



Arena Management Study

City of Sarnia | Final Report | March 2015



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Prepared by:



**Tucker-Reid
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LIMITATIONS

This report was prepared by Monteith Brown Planning Consultants Ltd., Tucker-Reid & Associates, and MacLennan Jaunkalns Miller Architects (herein referred to as “the Consulting Team”) for the account of the City of Sarnia. The material in this report reflects the Consulting Team’s best judgment in light of the information available to it at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. The Consulting Team accepts no responsibility for damages, if any, suffered by a third party as a result of decisions made or actions based on this report.

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We would like to thank all of those who contributed to the development of the City of Sarnia Arena Management Study. This document is a product of the vision and dedication of the public, local stakeholders, and City Officials and Staff.

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Executive Summary

Arenas are one of many valuable contributors to Sarnia's quality of life. Planning for their future is an important step in ensuring that they are efficiently managed and responsive to community needs. The purpose of the City of Sarnia Arena Management Study is to critically analyze the need, feasibility, and long-term planning for arenas. This has been accomplished by:

- reviewing existing information (public input, technical analysis)
- engaging stakeholders and the public
- assessing trends and facility demand
- examining financial feasibility and operational efficiencies
- identifying solutions to meeting short and long-term needs

The City has been analyzing its arena needs and options through a broad-based Arena Management Strategy for several years now. One aspect that sets this latest report apart is its inclusive public engagement program, which consisted of two stakeholder focus group sessions and three public meetings, as well as sessions with City staff. The staggering of the public meetings allowed residents and user groups to digest topic-specific information and influence subsequent study components, creating an environment for understanding and community support.

The following is a summary of key findings:

- **The Status Quo is not Sustainable:** Due to the age and condition of the City's arenas, there is a clear need to re-invest in the City's arena facilities. Doing nothing is not a viable option. Facility rationalization and modernization must become a priority for the City and its partners. This may require creative funding solutions in order to be financially achievable as the City does not have a dedicated reserve for major capital replacement and the City's Development Charges service level cap has been exceeded.
- **Ageing Arena Infrastructure:** Many of Sarnia's arenas are approaching or beyond their functional life cycle based on industry standards. Older arenas that have not been substantially renovated do not operate or functionally serve their users as efficiently or effectively as newer facilities, particularly with respect to energy efficiency, required capital maintenance, accessibility, comfort, sport tourism opportunities, etc. The City of Sarnia works collaboratively with Bluewater Power to identify and implement energy savings and grant opportunities and continued efforts are required.
- **Declining Number of Youth:** The City's 5 to 19 age group (the main users of arenas) declined by 22% between 1996 and 2011 and is projected to decline by an additional 19% by 2031. Declining registrations in arena activities can be expected barring any increase in participation rates. Currently, approximately 16% of youth participate in organized ice activities in Sarnia's arenas.

- **Aging Population:** The City's aging population may generate modest requests for additional ice during prime and non-prime times; however, this is unlikely to have any tangible impact on rental demand at municipal rinks.
- **Declining Participation in Organized Arena Activities:** Local registration levels in youth ice sports have been relatively steady in recent years, but have declined over the long-term. Recent increases in female hockey participation have helped to reduce this impact; however, trends suggest that participation rates have stabilized and overall registration will likely decline in numbers alongside the youth population.
- **Capacity in Prime Time:** System-wide, the City's arenas are operating at about 82% capacity during prime time hours in peak months (2013/14 season) and usage during non-prime time hours is in decline.
- **Surplus of Ice:** Based on the usage data and trends, the City could immediately close one arena without affecting the number of hours allocated to its affiliated groups. The Study found that a supply of 5 ice pads would be adequate for meeting local needs for at least the next ten years and likely for some time beyond. This position is supported by the majority of arena user groups. It should be noted that a reduction to 5 ice surfaces may, however, impose limitations on the number of winter-season entertainment events that can be scheduled at the RBC Centre or create disruptions for ice users as a result of such events.

Over the long-term, arena demand is expected to continue to erode slowly, to the point that a second ice pad could potentially be deemed surplus (in or around 2031). Changes in population, arena utilization, demand for non-ice events, and ice sport participation should be monitored and reassessed at the appropriate time to ensure that these findings remain appropriate.

- **Indoor Turf Facility Demand:** There are presently no indoor turf facilities in the City of Sarnia. Indoor sports use school gymnasiums, which are not ideal and difficult to access. Many youth currently play indoor sports and there may be pent-up demand for indoor adult soccer leagues. Some teams are travelling to other communities (e.g., London, Woodstock, etc.) to rent time at indoor turf facilities in order to support their increasing off-season training requirements.

Field sport groups are very interested in a multi-use indoor turf facility in Sarnia. The Study found that a single indoor turf field (approximately 200 x 100 feet) would be adequate for meeting local needs for the foreseeable future, but re-purposing Germain Park Arena into an indoor turf facility is not recommended due to its small size, lower ceiling height, and the need for substantial renovations. With an indoor turf facility representing a new level of service for the City, a facility provision scenario that does not require the municipality to be the primary funding or operating agent – such as provision by a non-profit or private operator – is recommended. Such a project may be referred to a City-wide Master Plan or related process for further examination.

- **Think Beyond the Rink:** Arenas directly serve only a small proportion of the City’s residents, although many are involved indirectly as parents and spectators. Like all public facilities, arenas have the potential to provide access to a broader range of recreational and community activities that can be enjoyed by people of all ages, abilities, and interests. The role that these facilities play in the community can be amplified through various upgrades, programs, events, and neighbourhood involvement, making them true multi-purpose facilities.

Based on a variety of financial, operational, architectural, and community inputs, the Study has recommended that the City endorse Option 1, which consists of the following:

a) Retain and revitalize Sarnia Arena, including:

- improvements to the façade (among other exterior repairs) and major renovations to its concessions, front lobby, change rooms, and more.

b) Retain and undertake key improvements to RBC Centre and Clearwater Arena, including:

- RBC Centre: replacement of HVAC units and the main video board, completion of sprinkler system installation in RBC 2, barrier-free improvements (including adding a ramp at the main entrance), and more.
- Clearwater Arena: reconfigure the backend of the building to accommodate accessible change rooms, undertake refrigeration upgrades, finish upgrades to public spaces and change rooms, improvements to the upper hall HVAC, new rubber flooring, new boards (Blue rink), barrier-free improvements, and parking lot upgrades, and more

c) Close Germain Park Arena as an ice venue and consider re-purposing it to alternate uses

The following capital cost estimates were developed for the recommended option. It is anticipated that the cost of these enhancements will be brought forward to Council for future consideration.

Summary of Costs – Recommended Major Capital Projects

Arena	High Priority	Medium Priority	Low Priority	Total
Clearwater Arena	\$932,000	\$3,957,200	\$0	\$4,889,200
RBC Arena	\$45,000	\$2,107,200	\$1,000,000	\$3,152,200
Sarnia Arena	\$705,000	\$1,351,600	\$385,000	\$2,441,600
Total	\$1,682,000	\$7,416,000	\$1,385,000	\$10,483,000

Costs are in 2015 dollars and not adjusted for inflation. See Appendix B for listing of projects and costs

For the purposes of comparison, three other options were assessed and the order of magnitude capital and operating cost impacts of all options are shown in the following table.

Summary of Financial Impacts of Various Options (2015\$, not adjusted for inflation)

Budget Element	2015 Projected Baseline	Option 1 (recommended)	Option 2	Option 3	Option 4
Description	Status Quo	Close Germain Park Arena and Undertake Arena Renewal Program	Replace Clearwater Twin Pad and Close Germain Park Arena	Add a 3 rd Pad to Clearwater Arena; Close Sarnia and Germain Park Arenas	Re-purpose Germain Park Arena into a Community Hub
Net Capital Cost	\$0.5 million per year (approx.)	\$1.05 million per year for 10 years	\$24.52 million (one time cost)	\$13.33 million (one time cost)	\$3.57 million (one time cost)
Net Operating Cost (annual)	\$657,700	\$539,000	\$503,400	\$570,700	\$779,600

In addition, the Study assessed the current arena management model and made the following recommendations:

Arena Policy Framework

1. Identify technology solutions to create efficiencies in arena operations, including but not limited to: online ice availability and booking options, staff communications, staff scheduling, continued efforts in energy management, security and safety, daily logs, inspection forms, accident and incident forms, stakeholder suggestions and complaints, staff-driven league scheduling, etc.
2. Refresh the Policy and Procedures supporting arena operations through the use of a common template addressing the gaps as outlined in the Arena Management Study (give priority to health, safety, and risk-related policies).
3. Post all policies and procedures online to ensure that all staff have right of entry and, further, that forms and daily logs are housed on the City’s computer system.
4. Complete an annual audit of the compliance of arena operations with legislative requirements by accessing the legislative audit tool on the Leisure Information Network (LIN).

