10/11 - 15/16	Avg Attendance in New Building (since 2000)	Arena Capacity (fixed seats)	Average Occupancy 10/11 - 15/16	2016 Population		Market Penetration Rates	
					City	County / CA / CMA	City	County / CA / CMA
Calgary	8,750.8	--	19,289	45.4%	1,239,220	1,392,609	0.7%	0.6%
Hamilton	3,844.0	--	17,400	22.1%	536,917	747,545	0.7%	0.5%
Edmonton	6,586.4	--	16,839	39.1%	932,546	1,321,426	0.7%	0.5%
Vancouver	6,474.7	--	16,281	39.8%	631,486	2,463,431	1.0%	0.3%
Saskatoon	4,963.1	--	15,195	32.7%	246,376	295,095	2.0%	1.7%
Quebec	11,376.0	--	15,176	75.0%	531,902	800,296	2.1%	1.4%
Halifax	7,239.5	--	10,595	68.3%	403,131	403,390	1.8%	1.8%
Ottawa	5,199.9	--	9,862	52.7%	934,243	1,323,783	0.6%	0.4%
London	8,984.4	8,862.3	9,046	99.3%	383,822	494,069	2.3%	1.8%
Moncton	4,415.1		7,500	58.9%	71,889	144,810	6.1%	3.0%
Kitchener	6,835.5	--	7,131	95.9%	233,222	523,894	2.9%	1.3%
Victoria	5,070.0	5,070.0	7,006	72.4%	85,792	367,770	5.9%	1.4%
Windsor	5,491.4	5,536.2	6,500	84.5%	217,188	329,144	2.5%	1.7%
Saint John	3,944.0	--	6,297	62.6%	67,575	126,202	5.8%	3.1%
Regina	4,206.7	--	6,136	68.6%	215,106	236,481	2.0%	1.8%
Red Deer	5,079.2	--	6,000	84.7%	100,418	100,418	5.1%	5.1%
Sudbury		**4,350.0**	**5,800**	**75.0%**	**161,531**	**164,689**	**2.7%**	**2.6%**

Source: QMJHL, OHL, WHL, individual CHL teams, Statistics Canada, PwC

6. Assessment of Building Costs and Features

Indicative Cost Estimate

Figure 43, following, identifies the total project cost (inclusive of hard construction costs, soft costs, furniture, fixtures and equipment and in some cases financial and consultant costs), fixed seating capacity and opening date of the some of the more recently opened sports and entertainment / arena facilities in Canada (since approximately 1995 with the opening of the CN Centre in Prince George, BC). Also included in Figure 43 is the "per seat cost" associated with each project.

Figure 43
Total Project Costs of Recently Built Sports and Entertainment Centres

City	Year Opened	Seats	Cost	Cost / Seat
Prince George	1995	5,800	$21,700,000	$3,700
Barrie	1996	4,200	$13,000,000	$3,100
Sarnia	1998	5,000	$18,500,000	$3,700
Brampton	1998	5,000	$24,500,000	$4,900
Mississauga	1998	5,400	$22,000,000	$4,100
Kelowna	1999	6,000	$26,000,000	$4,300
Guelph	2000	5,000	$21,500,000	$4,300
Cranbrook	2000	4,700	$22,600,000	$4,800
London	2002	9,000	$47,000,000	$5,200
Victoria	2003	7,000	$30,000,000	$4,300
Chilliwack	2004	5,000	$22,000,000	$4,400
Sault Ste. Marie	2005	5,000	$25,000,000	$5,000
Oshawa	2005	5,400	$45,000,000	$8,300
Kingston	2008	5,200	$46,100,000	$8,900
Windsor	2008	6,500	$71,700,000	$11,000
Abbotsford	2009	6,800	$66,200,000	$9,700
Moose Jaw	2011	4,400	$61,200,000	$13,900
St. Catharines	2014	5,200	$51,000,000	$9,800
Medicine Hat	2015	5,900	$74,900,000	$12,700
Moncton	2016	7,500	$91,000,000	$12,100

Source: PwC

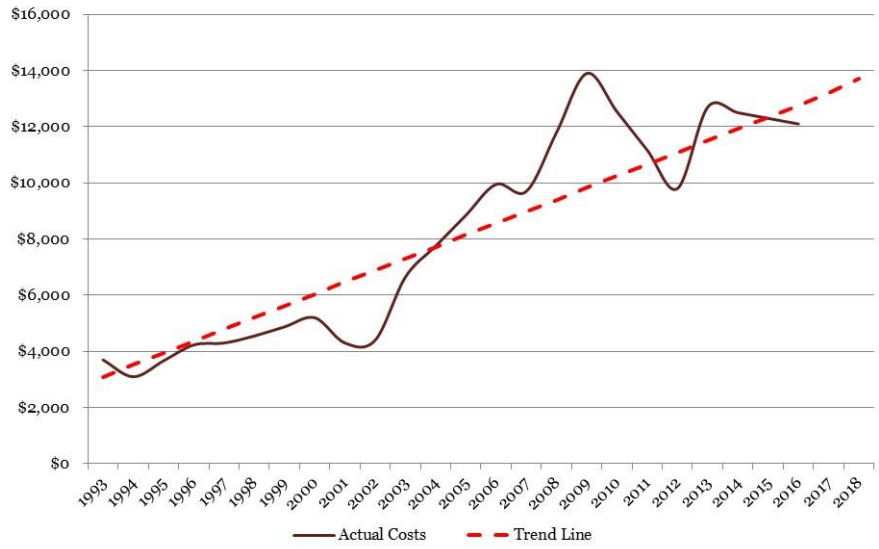
While a useful proxy for evaluating facility costs and how they have changed over time, there are limitations, particularly with respect to understanding and acknowledging some of the differences that exist within each building cost metric (from a size, layout, quality of finish and building component perspective) as well as from a physical location perspective (i.e., some markets are more expensive to build in than others; some sites may also be more expensive to build on than others) which may have a material impact on total project costs. For example:

- In 1998, the per seat cost of the Brampton Powerade Centre appears to be materially greater than the per seat cost of the Mississauga Hershey Centre despite these buildings being located less than 10 kilometres from one another and each building opening at approximately the same time. The Powerade Centre is, however, a larger building compared to the Hershey Centre, containing three ancillary ice pads (four in total) compared to just one ancillary pad at the Hershey Centre (two pads in total);

- Similarly, while costing almost $11,000 per seat in 2008, Windsor's WFCU Centre also contains three ancillary ice pads in addition to its 6,500 fixed seat spectator venue (this compares to Kingston Rogers K-Rock Centre which cost $8,900 per seat for its 5,200 fixed seats); and
- In 2011, it appears that Moose Jaw's 4,400-seat Mosaic Place was the most expensive building constructed in Canada, at almost $13,900 per seat. However, it should also be noted that this building also includes an eight-sheet curling rink plus banquet facility, which added to the overall cost of this venue.

Understanding that each building will therefore contain components, features, finishes and other elements that will impact its overall cost (higher or lower) and will be located in a jurisdiction with its own unique construction market fundamentals (labour availability, pricing, number of projects under development, etc.), utilizing a "cost per seat" proxy to understand how facility costs have changed over time and what facility costs may be in the near term is still considered to be an appropriate metric. Figure 44, following, graphically depicts facility costs per seat since 1993 (the estimated contract award date for the CN Centre in Prince George). A "best fit" trend line was estimated based actual building costs. Based on this review, it would appear that average building costs have grown at an annual compound rate of approximately 6.3% per year between 1993 and 2016, reaching approximately $12,750 per seat.

Figure 44
Trend in Per Seat Costs of Recently Built Sports and Entertainment Centres



Source: PwC

Projecting costs out to 2018 (the approximate contract award date for Greater Sudbury's new SEC), it would not appear unreasonable that costs could approximate $13,700 per seat. Based on this proxy, it would not appear unreasonable for a 5,800-seat SEC to cost in the range of $80.0 million. This $80.0 million total all-in cost is notionally allocated between the following:

- Hard costs $62.5 million (78.1% of total costs)
- Soft costs $12.5 million (15.6% of total costs; 20% of hard costs)
- Furniture, fixtures and equipment $5.0 million (6.3% of total costs)

The $80.0 million preliminary cost estimate is considered neither an extravagant building, nor one which includes design features below the following outlined minimum requirements. The $80.0 million preliminary cost estimate also relates only to a single, stand-alone facility (i.e., one that does not include community ice pads). Including additional ice pads to the cost of the SEC would increase its cost by approximately $7.5 million to $8.0 million per ice pad.

It should also be noted that this estimate excludes any extraordinary site related costs which could serve to increase total project costs (for example, because of geotechnical issues, site constructability issues, etc.), as well as the costs associated with any off-site improvements needed to facilitate the effective operations of the SEC (access road improvements, parking, hydro enhancements, etc.).

Design Features

Sports and entertainment centres have a number of key components that are critical to the overall operating success of the facility. As with any performance-oriented venue, these can be divided into three major categories:

- ***Front-of-House***

  The Front-of-House ("FOH") components are those components that create and provide an "overall experience" to the spectator or patron prior to them taking their seat. The FOH components are often described as being part of the "public domain" and include all elements associated with arriving at and entering the building.

  The FOH can either be integrated with the seating bowl, most commonly from a "top-fed" concourse, or it can be separated from the seating bowl in which case patrons access their seating through gates or vomitories cut into the arena bowl.

  Spectator facilities in the 5,000 to 6,000 seat range are tending to move away from the top-fed concourse allowing for better light control / separation between the FOH and the actual event.

- ***House***

  The House is the actual seating area surrounding the rink slab or flat floor area. The House includes all of the fixed seats, temporary floor seating (for concerts, assemblies, and centre-stage events), and private suites / loge boxes. While spectator arenas in the past have tended to treat the seating as part of the overall experience with no separation for spilled lighting from the concourses, current design is trending towards the House being a "black-box environment" similar to theatres and performing arts centres. Lighting effects and pyrotechnics are becoming a central part of the spectating experience and increasing the need for a black-box environment.

- ***Back-of-House***

  The Back-of-House ("BOH") is the component of the venue that is least understood by the general public but is key to the overall operation of the facility as a multi-use venue. The BOH is typically not accessible by the general public and is the realm of the entertainer / performer / athlete, along with the infrastructure that supports the event. In addition to dressing rooms and mechanical support space, the BOH also include major storage areas, the catwalk and rigging grid system within the roof structure, and broadcasting support.

Front-of-House Components

Main Lobby

The Main Lobby should be immediately visible as the main entrance to the building. It should be centrally located relative to the main concourse and should have connectivity to the interior space that forms part of the ticketing area.

The Main Lobby should be well-signed to allow for immediate and uncongested access to the Public Concourse as well as secured access to the VIP level(s) of the facility.

Public Concourse

The Public Concourse provides the main circulation for spectators and can be configured in a number of different ways depending on the overall design of the facility. Possible concourse configuration options are:

- top-fed concourse;
- bottom-fed concourse (typically in a horseshoe arrangement); and
- intermediate concourse.

Regardless of the concourse configuration, there will exist a need to accommodate relatively easy access by patrons to a number of key areas, including

- commercial space(s);
- concessions;
- washrooms; and
- seating (classified as part of the House).

Concourses need to be designed to conform to the appropriate Building Codes since they are primary exiting route for spectators. Beyond the ability to accommodate mandated exiting, the Concourse should be designed to minimize or eliminate bottlenecking or pinch points. Generally, concourses should have a general average width of 16 feet or more for a continuous concourse and 20 feet or more for a horseshoe concourse. This width should be increased in areas where spectators congregate or are expected to line up (for example, at or near concession points of sale).

Commercial Space

There should be at least one and preferably two small commercial units directly accessible from the concourse. Minimum size for commercial spaces are generally in the range of 500 square feet. Consideration is also provided in some instances, especially where a larger commercial space is provided, to have access from both the interior concourse of the building (during games and events) and from the exterior (to allow for regular business hours).

Concessions

Concessions should be evenly distributed along the concourse. The exact number of concessions is an aspect of building planning, but the number of fixed or permanent "points of sale" ("POS") should equal the total fixed seating capacity of the facility (in this instance 5,800) divided by 175 as a minimum and 150 as a preferred (in this instance, in the range of 33 to 40). In addition there is a requirement for portable POS kiosks in the concourse area which should have access to power. The number of temporary or portable POS is generally in the range of 30% of the number of permanent POS (i.e., 10 to 12).

Where concessions face directly onto the concourse, the width of the concourse should be increased so that there is some allowance for lineups. In this regard, concessions in the corners potentially allow for increased lineup area.

Washrooms

The number of washrooms fixtures is mandated by code. The only discretionary calculation is the breakdown for male and female spectators / visitors and this ratio varies depending on the event. For this reason, washroom counts are generally based on 60% of attendees being male and 60% being female.

Administration

The Administration area is specific to the general management of the venue and typically does not include space for the lead sports tenant. The Administration space should include as a minimum, the following:

- a General Manager's office;
- approximately five to seven support offices;
- open space for approximately 10 workstations;
- two conferencing rooms;
- general storage areas; and
- staff kitchen area with washroom facilities.

The Administration area should be designed / located so that there is reasonably easy controlled access from the exterior without requiring visitors to travel through secure parts of the facility. Administration areas should also be located to not consume prime space that could be utilized for commercial activities or programs especially during events.

Ticketing

The Ticketing area is ideally located relatively close to or connected with the Administration area although this may not always be possible. Tickets sales during the day are often done by administrative staff (as a less expensive alternative to having permanent ticketing staff at a stand-alone ticket sales counter).

The Ticketing area will generally have a series of booths facing directly to the exterior and / or as windows facing a large interior space (generally within public access areas prior to entering into the ticketed area of the venue). The interior space should be properly sized to accommodate lineups for patrons picking up their tickets upon arriving for the event.

House Components

Seating Bowl

The Seating Bowl has a targeted fixed-seat capacity of 5,800 seats and contains a combination general seating and enhanced or club seating. The row-to-row spacing within the seating bowl is fixed at 34 inches regardless of the seating type.

- ***General Seating***

  A total of approximately 5,020 "general admission" seats would typically be provided within a 5,800-seat venue. Such seats would have a typical width of 21 inches although 19-inch wide seats may be used in the radial corners of the bowl when required. In these instances there should be no more than three 19-inch seats in any one radial row.

  General seats will be riser-mounted (with the possible exception of those located in the top row) and have molded plastic flip-up seats and fixed molded plastic backs.

- ***Club Seating***

  In addition, some 500 Club Seat could be provided. Club seats are reserved seating areas within an arena, generally providing the spectator with greater proximity / better sight lines to the playing surface, a location straddling / near centre ice or alternatively in an end zone over-looking the visitor's net (during the first and third periods), admission into a restricted access lounge, in-seat food and beverage service and a higher quality seat. Club seats will generally have a typical width of 22 inches and will be riser-mounted with flip-up seats and fixed backs. Club seats will also have padded backs and seats, and include cup holders.

- ***Private Suites***

  Space for a total of 24 Private Suites (counting 240 seats) are estimated to be required although the actual number built will depend on the pre-marketing results. Suites generally are distributed on either (a) one side, (b) two sides, or (c) along one side and at the end of the seating bowl, depending on the number created. The suites will have three options in terms of size:

  - smaller suites with two dedicated rows in front with four seats per row;
  - regular suites with two dedicated rows in front with five seats per row; and
  - larger suites with two dedicated rows in front with six seats per row.

  The exact combination of suites will be determined during the pre-marketing and eventually confirmed during the actual leasing.

  Private suites seating will be upholstered backs and flip-up seating (theatre style). The two seats in the upper row closest to the aisle will be ganged for easy removal should a wheelchair space be required.

  Private suites will also have a counter that can be set to either a typical bar counter height of 42 inches or a wheelchair height of 30 inches. Three (for smaller suites) or four bar stools are generally provided with the bar counter.

- ***Loge Boxes***

  Loge boxes are generally "semi private suites" that provide in-seat service, exclusive access to a "Premium Lounge" during events and in some instances parking passes. A total of 10 Loge Boxes (providing 40 seats) are assumed to be provided, each box containing a front counter, four bar stools, and an optional small back counter with under-counter amenities.

- ***Event Floor / Field of Play***

  The Event Floor or Field of Play is generally that area contained within the rink boards. Most often this is in the format of an ice hockey rink but it can also be used for other indoor sports as well as concerts, trade shows and other revenue-generating events. The Event Floor / Field of Play should be enclosed by a highly flexible and adaptive rink board system that allows for easy removal of the glass or polycarbonate glazing panels.

  With the glazing in place, hockey and other complimentary sports such as indoor soccer and lacrosse can take place. With the glazing removed but the lower boards still in place, the floor could be used for a number of diverse events including:

  - concerts
  - basketball
  - trade and consumer shows
  - Broadway shows
  - banquets
  - curling events
  - public / religious assemblies
  - pow wows
  - conventions / conferences
  - graduation ceremonies
  - figure skating
  - motocross
  - monster trucks
  - circuses

  The Event Floor can be expanded with the use of easily removable rink boards and retractable seating. However for a spectator facility of some 5,800 seats, the number of retractable seats surrounding the playing surface should generally not exceed five to six rows. The effort of removing the rink boards and storing them elsewhere in the building may not be worth the effort since the space gained is partially offset by the amount of BOH storage space required. In addition, retractable seating can pose a maintenance issue. The decision to provide retractable seating should be based on the need as indicated by the proposed event calendar and in particular, the number of trade and consumer shows.

  Flooring inserts will be required and will generally be coordinated with the facility operator or an operations consultant. Insert design should accommodate circuses, gymnastic events and other programs that could form part of the facility event calendar.

- ***Media Booth***

  Technically this space is part of the BOH but because of its placement within the House, it is included in this section. A media booth will need to be open on the ice side and elevated above any seating so as not to have obstructed views of the ice surface. The media booth may be at centre ice or off-centre and should have a continuous counter length of approximately 60 feet and be secured before and after games and events.

Back-of-House Components

Home Team Dressing Room

The Home Team dressing room area will generally include the following:

- ***Entry Lounge*** with a combination of a sitting / conversational area and 24 street-lockers. This area would comprise the players' first point of entry to their dressing room area.
- ***Dressing Room*** with professional-style change lockers / benches with 20 32-inch units for players and two 42-ince units for goalies. The change units should be arranged along three sides of the change room with the fourth side having a white board, video monitor and other equipment required by the coach.
- ***Washroom*** with a minimum of four urinals, one regular water closet, one water closet for the disabled, and four sinks.
- ***Showers*** capable of accommodating up to eight individuals.

- ***Trainer Room*** with an open space for two massage tables and two therapy baths, and an enclosed Trainer Office.
- ***Coaches' Area*** including an office for the Head Coach and a large shared office for assistants. The shared office should be able to accommodate three work stations. The Coaches' Area will generally not have direct access to the Dressing Room to allow some level of privacy particularly during practices.
- ***Workshop*** where players and staff can work on equipment.
- ***Laundry Room*** to allow for the cleaning of team uniforms.
- ***Secure Storage*** adequately sized and ventilated for uniforms and equipment.

Ideally the Home Team dressing room and secure storage area will be located near an exterior door to allow for bus access.

Home Team Dressing Room – Optional Items

Additional items that can be included as part of the Home Team dressing room include:

- an ***Expanded Washroom***, which may include a steam room, sauna and large therapy pool;
- a ***Fitness Area***, including exercise equipment (include stationary bicycles, treadmills, free weights, etc.);
- a ***Media / Interview Room***, a room with a low stage at one end can capable of accommodating approximately 30 people.

Community Dressing Rooms

A total of four Community Dressing Rooms are generally provided. While the ideal number of dressing rooms for a community arena is 6, a spectator venue is event-driven rather than program-driven and the opportunity for a substantial number of figure skating and youth hockey games is limited.

All dressing rooms would be wheelchair accessible and have:

- bench seating for 24 players;
- interconnecting doors between pairs of dressing rooms;
- one handicap water closet, one urinal and one accessible lavatory; and
- showers with two regular shower heads and a stall equipped with both a regular head and an outlet for a demountable adjustable shower head.

Officials/Multi-Purpose Dressing Rooms

A dressing room is generally provided to accommodate officials for games as well as acting as a smaller change room for special events. The dressing room should have one urinal, one wheelchair water closet, two sinks, and two shower cubicles with change area.

Multi-Purpose Meeting Room / Green Room

A multi-purpose meeting room will is generally provided for special events and as a support or amenity area for performers and event promoters.

Kitchen / Commissary Storage

A commercial kitchen is typically included to accommodate banqueting (although in larger events, meals could be catered), conferences, suites catering, and specialty food vending (i.e., portable kiosks). A commissary storage area should be located either directly adjacent to, or in close proximity to both the kitchen and the BOH loading area.

Control Centre

The control centre is an area located at the main BOH point of entry so building operations staff can oversee all traffic / individuals entering the building. The control centre should have space for two offices, an open work area with space for four workstations, a first aid room, and a secure holding room.

Ice Resurfacing Room / Workshop

The ice resurfacing room (Zamboni room) should be located in the BOH rink to facilitate easy entry onto the rink surface. The room should have an ice-melt pit and the line of travel between the pit and the ice surface should be as straight as possible. The line of travel will ideally not conflict with the travel of either spectators or players during an event.

A workshop should also be included and located directly adjacent to the ice resurfacing room.

Marshalling / Open Storage

A large area between the BOH rink board entry and the building loading area is required both for the movement of traffic and the non-secure storage of fixtures and equipment. This area should be sized to sufficiently accommodate the following:

- ice covering
- rink board storage
- 1,500 folding seats
- Portable seating units
- a portable 40-feet by 60-foot stage
- rink board glass storage
- 50 circular folding tables
- portable chair units
- modular basketball floor
- basketball hoop storage
- show draperies

Movement of items from the open storage to the ice surface / rink floor should be straight-forward and allow for chair set-up by facility staff while a concert is setting up in the end-stage configuration.

Secure Storage

In addition to the open storage there should be a secure storage area for smaller pieces of equipment.

Mechanical Rooms

There are a number of service rooms that should be located in the BOH area. These include:

- ***Refrigeration Room*** with direct access to the exterior. This room should be located close to the point where the header trench connects with the refrigerated ice surface.
- ***Main Mechanical Room*** also with direct access to the exterior. The requirement for major additional rooftop units for the main seating bowl will be determined by the specific mechanical design.
- ***Main Electrical Room*** also with direct access to the exterior. There will be a series of smaller electrical rooms distributed at the four "corners" of the ice surface to be used for trade show cabling.

Back-of-House Vehicle Entry

The BOH vehicle entry will ideally need to accommodate two sloped bays for trucks backing up to the building. Generally, there will be no loading docks and trucks will be required to back into insulated bumpers on all four sides of the openings. In addition to the two loading bays, there will be a need for vehicle entry and truck access onto the event floor. The path from this door to the ice surface / event floor will require a clear-height of approximately 14 feet along the complete travel path.

Building Technical / Performance Commentary

A multipurpose SEC is a complex building that needs to respond to a broad range of uses and programs. While mid-size SECs are almost always associated with hockey, the most challenging design aspects of these facilities relate to the other activities that can occur within the building and how to quickly the building can convert from one configuration to another. The planning and design of a Sports and Entertainment Centre has a number of objectives but three are fundamental:

- Fitting into and enhancing the existing physical context, whether within a downtown or greenfield location;
- Taking advantage of the existing and potential market context and responding to it with a highly flexible and adaptive event-driven facility to maximize revenues; and
- Providing an operationally efficient building with the goal of minimizing energy and staffing costs.

Operations

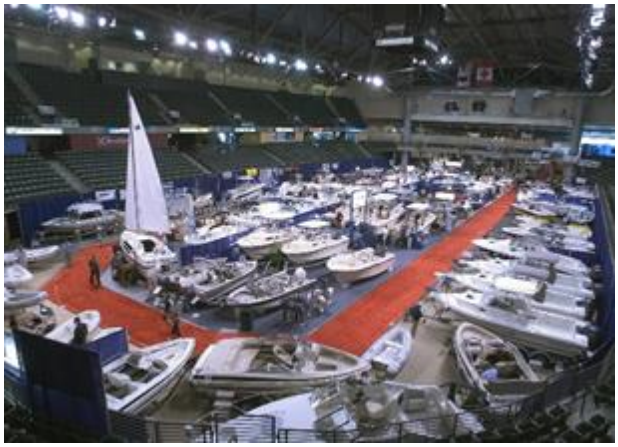
The effective operation of an SEC will require:

- Easy and direct universal access to all House and FOH components by the ticket holder regardless of the event.
- Controlled separation between the FOH, House and BOH areas. The audience should not be in a position to directly interact with performers, athletes, or machinery associated with an event unless that interaction is part of the event and controlled by either the facility or the event team.
- High level of flexibility in terms of venue transformation / re-configuration. One of the main goals in the design of an SEC is to provide the operator with the greatest flexibility and opportunity to maximize the "event calendar". Fundamental to that flexibility is the ability to quickly change from one event to another. As an example, an evening hockey game should be able to be followed the following evening by either a concert or dirt track event.
- An open-type roof structure capable of accommodating show heights and load requirements. The clear height from the event floor to the underside of structure over the ice rink should be a minimum of 45 feet, with 50 feet being ideal. Speaker / lighting loads are often in the 50,000 to 75,000 pound range and these need to be easily and quickly suspended from the underside of the roof structure. A rigging grid should also be provided especially over the location of the stage in end-stage configuration. The underside of the rigging grid should be at least 44 feet above the event level floor.

Figure 45
Illustrative Example of a Roof Structure Accommodating Show Heights and Load Requirements

- Access to the structure through catwalks for show setup, spotlight locations, lighting adjustments, and general servicing of both "sports" and building lighting.
- Event floor lighting to allow for various levels of economic operation (maintenance only, public programs, events). For events, lighting should be designed for television broadcasting and have the capacity for instant on / off. To the greatest extent possible all lighting should be accessible and serviceable from the catwalk system.
- Appropriate power distribution throughout the building. Critical areas of power concentration include BOH for concerts and end-stage events (this would comprise the largest single power source), the bowl corners (used for even distribution of power for trade shows and other floor type events), catwalk level (follow spots and special lighting), and shore power (easily accessed for use by show-oriented vehicles including television broadcasting support).
- The main air handling system for the spectator area must be designed to minimize ambient noise. Major ducts should be appropriately insulated acoustically, and the location of main mechanical supply units should be placed so as not to create either noise or vibration within the bowl.

Figure 46
Illustrative Example of a Flat Floor Event



- A separate exhaust system is required for smoke removal associated with pyrotechnics, vehicle exhaust (for example, during motocross events) and air-borne dirt (for example, during motocross events, rodeos, circuses, etc.). The exhaust system may be part of the smoke evacuation system designed by the fire protection / code consultant.
- Maximizing energy efficiency should be targeted with the use of high efficiency refrigeration plants, boilers, chillers, pumps and fans, and highly flexible control systems that allow for easy monitoring and optimum efficiency adjustments.

Building Design

Universal Accessibility

All aspects of the design should accommodate patrons with disabilities and do so in such a way that they are not marginalized or treated differently. Access to all parts of the publically accessible facility (which may vary from event to event) should allow those with disabilities to take the same route as their able-bodied companions. In this regard:

- Where stairs are required to either enter the building, access a concourse or access other levels of the building, elevators should be prominently located close to the public stair system;
- All concessions should be designed to accommodate wheelchair patrons at all points of sale. This should also apply to temporary points of sale and associated fixtures (service counters, etc.);
- All washrooms should have stalls and fixtures for patrons with disabilities. Design should accommodate young family use and not be an inhibition to the LBGTQ community; and
- Wheelchair seating should be as per the code in terms of numbers required. Wheelchair spaces should assume groupings of wheelchairs and not provide a single wheelchair space flanked by fixed seating units. Wheelchair spaces should be designed so that when a person directly in front of the wheelchair stands up the wheelchair patron behind can still see the field of play.

Building Envelope

The building envelope including exterior walls, roofing and glazing should be designed as a high-performance building skin. Materials that are accessible by the general public must be highly robust. Brick, masonry and concrete (poured in place, precast, or tilt-up) in addition to glass (in highly visible areas) are typically used for the lower eight to ten feet of event facilities.

Interior Materials

Architects will have a preferred palette of materials for use within the facility. Due to the potential for both vandalism and premature wear, the following is recommended.

- All walls in the BOH area should be of concrete block in construction unless concrete alternatives are available (poured in place, tilt-up, precast). In dressing rooms where tile is used as a wall finish, it should be applied to a masonry or concrete back-up wall.
- Generally walls in the FOH and House should be either concrete block or a feature material of equivalent durability. Private suites and offices can be of drywall construction as long as these spaces are in a secure area.
- While fire proofing spray may be a design solution in terms of building code requirements, no spray should be within reach of patrons and ideally should be should be hidden or masked.

Mechanical Systems

The main air handling system for the spectator area must be designed to minimize ambient noise. Major ducts should be appropriately insulated acoustically, and the location of main mechanical supply units should be placed so as not to create either noise or vibration within the bowl.

Maximizing energy efficiency should be targeted with the use of high efficiency refrigeration plants, boilers, chillers, pumps and fans, and highly flexible control systems that allow for easy monitoring and optimum efficiency adjustments.

7. Location Criteria

The development of a new SEC in Greater Sudbury has stimulated significant community discussion. The existing SCA was built in 1951 with a fixed-seating capacity of over 4,470. As with similar facilities built in Northern Ontario at the time, including the 4,700-seat Fort William Gardens (1951) and the 4,900-seat Sault Memorial Gardens (1949), the Sudbury Community Arena was designed and built as a hockey venue. These arenas would frequently accommodate other popular events from time to time, including bonspiels, circuses, concerts, public gatherings / ceremonies, as well as trade and consumer shows while at the same time hosting occasional community recreation and public skating programs.

More recently, discussion surrounding the replacement of the Sudbury Community Arena has intensified, and Greater Sudbury City Council has endorsed a new SEC as one of its "priority projects". Generally, there has been a recognition that the SCA has reached or perhaps gone beyond its useful life as a functioning sports and entertainment venue, and the cost of operating the aging infrastructure within the SCA is escalating while the opportunity to generate enhanced revenues is lessening. Additionally, there is a perception that the Greater Sudbury market is losing its ability to both maintain existing events and attract new ones because of the condition of the SCA and its lack of modern features and amenities.

The situation in Greater Sudbury is similar to that which has been experienced in other mid-size Canadian cities who are / have been looking to:

- enhance their attractiveness as a destination for regional, national and international events;
- improve the overall quality of life and the entertainment aspect that goes with that;
- increase the revenue-generating value of community facilities in general and spectator venues specifically; and
- leverage the construction of a new sports and entertainment venue as stimulant for additional strategic development.

The decision to replace an existing spectator facility with new SEC is a difficult one and communities going through this process often find that even the most efficient processes with strong community support can take significant time to realize a new facility. Key issues that dominate the discussion both at a governmental and community level include:

- ***What is the right size facility?*** There is typically a tendency to advocate for a large seating capacity for a number of reasons:
  - the region is growing and what may be right today could be undersize in ten to 20 years;
  - a large capacity will comply with critical event seating thresholds and attract more events; and
  - a large capacity can dominate the market and outperform competing venues.
- ***Is the construction of a new facility affordable?*** Construction costs for new SECs has tended to escalate in part because this building type has evolved to provide a broader range of experiences and revenue-generating opportunities:
  - they are increasingly designed to offer similar types of experiences as their larger professional counterparts with private suites, club seating, lounge areas, greater food and beverage choices;
  - there is now a requirement to include a broader electronic / entertainment experience with animated scoreboards, ribbon screens, pyrotechnics, and projection capabilities;
  - traveling events have more demanding BOH requirements both within the building (event hosting) and outside the building (event broadcasting); and
  - life safety and security / control requirements have resulted in a more sophisticated and complex design solution.

- ***Where is the most appropriate location for a new SEC?*** The discussion on site selection usually involves a broad range of considerations and passionate opinions on the "best location". Considerations typically include:
  - *Build a new facility where there is appropriate parking*. One of the key elements that must be included in any location decision is access to parking. Remote or suburban locations tend to have adequate land for parking but also tend to have only one major road leading to the site. As a result, while parking may be easily accommodated, there can be significant issues in terms of loading and especially exiting the parking area after an event (a common issue raised in regard to the WFCU Centre in Windsor).
  - *Build a new facility as part of a developmental stimulus*. This approach can stimulate or generate development in a new emerging area as was done in Medicine Hat (Canalta Centre), or as part of an urban renewal initiative as was done in London (with Budweiser Gardens).
  - *Build a new facility where it will have the greatest economic impact*. The development of a new publically funded SEC is significant and could generate both short and long-term economic impact. Depending on the number of events secured in the new facility, the area surrounding the venue could see an increase in activity (regardless of whether the site is an urban or suburban one).
  - *Build a new facility where there is the greatest opportunity for both public and private sector benefit*. A new SEC will bring together both the public and private sectors. While these projects are typically owned by the public sector, the operation of the facility is sometimes contracted to a national or North American company specializing in venue management and connected to the entertainment industry. Similarly the sports franchise is privately owned and a key tenant in the facility. The development of a new SEC in Greater Sudbury may have the ability to attract private-sector investment into the funding of the project.

Additional points of consideration and arguments put forth include:

- build the facility downtown (part of the rationale for why the City of Guelph elected to build the Sleeman Centre in its downtown versus on a developer-provided parcel of land in a suburban location); and
- build the facility where land is cheapest (part of the rationale for why the City of Medicine Hat built the Canalta Centre and the City of Barrie elected to build the Molson Centre in a suburban location).

Because of the strong opinions on where an SEC should be located, the selection of a preferred site should be done through a process that is visible, transparent, responsible and meaningful. More than the actual design of a facility, site evaluation and selection will be scrutinized by the community-at-large. When ultimately selecting a location, it is important that the community feel comfortable that the criteria used to evaluate and ultimately select a location are relevant, appropriately weighted and that the process is transparent.

To help achieve this, a Site Evaluation Matrix is generally prepared and presented to the community. Typically a Site Evaluation Matrix would take into account the following:

- Identification of potential sites based on their physical dimensions and size (is the site physically large enough to accommodate an SEC);
- A site condition review for each proposed site, including a high-level environmental and geotechnical condition assessment and assessment of the need and availability of infrastructure required to adequately service the proposed SEC (can you effectively build on that site and at what cost);
- Schematic project costs based on the proposed conceptual program of area requirements recognizing that different sites may require different area requirements and building configurations (will it cost more or less to build the building on a site compared to others);
- A comparative economic impact assessment for each proposed site, including the identification of potential opportunities for the development and / or redevelopment of lands in proximity to the site (will a particular site have the ability to produce greater spin off benefits compared to others);

- Commentary on traffic and parking requirements and how they impact each site. In this regard, a detailed and professionally prepared traffic and parking study for each proposed site including an estimation of parking requirements will be needed (does sufficient parking exist in the area surrounding the site and what, if any, street and vehicular access improvements are required); and
- The Site Evaluation Matrix should reflect the objectives of the City (and their respective degrees of importance) so that there is a direct and transparent link with the overall evaluation process.