5. Revise the Ice Allocation Policy to base pricing on the actual cost of an hour of ice and the benefit to the community and individual good in terms of subsidization of ice.
6. Identify the standards for various age and competition levels in terms of levels of subsidization in the Ice Allocation Policy.
7. Develop and implement a Cash Management Policy to ensure that any cash handling is completed with safeguards in place including the use of Point of Sale (POS) systems.

Arena Asset Management

8. Develop and implement an Arena Preventative Maintenance Program in order to extend the lifespan of equipment and amenities and to determine a timely replacement program. This will require the use of key protocols, such as regular roof maintenance programs, building condition audits, etc.
9. Develop a 25-Year Capital Plan in order to determine when assets will need repairs, refurbishments, and replacements in order to develop funding mechanisms.
10. Develop a Parks and Recreation Master Plan to identify community-specific issues and priorities across all municipal leisure facilities and program areas. The Master Plan should consider the findings of this Arena Management Study and prioritize its recommendations amongst the broader scope of public needs.
11. Where feasible, seek opportunities to re-use viable equipment from decommissioned facilities into retained facilities (e.g., re-purpose the Germain Park Arena refrigeration system components at Clearwater Arena).

Human Resources and Organizational Effectiveness

12. Begin discussions with the Labour Management Committee with respect to the qualifications of part-time staff entering the full-time labour pool and ways to increase qualifications and training.
13. Develop a Training and Professional Development Program to enhance the skills and competencies of arena-related staff and to gain from shared expertise and knowledge.
14. Develop a Staff Engagement, Communications, and Recognition Program that seeks to engage staff in operational improvements, recognize impressive contributions, and support increased communications.
15. Ensure that stakeholder and participant satisfaction levels are tested on an annual basis and that staff act on consistent comments on identified areas of improvement.

Financial Management

16. Build the 2016 arena operating budgets from a zero-based perspective, justifying each revenue and expenditure item and utilizing actual budget performance from the previous year.
17. Calculate the operational cost per hour (for one hour of ice) on an annual basis, both on a gross operating budget basis with a view toward reducing the costs through operational efficiencies and revenue enhancements.
18. Continue to monitor the impact of reduced ice rates and report out annually to the public, stakeholders, and Council. Consider a reduced last minute ice rental rate in order to maximize otherwise unused ice.
19. Expand on-ice and off-season programs, camps, and casual/drop-in opportunities to increase revenues and facility use.
20. Engage neighbourhoods and the community in discussions surrounding the use of arena facilities as community hubs and gathering places.
21. Consider the implications of extending naming rights to other community facilities and assets.
22. Develop a listing of sponsorship opportunities within the arena operations (e.g., public skating, programs and events, etc.) and procure sponsorships in a transparent manner.
23. Consider annual contributions from operating budgets to fund planned arena asset repairs and replacements.
24. Any operational savings from arena decommissioning or the installation of energy-efficient systems should remain within the arena business unit to fund arena-related capital renewal projects and to reduce the unfunded renewal amount.
25. Complete an annual assessment and implement measures to better manage the costs of overtime and employee absenteeism (e.g., scheduling, the use of float positions, etc.).

Accountability and Performance Measurement

26. Review the suggested Performance Measures Framework, which identifies inputs, outputs, efficiency, and effectiveness measures. Implement and report to stakeholders and Council on annual findings and any remedial measures.
27. Meet annually with arena users to discuss scheduling, allocation, capital improvements, and more.
28. Consider the creation of an Arena Advisory Committee to assist staff in overseeing the implementation of the City of Sarnia Arena Management Study recommendations.

1.0 Introduction

1.1 Current Situation

Ice sports and activities are part of Sarnia's fabric, as evidenced by the many arenas that were built decades ago. The City currently operates six ice pads at four different sites (single pads at Germain Park and Sarnia Arenas, and twin pads at Clearwater Arena and RBC Centre); there are no other arena providers within the municipality. Some are smaller single pad designs, while others are multi-pad rinks that have opportunity for expansion and/or alternate uses, such as indoor turf and/or hard surface courts. All facilities have accessibility challenges and most lack the amenities typical of more contemporary arenas.

As these arenas begin to reach a critical point in their lifespan, other factors are emerging that suggest declining demand for ice time. The challenges facing Sarnia's arena system are much different from decades past: competing activities are drawing people away from ice sports; the aging population is leading to lessening demands; the cost of participation is rising (which is particularly troublesome in a depressed economy); advances in arena design are pushing some of the City's rinks (many of which are already cost inefficient) towards obsolescence; the continual need to promote and advertise ice time; and an overall erosion of demand is leading to decreased rentals in nearly all time slots. In short, Sarnia's arenas require significant investment and new management strategies going forward.

1.2 Study Purpose

The City has begun the process of critically analyzing its arena needs and options through a broad-based Arena Management Strategy (see Section 1.3 for more information on past studies and decisions). Prior analyses have focused on technical studies (e.g., building condition audits, electrical surveys, asset management plans, etc.) and a review of utilization data, as well as high level strategies to inform the community of potential outcomes. The development of a more comprehensive study is now required to synthesize this information, engage stakeholders, confirm feasibility, identify operational efficiencies, and work together to identify solutions to meeting short and long-term needs.

Fundamental to the development of this Study is a comprehensive community engagement strategy consisting of Stakeholder focus groups, public meetings, staff workshops, Council meetings, and regular meetings with the City's Project Team.

Key objectives for the Arena Management Study include:

- projecting current and future needs and gaps for arena facilities and indoor turf facilities (should there be an opportunity to re-purpose a surplus arena) based on trends in arena participation and community demographics;
- considering updated information on arena condition/lifecycle, quality, and distribution relative to population centres;
- working closely with staff, stakeholders, and the public to create a community-responsive study;
- identifying practical and effective ways to deliver arena services for the City (e.g., potential partnerships, capital avoidance strategies, operational efficiencies, etc.); and
- developing an achievable implementation strategy to meet the highest priority needs of the City, identifying specific recommendations for individual arenas, and targeting investments and services to maximize benefit to current and future residents.

Together, these objectives provide a basis for developing informed recommendations that can effectively and sustainably guide the provision and management of Sarnia's arenas into the future.

There were three primary deliverables that formed the Arena Management Study; each draft document was presented to the public for review and comment:

1. **Sub-deliverable #1: Facility Needs Assessment (Sections 1 to 7)**
This report contained preliminary findings, activity trends, demographic profile, utilization profile, a statement of arena provision requirements, and the results of the stakeholder focus groups. This report was presented to the public on December 3, 2014.
2. **Sub-deliverable #2: Building and Operations Review (Sections 8 and 9)**
This report contained an evaluation of Sarnia's existing arenas and considerations to enhance operational efficiencies. This report was presented to the public on January 27, 2015.
3. **Sub-deliverable #3: Facility Provision Options (Section 10)**
This report contained recommendations with respect to roles and responsibilities, facility locations, configurations, and financial implications relative to arena and opportunities for adaptive re-use. This report was presented to the public on February 24, 2015.

The Arena Management Study has been compiled from all three sub-deliverables.

While the Arena Management Study presents a comprehensive assessment of arena needs and options, it is important to note the following restrictions:

- existing building condition assessments have been relied upon; engineering services are beyond the scope of this study; and
- detailed financial analysis and specific capital maintenance recommendations (e.g., identifying which arenas require new floors, boards, mechanical systems, etc.) are beyond the scope of this assignment; these decisions are to be guided by the building condition assessments and input from City staff.

1.3 Planning Context

The assessment of local arena needs and demand has been a frequent topic of discussion within the community and City Council for the past several years. The following narrative captures key steps and decisions points related to arena infrastructure and operations in the City to date.

In 2010, an internal Arena Review was undertaken by the City of Sarnia, which recommended a more detailed examination of arena operations by 2012. The City embarked on the development of an Arena Management Strategy in 2012/13 due to declining use, shifting demographics, revenue shortfalls (by the end of 2013, it was projected that the City would have an arena revenue shortfall of \$256,000), and concerns over aging infrastructure. The Arena Management Strategy process was multi-faceted, with reporting on arena usage, financial positions, asset management, energy efficiency, and ice allocation practices.

An Asset Management Plan prepared by Ameresco Canada in January 2013 found that the City was facing a \$3.4 million shortfall in capital funds to update its aging arenas and that this shortfall would grow to \$9.2 million in five years' time (note: this includes a current shortfall of \$256,000 and \$388,500 in five years' time at Germain Park Operations Building, which is outside the scope of this Arena Management Study). Options for implementing energy-efficient technologies were identified as a means of achieving operating savings over the long-term. These improvements had a total cost of \$4.9 million, which would create savings that could then be reinvested into other necessary capital improvements.

Also in January 2013, an Ice Allocation Policy was developed to establish the process of the reallocation of ice in the event of arena closures.

In November 2013, City staff released the first version of its Arena Management Strategy. This Strategy was largely based on an analysis of financial and usage data through a study prepared by BMA Consulting. Public input was not part of this initial phase.

The Strategy recommended closure of Germain Park Arena in 2014, which was expected to result in \$126,000 in annual savings. An option was also introduced to

convert the arena into an artificial turf fieldhouse (at an estimated cost of \$1 million). The Strategy also included taking over the management of the RBC Centre (at an annual cost of \$510,000 to the City), which was nearing the end of its agreement term with Sarnia Sports Centre Inc. (SSC). SSC had been experiencing substantial annual losses as a result of the RBC Centre and was actively seeking to turn over management to another party. With a potential takeover of the RBC Centre, the City was also entertaining the divestiture or closure of the second (smaller) ice surface by spring 2015.

The Arena Management Strategy was presented to City Council on November 27, 2013. Council deferred its decision pending a public input session on the Strategy, which was subsequently held on January 15, 2014.

Nearly 50 emails and written submissions were received by the City in December 2013 and January 2014 regarding the possible closure of municipal arenas. Many residents spoke very passionately for the retention of all or most City rinks, while some supported the idea of an indoor venue for non-ice activities, such as soccer, roller derby, and lacrosse. These submissions illustrated skepticism over the application of usage data and many felt that demand forecasts did not adequately capture true community needs. Several residents cited examples of new arena development in other cities and lobbied for Council to consider the impact of these facilities on the local quality of life.

In addition to the public input session, the City undertook focus groups with primary arena organizations on February 26, 2014 to discuss scheduling options assuming a supply of four ice pads.

Just prior to the January 15, 2014 public input session, Lambton College Student Administrative Council had expressed its interest to the City in purchasing the second rink at the RBC Centre for an indoor multi-use court complex for student and community use. The proposal involved the development of a multi-use hard court gymnasium (26,000sf) with seating for more than 1,200 spectators (retractable seating) and a new ground level lobby with public washrooms and an elevator (9,200sf). Future options for the development of an attached fitness centre and multi-purpose rooms were also discussed. Should this conversion project not be feasible, the College has indicated that it may look at building a new recreation centre. The College's proposal to convert RBC 2 into a gymnasium was put on hold pending the results of this Arena Management Study and in **January 2015, the College formally withdrew its proposal to assume RBC 2 for a recreational and fitness complex, which was in** keeping with the direction of this Arena Management Study.

In April 2014, it was revealed that the City would be responsible for covering more than \$565,000 in back rental payments on the RBC Centre, which was still being operated by Sarnia Sports Centre Inc. at the time, although the agreement officially ended in April 2013. The RBC Centre has a monthly debt charge of \$36,000 and still owes approximately \$5.1 million, which is currently slated to be paid off in about 16 years.

At its April 28, 2014 meeting, City Council approved the Arena Management Strategy, which directed staff to undertake a feasibility analysis for arena facilities, an asset management plan for all arenas, and to finalize negotiations with Lambton College on potential divestiture and repurposing of RBC 2 to a multi-purpose fieldhouse. Based on public input, the City pulled back from its original position of closing two arenas, to only closing one. The Strategy supported the continued operation of the City arenas for the time being (except for RBC 2), the development of a sponsorship program, and directed staff to work with user groups to transition to five ice surfaces from the current six.

At this time, staff also introduced an option to expand Clearwater Arena into a quad pad arena by adding two additional rinks (while closing Germain Park and Sarnia Arenas by 2020), along with more dressing rooms and a new lobby, at an estimated cost of \$12 to \$15 million. This scenario would consolidate the City's arenas at two sites and modernize its infrastructure, while avoiding necessary upgrades at its two older facilities. In addition, operational efficiencies would be created through the establishment of a four pad complex. Staff recommended that a feasibility study be initiated to consider the viability and costs of such an endeavour.

The specific resolutions passed by City of Sarnia Council at its meeting on April 28, 2014 are as follows:

“That an Asset Management program be established for all arenas using the report as prepared by Ameresco in 2013.

That Germain Arena is open for the 2014-15 ice season and that Sarnia Arena open for May 1, 2015 allowing for summer rentals.

That the City finalize negotiations with Lambton College on the divestiture of the RBC#2 by June 30, 2014 to allow the College to acquire and repurpose the facility to a multipurpose field house with the project work to begin on April 1, 2015.

That City staff work with arena user groups and tournament organizers to transition from six ice surfaces to five in order to minimize impacts.

That a sponsorship program be developed for consideration by Council for the Parks and Recreation Department to promote potential partnerships with Sarnia's business, industrial and commercial sectors.

That Council direct staff to prepare a report analyzing the feasibility of constructing a one or two pad arena to partner with Clearwater Arenas as a multi pad complex replacing Sarnia Arena and Germain Arena by 2020.”

Subsequently, at its meeting on June 23, 2014, City of Sarnia Council passed the following resolutions:

1. That Sarnia City Council authorize the issuance of an RFP for the feasibility analysis, arena structural review, and sponsorship program development as outlined in this report
2. That Sarnia City Council approve the revised timetable and the expenditure of funds to an upset limit of \$75,000.
3. That staff be directed to prepare a complete and detailed list of the deferred maintenance projects across all facilities over the next five years.

The Local Arena Task Force (a collection of local arena users) called for Council to delay any decisions on RBC 2 pending the results of the feasibility study. The Task Force was in agreement that the City needs five full-size ice surfaces, but Germain Park Arena is not one of those rinks.

The future of Sarnia's arenas is a contentious issue in the community, not only due to the potential loss of service, but also to the way in which the matter has been handled publicly. The issue of declining arena usage has been apparent in the City for many years; however, it was not until 2012 that the City began to closely examine this issue through the Arena Management Strategy.

One of the City's goals in undertaking the Arena Management Strategy was to improve the fiscal operating base of its arenas; this was despite the fact that the City's per capita spending on indoor recreational facilities was by far the lowest amongst 24 comparable municipalities according to the BMA Study. Based on our independent review of the process to date, it would appear that the financial efficiency has received far more weight than other factors such as proper asset management, user group needs, and the intrinsic benefits of these facilities to healthy and active communities.

Public input was not sought until after recommendations were made to re-purpose two of the City's six ice pads, which creates concerns surrounding transparency. Arenas, like all recreational infrastructure, exist to serve the community and meaningful consultation, combined with reasoned analysis, should be at the core of any process defined to provide a balanced view of needs and strategies.

To its credit, the City has deferred decisions regarding the long-term usage of its arenas to this Study, which involves a comprehensive public engagement process, as well as a more in-depth examination of usage, demographic trends, facility condition, and financial feasibility. The recent transfer of RBC Centre operations to the City also coincides well with the timing of this Study.

2.0 Community Profile

The City is gradually witnessing a number of changes in its socio-demographic composition and recreational interests that are influencing the demand for (and design of) arenas and indoor turf facilities in Sarnia.

2.1 Existing and Forecasted Population

The age profile of a community is an important indicator of its recreational demands, and offers guidance to the types of facilities that should be offered. For example, a community with a high proportion of children and youth may have higher demand for competitive sports such as hockey or skating, while a community with a higher proportion of older adults may require facilities that offer less intensive forms of exercise.

Sarnia's population is aging. The median age of Sarnia residents was recorded at 44.8 years in the 2011 Census, which is up considerably from a median age of 37.3 years in the 1996 Census. The City's population is much older when compared to that of the entire Province (the Ontario median age was 40.4 years in 2011) and is also aging at a more rapid pace due to lower birth rates and/or immigration.