The selection of a preferred site for the new SEC will have long term implications and the selection of a site will need to provide Council with a level of confidence in terms of moving forward. The process should reflect community values, a recognition of what is in the best financial interests of the City, and recognize the level of investment, both from a construction and operating perspective that the project and the various sites present.

The following criteria are recommended for use in identifying, evaluating and selecting a preferred location for the SEC:

- A first criteria is ***Site Dimension***. Depending on the configuration of the SEC, the facility will generally require a site with the following dimensions:
  - For a top-fed concourse design (i.e., where spectators enter the arena onto a concourse and proceed to walk down to their seats upon entering the arena bowl) in an urban location, a site in the range of 340 feet wide by 380 feet in length (130,000 square feet; roughly 3.0 acres) is generally required. This area does not provide for an outdoor area for vehicle storage and assumes that the building will be surrounded on all sides by city streets. The dimensions assume that private suites would be located on the concourse level; if however, suites were to be suspended from the roof structure (and thereby reducing the width of the concourse), the width could be decreased to 280 feet and the area reduced to 280 feet by 380 feet (110,000 square feet; 2.5 acres)

    For a top-fed design in a suburban or greenfield location, the site area needs to be increased for BOH on-site vehicle circulation / storage as well as a large front door gathering area. As a result the size of the site required would be in the range of 340 feet by 500 feet (170,000 square feet or 3.9 acres) where the private suites are located on the concourse, and 280 feet by 500 feet (140,000 square feet or 3.2 acres) where the suites are suspended from the structure. The additional site area is almost exclusively for the BOH vehicle movement.
  - For a bottom-fed design (i.e., where spectators enter the arena bowl at ice level and walk up to their seats), the recommended site area is 280 feet by 530 feet (150,000 or 3.45 acres). This area does not provide for an outdoor area for vehicle storage and assumes that the building will be surrounded on all sides by city streets.

    In a suburban or greenfield site, the recommended site area is 330 feet by 530 feet (175,000 square feet or 4.0 acres), as the total size area needs to be increased for BOH on-site vehicle circulation / storage as well as a large front door gathering area.
  - For an intermediate concourse design (i.e., where spectators enter the arena bowl mid-way and either walk up or down to their seats), the recommended site area is 280 feet by 380 feet (110,000 or 2.5 acres). This area does not provide for an outdoor area for vehicle storage and assumes that the building will be surrounded on all sides by city streets.

    In a suburban or greenfield site, the recommended site area is 280 feet by 500 feet (140,000 square feet or 3.2 acres), as the total size area needs to be increased for BOH on-site vehicle circulation / storage as well as a large front door gathering area.
- The second location criteria deals with ***Vision***; is the development of an SEC on a particular site consistent with the overall long-term vision of Greater Sudbury and its pattern of strategic growth? Any site being considered for the SEC should be considered within the larger parameters of long term strategic community benefit rather than as an appropriately sized property for a specific building.

- A third location criteria is ***Complimentary Benefits***; does the development of the SEC on a site enhance the neighbouring area or context? The question applies equally to a downtown or suburban site and measures the extent to which there is a synergistic opportunity for enhanced benefits. The extent to which those benefits accrue to Greater Sudbury is key to this question. For a downtown site those benefits could include a more vibrant and renewed urban core, while for a suburban site the benefits could be fast-tracking the development of an area that might be part of a longer-term vision
- A fourth criteria is ***Ease of Development***; are there issues or costs associated with the development of the SEC on a particular site? For example, are there environmental or geotechnical issues that impact the development process and / or add to the cost of building the SEC? An SEC has a very large footprint and the building will require an extremely flat floor built on a solid under-base. A particular site could have a significant cost impact on the project and the development of the overall site (for example, is blasting or piling required for the development of the SEC on a particular site and would either of these have a direct impact in terms of the freedom of developing the most appropriate design).

  In addition to geotechnical and environmental issues, other considerations needed to be considered include, for example, are there issues with a particular site from an infrastructure / services availability perspective (i.e., does sufficient electrical, water, sewer, storm water, etc. services exist at / to the site, or must these be brought to the site / replaced and at what cost).
- A fifth criteria is ***Access***; is the site under consideration easily accessible from a vehicular, pedestrian, and transit (both current and future) perspective? Are improvements / modifications required to support the site? Is it realistic to implement episodic transit specific to major events? Are improvements to the existing road network required to facilitate vehicular access (for example, road improvements / widenings, new signalization, etc.).
- A sixth criteria relates to ***Parking***; how much parking is required for the SEC and how many parking spaces currently exist in the vicinity of the site to support the SEC? Is there sufficient parking in the area that can be reasonably used to accommodate demands? Can parking be added whether on or off-site? If additional parking is required, would it be well-used on a daily basis for other purposes. Would the creation of additional parking be a prudent investment?
- A seventh criteria is ***Cost***; does the City already own the site or would the City need to acquire the property? Are there issues associated with the development of the site that result in higher project or construction costs? Can some of these costs be shared (for example with adjoining land owners)? These question apply not only to the site under consideration, but also to costs beyond the boundaries or perimeter of the site (some of which are dealt with in Criteria Four - Ease of Development). It should be noted that such additional development costs should not necessarily be seen as a liability if they help facilitate future investment and development.
- An eighth criteria is ***Economic Impact***; does the development of a particular site have an enhanced economic impact for the surrounding neighbourhood, for Greater Sudbury and / or the broader region? Would the development of a particular site maximize the ability of the SEC to bring positive economic impact to the area? Is the positive impact spread over a narrow spectrum of beneficiaries or a broad one?
- A ninth criteria is ***City Building***; can the siting of the SEC on a particular site enhance the process of "city-building" by contributing to economic growth, quality of life, citizen satisfaction and community pride?

Figure 47, following, provides a draft Site Evaluation Matrix for use in comparing and evaluating potential sites. Included in this Matrix are indicative weights for use in valuing individual criteria and sub-criteria. Prior to embarking on any locational assessment, it is recommended that City agree to the individual weights assigned to each respective criteria and sub-criteria.

Figure 47
Draft Site Evaluation Matrix

Draft Site Evaluation Matrix

1.	**Vision**	**15%**
a	Will the development of a SEC on this site be seen by the residents as appropriate?	20%
b	Is a SEC one of the highest and best uses of this site?	20%
c	Does a SEC on this site reflect the City's vision and City's Official Plan?	20%
d	Will this development stimulate future growth/expansion consistent with the City's vision?	20%
e	Does the development of this site strike an appropriate balance between public and private sector benefits both short and long term?	20%
2.	**Complimentary Benefits**	**15%**
a	Will the surrounding neighbourhood/area be positively impacted by this development?	35%
b	Can this site support the development/expansion of an event/entertainment zone?	30%
c	Will this project help develop or advance existing infrastructure expansion plans?	20%
d	Are there additional benefits not necessarily associated with entertainment/event activity?	15%
3.	**Ease of Development**	**10%**
a	Is the site well-serviced and can existing servicing handled the added requirements of a SEC?	35%
b	Are there issues that would prolong the development or approval process?	20%
c	Are there environmental issues or concerns associated with the site?	15%
d	Are there significant geotechnical or topographic issues with the site specifically for a SEC?	15%
e	Would development generate local area reaction/controversy?	15%
4.	**Access**	**10%**
a	Does the site have easy vehicular access and egress for event setup?	20%
b	Does the site have appropriate vehicular access and egress for spectators at events?	20%
c	Does transit currently service the site and/or would service be provided?	20%
d	Can transit reduce car dependent travel to this site?	20%
e	Is this site accessible by patrons walking to the event (hotel, restaurants, etc.)?	20%
5.	**Parking**	**10%**
a	Is there the potential for adequate parking on or near the site?	25%
b	Is there existing parking in the area that can be used for events?	25%
c	Does the event centre parking also effectively support other uses during non-event days?	25%
d	Is there appropriate space for event loading/busing?	25%
6.	**Cost Impact**	**10%**
a	Is there a cost premium for developing the spectator component on this site?	35%
b	Is there a cost premium for overall site development?	25%
c	Are there funding opportunities associated with the development of this site?	20%
d	Are there partnering opportunities associated with the development of this site?	20%
7.	**Economic Impact**	**15%**
a	Does the development of this site have a positive economic impact on the surrounding area?	35%
b	Would this site become an entertainment/event destination?	35%
c	Is this site positively impacted by the existing surrounding development?	30%
8.	**City-building**	**15%**
a	Does the development on this site enhance the profile of Greater Sudbury as a destination?	40%
b	Would the development of this site enhance the quality of life for the community?	30%
c	Would the development as envisioned foster pride by the residents of Greater Sudbury?	30%
	TOTAL SCORE	**100%**

8. Assessment of Prospective Building Operations

Operating revenue assumptions

In assessing how a new 5,800-seat SEC could potentially operate from a financial perspective, PwC developed a proforma cash flow model to depict the operations of this Facility.

In deriving a proforma cash flow model, PwC benchmarked actual operations of comparable facilities, and identified a range of estimates for facility use, revenue and operating expenditures at the lower end of an identified revenue range / upper end of an identified expense range. As such, projected facility operations are considered to be at the lower end of a supportable range of revenue and operating expenses estimates, operating results which could be bettered by effective management, marketing and facility positioning.

Calendar of events

A prospective calendar of events for the Facility, for an average year of Facility operations is summarized in Figure 48, following. Per discussions with the event promotion industry and facilities in comparable markets, some 78 events are assumed. This event profile is comprised of the following events:

- 36 OHL games (2 exhibition games and 34 regular season home games);
- 9 concerts;
- 5 family shows;
- 4 other sporting events;
- 5 other entertainment events; and
- three three-day trade and consumer shows and ten other rentals.

Figure 48
Prospective Calendar of Events

User / Tenant	Annual Number of Event Days	Average Attendance	Annual Attendance	% of Capacity
Sudbury Wolves	36	4,350	153,900	73.7%
Concerts	9	4,500	40,500	77.6%
Family Shows	5	3,500	17,500	60.3%
Other Sports	4	4,500	18,000	77.6%
Other Entertainment	5	3,500	17,500	60.3%
Trade & Consumer Shows / Day Rentals	19	n/a	n/a	n/a
TOTALS	**78**		**247,400**	**42.3%**

Source: PwC

In addition, it is also assumed that the SEC would be available for use by minor and youth organizations on a regular basis throughout the winter season (approximately September 1 through April 30), including minor hockey (boys and girls), adult hockey, etc. It is also assumed that the ice would be removed between May 1 and July 31, during which time the SEC could be utilized for a broad range of floor events. During August, it is presumed that the ice would be reinstalled and that the SEC would be used for various hockey camps, training camps and other ice uses.

In projecting this calendar of events, consideration was given to comments forwarded to PwC by members of the concert and event promotion including, including promoters, agents, production officials and management with the Sudbury Wolves and staff at the SCA. Among the comments, opinions and perceptions forwarded by this group were the following:

- The configuration and amenities contained in the existing SCA serve as an impediment to attracting events and attendees;
- While centring a large trade area, weather and travel issues will dictate that the majority of event attendees come from the local area (apart of marquee acts);
- A number of promoters and agents cautioned that despite the presence of a new venue, operating as a pure rental venue (i.e., not taking show risk of any sort) could hinder its ability to secure acts. Despite this, it was still felt that a venue in the range of 5,800 seats (over 6,000 in in concert setting) would be supportive in helping attract a broad range of events, including concerts (rock artists, country artists, etc.), other sporting / entertainment events (whether curling, figure skating, monster trucks / motor cross, combative sporting events, other sports) and a range of family shows.

The foregoing alludes to potential market support for a new 5,800-seat venue. However, while it may be possible for a new venue to capture an increased number of concerts and other spectator and entertainment events, the ability to do so on a regular basis will continue to be impacted that availability of touring acts, the value of the Canadian dollar (for American acts) and the perceptions and ability of the local market to support events.

Sudbury Wolves

As noted, it is assumed that the Sudbury Wolves will play a total of 36 home games per season (two exhibition and 34 regular season games) and attract an average of 4,350 fans per game (3,000 for exhibition games). It has been further assumed that the team would pay a percentage of their gross ticket revenue for the right to utilize the facility. In addition, the Wolves would be entitled to receive a share of the net revenue generated from concessions (including private suite catering) during its home games, as well as a proportion of advertising revenues (excluding revenue from building sponsorships), similar to arrangements made with other CHL teams. Assuming allowances for complementary tickets and average realizable ticket prices, it is estimated that the Wolves would pay some $140,000 per year in rent per year.

In addition, it is also assumed that the Sudbury Wolves would pay a fixed fee for reimbursable game-day expenses of $4,000 per game (an additional $144,000 annually).

Other events

Similar to other mid-sized venues in Canada, it is envisioned that the venue would be successful in securing ticketed entertainment events, including concert dates, family shows, other entertainment, etc. per year. As noted above, it is assumed that the venue could annually attract some nine concerts per year, an amount that is comparable with what other venues have secured, and a number which is believed to be a sustainable number of bookings per year (some years may be higher, others lower).

Similar to concerts, it is presumed that the venue would be successful in securing a number of family shows, including circuses, “Dora”, the “Wiggles”, “Lord of the Dance”, “So You Think You Can Dance”, “Disney Playhouse”, Cirque du Soleil, etc. It is assumed that five separately ticketed events of this nature could be held annually (with some bookings producing multiple shows).

It has similarly been assumed that the venue could be successful in securing a number of non-Sudbury Wolves sporting events, including NHL exhibition games, “OHL Top Prospects Games”, exhibition games by Canada’s various National hockey teams (whether men’s, women’s, etc.), curling events (provincial championships, Scotties Tournament of Hearts or professional bonspiels), exhibition basketball (including Harlem Globetrotters), figure skating, lacrosse, etc. We have assumed that four events of this nature could be held annually, although in some years the number may be significantly higher (as has happened in other markets when major curling bonspiels and skating shows have been booked into a facility).

It has also been assumed that the venue would be successful in securing a number of other entertainment events, including "WWE Wrestling", Professional Bull Riding, "SuperDogs", monster trucks, motocross, rodeos, etc. We have assumed that five of these events could be held annually.

Lastly, it has been assumed that a new SEC would be made available for multi-day rentals, including rentals for trade and consumer shows, for community events, religious and cultural gatherings, for corporate fundraisers, film shoots, etc. We have assumed that three, three-day trade or consumer shows that could be brought into the facility, and that there would be ten single day events programmed into the arena (including university / college / high school commencement ceremonies, job fairs, religious gatherings, corporate events, etc).

Event summary

Figure 49, following, summarizes the projected event calendar for the proposed SEC against select other mid-size arena venues.

Figure 49
Comparison of the Calendar of Events against Comparable Facilities

	Essar Centre		Rogers K-Rock Centre		GM Centre, Oshawa		Meridian Centre 2016	Greater Sudbury SEC
	2012	2013	2015	2016	2015	2016		
Lead Tenant	41	39	n/a	n/a	n/a	n/a	+/- 40	**36**
Concerts	17	7	n/a	n/a	n/a	n/a	5	**9**
Family Shows	0	0	n/a	n/a	n/a	n/a	2	**5**
Other Sports	31	35	n/a	n/a	n/a	n/a	+/- 50	**4**
Other Entertainment	20	16	n/a	n/a	n/a	n/a	n/a	**5**
Trade & Consumer Shows	25	12	n/a	n/a	n/a	n/a	n/a	**19**
Total	**134**	**109**	**96**	**108**	**97**	**86**	**+/- 95**	**78**

Notes: Most recent information from the City of Sault Ste. Marie is 2013. "Other" includes hockey tournaments. "Other Sports" include Soo Thunderbird home games. Excluding these users, the number of events secured by the Essar Centre was 89 in 2012 and 60 in 2013.

For Meridian Centre, "Other Sports" includes assumptions for NBLC Niagara River Lions home games (basketball), IIHF Women's U18 Hockey Championships, Brock University Basketball and Hockey games, Skate Niagara competition, NHL preseason game

Source: City of Greater Sudbury, City of Sault Ste. Marie, City of Kingston, City of St. Catharines

Suites license revenue

It is envisioned that the venue could be outfitted with up to 21 private suites and a "group sales" suite. In addition, three "founders suites" are assumed to be included within this total and provided to facility operations, to the Arena's naming right's holder, and to the lead tenant at no cost. These suites are projected to generate substantial revenue through their yearly rental. Their annual license fee and projected take-up will be directly dependent upon the number of events that take place in the Facility.

For the purpose of this assessment, it is assumed that an annual suite license fee would approximate $17,500 per year plus the cost of season tickets. Based on industry standards, our opinion is that 80% of these suites could be leased. Based on the pricing information of comparable suites in similar type venues, it is estimated that revenue from suite licensing from could approximate $275,000 annually (after a 12.5% sales commission). By way of comparison, the Essar Centre generated $125,000 from 12 suites in 2013, while the K-Rock Centre generated an estimated $620,000 in 2016 and the GM Centre (Oshawa) generated a projected $395,000.