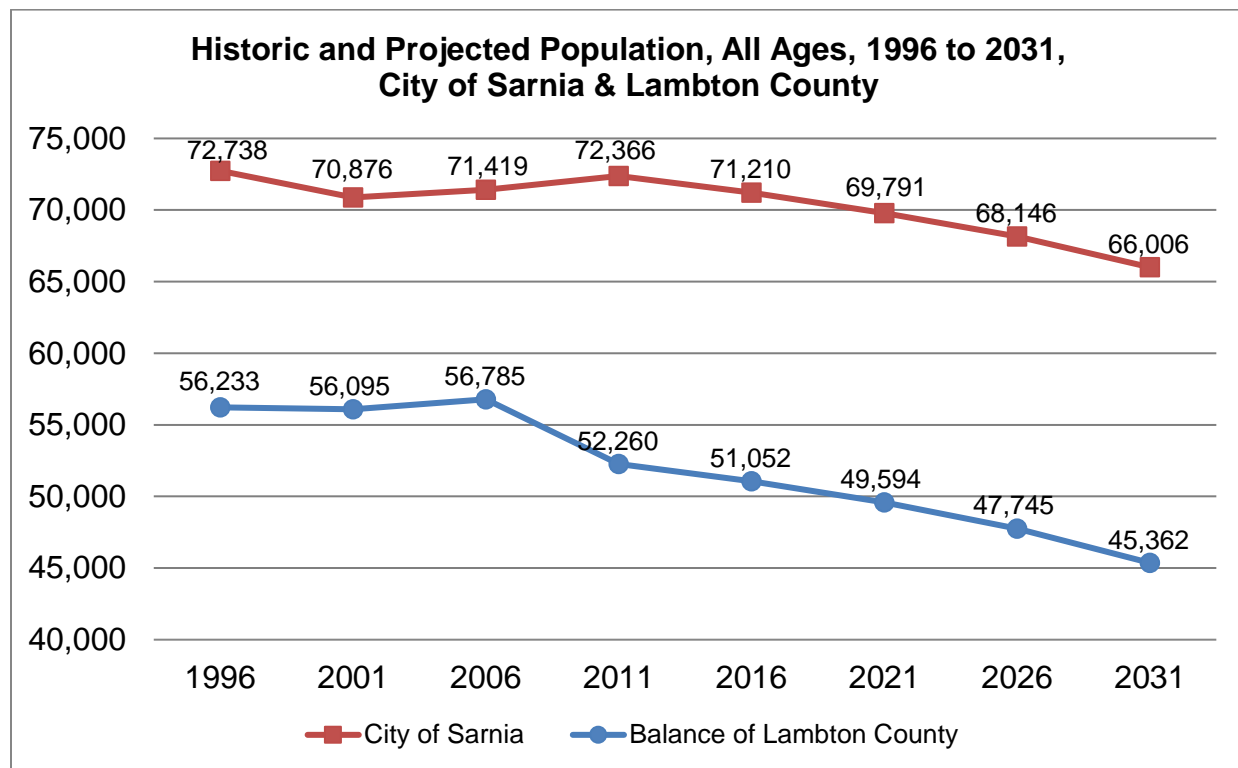
The City's population – like that of many communities outside of larger metropolitan areas – is being affected by declining birth rates, a continuing exodus of young adults, an increasingly aged population (the trailing edge of baby boom generation is now 50 years old), and limited immigration rates. Sarnia's population was recorded at 72,366 in the 2011 Census, a decline of 0.5% since 1996. Despite this, new housing starts have continued to increase, driven largely by a declining average household size. New residential construction may give the illusion of population growth, but for the aforementioned reasons, this has not been the case.

Most important when looking at recreation infrastructure is the size of the 5 to 19 age cohort. Although the City's entire population declined only marginally between 1996 and 2011, the 5 to 19 age cohort declined by 22%. This downward trend is expected to continue.

The County of Lambton prepares population forecasts for all lower-tier municipalities, including the City of Sarnia. The most recent set of forecasts were established in August 2012 (they are reviewed every five years to capture new census period trends) and extend to 2031 using high, low, and reference scenarios. The "reference" forecasts are being used to support the City's current Official Plan Review and are shown in the following graph.

The forecasts project a 2031 population of 66,005 persons within the City of Sarnia, which represents a decline of 9% (6,361 persons) between 2011 and 2031. While the City's build-out population forecast remains 81,540 persons, this figure is not within the horizon of the current forecasts. The future employment picture in the City could have a

significant impact on future population levels as growth in employment has the potential to generate net in-migration to Sarnia and area.



Source (1996-2011): Statistics Canada, Census

Source (2016-2031): County of Lambton. Population Projections, Census Years 2011 to 2031. October 2012

Note: Excludes Census undercoverage.

As many local programs also draw users from other areas of Lambton County, the population data and forecasts for the balance of the County are also included on the preceding graph. The forecasts project a 2031 population of 45,362 persons for the remainder of the County of Lambton, which represents a decline of 13% (6,898 persons) between 2011 and 2031.

The County’s population forecasts were built using an age cohort model that identifies the anticipated age characteristics of future populations (see the following table and graph). The forecasts indicate that all age groups below the age of 65 will decline in total persons by the year 2031, most notably persons 20 to 34 years old (30% decrease), persons 50 to 64 years old (29% decrease), persons 0 to 4 years old (20% decrease), persons 5 to 19 years old (19% decrease), and persons under the age of 10 (17% decrease). In fact, the only age group that is expected to grow in number is those age 65 and older; this age cohort is forecasted to increase by 46% by 2031. These projections are indicative of an aging community. Similar declines are forecasted for the remaining areas of Lambton County.

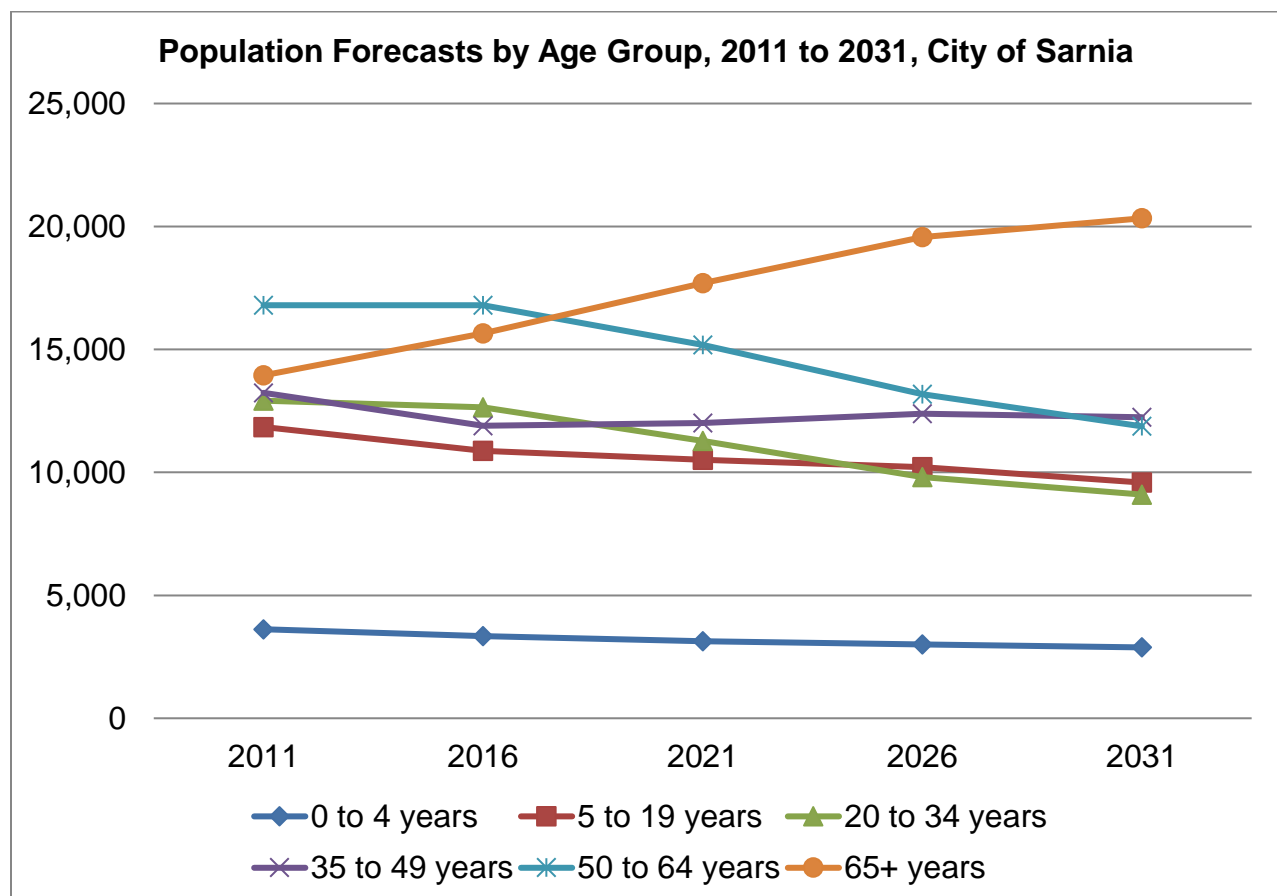
Population Forecasts by Age Group, 2011 to 2031, City of Sarnia

	2011 (actual)	2016	2021	2026	2031	Change, 2011 to 2031	
0 to 4 years	3,620	3,341	3,127	3,001	2,882	-738	-20%
5 to 19 years	11,845	10,881	10,505	10,214	9,586	-2,259	-19%
20 to 34 years	12,915	12,649	11,280	9,803	9,098	-3,817	-30%
35 to 49 years	13,235	11,896	12,007	12,382	12,237	-998	-8%
50 to 64 years	16,795	16,797	15,181	13,176	11,872	-4,923	-29%
65+ years	13,945	15,646	17,691	19,570	20,331	6,386	46%
Total	72,366	71,210	69,791	68,146	66,006	-6,360	-9%

Source (2011): Statistics Canada, Census

Source (2016-2031): County of Lambton. Population Projections, Census Years 2011 to 2031. October 2012

Note: Excludes Census undercoverage. Totals may not add due to rounding.

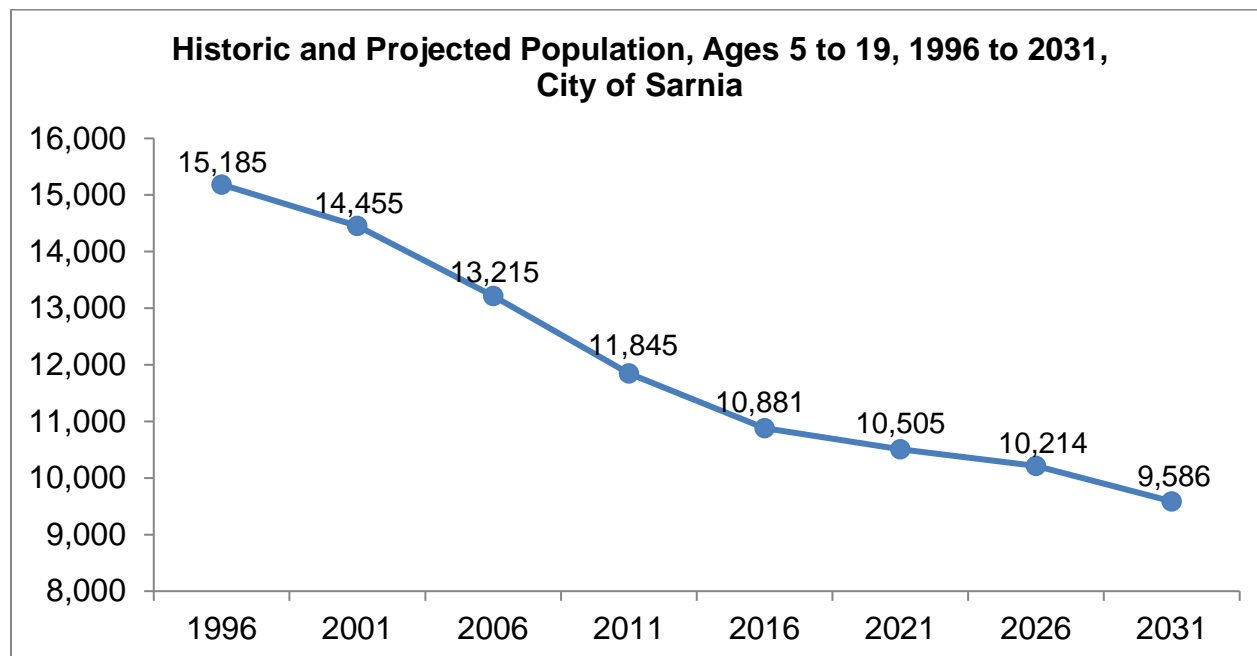


Source (2011): Statistics Canada, Census

Source (2016-2031): County of Lambton. Population Projections, Census Years 2011 to 2031. October 2012

Note: Excludes Census undercoverage. Totals may not add due to rounding.

The following graph documents the historic and forecasted population of 5 to 19 year olds within the City, the age group that is the predominant market for minor sports. Between 1996 and 2011, the number of children and youth ages 5 to 19 in the City of Sarnia declined by 22% (3,340 persons) and is projected to decline another 19% between 2011 and 2031 (2,259 persons). In total, in the 35 years between 1996 and 2031, Sarnia’s youth demographic is forecasted to decrease by 37%. This substantial drop is a major contributor to the declining registration in minor sports within the City.



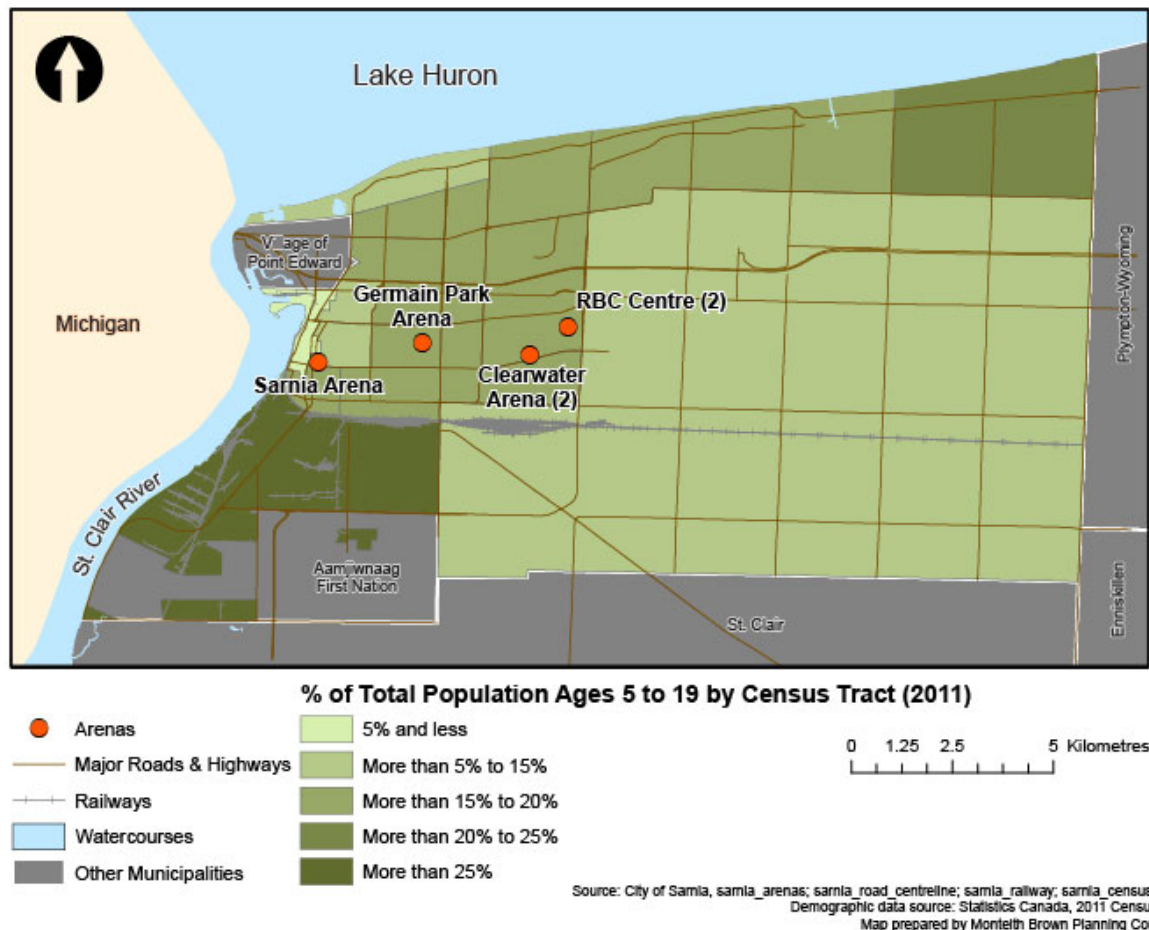
Source (1996-2011): Statistics Canada, Census

Source (2016-2031): County of Lambton. Population Projections, Census Years 2011 to 2031. October 2012

Note: Excludes Census undercoverage.

The following map illustrates the location of the City’s arenas in relation to residents ages 5 to 19, using 2011 Census data.

City of Sarnia - % of Total Population Ages 15 to 19 by Census Tract (2011)



These trends are likely to have notable implications on local sport requirements between 2011 and 2031:

- Children and youth (ages 5-19) are forecasted to decline faster than the overall population – a decrease of 19% is projected between 2011 and 2031. This suggests that facility requirements for this major market segment will continue to shrink based on current usage patterns.
- The proportions of adults (ages 20 to 49) are forecasted to decline by 18% between 2011 and 2031. Assuming steady participation rates, this suggests that the adult sport market and associated demand is also likely to shrink.
- The proportion of seniors (ages 65+) is expected to increase from 19% of the 2011 population to 31% of the 2031 population, or approximately 6,386 more residents. This may create modest additional demands for sport activities aimed at the seniors' market (e.g., old timer leagues, huff'n'puff skating, etc.).

2.2 Other Socio-Demographic Considerations

Research shows that income levels also influence (or at least are an indicator of) participation levels in recreation and leisure. Generally speaking, the greater a person's level of income, the more likely they are to participate in such activities as they typically have the means and motivation to do so. In Sarnia, the 2011 National Household Survey indicates that median employment income for adults 15 years was \$50,866, which was in line with the Provincial median. However, Sarnia's unemployment rate remains notably higher than the Provincial average. This data suggests that, on the whole, Sarnia's population may have greater challenges in affording the costs typically associated with organized sports. Fortunately, many municipalities and organizations have established (or have access to) subsidy programs to financially assist those that cannot afford the full cost of registration in youth sports; however, these programs are typically aimed at recreational-level participation that may require less facility access compared to competitive levels of play.