Loge box license revenue

As noted above, loge boxes are generally "semi private suites" that provide in-seat service, exclusive access to a "Premium Lounge" during events and in some instances parking passes. A total of 10 Loge Boxes (providing 40 seats) are assumed to be provided, each box containing a front counter, four bar stools, and an optional small back counter with under-counter amenities. Based on the pricing information from comparable facilities and facility operators, it is estimated that revenue from Loge Boxes from could approximate $55,000 annually (after a 12.5% sales commission and 80% of the boxes being licensed).

Club seat license revenue

Club seats are reserved seating areas within an arena, generally providing the spectator with greater proximity / better sight lines to the playing surface, a location straddling / near centre ice or alternatively in an end zone over-looking the visitor's net (during the first and third periods), admission into a restricted access lounge, in-seat food and beverage service and a higher quality seat. Revenues represent the fees captured to allow the purchaser to secure access to these seats to any event staged at the facility.

We have forecast a price of $500 per club seat, with this fee representing the seat license fee only, and thus exclude tickets. Based on our analysis, if 500 club seats were able to be created within the building, we have assumed 70% would be leased, generating some $155,000 annually for the Facility (net after deducting cost of sales). By way of comparison, the K-Rock Centre generated an estimated $210,000 in 2016.

Naming rights and other sponsorships

Naming rights are the right to name a piece of property, either tangible property or an event, usually granted in exchange for financial considerations. Institutions like schools, places of worship and hospitals have a tradition of granting donors the right to name facilities in exchange for such financial contributions. Securing the naming rights for arenas, stadia, theatres, and other public gathering places is seen by companies as a form of advertising and naming rights deals worth millions of dollars have been made.

Previously "branding" constituted the prime motivation for "naming" a facility (i.e., being associated with the building, the facility's tenants, etc.); increasingly, corporations are looking at the strategic value of being associated with a building / team and with a particular geographic area, and how that relationship can help further the overall corporate direction of the company, particularly with respect to growing its business. Generally, the value which an entity will attach to a venue will be dependent upon two principal factors:

- the philanthropic / sense of belonging / linkage to the local community which the naming sponsor / benefactor has to the local area, community, facility etc.; and
- the marketing / strategic value of the facility to the entity's business.

Valuing naming rights associated with the latter are relatively straightforward, and will generally be a function of the "number of eyes" and "number of ears" who see / hear the name of the entity which sponsored the facility. As such, the greater the number of times a venue is likely to be referenced, the higher the calibre of sport team(s) that plays within a building, and the larger the market those teams play within, the greater will be the value of that sponsorship. Alternatively, the former is more difficult to value, given that it plays on the emotional sensitivity and philanthropic attachment of individuals to the area.

Figure 50, following, summarizes the total and annual naming right values of various Canadian sports stadiums and arenas. It is interesting to note that the Bank of Nova Scotia, in 2014, announced its intention to rename the Halifax Metro Centre as the Scotiabank Centre. This 10-year naming rights deal is worth a reported $6.5 million over its duration ($650,000 per year), with $5.3 million of this fee being pledged towards facility upgrades (the facility opened in 1978).

Also of interest are the following:

- With the exception of the John Labatt Centre (now the Budweiser Gardens), most CHL arenas have sold naming rights for approximately $1.5 million to $2.0 million ($150,000 to $200,000 per year);
- In most instances, naming rights are paid in equal annual instalments;
- Apart from major facilities housing preeminent professional teams, most facilities in Canada generate annual proceeds from naming rights of less than $200,000 per year (with the exception of the above mentioned Scotiabank Centre and Budweiser Gardens); and
- The most recent naming rights deal was announced in August 2016, when Progressive Auto Sales agreed to rename the Sarnia Sting OHL building the Progressive Auto Sales Arena; the total value of this deal is reported $445,000 (total) over 10 years

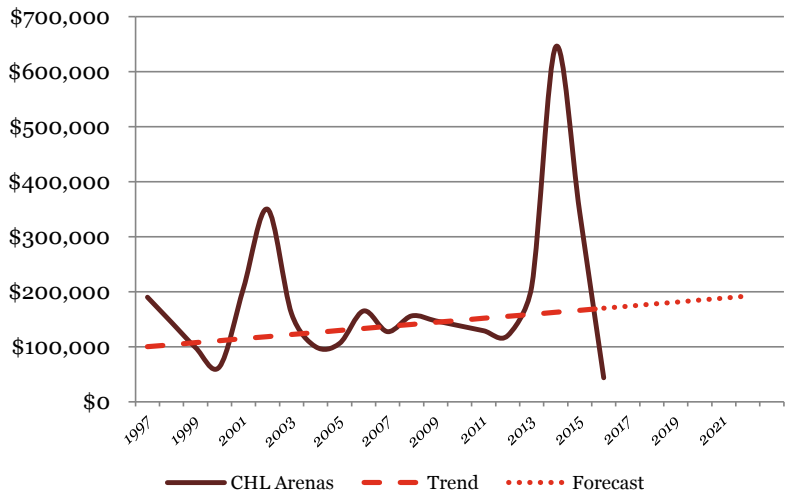
Figure 50
Value of Naming Rights at Various Canadian Hockey League Arenas and other Stadia

Building Name	City	Naming Rights Sold To	Price	Term	Average Annual Value	Tenant(s)	Expiration
Canadian Hockey League Arenas							
Scotiabank Centre	Halifax	Bank of Nova Scotia	$6,500,000	10	$650,000	Halifax Mooseheads	2024
Budweiser Gardens	London	Labatt Breweries	$6,400,000	10	$640,000	London Knights	2024
John Labatt Centre	London	Labatt Breweries	$3,500,000	10	$350,000	London Knights	2012
Meridian Centre	St. Catharines	Meridian Credit Union	$5,230,000	25	$209,200	Niagara Ice Dogs	2038
Hershey Centre	Mississauga	Hershey Food Corp	$1,900,000	10	$190,000	St. Michael's Majors	2007
K-Rock Centre	Kingston	K-Rock FM	$1,700,000	10	$170,000	Kingston Frontenacs	2017
WFCU Centre	Windsor	Windsor Family Credit Union	$1,620,000	10	$162,000	Windsor Spitfires	2018
General Motors Centre	Oshawa	General Motors of Canada	$1,650,000	10	$165,000	Oshawa Generals	2016
Credit Union Centre	Saskatoon	Saskatoon Credit Union, et. al.	$1,600,000	10	$160,000	Saskatoon Blades	2013
Essar Centre	Sault Ste. Marie	Essar Steel Algoma Inc.	$1,500,000	10	$150,000	Soo Greyhounds	2018
EnCana Centre	Dawson Creek	EnCana Corporation	$600,000	5	$120,000	n/a	2017
Interior Savings Centre	Kamloops	Interior Savings	$1,060,000	10	$106,000	Kamloops Blazers	2015
Save-on-Foods Memorial Centre	Victoria	Save-on-Foods	$1,000,000	10	$100,000	Victoria Salmon Kings	2014
Colisee Pepsi	Quebec City	PepsiCo.	$985,545	10	$98,555	Quebec Ramparts	2009
Sleeman Centre	Guelph	Sleeman Breweries	$1,100,000	13	$84,615	Guelph Storm	2020
Mile One Stadium	St. John's	n/a	$634,115	10	$63,412	former St. John's Fog Devils	2010
Progressive Auto Sales Arena	Sarnia	Progressive Autosales	$435,000	10	$43,500	Sarnia Sting	2026
Enmax Centrum	Red Deer	Enmax Corp.	n/a	6	n/a	Red Deer Rebels	2008
Urbandale Centre	Ottawa	Urbandale Construction	n/a	1	n/a	Ottawa 67's	2010
Prospera Place	Chilliwack	Prospera	n/a	10	n/a	Chilliwack Chiefs	2014
Powerade Centre	Brampton	Coca-Cola Canada	n/a	10	n/a	Brampton Battalion	2015

Source: Street & Smith's Sports Business Journal, PwC.

Figure 51, following, identifies trends in the annual value of naming rights for mid-size arena facilities since approximately 1997, and shows that, on average, current naming rights in Canada for mid-sized venues could approximate some $175,000 per year (or $1.75 million over a 10 year term).

Figure 51
Naming Rights Value Trends for Mid-Sized Canadian Arenas



Source: Street & Smith's Sports Business Journal, PwC.

Based on our review of the naming sponsorship landscape in Canada for mid-size spectator arenas and the Greater Sudbury market, we estimate that the naming rights for the venue would likely be below industry norms and potentially achieve $1.0 million for a 10-year term, and payable in equal annual instalments (i.e., $100,000), and subject to a 12.5% sales fee.

In addition, building sponsorships from beverage and pouring rights are estimated at an additional $100,000 per year (and subject to a 12.5% sales fee).

Advertising

Advertising revenue will flow from the sale of signage in the concourses, on scoreboards, fascia or other locations inside and outside the arena, as well as other sponsorships (i.e., beverage exclusivity contracts) that may be negotiated. Advertising revenue will also vary depending on the arrangements made with the arena's various tenants. We have estimated a number of streams of advertising revenue including in-arena advertising, concourse advertising, main scoreboard, and various other sponsorships.

In-stadium advertising includes both backlits and electronic positions located on balconies and other exposed walls within the arena's seating area; revenue from such advertising positions is assumed to be shared with the Sudbury Wolves on a 90:10 (i.e., 90% to the Wolves; 10% to the SEC) basis. Scoreboard advertising relates to revenue generated from various advertisements placed around the arena's scoreboard(s) and on its digital displays; revenue from such advertising positions is assumed to be shared equally with the Sudbury Wolves. Dasherboard and on-ice logos represent advertisements placed on the rink boards and on various locations within the ice surface; revenue from such positions is assumed to accrue solely to the benefit of the Sudbury Wolves (except for two dasherboard and two in-ice logos that would be reserved for facility sponsors). Finally concourse advertising relates to the various signage positions within the arena's concourses, including entrances into the seating area (including posters, back-lits and scrolling signage); such revenue is assumed to accrue to the exclusive benefit of the SEC.

In total, we have estimated advertising revenues to total some $475,000 per year, with this income subject to a "cost of sale" (equal to 12.5%) and sharing with the Sudbury Wolves (generally, advertising able to be seen by spectators while sitting in their seats accrue mostly to the benefit of the team, while advertising in other areas of the arena are shared or accrue mostly to the benefit of the arena). In total, we forecast net revenue to the Facility of some $225,000 per year. By way of comparison, the Essar Centre generated approximately $70,000 from advertising in 2013 while the Rogers K-Rock Centre generated $450,000 in 2016 (including revenue from naming rights) and the GM Centre is projected to have earned $275,000 in 2016.

Concession / Food & Beverage

Revenues from food and beverage operations, including concessions and suite catering, are expected to flow from the sale of food, beverage and other goods during events. Concession revenues are dependent upon the total number of visitors to the facility over the course of an operating year. Major facility tenants are assumed to share in this lucrative revenue source, and in this regard, we have assumed a 50:50 split of net revenues between the venue and the Sudbury Wolves during OHL games; the facility is assumed to retain 100% of net revenues for all other events.

Concession revenues are based on "per cap" spending of $5.00 for general admission, $10.00 for club seat holders, and $20.00 per person for luxury suites guests. On an overall basis, per cap spending is projected to average $6.10. All "per caps" are gross spending amounts, and compare those from other new OHL and WHL facilities which, as we understand it, range to $8.00 per person or more.

Based on comparable facilities, we have estimated a 75% cost of goods / sales ratio to account for concession operating costs (including salaries) and food and beverage purchases. Costs associated with suite hosts / hostesses are carried as part of the operating expenses of this facility.

In total, some $1.4 million in total concession sales is projected for the arena, with approximately $115,000 accruing to the benefit of the Sudbury Wolves, and $235,000 accruing as income for the SEC.

In addition to food and beverage sales, it is also assumed that the SEC would benefit from the sale of merchandise. Based on industry average per caps of $5.00 and 5% of net sale proceeds accruing the arena, some $60,000 could be generated for the facility.

Ticket Surcharge

A ticket surcharge of $2.50, added to the price of each ticket, has also been assumed. This revenue has been generated by many other comparable facilities and is generally collected to fund a capital reserve account to "preserve the long-term maintenance and improvement of the arena" and to serve an additional revenue source to help pay for facility operations. In calculating the amount of this surcharge, we have assumed that all event attendees (whether paid or having received complimentary tickets), would be assessed this levy. In total, some $575,000 is estimated to be collected.

Box Office Fees

Most facilities charge a "convenience fee" for ordering tickets. Based on comparable information, it is assumed that some $110,000 could be generated from this source.

Ice Rentals

Lastly, it is assumed that the facility would be available for use by minor and youth organizations on a periodic basis throughout the winter season (approximately September 1 through April 30), including minor hockey (boys and girls), adult recreational hockey, etc. No summer utilization has been assumed. Assuming ice utilization rates approximating 20% of available prime time hours (at $225 per hour) and 5% of available non-prime time hours (at $125 per hour), some $70,000 in total ice rental revenue could be generated.

Gross Operating Revenue

Based on the foregoing, gross operating revenue for a new 5,800-seat SEC in Greater Sudbury is estimated at some $2.610 million (Figure 52, following). At this level of projected operating revenue, the facility is projected to generate a greater amount of income than did the Essar Centre in 2016, but less revenue compared to facilities in Kingston ($2.978 million in 2016) and Oshawa ($3.777 million in 2016). It should be noted, however, that the projected operations of a new SEC in Greater Sudbury does not include gross ticket revenues as may exist in these other facilities. As such, when compared to those facilities with higher annual revenues, and taking into consideration the income profile and cost structure in Greater Sudbury compared to these markets, the projected level of revenue the Facility is estimated to generate does not appear unreasonable.

Figure 52
Projected Operating Revenue, proposed Greater Sudbury SEC

	Year 1
FACILITY REVENUES	
Sudbury Wolves	$ 282,500
Other events	403,100
Net concession revenue	233,900
Net merchandise revenue	57,500
Advertising and Sponsorships	397,300
Suites license revenue	328,100
Club seat license revenue	153,100
Ticket surcharge	574,800
Box office revenue	109,700
Ice rental revenue	69,300
Total Revenues	**$ 2,609,300**
COMPARATIVE FACILITIES	
GM Centre, Oshawa ON (2016)	$3,766,700
Rogers K-Rock Centre, Kingston ON (2016)	$2,978,400
Essar Cente, Sault Ste. Marie (2016)	$1,632,600

Source: PwC

Operating expense assumptions

Operating Expenses have been divided into the following categories for comparison with operating information from other facilities, including personnel costs, operations and maintenance, marketing, utilities, insurance, and other. Operating expense assumptions are primarily derived from operating pro-forma estimates from comparable facilities. Costs associated with a special events (including security and electrical and mechanical set-up / tear-down) are assumed to be reimbursed by the event sponsor.

Personnel costs

Personnel costs will be incurred in all aspects of Facility operations including venue management, administration, facility operations, marketing and maintenance. With the exception of certain specific event costs, which are assumed to be charged back to the facility user or allocated as part of the "Operations, Maintenance and Repairs" budget, this category is inclusive of all personnel employed by the Facility.

A total staff compliment of some 65 individuals (comprising approximately 35 FTE's) is assumed, with these individuals comprising the following positions:

- General Manager;
- Assistant General Manager;
- Administrative assistants;
- Finance Manager;
- Finance assistant;
- Marketing Coordinator;
- Marketing Assistant;
- Event Services Manager;
- Director of Operations / Lead Hand;
- Facility Maintenance Crew / Event Operations support (both full and part-time);
- Box Office staff (Manager and assistant);
- Customer Service Representatives / Booking Agents (part-time); and
- Suite Hosts / Hostesses / Guest Services personnel (part-time).

Based on the foregoing, total Facility personnel costs are estimated to be some $1.590 million per year, including benefits. This compares to costs currently incurred at the SCA ($670,000, in 2015), the Essar Centre ($835,000 in 2016) and various privately managed facilities, including the GM Centre, Rogers K-Rock Centre and Meridian Centre (who incur between $1.0 million and $1.7 million).

Utilities

Utility costs encompass all costs related to heating, electricity, gas, water / sewer, etc. These costs are primarily driven by the amount of enclosed space within the arena, facility usage, as well as the energy efficiency of the building. We believe that utility costs will represent a significant annual operating expense given the need to light the arena during events, refrigerate the building and keep the ice at an acceptable temperature, and operate the scoreboard. Also, as utility prices continue to increase, this operating expense will become more significant in future years.

Based on the comparable facility benchmarks, we have estimated utility costs to be $500,000 per year. This estimate compares to current costs at the Essar Centre ($420,000 in 2016)

Operations, maintenance and repairs

Operations, maintenance and repair costs include various materials, equipment and services needed for the daily operation and upkeep of the facility. Potential costs include supplies, equipment, plumbing and electrical services, security, etc. Event costs, including staffing, are assumed to be passed back to facility users and tenants. These costs will be primarily driven by building usage, with supplies, equipment and various service contracts required to upkeep and run the facility representing the majority of these costs.

Based on our comparable facility benchmarks, we estimate building operations and maintenance to approximate $250,000 per year.

Marketing

The projected marketing budget is assumed to cover all costs associated with attracting events to the Facility, and to secure advertising and other sources of revenue. We have allocated $75,000 to cover out-of-pocket marketing expenses including memberships, travel, advertising and promotions and other expenses related to marketing the arena and attracting events. Marketing salaries have been accounted for in the projection of Personnel Costs, above.