Participation in and accessibility of recreation opportunities can also be impacted by immigration and diversity levels. Based on estimates from the 2011 National Household Survey¹, the City has a lower percentage of immigrants (14%) than the Province (29%). Only 15% of Sarnia's immigrant population arrived in Canada since 2001 and 76% of the immigrant population is of European or American descent. This data suggests a high level of homogeneity in the population which is indicative of strong participation in traditional Canadian sports.

¹ The National Household Survey was a voluntary, self-administered survey conducted for the first time in 2011 as a replacement for the long census questionnaire. Due to the survey methodology, the City of Sarnia data had a non-response rate of 19.0%, which may affect data quality.

3.0 Trends in Sport Participation & Management

Based on our experience preparing similar studies throughout Ontario, this section provides an overview of some of the key trends and best practices pertaining to ice and field sport participation and facility management. Where applicable, potential implications for the City of Sarnia have been noted. Further analysis and application of these trends can be found in subsequent sections of this report.

3.1 Barriers to Participation

Research across Ontario shows that a lack of free time – driven by busy lifestyles at home, work, and school – is the primary barrier to participation in recreation for youth and adults. There are significant time commitments associated with most sports, including weekly practices and games, tournaments, and potentially travel to other centres. However, there is a strong willingness to travel for high quality facilities and programs.

Sports face heavy competition from other sports and sedentary activities and there is also a growing emphasis on spontaneous, non-programmed activities that can be scheduled on a moment's notice – this profile does not align well with organized sports. Unfortunately, more and more children and youth are seeking non-recreational forms of activity altogether (e.g., video games), which leads to increasing rates of obesity and inactivity. While the Canadian Physical Activity Guidelines recommends that teens achieve a minimum of 60 minutes of physical activity each day, a report by Active Healthy Kids Canada on physical activity among the Country's younger population reports that only 7% of children (between the ages of 5 and 11) and 4% of youth (between the ages of 15 and 17) are meeting this target, resulting in a physical activity grade of "D-" for 2014².

Affordability can also be a significant barrier to participation in recreation, particularly in higher cost sports, as studies have correlated higher household income to higher participation rates due to a greater ability to pay. For hockey, costs can be intensive, particularly for rep level play (i.e., "representative" travel teams) where household expenditures on registration fees, equipment, and travel are much higher than at the house league level. This concern is especially prevalent in communities such as Sarnia with higher than average unemployment rates; the City's geographic location also necessitates a high degree of travel for competitive level sports. According to a recent article, cost could be the most pressing problem facing hockey at the grassroots level, with a senior Hockey Canada official stating that cost plays a significant role in the

² Active Healthy Kids Canada. (2014). Is Canada in the running? Report card on physical activity for children and youth. Retrieved from: http://dvqdas9jty7g6.cloudfront.net/reportcard2014/AHKC_2014_ReportCard_ENG.pdf

stagnant or declining registration numbers faced by many minor hockey associations.³ Many local organizations offer informal financial assistance programs and also have access to initiatives such as Canadian Tire Jumpstart. A recent partnership between Hockey Canada and Bauer Hockey – “The First Shift” – is also aimed at improving the accessibility and affordability of introductory hockey as a way to attract new players to the sport.

3.2 The Impact of an Aging Population

Across Ontario and Canada, the average age of the population is becoming older as the populous ‘Baby Boom’ generation moves through their lifecycle. In Ontario, the number of seniors aged 65 and over is projected to double from 1.9 million in 2011 (representing 14% of the population) to 3.8 million by 2031 (representing 23% of the population). After 2031, the growth in seniors will slow significantly. A similar trend is also anticipated in the City of Sarnia, where the 65+ age group is projected to increase by 46% between 2011 and 2031.

The implications of an aging population on indoor space utilization are potentially significant. On one hand, there may be new opportunities to utilize space in non-prime time hours due to the growing market of older adults who may, for example, make use of daytime ice for dedicated skating times and hockey leagues. On the other hand, an aging population also means that the child and youth market, the most common users of arenas, is shrinking (in terms of proportion and number), which in turn is likely to reduce the number of ice users in total.

3.3 Changes in Hockey Registration

For many of the reasons noted above, over the course of the last few decades, several organized sports have witnessed declines in participation. While not currently a significant factor in Sarnia, participation in many sports is also being impacted by immigration – many new Canadians are coming from countries in which ice hockey is not often played, thus affecting participation rates at the minor level.

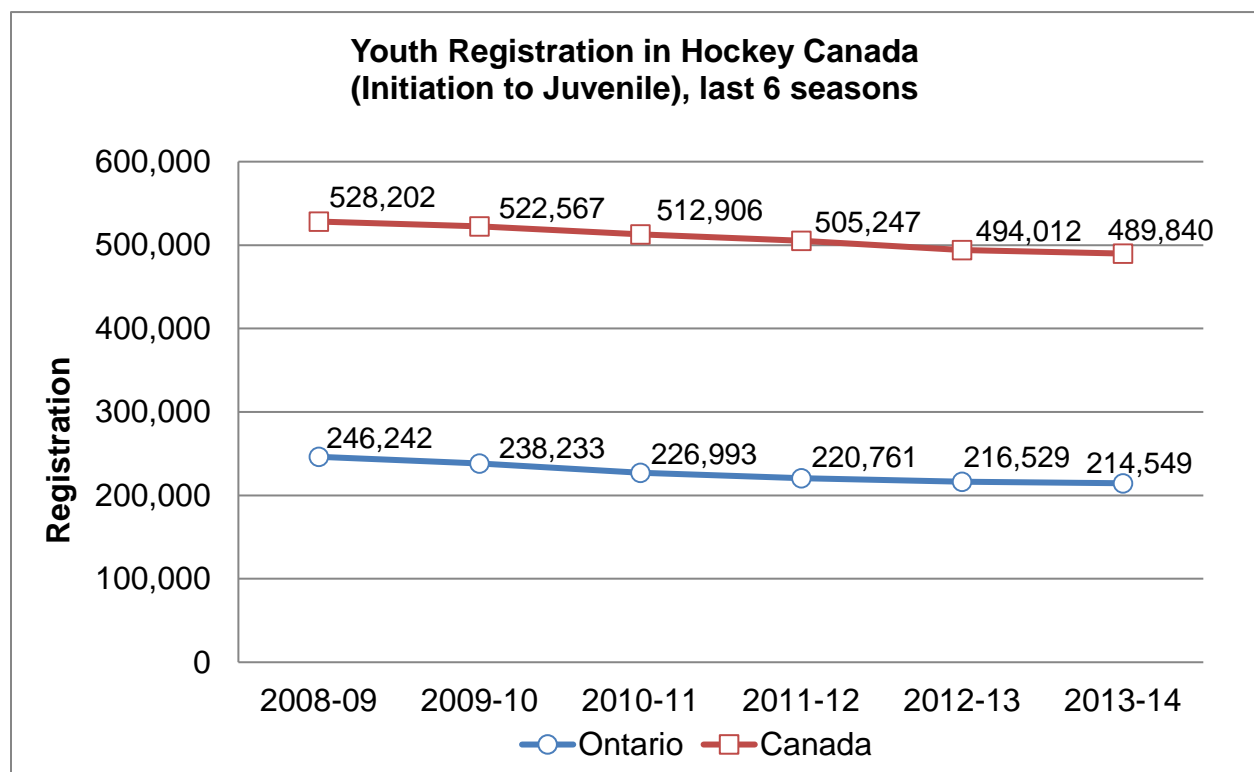
Changes in hockey registration are notable:

- Approximately 9% of Canadian children and youth play hockey, half the percentage that played 20 years ago. The size of Ontario’s 5 to 19 age group increased by only 0.4% between 2001 and 2011, despite the entire population growing by 12.6%.

³ Rutherford K. [Is the cost keeping kids out of minor hockey? Absolutely, players and parents say.](http://www.cbc.ca/sports/hockey/ourgame/story/2009/01/16/hockey-costs-too-much.html) CBC Sports. Available online at www.cbc.ca/sports/hockey/ourgame/story/2009/01/16/hockey-costs-too-much.html

- Hockey Canada and the Ontario Hockey Federation experienced peaks in youth registration for the 2008-2009 season. Youth registration has declined by 13% in Ontario since this time, a time period that coincides with the economic downturn and very slow youth population growth. Registration remains strongest in the younger age groups (Initiation, Tyke, Novice), while the Atom to Midget age groups have seen the greatest declines.
- Female hockey participation in Ontario also peaked in 2008/09. In the ten years prior to 2008/09, female hockey registration increased nearly four-fold and made-up for a reduction in male registration. Female hockey participation has declined slightly since, suggesting that the market has reached equilibrium. In 2013/14, females comprised nearly one-third of all youth hockey registrants in Ontario.