Insurance

Insurance costs are allocated to cover building and liability insurance. A benchmark value for insurance was not easily determinable from operating statements of comparable facilities based on the fact that some of these arenas are generally included in the insurance coverages purchased by the municipality. For the purpose of this assessment, it is assumed that additional insurance costs could approximate $100,000 per year.

Other miscellaneous expenses

The value for "Other Miscellaneous Expenses" of $175,000 was deemed reasonable through comparisons with various other arenas. This expense category is a reserve for those expenses not accounted for elsewhere, as well as those unforeseen expenses that are inevitably incurred during the facility's operations. Sample miscellaneous costs include travel, training, staff uniforms (normally required twice yearly), office expenses, telephone expenses, activity expenses, box office expenses.

Event costs

Event costs include costs associated with staging events which may not be covered under the rental agreement with the lead tenant, event promoters, or other users of the venue. For the purpose of this assessment, we have assumed a budget allocation of $200,000 per annum.

Management Fee

A number of Canadian municipalities have turned to professional "public assembly facility / venue management companies" to assist in, or take over the day-to-day management, marketing, programming and / or operation of their sports facility / arena. While the prime impetus for changing from public to private management is varied, in Ontario it would appear that the decision to retain such services has coincided with a decision to replace the municipality's aged arena with a new "sports and entertainment facility". Generally such older facilities were simply hockey arenas – they were managed as arenas (both for semi-professional and minor hockey) and occasionally were able to attract a non-hockey spectator event. However, these venues were not generally marketed as entertainment venues. When these arenas were used as a venue for staging concerts and other entertainment, their building managers generally undertook little marketing and operated the facility as a pure "rental venue".

With the decision to replace these aged facilities with newer, state-of-the-art facilities that are designed to be capable of hosting a broad range of entertainment events, some municipalities have looked at their operating structure, and at the effectiveness and capabilities of their staff to effectively market and program these facilities and elected instead to retain the services of a private facility management firm.

Among the cities in Ontario and in other parts of Canada that have elected to utilize private facility management for their mid-sized (i.e., 4,000- to 10,000-seat) arenas are:

- Victoria BC (RG Properties);
- Abbotsford BC (Global Spectrum);
- Langley BC (Ten Fleet Sports);
- Penticton BC (Global Spectrum);
- Chilliwack BC (Chilliwack Chiefs Development Group Limited Partnership);

- Kelowna BC (RG Properties);
- Dawson Creek BC (Global Spectrum);
- Medicine Hat AB (SMG);
- Windsor ON (Global Spectrum, event marketing only);
- Sarnia ON (initially managed by Lauridon Sports Management and then the Sarnia Sting; now city-run);
- London ON (Global Spectrum);
- Guelph ON (Nustadia initially, now city-run);
- St. Catharines ON (SMG);
- Hamilton ON (municipal arm's length corporation initially, now Global Spectrum);
- Mississauga ON (SMG);
- Brampton ON (Realstar Group);
- Toronto – Mattamy Athletic Centre (Global Spectrum);
- Toronto – Ricoh Coliseum (Maple Leaf Sports and Entertainment);
- Oshawa ON (Maple Leaf Sports and Entertainment initially, now Global Spectrum);
- Kingston ON (SMG); and
- Moncton (SMG).

Based on discussions with facility managers and city officials, the rationale for choosing to retain a private facility management firm (versus operating the venue publicly) includes the following:

- Gaining access to the entertainment and event promotion / agent industry. Each of the above noted municipalities constructed new facilities which offered a greater ability (compared to the building they replaced) to stage concerts and special events. Given the capital outlay which these municipalities made, coupled a perceived lack of experience, insight, knowledge and access their staff had to the entertainment industry, a strategic decision was made to retain such experience and access through a private facility management firm.
- In some instances, these projects were pursued as part of a public-private partnership process and required that respondents to their RFP process propose a comprehensive team with experience in all facets of sports and entertainment facility management. In other instances, a separate procurement process was utilized to identify and retain such a firm.
- Revenue maximization. In retaining private managers, it was felt that these private companies would be better able to negotiate more lucrative deals with promoters, sponsors, suite holders, club seat holders, other rights holders, food and beverage providers, and with the lead hockey tenant. In addition it was felt that a private entity would be able to drive higher revenues within the venue, including enhanced revenues through improved event ticket sales, higher concession sales, etc.
- Management efficiencies and cost containment. As part of a wider corporate entity that is distant from municipal politics and controls, it was felt that a private management firm would have a greater ability to implement strategies and protocols to streamline decision making (for example, in contract negotiation). In addition, experienced management firms generally have business and information systems specifically designed for the facility management industry and have a network of facilities that can benefit from such areas as bulk purchasing.
- Marketing / branding. Similar to the comments forwarded above relating to access to the entertainment / event industry, it was felt that private facility managers are able to more effectively brand and market a venue. In this manner, best practices and emerging trends gleaned from other venues managed by them are able to be quickly implemented (as opposed to potentially taking longer to reach municipal staff through their more informal information sharing networks).
- Pre-opening services and support. One of the key benefits provided by private facility managers would occur during the planning, designing, testing and commissioning of a new venue. Given that most municipal staff may never have been involved in such a process previously, the private management firm would be able to draw upon their experiences from opening other facilities.

- Separation of "municipal responsibility and influence". Because private facility managers operate a municipality's venue pursuant to a management contract which specifically outlines the terms and conditions of how the venue is to be operated, with annual operating budgets submitted for approval, the venue itself is able to be operated outside the day-to-day influences and "politics" of traditional municipal operations (for example, a user cannot go to the city and attempt to circumvent the venue manager's operating agreement with the City and get, for example, preferential treatment).

Services provided by private management companies sometimes include the following:

- Pre-opening services and support
    - Design review and consulting
    - Furniture, fixture and equipment procurement
    - Pre-opening marketing and branding
    - Pre-opening operations timelines / schedules
- Financial operations
    - Standardized reporting with individual client customization
    - Benchmarking to ensure expenses and revenues meet or exceed industry standards
    - Internal controls / audits to ensure compliance with client requirements
    - Training programs for industry specific conditions
- Revenue maximization
    - Industry recognition via private management "brand" reputation
    - Identification / creation of existing and future revenue sources
    - Leading edge identification of new advertising and sponsorship technologies via international facility network
- Tenant / lessee relations
    - Negotiation and maintenance of tenant leases
    - Experience and access to historical records on deal negotiation / structure with major national / international touring events
    - Devising marketing partnerships / initiatives with tenants, facilities and host communities
- Human resources and professional development
    - Provision of professionally trained, experienced managers with full corporate support for all disciplines
    - Proprietary training programs / conferences
    - Organized labour negotiations / relationships
- Risk management
    - Contracts / license agreement support
    - Development of standardized agreements
    - Insurance procurement and preferred pricing through volume arrangements
- Operations
    - Best practices programs
    - Proprietary software
    - Master service agreements
    - Preferred vendor relationships / pricing through national and international supplier relationships
    - Venue assessments
- Marketing / branding
    - Multi-venue cooperative advertising
    - Cooperative lead generations
    - Promotional exposure opportunities through corporate brand support

- Live entertainment and sports programming
    - Dedicated corporate event booking and promotion department
    - Proprietary booking software
    - Multi-venue / multi-date booking leverage
    - Event promotion
    - Programming development through early identification of new touring events
    - On-going industry exposure opportunities through trade shows, conferences and industry trade publications
- Municipal partners maintain control
    - Annual approval of operating and capital budgets
    - Direction and supervision of policy
    - Regular financial and management reports

For the purpose of this assessment, a management fee of $175,000 has been assumed; the City of Greater Sudbury should determine the merits of whether it should continue to operate the SEC (and its existing SCA) with its existing staff or retain the services of an experienced third party venue management firm.

Capital Reserve

Finally, a Capital Reserve allowance has been estimated, using practices adopted in other arena facilities, and is based on a yearly allocation of $200,000, and subject to annual inflation of 3%. A capital reserve represents a specific reserve set up to account for future capital improvements or repairs.

Gross Operating Expense

Based on the foregoing, gross operating expenses for the proposed 5,800-seat Greater Sudbury SEC are estimated at some $3.265 million (Figure 53, following). At this level of projected operating expense, the proposed downtown facility is projected to incur a higher level of expense than was projected to be incurred at the Essar Centre and Rogers K-Rock Centre in 2016 ($2.225 million and $2,220 million, respectively), and less than was projected to be incurred at the GM Centre in 2016 ($4.174 million).

Figure 53
Projected Operating Expenses, proposed Greater Sudbury SEC

	Year 1
FACILITY EXPENSES	
Personnel costs	$ 1,590,000
Utilities	500,000
Operations, maintenance & repairs	250,000
Marketing	75,000
Insurance	100,000
Other miscellaneous expenses	175,000
Event costs	200,000
Management fee	175,000
Capital Reserve	200,000
Total Expenses	**$ 3,265,000**
COMPARATIVE FACILITIES	
GM Centre, Oshawa ON (2016)	$4,174,500
Rogers K-Rock Centre, Kingston ON (2016)	$2,220,800
Essar Cente, Sault Ste. Marie (2016)	$2,224,700

Source: PwC

Summary of Operations

Figure 54, following, provides a summary of the potential cash flows associated with the proposed 5,800-fixed seat SEC in Greater Sudbury. Based on the above described operating assumptions, the facility is projected to generate operating revenues of some $2.609 million and incur direct facility operating expenses, excluding management fees and capital reserves, of $2.890 million, yielding a net operating deficit, prior to management fees and capital reserves of approximately $280,700. After allowing for management fees and capital reserves, the planned 5,800-fixed seat SEC is projected to generate an operating deficit of some $655,700 in its first full year of operations.

Figure 54
Projected Operating Position, Year 1, proposed Greater Sudbury SEC

	Year 1
Gross Operating Revenue	$ 2,609,300
Gross Operating Expenses	2,890,000
Net Income before Management Fees	**$ (280,700)**
Management fee	175,000
Capital Reserve	200,000
Net Income	**$ (655,700)**
COMPARATIVE FACILITIES	
Sudbury Community Arena (2015)	($695,400)
Essar Centre, Sault Ste. Marie ON (2016)	($592,100)
Meridian Centre, St. Catharines ON (2016)	($440,000)
GM Centre, Oshawa ON (2016)	($397,700)
Rogers K-Rock Centre, Kingston ON (2016)	$757,500

Source: PwC

This projected operating deficit compares to operating deficits currently being incurred by the SCA ($695,000), as well as in Oshawa ($397,700), St. Catharines ($440,000) and Sault. Ste. Marie ($592,100).

Over time, the projected operating deficit, both prior to and after management fees and capital reserves, is projected increase. By the fifth year of operations, it is projected that the facility's total operating obligation, including management fees and capital reserves, could approach $825,000 annually (Figure 55, following).

Figure 55
Projected Operations, proposed Greater Sudbury SEC (Years 1 – 5)

	Year 1	Year 2	Year 3	Year 4	Year 5
FACILITY REVENUES					
Sudbury Wolves	$ 282,500	$ 289,600	$ 296,800	$ 304,200	$ 311,800
Other events	403,100	413,200	423,500	434,100	445,000
Net concession revenue	233,900	239,700	245,700	251,800	258,100
Net merchandise revenue	57,500	58,900	60,400	61,900	63,400
Advertising and Sponsorships	397,300	402,900	408,600	414,400	420,400
Suites license revenue	328,100	328,100	328,100	328,100	328,100
Club seat license revenue	153,100	153,100	153,100	153,100	153,100
Ticket surcharge	574,800	589,200	603,900	619,000	634,500
Box office revenue	109,700	112,400	115,200	118,100	121,100
Ice rental revenue	69,300	71,000	72,800	74,600	76,500
Total Revenues	**$ 2,609,300**	**$ 2,658,100**	**$ 2,708,100**	**$ 2,759,300**	**$ 2,812,000**
FACILITY EXPENSES					
Personnel costs	$ 1,590,000	$ 1,629,800	$ 1,670,500	$ 1,712,300	$ 1,755,100
Utilities	500,000	520,000	540,800	562,400	584,900
Operations, maintenance & repairs	250,000	256,300	262,700	269,300	276,000
Marketing	75,000	76,900	78,800	80,800	82,800
Insurance	100,000	102,500	105,100	107,700	110,400
Other miscellaneous expenses	175,000	179,400	183,900	188,500	193,200
Event costs	200,000	205,000	210,100	215,400	220,800
Total Expenses	**$ 2,890,000**	**$ 2,969,900**	**$ 3,051,900**	**$ 3,136,400**	**$ 3,223,200**
Net Cash Flow Before Management Fees / Capital Reserve	**$ (280,700)**	**$ (311,800)**	**$ (343,800)**	**$ (377,100)**	**$ (411,200)**
Management fee	175,000	179,400	183,900	188,500	193,200
Capital Reserve	200,000	205,000	210,100	215,400	220,800
NET CASH FLOW	**$ (655,700)**	**$ (696,200)**	**$ (737,800)**	**$ (781,000)**	**$ (825,200)**

Source: PwC

9. Project Financing

As summarized in Figure 56, following, the majority of mid-size sports and entertainment venues developed in Canada have been paid for exclusively from municipal sources. In some cases, the municipality has been able to secure small contributions from private developers / operators through public-private partnership arrangements (including Sarnia, Brampton, Guelph and London) while in others more sizeable contributions were made by the private development partner (for example, in Kelowna and Chilliwack BC; in each instance, however, it should be noted that the municipality is obligated to make payments to their private partner, essentially guaranteeing the financing).

Figure 56
Financing of Canadian Mid-Sized Sports and Entertainment Centres

	Year Opened	Total Cost	Project Financing			Management Responsibility		Notes
			Municipal	Other Government	Private	Operator	Financial Responsibility	
Prince George, BC	1995	$21.7 million	100.0%	--	--	City	City	Stand-alone 5,800-seat building
Barrie, ON	1996	$13.0 million	100.0%	--	--	City	City	Stand-alone 4,200-seat building
Sarnia, ON	1998	$18.5 million	91.9%	--	8.1%	City (was private)	City (was private)	5,000-capacity building with auxiliary ice pad
Brampton, ON	1998	$24.5 million	91.8%	--	8.2%	Private (Realstar)	City (some sharing with operator)	5,000-seat building with 3 auxiliary pads
Mississauga, ON	1998	$22.0 million	100.0%	--	--	Private (SMG)	City	5,400-seat building with auxiliary pad
Kelowna, BC	1999	$26.0 million	23.1%	--	76.9%	Private (RG Properties)	Private (RG Properties)	Stand-alone 6,000-seat building; private partner provided equity and secured debt - debt is repaid by annual contributions made by the partner
Guelph, ON	2000	$21.5 million	93.0%	--	7.0%	City (was private)	City (was private)	Stand-alone 5,000-capacity building
Cranbrook, BC	2000	$22.6 million	100.0%	--	--	City	City	Stand-alone 4,700-seat building
London, ON	2002	$47.0 million	84.0%	10.6%	5.4%	Private (Global Spectrum)	Private (Global Spectrum)	Stand-alone 9,000-seat building
Victoria, BC	2003	$30.0 million	n/a	n/a	n/a	Private (RG Properties)	Private (RG Properties)	Stand-alone 7,000-seat building
Chilliwack, BC	2004	$22.0 million	--	--	100.0%	Private (Chilliwack Chiefs)	Private	5,000-capacity building with auxiliary ice pad; developer took out loan; repayment is done through annual payments made by the City
Sault Ste. Marie, ON	2005	$25.0 million	100.0%	--	--	City	City	Stand-alone 5,000-capacity building
Oshawa, ON	2005	$45.0 million	100.0%	--	--	Private (Global Spectrum)	City	Stand-alone 5,400-capacity building - financing does not include contribution from operator
Kingston, ON	2008	$46.1 million	91.3%	8.7%	--	Private (SMG)	City (some sharing with operator)	Stand-alone 5,200-capacity building - financing does not include contribution from operator or fundraising
Penticton, BC	2008	$56.2 million	100.0%	--	--	Private (Global Spectrum)	City	Stand-alone 4,700-seat building - connected to Penticton Trade & Convention Centre
Windsor, ON	2008	$71.7 million	100.0%	--	--	City / Private (Global Spectrum)	City	6,500-seat building with 3 auxiliary pads
Abbotsford, BC	2009	$66.2 million	100.0%	--	--	Private (Global Spectrum)	City	Stand-alone 6,800-capacity building
Moose Jaw, SK	2011	$61.2 million	100.0%	--	--	City	City	4,400-seat building with 8-sheet curling rink and banquet facilities
St. Catharines, ON	2014	$51.0 million	100.0%	--	--	Private (SMG)	City	Stand-alone 5,200-capacity building - financing does not include contribution from operator
Medicine Hat, AB	2015	$74.9 million	100.0%	--	--	Private (SMG)	City	Stand-alone 5,900-seat building
Moncton, NB	2018	$91.4 million	44.8%	52.5%	2.7%	Private (SMG)	City	Stand-alone 7,500-seat building

Source: PwC

As can also be noted from Figure 56, few municipalities in Canada appear to have been successful in securing financial support from senior levels of government, including from their respective provincial government or from the federal government.

Notable exceptions include:

- London, who were successful in 2002 in obtaining $5.0 million in SuperBuild funding; a funding program that existed at that time and which allowed for monies to be allocated to new and / or renovated sports facilities, including major arenas and community recreation facilities;
- Kingston, who were successful in obtaining $4.0 million in provincial funding; and
- Moncton, who were successful in obtaining a reported $48.0 million in federal and provincial funding for their new downtown arena. Included in this funding is a reported $21.0 million forgivable loan from the Province of New Brunswick; the federal contribution includes the ability to allocate funds available to the City from the "Build Canada Fund Gas Tax" program for the Downtown Events Centre. The City also received a $2.5 million from Downtown Moncton (local BIA).

It is noteworthy, however, that the City of Thunder Bay, in attempting to secure both federal and provincial funding for their proposed Events Centre, were denied the ability to reallocate gas tax funding by the Federal Government.

As we understand it, the federal government has a policy in which it "will not fund arenas if the major tenant is not an amateur sports organization"; in this regard, it follows that a major junior hockey team is considered a professional sports team. While funding programs would appear to exist, for example, the Federal Gas Tax Fund (which assists municipalities by providing funding for local infrastructure projects, including culture, tourism, sports and recreation projects), the policy against funding sports and entertainment centres whose lead tenant is an OHL franchise has negated the approval for funding for these facilities.

Based on the inability of the City of Thunder Bay to secure funding from either the federal or provincial governments (Thunder Bay has been attempting to secure such funding since approximately 2014), it would appear that unless the federal and provincial governments alter their philosophies about funding sports and entertainment centres (in this instance, while the lead tenant is "for profit" and therefore "professional", it would pay market rent), the majority of the proposed Greater Sudbury SEC will need to be financed internally by the City.

Opportunities for potentially securing some degree of local financing / contribution for the facility, could include:

- Obtaining contributions from local groups (for example, as was done in Moncton with the $2.5 million contribution from the Downtown Moncton BIA);
- Embarking on fundraising campaigns, including, for example, selling "bricks" at the new facilities and securing other donors ("friends", "patrons", "contributors", "leaders", etc., at different pricing levels);
- Obtaining land contributions from local developers;
- Obtaining contributions from the Sudbury Wolves; and
- Obtaining a one-time contribution from a third party venue management firm (in some instances, and in order to secure a multi-year operating contract, a venue management firm may provide a contribution to assist in paying for, for example, concession equipment).

10. Economic Benefits

About economic impact

Economic impacts are generally defined as changes to an economy as a result of a development, undertaking or activity. As such, economic impacts measure changes in the size and structure of a jurisdiction's economy when goods and services are purchased using money generated from outside a region, or as the result of an infusion of capital for the construction of a new facility or service. Almost all activities can generate economic impact; however in its strictest sense, activities and expenditures which result in "new" spending are the types of activities which local officials most greatly desire.

In evaluating and quantifying the economic impact of a facility, service, program offering, etc., four types of impacts are typically reviewed:

- ***Direct Economic Impacts:*** refer to the total expenditures on goods and services, including wages and salaries, for the construction of a proposed development, the operations of a facility or service, the staging of an event, etc.
- ***Indirect Economic Impacts:*** refer to the purchase of goods and services needed to then produce the goods and services that are directly purchased in support of the construction of the proposed facility, the operation of that facility or service, the staging of the event, etc. Indirect impacts therefore measure the magnitude of interactions with other businesses which supply the necessary materials and services, which lead to indirect demand for goods and services from other industries.
- ***Induced Impact:*** refer to the impact of personal expenditures by people who have been paid wages and salaries for the construction or in the operations of the facility or service, the staging of the event, etc., as well as for the production of indirect goods and services.
- ***Associated Economic Impacts:*** refer to the spin-off impacts generated by the construction of the facility, the operations of the facility or service, the staging of the event, etc., including spending by visitors, conference delegates and tourists. For example, the spending by non-residents could be considered an associated impact.

In quantifying the economic impact of a facility, event or service, four types of impact are generally quantified:

- ***Spending Impact:*** measure the impact resulting from the purchase of goods and services throughout the economy (including purchases made at multiple stages during the construction process and during facility operations);
- ***GDP Impact:*** the impact on overall economic output, as measured by changes in the gross domestic product of the region / country;
- ***Employment Impacts:*** the increases in employment resulting from the purchase of goods and services;
- ***Income Impacts:*** the increases in personal income resulting from increases in employment; and
- ***Tax Impact:*** the amount of tax revenue government agencies could be inferred to generate from the construction of a facility, the operations of a facility or event, consumer spending, new employment income, etc. (inclusive of property taxes, income taxes, sales taxes, etc.).

In an attempt to assess the economic benefits associated with the construction and operation of the proposed Greater Sudbury SEC, PwC utilized the following assumptions:

- Total facility development costs are estimated at $80.0 million; this estimate excludes any site related costs which could serve to increase / decrease total project costs, as well as the costs associated with any off-site improvements needed to facilitate the effective operations of the SEC;

- Operating costs for the SEC were based on the proforma cash flow estimates included in Section 8 of this Report; and
- Statistics Canada Input-Output multipliers were utilized to quantify the various impacts associated with the construction and operation of the proposed Greater Sudbury SEC.

Construction impacts

Spending impact

As noted above, the assumed cost of the proposed Greater Sudbury SEC is projected to be in the range of $80.0 million, including hard construction costs, soft costs (fees paid to architects, engineers, etc.), building fit-out (furniture, fixtures and equipment, "FF&E"), and project indirects, and contingencies. After allowing for taxes paid on material inputs, the estimated expenditure for assessing economic impact is estimated to be $76.6 million.

The construction of the proposed Greater Sudbury SEC will have a major impact and will generate a number of economic benefits, ranging from direct construction employment, GDP impacts both locally (where goods are secured from local vendors) and abroad, as well as tax revenue impacts to government (sales taxes associated with the purchase of goods and services, as well as income tax from the wages paid to the various construction employees and service providers).

Labour costs associated with major expense items were estimated and Statistics Canada Input-Output multipliers were utilized to identify the indirect and induced impacts associated with these various expenditures. Based on this review, the Total Spending Impact, including indirect and induced economic impacts of construction, consulting, FF&E purchases, etc. associated with the construction of the proposed Greater Sudbury SEC is estimated to be $139.3 million in Ontario, and slightly more than $154.0 million nationally.

Figure 57
Construction Spending Impacts – proposed Greater Sudbury SEC

GREATER SUDBURY SEC DEVELOPMENT	WITHIN ONTARIO	WITHIN CANADA
Direct Impacts	$76,606,000	$76,606,000
Indirect Impacts	$34,936,000	$42,732,000
Induced Impacts	$27,765,000	$34,663,000
TOTAL SPENDING IMPACT	**$139,307,000**	**$154,001,000**

Source: PwC

GDP impacts

In terms of the proposed Greater Sudbury SEC's impact on the overall economy, it is estimated that the direct impact of the project on the Gross Domestic Product of Ontario and Canada is over $40.3 million. Including indirect and induced impacts, the development of the proposed Greater Sudbury SEC is projected to contribute more than $75.4 million to Ontario's economy and almost $82.8 million to the Canadian economy.

Figure 58
Construction GDP Impacts – proposed Greater Sudbury SEC

GREATER SUDBURY SEC DEVELOPMENT	WITHIN ONTARIO	WITHIN CANADA
Direct Impacts	$40,302,000	$40,302,000
Indirect Impacts	$18,625,000	$22,406,000
Induced Impacts	$16,479,000	$20,090,000
TOTAL GDP IMPACT	**$75,406,000**	**$82,798,000**

Source: PwC

Employment income impacts

In developing the proposed Greater Sudbury SEC, it is estimated that the various construction workers, consultants and other advisors involved in pre-opening activities will be paid approximately $31.4 million in total salaries and wages. Utilizing Input-Output multipliers obtained from Statistics Canada to identify indirect and induced impacts, the Total Income Impact is estimated to be in the range of $51.5 million in Ontario, and almost $55.5 million nationally, including indirect and induced impacts from workers employed to produce the goods and services needed to construct the proposed Greater Sudbury SEC.

Figure 59
Construction Employment Income Impacts – proposed Greater Sudbury SEC

GREATER SUDBURY SEC DEVELOPMENT	WITHIN ONTARIO	WITHIN CANADA
Direct Impacts	$31,435,000	$31,435,000
Indirect Impacts	$12,180,000	$14,361,000
Induced Impacts	$7,901,000	$9,697,000
TOTAL EMPLOYMENT INCOME IMPACT	**$51,516,000**	**$55,493,000**

Source: PwC

Employment impacts

Utilizing total employment multipliers from Statistics Canada, it is concluded that the construction of the proposed Greater Sudbury SEC could directly generate some 495 person years of direct employment and give rise to a Total Employment Impact of approximately 850 person years of employment in Ontario and some 925 person years of employment nationally (the reader should note that "person years of employment" does not necessarily translate directly into the "number of jobs created", as a number of part-time positions could result; when added together, these part-time positions combine to make the equivalent of one full year of employment for one person).

Figure 60
Construction Employment Impacts – proposed Greater Sudbury SEC

GREATER SUDBURY SEC DEVELOPMENT	WITHIN ONTARIO	WITHIN CANADA
Direct Impacts	495	495
Indirect Impacts	200	240
Induced Impacts	155	190
TOTAL EMPLOYMENT IMPACT	**850**	**925**

Source: PwC

Tax impacts

The construction of the proposed Greater Sudbury SEC is projected to generate significant revenue to each level of government, including provincial sales taxes generated from the purchase of goods used to construct the facility, from the purchase of the facility's "FF&E", as well as from federal and provincial income taxes paid to workers retained to physically construct the venue. Municipal revenues, including building permit revenues, have not been estimated as part of this analysis, and thus would represent an additional benefit to the community.

Overall, the construction of the proposed Greater Sudbury SEC is estimated to generate some $7.6 million in federal and almost $6.0 million in provincial taxes. In total, almost $13.6 million in federal and provincial tax revenue is projected to be generated through the construction of the proposed Greater Sudbury SEC.

Figure 61
Tax Impacts – Construction of the proposed Greater Sudbury SEC

GREATER SUDBURY SEC DEVELOPMENT	TOTAL GOVERNMENT REVENUE
Province of Ontario	$5,965,700
Government of Canada	$7,609,900
TOTAL GOVERNMENT REVENUE IMPACT	**$13,575,600**

Source: PwC

Operational impacts

Spending impacts

Once the proposed Greater Sudbury SEC has been constructed, its operations are similarly projected to give rise to a series of economic impacts. As summarized in Figure 62, following, it is projected that the proposed Greater Sudbury SEC would incur total operating expenses in its initial year of operations of approximately $3.966 million. These expenditures are comprised of:

- direct operating expenditures for the SEC;
- direct food and beverage purchases from SEC;
- capital repairs; and
- project management fees.

For the purpose of this assessment, operations of the Sudbury Wolves are assumed to be similar to what is currently being incurred and therefore would not result in any net new economic impact.

Figure 62
Proposed Greater Sudbury SEC – Operational Spending

	Year 1
Personnel costs	$ 1,590,000
Utilities	500,000
Operations, maintenance & repairs	250,000
Marketing	75,000
Insurance	100,000
Other miscellaneous expenses	175,000
Event costs	200,000
Management fee	175,000
Capital Reserve	200,000
Total Facility Operating Expenditures	**$ 3,265,000**
Food & Beverage Purchases	$700,700
Total Expenditures	**$ 3,965,700**

Source: PwC

This range of direct expenditure will give rise to a series of indirect induced impacts, including spending, GDP and employment impacts generated as a result of the proposed Greater Sudbury SEC's purchases. For example, the Facility's purchase of materials and supplies from local distributors / merchants would require those store owners / suppliers to purchase goods and services (and employ workers) in order to produce / obtain the materials needed to fill the SEC's order.

Utilizing input-output multipliers generated by Statistics Canada for Ontario for various expenditure categories, it is estimated that the proposed Greater Sudbury SEC's annual spending impact (direct, indirect and induced impacts) resulting from its annual expenditure of almost $4.0 million is expected to total some $6.9 million annually in Ontario and almost $7.6 million annually across Canada.

Figure 63
Operational Spending Impacts – proposed Greater Sudbury SEC

GREATER SUDBURY SEC OPERATIONS	WITHIN ONTARIO	WITHIN CANADA
Direct Impacts	$3,966,000	$3,966,000
Indirect Impacts	$1,620,000	$1,953,000
Induced Impacts	$1,315,000	$1,637,000
TOTAL SPENDING IMPACT	**$6,901,000**	**$7,556,000**

Source: PwC

GDP impacts

With respect to the operational impacts of the proposed Greater Sudbury SEC on the overall economy, it is estimated that the direct impact on the economy's gross domestic product is some $2.3 million annually. Including indirect and induced impacts, the proposed Greater Sudbury SEC is projected to annually contribute almost $4.0 million to Ontario's economy and more than $4.3 million to the Canadian economy annually.

Figure 64
Operational GDP Impacts – proposed Greater Sudbury SEC

GREATER SUDBURY SEC OPERATIONS	WITHIN ONTARIO	WITHIN CANADA
Direct Impacts	$2,285,000	$2,285,000
Indirect Impacts	$897,000	$1,070,000
Induced Impacts	$780,000	$949,000
TOTAL GDP IMPACT	**$3,962,000**	**$4,304,000**

Source: PwC

Employment income impacts

As noted below, the direct employment impact of the the proposed Greater Sudbury SEC is estimated at some 60 person years of employment, with these individuals being paid some $1.9 million in annual salaries and wages (including concessions staffing). Utilizing similar input-output multipliers published by Statistics Canada for Ontario, it is estimated that the annual employment income impact of the proposed Greater Sudbury SEC will approximate $2.8 million in Ontario and more than $3.0 million nationally.

Figure 65
Operational Employment Income Impacts – proposed Greater Sudbury SEC

GREATER SUDBURY SEC OPERATIONS	WITHIN ONTARIO	WITHIN CANADA
Direct Impacts	$1,874,000	$1,874,000
Indirect Impacts	$582,000	$682,000
Induced Impacts	$374,000	$458,000
TOTAL EMPLOYMENT INCOME IMPACT	**$2,830,000**	**$3,014,000**

Source: PwC

Employment impacts

The direct spending and employment supported by the proposed Greater Sudbury SEC is estimated to directly sustain approximately 60 person years of employment (i.e., full-time equivalents), including working employed directly by the Events Centre and its various food and beverage / concessions workers. This direct spending and employment is concluded to give rise to increases in employment as a direct result of the purchase of goods and services. Based on Statistics Canada Input-Output multipliers, it is estimated that an additional 20 person years of employment will be indirectly supported per year by the SEC, yielding a total employment impact of approximately 80 person years of employment in Ontario and nationally.

Figure 66
Operational Employment Impacts – proposed Greater Sudbury SEC

GREATER SUDBURY SEC OPERATIONS	WITHIN ONTARIO	WITHIN CANADA
Direct Impacts	60	60
Indirect Impacts	10	10
Induced Impacts	10	10
TOTAL EMPLOYMENT IMPACT	**80**	**80**

Source: PwC

Tax impacts

The operations of the proposed Greater Sudbury SEC is projected to generate significant annual revenue to each senior level of government, including federal and provincial sales taxes generated from the sale of concessions and event tickets, in addition to federal and provincial income taxes paid to workers. For the purpose of this assessment no direct revenue from the operations of the SEC has been assumed to accrue to the City of Greater Sudbury as it is assumed the SEC would be declared a Municipal Capital Facility in order to exempt the facility from property taxes.

Overall, the operations of the proposed Greater Sudbury SEC is estimated to generate almost $0.75 million for the federal government and more than $0.8 million in annual revenue for the Province of Ontario. In total, almost $1.55 million in federal and provincial tax revenue is projected to be annually generated from the operations of the proposed Greater Sudbury SEC.

Figure 67
Operational Tax Impacts – proposed Greater Sudbury SEC

GREATER SUDBURY SEC OPERATIONS	TOTAL GOVERNMENT REVENUE
Province of Ontario	$801,100
Government of Canada	$748,200
TOTAL GOVERNMENT REVENUE IMPACT	**$1,549,300**

Source: PwC

Associated Impacts

In addition to the above presented economic benefits directly associated with the construction and operation of the proposed Greater Sudbury SEC, a number of social and other benefits could be expected to accrue from the siting and operation of this Facility. These associated benefits include:

- Sport event hosting;
- Increased spending by visitors attending events held at the SEC; and
- Incremental investment / economic development impacts.

Sport and event hosting

Sport tourism is one of the fastest growing tourism market segments in North America, with over 200,000 sporting events happening annually in Canada. The Canadian Sport Tourism Alliance ("CSTA") notes that sport tourism generated some $5.2 billion in annual spending by domestic and international visitors in 2014, a 44% increase over comparable 2010 figures. According to the CSTA, sport is a major industry and a reason that people travel both domestically and internationally; moreover, it is an essential element in the growth and development of civic pride, sport development and increased sport participation.

With the development of a new SEC in Greater Sudbury, it is noted that a number of potential events could be attracted to the facility; these events include sporting events, concerts, family shows, trade shows and conferences, aboriginal conferences and cultural celebrations, as well as potential local, regional, provincial, national and international events and competitions, including hockey, curling, figure skating, basketball, volleyball, wrestling, gymnastics, cheerleading, indoor track and field events / competitions, and other events. Depending on the nature and size of the event attracted to the SEC, their economic impact within the City could be significant.