Similarly, Skate Canada (the national governing body for figure skating) has also experienced a slow decline in registration, with the number of associate members declining by 9% between 2006/07 and 2012/13 (source 2013 Skate Canada Annual Report). Synchronized skating and power skating programs have seen the greatest increases, with the latter having grown in Sarnia in recent years.



Source: Hockey Canada Annual Reports

3.4 Demand for Prime Time Ice

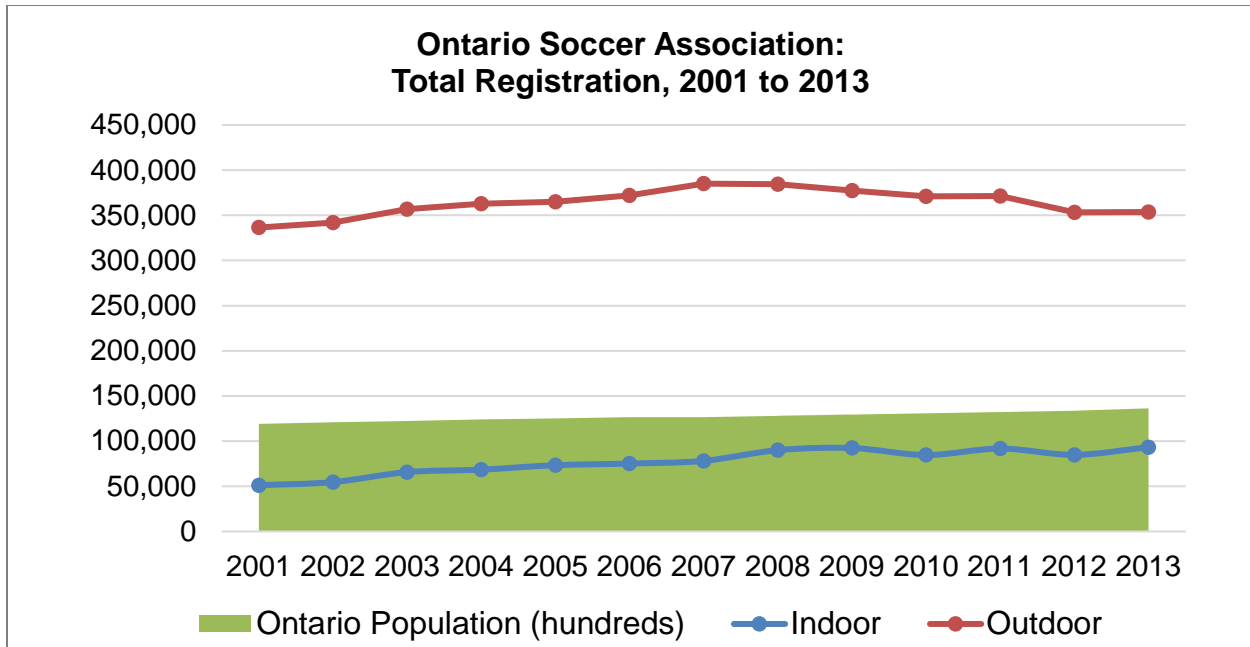
Despite declining registration levels and ice rentals, the most desirable prime time hours consistently remain in high demand in most municipalities; these times are usually between 5pm and 10pm on weekdays and all day on weekends, with a focus on youth-serving organizations. Sarnia's prime time hours are very similar, beginning at 5pm on weekdays and 7am on weekends, ending at 10pm on all days. Prime time in Sarnia primarily serves minor organizations but is increasingly becoming available for adult rentals.

However, with more households facing time constraints, there is evidence of a shrinking "window" of desirable ice times and more competition for prime time rental slots. In some communities, declining registrations have adversely affected bookings during "shoulder" hours that fall just outside of the prime times (e.g., 7 to 8am, 4 to 5pm, and 10pm to 12am). This finding is consistent with trends seen in Sarnia, although it would appear to be somewhat more pronounced locally.

Daytime (weekday) usage during non-prime hours has traditionally been difficult for most municipalities to sell and this is no different in Sarnia. Most communities undertake ice maintenance during this time, offer a variety of public skating programs, rent ice to local schools, and pick-up the occasional adult group rental. However, many communities are experiencing declining school board utilization due to rising busing costs and changes to the physical education curriculum. As such, some municipalities are choosing not to staff stand-alone arenas during the daytime, instead opening them up at 4pm or 5pm on weekdays, which is the current practice at Germain Park Arena.

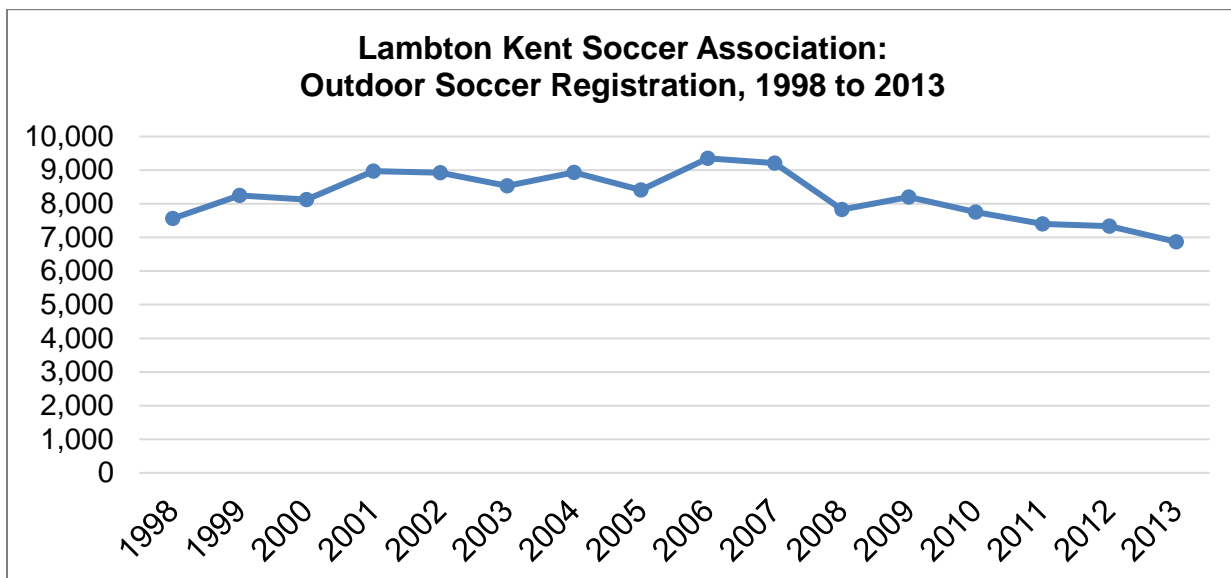
3.5 Changes in Soccer Registration

Soccer in Canada underwent enormous growth in the 1990s (replacing baseball and hockey as the most popular team sports among Canada's youth) and has been sustained by high registration in the past decade. The sport's popularity continues today, however, its growth appears to be slowing across the province, including players in younger age cohorts. According to the Ontario Soccer Association (OSA), enrolment in outdoor soccer activities peaked in 2007 and has seen small declines each year since, most notably at the youth level.



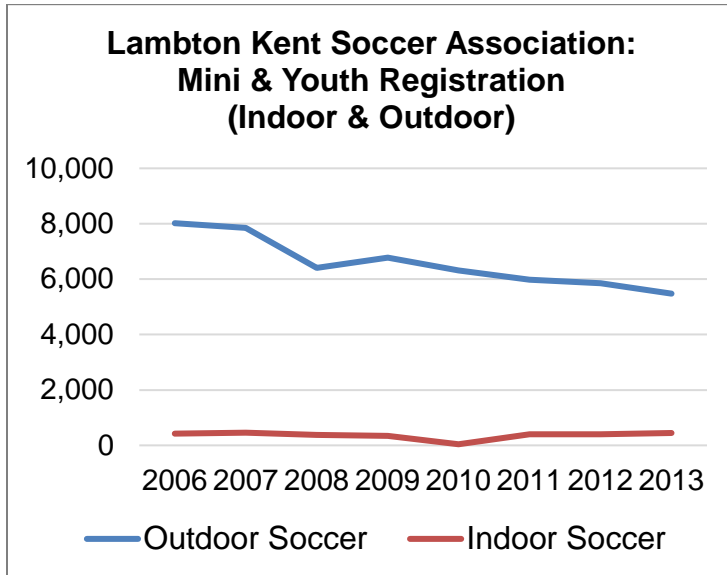
Source: Ontario Soccer Association (OSA)

Lambton Kent Soccer Association, which is the umbrella association for all affiliated Sarnia member organizations (including those in Lambton County and the Municipality of Chatham-Kent), has seen declining registration levels in outdoor soccer since 2006. In fact, in the past seven years, outdoor soccer registration in Lambton Kent has declined by nearly 2,500 players, a decrease of 27%, which is greater than the 5% decline in soccer registration seen in the province during that same period. The data suggests that outdoor soccer registration in the district is on the decline, likely primarily as a result of the decline in the youth population.