By way of example, the Essar Centre in Sault Ste. Marie hosted the Canadian Adult Recreational Hockey Association ("CARHA") Hockey World Cup in 2012. The CARHA organizes its "world cup" every four years in a select Canadian city, and is an event that attracts participants from all across Canada, the United States, and Europe. In 2012, over 120 teams travelled to Sault Ste. Marie for this week long event, labelled the "Olympics" of adult recreational hockey (reported to be the largest international adult recreational hockey tournament in the world).

According to the City of Sault Ste. Marie, "While there has been, and will continue to be, an annual cost to operate the Essar Centre, it is important to note the many social and economic benefits to the community". The Essar Centre is the flagship facility for marketing sport tournaments in Sault Ste. Marie; in addition, the Essar Centre is easily converted to convention mode. The economic benefits of a single three-day convention with 2,500 out-of-town visitors is reported at $1.125 million, while a three-day tournament with 40 teams generates up to $360,000 in economic benefits to the community. The Essar Centre is reported as being an important tool in increasing local quality of life and helping to attract new residents to the community[1].

Numerous other communities have realized similar benefits, whether from hosting events such as major curling tournaments (Scotties Tournament of Hearts, Northern Ontario Travelers Tankard, "Road to the Roar", Home Hardware Canada Cup, etc.), figure skating competitions (Skate Canada, Canadian Figure Skating Championships), volleyball (world league qualifiers), as well as National Hockey League and National Basketball Association pre-season exhibition games, IIHF World Junior Championship pre-competition games, etc.

With the development of the proposed Greater Sudbury SEC, it is anticipated that these and similar events could be staged within this building. Moreover, the probability of Greater Sudbury securing such events, particularly events with higher profile, would likely not be possible without the presence of a new SEC.

Increased Visitor Spending

As alluded to above, the proposed Greater Sudbury SEC and the events staged therein, could attract a large number of visitors to the Greater Sudbury region. Depending on the nature of the event, significant spending impacts could be imparted; additionally increased room night demand could be generated as a result of increased visitation to the Greater Sudbury area.

According to the Greater Sudbury Chamber of Commerce, tourism is an important economic driver in Greater Sudbury. However, through research outlined in a report prepared by the Greater Sudbury Chamber of Commerce in partnership with the Ontario Chamber of Commerce[2], it was noted that Ontario (and by extension the Greater Sudbury Region) is missing out on significant tourism growth opportunities.

1 *City of Sault Ste. Marie, 2012 Essar Centre Annual Report.*
2 *Closing the Tourism Gap: Creating a Long-Term Advantage for Ontario*

While the development of a new SEC, in itself, will not resolve the issues, it can provide an additional component to help broaden the appeal of the Greater Sudbury region to visitors. By way of example, it was noted that of the more than 271,000 attendees at events staged in the Meridian Centre (St. Catharines) in 2016, a significant proportion of them were from locations other than Niagara Region and Southern Ontario, including other regions in Canada and from various regions in the United States.

Figure 68
Meridian Centre – Event Attendees, 2016

Source: City of St. Catharines, Meridian Centre, SMG Canada

Broadening the visitation potential for Greater Sudbury would impart a number of positive impacts, including increased hotel occupancy and increased retail expenditures, among others.

Incremental Investment

A final associated impact relates to incremental investment that could arise from the development of the proposed Greater Sudbury SEC, its ability to attract thousands of users / patrons / visitors on an annual basis, and its ability to facilitate the redevelopment / attraction of ancillary uses to properties / areas surrounding the SEC.

Literature on the economic impact of sports and entertainment centres generally shows that there can be a positive correlation between the siting of such facilities and corresponding future investments in residential, retail / entertainment and other commercial development; additional evidence suggests that investments in such facilities have helped energize city cores, broaden a municipality's tax base and create attractive and pedestrian-friendly neighbourhoods. Canadian examples often citied include downtown London, where Budweiser Gardens partly assisted in revitalizing an area of the city's downtown core (where it has been noted that there was a 40% increase in the area's housing stock, office and retail vacancies fell, commercial rental rates improved and building permit activity increased significantly; overall in the 10-year period from when Budweiser Gardens was first opened, total property assessment values increased by 61% including from numerous new retail, restaurants, office and residential developments).

Other examples include:

- In Kingston, where between the opening of the Rogers K-Rock Centre in 2008 and 2012, the number of new business located in the downtown core of that city increased in every year. In addition, three separate pre-event surveys of Rogers K-Rock Centre patrons indicated that, on average, 48% of respondents ate in a restaurant prior to attending an event, and of those, 65% ate in a restaurant located in the city's downtown core.

- In Oshawa, where the downtown commercial vacancy rate decreased from approximately 21% in 2006 to approximately 11% within the six years following the opening of the GM Centre, and where 83% of all building permits, by value, issued in downtown Oshawa between 1994 and 2011 where issued after the GM Centre opened in 2006 (roughly $540 million of $650 million). Moreover, the GM Centre is cited for producing economic spin-offs in this area, attracting non-residents to the city, and for driving a "night time economy".
- In Guelph, where investments made in the City's downtown "cultural infrastructure" (including the Sleeman Centre, River Run Theatre and Market Square development) has been proven to draw people to the district, generate higher property values, support enhanced retail economies and provide associated returns from an enhanced tax base.
- In Moncton New Brunswick, the now under construction Moncton Downtown Events Centre is reportedly spawning new interest in that city's downtown core, with a reported $100+ million in development applications having been submitted to the city, including mixed-use projects involving hotels, residential, retail and restaurants.

The ability to positively influence development is not, however, exclusively limited to facilities located in a city's central core; rather sports and entertainment facilities have been used by other jurisdictions to help stimulate economic development in more suburban locations, including facilities located in Barrie Ontario, Medicine Hat Alberta and Wilkes-Barre / Scranton Pennsylvania:

- With respect to the Barrie Molson Centre, this facility was built on a greenfield site just east of Highway 400 in the southern section of the city of Barrie on land donated by Molson Breweries. At the time of its development in 1994 and 1995, the lands around the facility were mostly unimproved. With the development of the city, this area has evolved into a major retail node, focused along Highway 400 (in this regard, the development of the surrounding area is felt to be due more to traditional market forces brought about by significant residential and commercial development and a location on a major highway than with respect to the siting of the Barrie Molson Centre in this location).
- In Medicine Hat Alberta, the city notes that the Canalta Centre, which opened in 2015 on land donated by a private developer, has influenced significant development in and around that facility, including a hotel, restaurants and retail facilities (the location was already being developed as a retail node and according to the city and subsequent development of the Canalta Centre on this site has helped spur and advance development in the area).
- In Wilkes-Barre / Scranton Pennsylvania, the Mohegan Sun Arena at Casey Plaza (home of the AHL affiliate of the Pittsburgh Penguins) has generally been viewed as a catalyst for significant additional development which has taken place around this facility. Prior to this building's construction, the surrounding area was generally characterized as comprising "some of the most worthless property in north-eastern Pennsylvania". Since the venue's development, the area is reported to be one of the busiest retail districts in the region, with a number of hotels, restaurants and retail developments having been completed since the arena's opening in 1999. It is also worth noting that the success which this facility and region have enjoyed is also due, in part, to its location in a growing regional economy (the Wilkes-Barre / Scranton area comprises the third largest market in Pennsylvania with a total population of some 14 million people within a 100-mile radius).

While numerous other examples exist which speak to the positive impacts which new and / or enhanced sports, entertainment and conference facilities have had on their surrounding areas and in influencing development, there are likewise numerous examples where little or no spin-off development impact has occurred or could be directly or indirectly linked to the presence of the facility. In order to maximize the possibility that such positive spin-off developments will occur, it is generally concluded that local economic conditions and supportive planning and development policies will be required.

In this regard, and in order to maximize the possibility of ancillary development occurring, it has been suggested that cities need to supplement their decision to locate a sports and entertainment venue at a particular locations with planning and development tools / levers in order to help facilitate such complementary development, including establishing "community improvement zones" in the area surrounding the site, enacting policies / programs to stimulate development and / or committing to other investments in order to ensure that the area surrounding the sports and entertainment centre is viewed as a viable development / investment area. Based on our experiences, the ability of a facility to foster positive development in a sports and entertainment centre's vicinity is directly dependent upon how the facility is positioned as part of a broader economic development strategy.

In addition, it is generally concluded that such zones must be large enough to house both the facility, and facilitate the attraction / preservation of a critical mass of commercial / retail / entertainment space (including restaurants / cafes, sports boutiques, fashion boutiques, music stores, specialty food shops, cinemas, plazas, etc.). In greenfield sites, this amount of critical mass will sometimes need to be "created" and could take years to fully evolve, whereas in more urban locations, a critical mass of space is likely already present and city cores are able to realize positive spin-off benefits more quickly.

Appendix A

Average Annual Attendance – CHL Teams

ONTARIO HOCKEY LEAGUE AVERAGE ATTENDANCE 2000-01 THROUGH 2015-16
(alphabetically)

Team	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Average Attendance		
																	10/11 - 15/16	05/06 - 15/16	00/01 - 15/16
Barrie	3,724.0	3,711.8	3,842.0	3,728.4	3,889.6	3,816.1	3,846.0	3,537.0	3,486.4	3,731.8	3,422.6	3,655.3	3,731.4	3,729.4	3,741.0	3,830.0	3,685.0	3,684.3	3,713.9
Belleville	3,065.8	3,158.1	3,108.0	2,785.4	2,879.3	2,605.6	2,788.5	2,773.4	2,970.3	2,745.7	2,644.9	2,493.9	2,550.8	2,339.6	2,545.0	---	2,514.9	2,645.8	2,763.6
Brampton	2,381.4	2,316.8	2,301.2	2,173.5	2,628.4	2,734.2	2,577.3	2,509.5	2,404.6	2,090.3	1,885.9	1,986.4	2,191.1	--	--	--	2,021.1	2,297.4	2,321.6
Erie	3,515.1	3,912.1	4,268.8	4,266.2	4,428.3	4,080.5	3,591.8	3,526.6	3,526.4	3,591.8	3,476.1	2,854.9	3,115.1	4,429.1	4,947.0	4,481.0	3,883.9	3,783.7	3,875.7
Flint	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2,984.0	2,984.0	2,984.0	2,984.0
Guelph	3,229.4	3,348.7	3,371.3	3,665.1	4,066.6	4,046.3	4,235.6	4,154.2	4,068.9	3,989.3	3,934.9	3,871.1	4,265.5	4,326.4	4,507.0	4,232.0	4,189.5	4,148.3	3,957.0
Hamilton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3,844.0	3,844.0	3,844.0	3,844.0
Kingston	2,392.4	2,177.0	1,913.5	1,978.5	2,095.1	2,198.0	2,247.0	2,550.3	3,093.4	2,881.2	2,874.7	2,546.5	3,438.6	3,794.5	3,963.0	4,130.0	3,457.9	3,065.2	2,767.1
Kitchener	4,880.1	5,260.8	5,590.7	5,904.9	5,911.3	5,951.3	5,887.1	6,035.3	6,245.9	6,263.9	6,375.8	6,364.6	7,212.2	7,056.3	6,992.0	7,012.0	6,835.5	6,490.6	6,184.0
London	3,648.4	3,905.4	7,604.2	8,362.0	9,038.1	9,090.3	9,036.9	9,013.2	9,006.5	9,015.4	8,954.0	8,953.1	8,991.2	9,017.9	8,977.0	9,013.0	8,984.4	9,006.2	8,226.7
Mississauga	2,615.7	2,532.5	2,641.0	2,903.9	3,739.3	2,995.7	2,225.4	2,138.3	2,393.0	2,247.8	3,101.9	2,458.2	2,337.2	2,592.7	2,906.0	3,025.0	2,736.8	2,583.7	2,678.3
Niagara / St. Catharines	--	--	--	--	--	--	--	2,772.9	2,961.9	2,914.0	2,913.2	2,982.0	3,046.3	2,989.5	--	--	2,982.7	2,940.0	2,940.0
	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4,328.0	4,557.0	4,442.5	4,442.5	4,442.5
North Bay	2,383.7	2,314.2	--	--	--	--	--	--	--	--	--	--	--	3,365.8	3,447.0	3,327.0	3,379.9	3,379.9	2,967.5
Oshawa	2,375.0	2,832.5	3,282.4	3,219.3	2,872.2	3,013.9	4,449.0	5,133.6	4,794.0	4,163.6	4,222.5	4,383.5	4,760.4	4,860.3	5,248.0	5,353.0	4,804.6	4,580.2	4,060.2
Ottawa	7,798.9	9,142.7	9,022.6	8,647.3	9,236.5	8,207.3	8,062.5	8,103.3	7,865.5	7,499.4	7,204.7	6,506.8	--	--	3,604.0	3,484.0	5,199.9	6,726.4	7,456.1
	--	--	--	--	--	--	--	--	--	--	--	--	5,615.2	4,305.4	--	--	4,960.3	4,960.3	4,960.3
Owen Sound	2,384.8	2,553.6	2,526.7	2,578.1	2,771.9	2,725.8	2,867.7	2,478.2	2,417.8	2,374.6	2,722.0	2,871.1	3,058.0	2,951.7	2,951.0	2,839.0	2,898.8	2,750.6	2,692.0
Peterborough	2,560.9	2,575.5	2,821.7	2,828.1	3,116.2	3,430.4	3,305.9	3,109.8	2,963.4	2,788.4	2,725.9	2,537.3	2,541.9	2,511.7	2,485.0	2,573.0	2,562.5	2,815.7	2,804.7
Plymouth	2,711.1	3,145.0	3,178.0	3,012.7	3,226.0	2,657.6	2,717.4	2,641.5	2,342.9	2,685.0	2,729.5	2,656.7	2,850.4	2,478.4	2,388.0	--	2,620.6	2,614.7	2,761.4
Saginaw	--	--	4,025.7	4,263.2	4,191.0	4,337.2	4,266.7	3,932.6	3,731.6	3,594.4	3,916.6	3,774.3	3,683.8	3,711.1	3,555.0	3,354.0	3,665.8	3,805.2	3,881.2
Sarnia	4,271.4	4,269.0	4,105.2	4,017.4	3,546.2	3,495.9	3,384.4	3,715.0	3,490.5	3,246.0	3,045.9	3,465.8	3,282.5	3,019.3	2,877.0	3,122.0	3,135.4	3,285.8	3,522.1
Sault Ste. Marie	2,880.5	3,090.3	2,854.4	2,828.7	3,150.2	3,500.6	4,503.8	4,608.1	4,434.4	4,423.8	4,487.8	4,315.7	4,148.8	4,261.9	4,366.0	4,071.0	4,275.2	4,283.8	3,870.4
Sudbury	4,057.5	3,851.0	3,465.1	3,397.6	4,261.4	4,610.4	4,467.1	4,162.1	4,198.2	3,822.8	3,443.6	3,762.4	3,915.3	3,793.2	3,729.0	3,108.0	3,625.3	3,910.2	3,877.8
Toronto	1,421.0	1,170.5	1,063.7	1,004.4	1,356.9	1,009.4	1,164.1	--	--	--	--	--	--	--	--	--		1,086.8	1,170.0
Windsor	3,081.2	3,091.8	3,196.3	3,189.4	2,718.3	2,680.7	3,064.1	3,343.7	5,063.4	6,278.3	6,250.3	5,858.5	5,691.1	5,306.3	5,067.0	4,775.0	5,491.4	4,852.6	4,291.0
OHL Average	**3,273.1**	**3,415.3**	**3,709.1**	**3,737.7**	**3,956.2**	**3,859.4**	**3,934.4**	**4,011.9**	**4,073.0**	**4,017.4**	**4,016.6**	**3,914.9**	**4,021.3**	**4,041.0**	**4,131.2**	**4,155.7**	**4,046.8**	**4,016.1**	**3,891.8**

QUEBEC MAJOR JUNIOR HOCKEY LEAGUE AVERAGE ATTENDANCE 2000-01 THROUGH 2015-16

(alphabetically)

Team	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Average Attendance		
																	10/11 - 15/16	05/06 - 15/16	00/01 - 15/16
Acadie-Bathurst	3,125.2	3,074.4	2,829.4	2,317.7	1,697.5	2,398.9	2,303.9	2,182.8	1,705.5	1,389.7	1,611.3	1,424.3	1,411.1	1,682.1	1,617.0	1,518.0	1,544.0	1,749.5	1,745.2
Baie-Comeau	2,488.8	2,555.3	2,553.8	2,149.3	2,074.7	2,127.2	2,268.0	2,219.5	2,014.1	1,769.7	1,652.0	2,152.6	2,463.1	2,490.6	2,146.0	1,821.0	2,120.9	2,102.2	2,099.9
Blainville-Boisbriand	--	--	--	--	--	--	--	--	--	--	--	3,016.5	2,928.4	2,703.1	2,677.0	2,350.0	2,735.0	2,735.0	2,735.0
Cape Breton	3,072.2	3,093.1	3,245.9	3,580.1	3,147.4	3,112.4	3,146.6	3,343.0	3,385.9	3,329.1	2,954.3	2,600.6	2,470.9	2,432.3	2,548.0	2,545.0	2,591.8	2,897.1	2,917.9
Charlottetown / PEI	--	--	--	3,197.6	3,385.1	2,890.1	2,563.3	2,299.1	2,097.4	2,055.1	1,819.0	1,602.6	1,846.3	2,470.1	2,187.0	2,205.0	2,021.7	2,185.0	2,285.0
Chicoutimi	1,296.6	2,295.4	2,104.3	2,240.1	3,401.0	4,131.9	3,927.4	3,837.8	3,788.9	3,181.6	3,068.9	2,844.4	2,964.1	2,758.4	2,380.0	2,209.0	2,704.1	3,190.2	3,207.8
Drummondville	1,573.3	1,665.8	1,396.6	1,580.5	2,030.5	2,477.9	2,504.4	2,299.3	2,669.1	2,803.2	2,758.3	2,456.6	2,372.5	2,468.9	2,402.0	2,348.0	2,467.7	2,505.5	2,465.9
Gatineau / Hull	2,872.5	2,734.2	2,672.8	2,987.2	2,972.0	2,932.8	2,960.0	2,823.1	2,868.5	2,625.8	2,591.1	2,701.4	2,723.4	2,523.1	2,399.0	2,288.0	2,537.7	2,676.0	2,700.7
Halifax	7,410.8	7,429.8	7,587.7	7,601.1	7,816.0	7,719.5	7,340.4	7,588.7	6,683.7	5,506.0	5,330.6	6,608.2	8,686.1	8,170.9	7,748.0	6,893.0	7,239.5	7,115.9	7,174.3
Lewiston	--	--	--	2,102.4	2,661.8	2,521.2	2,711.5	2,578.8	2,281.5	1,852.7	2,001.2	--	--	--	--	--	2,001.2	2,324.5	2,372.7
Moncton	4,718.4	4,273.7	4,342.2	4,327.9	4,611.0	5,800.3	4,746.6	4,013.7	4,333.8	4,605.5	4,570.5	4,257.6	4,518.6	4,427.1	4,386.0	4,331.0	4,415.1	4,544.6	4,550.1
Montreal	1,770.4	3,359.6	1,457.6	--	--	--	--	--	3,116.2	2,773.5	2,945.9	--	--	--	--	--	2,945.9	2,945.2	2,945.2
Quebec	3,555.3	3,349.1	5,443.3	5,932.5	6,918.7	8,603.6	10,443.4	10,980.9	11,721.7	12,089.5	11,680.3	11,723.9	11,344.8	9,974.1	9,698.0	13,835.0	11,376.0	11,099.6	10,751.2
Rimouski	4,315.1	4,279.8	3,786.0	4,501.1	4,800.5	4,158.1	4,160.2	4,035.5	4,110.1	3,530.5	3,524.6	3,596.4	3,806.6	3,607.3	3,583.0	3,325.0	3,573.8	3,767.0	3,853.2
Rouyn-Noranda	1,982.0	1,755.3	1,966.6	1,985.5	1,952.1	2,000.1	2,086.6	2,171.4	2,073.7	1,952.0	1,695.6	1,859.5	2,104.5	2,021.4	1,983.0	2,161.0	1,970.8	2,009.9	2,005.1
Saint John	--	--	--	--	--	4,477.0	3,838.7	3,977.5	3,929.8	4,140.6	4,477.6	4,560.6	3,992.1	3,422.9	3,582.0	3,629.0	3,944.0	4,002.5	4,002.5
Shawinigan	2,501.5	2,627.1	2,308.7	1,989.2	2,211.0	2,054.7	1,960.5	2,156.5	2,823.0	3,211.1	3,242.8	3,541.8	3,110.8	2,641.7	2,830.0	3,126.0	3,082.2	2,790.8	2,742.5
Sherbrooke	1,564.8	1,617.4	1,862.9	--	--	--	--	--	--	--	--	--	3,186.0	2,722.0	2,701.0	2,441.0	2,762.5	2,762.5	2,762.5
St. John's	--	--	--	--	--	3,928.0	3,666.0	3,545.6	--	--	--	--	--	--	--	--		3,713.2	3,713.2
Val-d'Or	2,236.3	1,938.6	2,021.6	1,777.7	1,747.2	1,792.0	2,074.7	2,629.9	1,814.4	1,750.8	1,920.5	1,728.6	1,803.5	1,749.2	1,668.0	2,012.0	1,813.6	1,904.0	1,890.9
Victoriaville	1,770.2	1,722.5	1,731.7	1,630.4	2,041.3	2,010.8	2,112.1	2,327.6	2,153.1	2,417.2	2,550.6	2,644.4	2,604.6	2,436.9	2,430.0	2,246.0	2,485.4	2,357.6	2,331.2
QMJHL Average	**2,890.8**	**2,985.7**	**2,956.9**	**3,118.8**	**3,341.7**	**3,618.7**	**3,600.8**	**3,611.7**	**3,531.7**	**3,388.0**	**3,355.3**	**3,489.4**	**3,574.3**	**3,372.4**	**3,275.8**	**3,404.6**	**3,412.0**	**3,474.8**	**3,463.7**

WESTERN HOCKEY LEAGUE AVERAGE ATTENDANCE 2000-01 THROUGH 2015-16
(alphabetically)

Team	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Average Attendance		
																	10/11 - 15/16	05/06 - 115/16	00/01 - 15/16
Brandon	3,072.5	3,346.8	3,847.4	3,210.7	3,533.4	3,103.6	4,130.6	4,133.6	4,078.7	4,861.0	4,279.3	4,143.4	3,787.3	3,525.8	3,895.0	4,212.0	3,973.8	4,013.7	3,822.6
Calgary	6,083.8	6,832.2	6,665.4	7,569.7	10,061.9	8,869.8	8,852.5	9,071.6	8,850.0	8,478.4	9,300.3	8,973.2	9,299.8	8,252.4	8,462.0	8,217.0	8,750.8	8,784.3	8,365.0
Chilliwack	--	--	--	--	--	--	4,467.1	4,534.2	4,072.8	3,259.8	3,372.3	--	--	--	--	--	3,372.3	3,941.2	3,941.2
Edmonton	--	--	--	--	--	--	--	5,189.1	5,538.6	4,730.0	5,154.1	6,421.1	7,575.2	6,742.9	6,787.0	6,838.0	6,586.4	6,108.4	6,108.4
Everett	--	--	--	5,663.1	6,332.2	6,154.5	6,460.1	6,424.5	6,030.0	5,700.8	5,806.6	5,277.9	5,061.7	4,901.2	5,089.0	4,878.0	5,169.1	5,616.8	5,675.4
Kamloops	5,367.5	5,407.1	5,373.2	5,168.8	4,972.1	4,861.9	4,787.4	4,562.5	4,375.4	4,371.5	4,132.2	4,178.3	4,825.2	4,147.7	3,994.0	3,769.0	4,174.4	4,364.1	4,643.4
Kelowna	4,441.5	4,613.1	5,394.6	6,102.4	6,149.5	6,157.7	6,102.2	6,118.2	6,121.2	6,130.6	6,085.6	6,081.9	5,358.2	5,140.9	5,328.0	5,242.0	5,539.4	5,806.0	5,660.5
Kootenay	3,634.5	3,473.4	3,440.0	2,925.9	3,370.4	3,308.9	3,039.9	3,026.5	3,070.6	2,807.3	2,501.4	2,804.7	2,411.4	2,232.2	2,239.0	1,957.0	2,357.6	2,672.6	2,890.2
Lethbridge	3,069.1	3,434.9	3,383.2	3,420.8	3,828.8	3,935.3	3,889.9	3,959.5	4,128.3	3,316.5	3,137.5	3,283.1	3,650.3	3,089.2	3,010.0	3,746.0	3,319.3	3,558.7	3,517.6
Medicine Hat	3,171.0	3,936.8	4,069.8	4,006.0	4,006.0	4,006.0	4,006.0	4,006.0	4,006.0	4,006.0	4,006.0	4,006.0	4,006.0	4,006.0	4,006.0	4,248.0	4,046.3	4,028.0	3,968.6
Moose Jaw	2,107.7	2,040.0	2,064.4	2,122.5	2,116.8	2,526.2	2,456.6	2,363.4	2,318.4	2,235.1	2,654.6	3,897.6	3,814.3	3,612.8	3,312.0	3,332.0	3,437.2	2,956.6	2,685.9
Portland (overall)	7,101.2	6,879.1	6,273.8	6,493.5	5,859.8	6,129.1	5,188.9	4,460.0	3,648.3	4,437.2	5,594.3	6,074.7	6,687.5	7,329.3	6,980.0	7,004.0	6,611.6	5,775.8	6,008.8
Moda Centre (Rose Garden)	*9,191.8*	--	*7,892.1*	*7,724.3*	*8,697.1*	*7,733.6*	*8,836.7*	--	*5,812.2*	*6,294.8*	*7,630.4*	*8,018.3*	*7,704.4*	*7,705.8*	*7,891.1*	*8,376.0*	*7,887.7*	*7,600.3*	*7,822.0*
Memorial Coliseum	*5,263.2*	--	*3,730.8*	*4,315.9*	*4,256.0*	*4,524.6*	*4,459.4*	--	*3,299.2*	*2,579.6*	*3,772.5*	*4,335.7*	*6,687.5*	*6,908.5*	*6,069.8*	*5,470.0*	*5,540.7*	*4,810.7*	*4,690.9*
Prince Albert	2,353.4	2,094.3	2,121.3	2,111.0	2,167.6	2,320.6	2,198.1	2,118.9	2,127.0	2,104.1	2,271.4	2,426.1	2,674.1	2,495.8	2,431.0	2,369.0	2,444.6	2,321.5	2,274.0
Prince George	5,706.8	5,216.2	4,386.1	3,584.1	3,150.0	3,110.5	2,967.5	2,815.0	2,525.2	2,164.4	2,206.6	2,046.9	1,839.8	1,692.5	2,852.0	3,122.0	2,293.3	2,485.7	3,086.6
Red Deer	4,895.4	5,731.2	5,939.0	5,850.5	6,036.4	5,996.4	6,129.4	5,883.2	5,466.8	4,557.2	4,746.6	4,858.3	5,174.9	4,949.1	5,111.0	5,635.0	5,079.2	5,318.9	5,435.0
Regina	4,739.3	4,402.3	4,641.9	4,253.4	4,281.8	4,223.5	4,675.8	5,094.9	4,824.8	4,382.4	4,029.6	4,129.5	4,245.5	3,955.8	4,317.0	4,563.0	4,206.7	4,403.8	4,422.5
Saskatoon	2,923.3	3,204.7	3,915.4	3,361.3	5,133.1	4,264.5	4,277.3	4,299.9	4,825.1	4,393.2	5,031.3	5,047.7	6,040.2	4,719.4	4,563.0	4,377.0	4,963.1	4,712.6	4,398.5
Seattle	5,313.3	4,717.7	4,600.0	4,449.9	4,394.9	4,142.8	4,019.3	4,082.4	4,181.0	3,853.4	4,095.5	4,206.1	4,036.2	4,427.4	4,507.0	4,792.0	4,344.0	4,213.0	4,363.7
Spokane	6,627.4	6,369.7	6,099.6	6,293.1	6,250.1	6,105.6	6,027.8	6,557.1	6,656.1	6,452.6	6,439.2	6,442.9	6,367.6	6,101.7	5,829.0	5,765.0	6,157.6	6,249.5	6,274.0
Swift Current	2,047.0	2,116.2	2,133.8	2,073.5	1,949.2	1,983.0	1,895.2	2,092.5	2,286.7	2,194.9	2,136.7	2,203.6	2,178.1	2,119.0	2,162.0	1,970.0	2,128.2	2,111.1	2,096.3
Tri-City	3,187.3	2,636.6	2,735.1	3,244.9	3,277.0	3,857.3	3,942.8	4,245.4	4,424.0	4,480.1	4,702.0	4,653.4	4,495.4	4,225.8	4,019.0	3,718.0	4,302.3	4,251.2	3,865.3
Vancouver	--	5,800.6	5,084.6	4,956.4	8,400.6	7,037.6	8,759.1	8,717.3	8,470.0	7,117.4	7,449.8	6,944.1	7,204.5	6,265.9	5,815.0	5,169.0	6,474.7	7,177.3	6,879.5
Victoria	--	--	--	--	--	--	--	--	--	--	--	5,659.9	5,189.4	4,800.4	4,840.0	4,860.0	5,070.0	5,070.0	5,070.0
WHL Average	**4,205.8**	**4,327.1**	**4,324.7**	**4,343.1**	**4,763.6**	**4,604.8**	**4,673.3**	**4,716.2**	**4,637.5**	**4,360.6**	**4,506.0**	**4,716.4**	**4,814.7**	**4,488.2**	**4,524.9**	**4,535.6**	**4,631.3**	**4,613.1**	**4,559.7**

Appendix B

General Assumptions and Limiting Conditions

General Assumptions and Limiting Conditions

1. The use of any Projection made in conjunction with this Report may not be appropriate for use outside of its intended purpose. The Projection, which will not reflect actual development, economic, demographic and / or financial results, may reflect a possible scenario for the operations of new Sports and Entertainment Centre / Arena in Greater Sudbury, Ontario during the Projection Period, given PwC's judgment as to a probable set of economic conditions, together with the hypotheses which are consistent with the purpose of the Projections. Scenarios produced in conjunction with our analysis may contain hypotheses and assumptions which are based on a set of economic conditions or anticipated courses of action that are not unreasonable, are consistent with the purpose of the projections, but which will not materialize as set out therein. The hypotheses represent plausible circumstances, but need not be, and may not have been fully supported.

   Since future events are not subject to precise projections, some assumptions will not materialize in the exact form presented by our analysis. In addition, other unanticipated events and circumstances may occur which could influence the future performance of the Facility. Therefore, the level of growth which will occur in the future will vary from the analysis of prospective market and economic conditions set out therein. While there is no recourse to predicting these matters with certainty apart from informed and reasoned judgments, it must be stated that future events will lead to variations in performance which may materially alter the success and performance of the Facility. PwC does not warrant that actual results achieved during the Projection Period will be the same, in whole or in part, as those shown in the Projection. The Projection is based on hypotheses and there is a significant risk that actual results will vary, perhaps materially, from the results projected.

2. Unprecedented and ongoing events in the financial and credit markets have resulted in an uncertain and volatile economic environment. While some historic initiatives are being investigated by the U.S. Treasury and Federal Reserve, as well as other Central Banks to halt the disruptions in capital markets, there is still considerable uncertainty about the near to medium term outlook. Any continued constriction of the credit markets, along with weakening economic fundamentals may impact all asset classes both in terms of value and liquidity. While the Canadian economy may not yet have been impacted significantly, that situation may not continue. Given volatility within the current environment, of necessity, this report has been based on the assumption that the economy will remain stable without further significant disruptions and deterioration in credit availability.

3. Responsible ownership and competent property management are assumed.

4. Information furnished by others upon which all or portions of this report are based, is believed to be reliable, but has not been verified in all cases. No warranty is given as to the accuracy of such information.

5. Our report and work product cannot be included, or referred to, in any prospectus, securities and exchange commission filing or other public investment document.

6. The intended use of this report is as a feasibility and business case assessment for a proposed new Sports and Entertainment Centre / Arena in Greater Sudbury, Ontario. This report is for informational purposes only.

7. It is assumed that all required licenses, certificates of occupancy, consents, or other legislative or administrative authority from any local, provincial, or national government or private entity or organization have been, or can readily be obtained, or renewed for any use on which the estimates provided in this report are based.

8. No investigation has been made of, and no responsibility is assumed for, the legal description or for legal matters including title or encumbrances. The site upon which the Venue is to be built and operated is assumed to be free and clear of liens, easements, encroachments and other encumbrances unless otherwise stated.

9. Full compliance with all applicable federal, provincial and local zoning, use, occupancy, environmental, and similar laws and regulations is assumed, unless otherwise stated.

10. No responsibility is taken for changes in market conditions and no obligation is assumed to revise this report to reflect events or conditions which occur subsequent to the effective date of this report.

11. Any financial structure within this report is predicated on the market conditions prevailing as of the date of this report.

12. Areas and dimensions of any property referenced in this report were obtained from sources believed to be reliable. Maps or sketches, if included in this report, are only to assist the reader in visualizing the property / site and no responsibility is assumed for their accuracy. No independent surveys were conducted.

13. It is assumed that there are no hidden or unapparent conditions of the site, subsoil, or structures that affect value. No responsibility is assumed for such conditions or for arranging for engineering studies that may be required to discover them.

14. No soil analysis or geological studies were ordered or made in conjunction with this report, nor was an investigation made of any water, oil, gas, coal, or other subsurface mineral and use rights or conditions.

15. Neither PwC any individuals signing or associated with this report shall be required by reason of this report to give further consultation, to provide testimony or appear in court or other legal proceedings, unless specific arrangements thereof have been made.

16. This report has been made only for the purpose stated and shall not be used for any other purpose. Neither this report nor any portions thereof (including without limitation any conclusions as to value, the identity of PwC or any individuals signing or associated with this report, or the professional associations or organizations with which they are affiliated) shall be disseminated to third parties by any means without the prior written consent and approval of PwC.

17. We have not been engaged nor are qualified to detect the existence of hazardous material which may or may not be present on or near the property. The presence of potentially hazardous substances such as asbestos, urea-formaldehyde foam insulation, industrial wastes, etc. may affect the value of the property. The estimates presented herein are predicated on the assumption that there is no such material on, in, or near the property that would cause a loss in value. No responsibility is assumed for any such conditions or for any expertise or engineering knowledge required to discover them. The client should retain an expert in this field if further information is desired.

18. We have not audited or otherwise verified the capital cost associated with development the Facility.

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