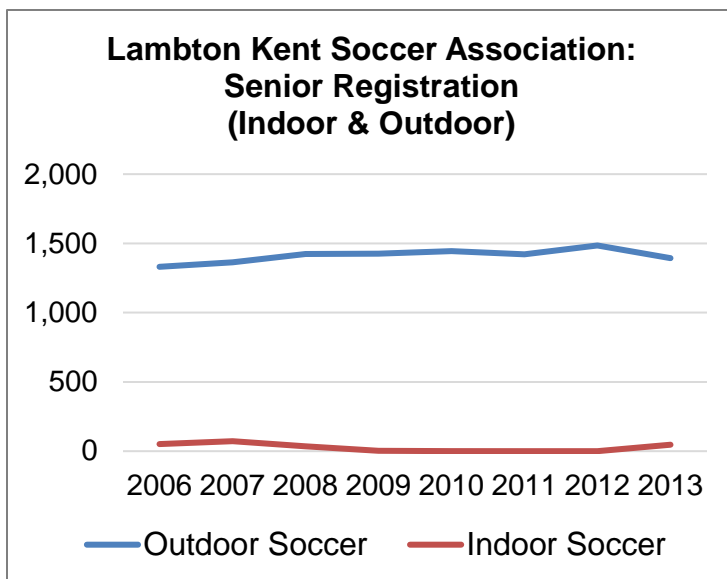


Source: Ontario Soccer Association (OSA)

Currently, the ratio of youth to adult outdoor soccer players is approximately 4 to 1 across the Province (down from approximately 5 to 1 in 2006); a similar ratio is found in Lambton Kent. The strength of adult soccer can be partially attributed to the aging of youth soccer participants from the 1990s, and continuing participation in soccer.



Source: Ontario Soccer Association (OSA)



Source: Ontario Soccer Association (OSA)

In terms of indoor turf sports, the demand for indoor facilities has been largely driven by an increased emphasis on year-round training and competition. Provincially, the number of indoor soccer players registered by the OSA has increased by 24% since 2006 (compared to a 5% decline in outdoor registration in the same time period), although has been relatively steady over the past five seasons. Indoor soccer pertains to a much smaller segment of market compared to outdoor soccer.

As of 2013, the ratio of outdoor to indoor soccer players is 4 to 1 in Ontario (in 2002, the ratio of outdoor to indoor players across Ontario was 6.25 to 1). In Lambton Kent, the current ratio of outdoor to indoor soccer players is 14 to 1, suggesting that there may be pent-up demand in Sarnia and area. Participation in indoor soccer is largely dependent on the availability, quality, and cost of appropriate facilities; in the Lambton Kent District, most if not all indoor soccer is played out of gymnasiums.

For the 2012/13 indoor season, reported data for Lambton Kent Soccer Association indicates that 90% of participants were in mini or youth leagues and 10% were in senior leagues. This is very different from the provincial average of 56% mini/youth and 44% senior. Compared to many other associations, there is a lower proportion of adults playing indoor soccer in the Lambton Kent district.

3.6 Trends in Other Field Sports

Most indoor turf fields are intended to be utilized for more than soccer and, therefore, trends relating to other activities are important to consider:

- Tackle Football is a sport with cyclical popularity, which may be gaining popularity again in Ontario, particularly for players from 7 to 19 years of age. The sport is often challenged by access to well lit fields, as football is an autumn sport and night falls earlier during that time of year. Due to the smaller size of most indoor fields, football clubs would most likely use such a facility for indoor training in the later winter and spring.
- Field Lacrosse is played by approximately 10% of Canada's registered lacrosse players. The alternative, box lacrosse, is the preferred form of lacrosse that is accommodated in indoor arenas or boarded turf facilities. Field lacrosse is generally played during the spring on football or soccer fields.
- Ultimate Frisbee emerging in the 1990s and appeals to the 20-39 age bracket. Part of the sport's appeal is its low equipment cost.
- Rugby is not seen as a growth sport in most parts of the province, but remains stable in communities with strong programs. The rugby season typically begins in May and continues through the summer. Rugby leagues in the region may benefit from an indoor turf facility for off-season training.
- Field Hockey is a growing sport that is played mostly through schools. Field hockey is one of the few field sports where the majority of players are women (about a 3:1 ratio) and is often offered as part of high school athletic programs. The sport is becoming a year-round activity and has been gaining popularity indoors, similar to soccer.

3.7 Increased Focus on Skill Development and Competition

Ice and field sport governing bodies in Canada are now implementing a Long-Term Athlete Development model that emphasizes athlete growth, maturation and development. This model identifies the needs of athletes at various stages of their development, including training and competition needs and also addresses the appropriate stages for the introduction and refinement of technical, physical, mental and tactical skills.

As a result of this and other factors (such as the amalgamation of associations and changes to residency requirements that allow for greater player movement), competitive development experiences and opportunities are in high demand. The higher the level of play and the greater the focus on athlete development, the more time that is required for practices, games, and camps. This is a notable trend for Sarnia given that it has two competitive minor hockey organizations regulated by Ontario Hockey Association and Minor Hockey Alliance of Ontario. Many organizations are altering their standards of play in order to offer their registrants more facility time during all seasons. Hockey schools, academies, and other enhanced development experiences (e.g., power skating) are turning hockey, soccer, and other sports into year-round activities. While this model allows for more time on the field of play, it also coincides with demands for dryland training spaces and indoor turf, which are important considerations for facility planning.

3.8 Implications of Aging Infrastructure

Most of Ontario's recreational infrastructure was built in the 1960s and 1970s (one-half of Sarnia's ice pads were built during or prior to his era). There are a number of challenges with older arenas, including (but not limited to) the following:

- many were designed to different construction and design standards and may have antiquated facility components (structural, mechanical, electrical, etc.);
- many lack modern amenities, such as larger (or a sufficient number of) change rooms, heated viewing areas, and multi-use designs;
- many have smaller ice pads, which creates safety and quality of play concerns with bigger, faster players having less space to skate;
- many are single pad designs that cannot offer the convenience and cost savings of multi-pad arenas;
- many may not be barrier-free for persons with disabilities; and
- many are not energy efficient and thus have higher operating costs.

Recognizing this, recent Federal and Provincial funding programs have contributed millions of dollars toward the renewal and construction of recreational infrastructure.

3.9 Re-purposing Surplus Arenas

Certain municipalities have also explored adaptive re-use of their redundant arena facilities for purposes such as community centre space (e.g., Kingsdale Community Centre in Kitchener), indoor soccer (e.g., Syl Apps Community Centre in Paris, Ontario), gymnastics (e.g., Ken Giles Recreation Centre in Brampton), indoor playgrounds (Vancouver), commercial or institutional usage (e.g., the former Maple Leaf Gardens in Toronto), and storage for public works or other operations equipment. Other examples of adaptive re-uses include curling rinks, indoor tennis, box lacrosse, indoor skateboarding, roller derby, etc. Re-purposing can extend the life of an existing facility, but is often just as costly as building new given the need to refurbish the building components. As a result, the most common response in Ontario has been to decommission and demolish surplus arenas. Through this Study, the possible re-purposing of any identified surplus ice pad(s) has been considered.

3.10 Strategies for Increasing Ice Usage

Our experience suggests that most urban municipalities have very limited prime time availability at their arenas, but most have a good deal of non-prime ice availability. To help boost non-prime usage, some municipalities are offering seniors-only and adult-only drop-in skating, adult shinny, and parent and tot shinny and drop-in skating. Hockey leagues for older adults 55+ are also beginning to emerge in a variety of communities. Oakville offers all-day figure skating and shinny if the arena is available, and Markham is offering a daytime older adult and tot skate. Richmond Hill is attracting new users through a variety of non-traditional programs such as learn-to-skate programs targeted to new Canadians, school rentals at which the Town provides an instructor, and lunchtime skates for employees of local companies. It remains to be seen if sufficient demand exists in Sarnia for similar drop-in programs.

3.11 Multi-Pad Arenas & Multi-Purpose Facilities

In this era of user convenience and cost recovery, more often municipalities are centralizing multiple recreational facilities on individual sites. Experience in hundreds of communities across Canada supports the finding that multi-use recreation facilities can provide a great number of benefits. While the specific nature and degree of these benefits will depend on local circumstances, facility design (e.g., barrier-free, more and larger change rooms, heated viewing areas, walking tracks, etc.), facility operation, and a host of other factors, there is no denying that multi-use recreation facilities have the potential to generate substantial economic, social, and environmental gains for local municipalities. These benefits are most notable in those municipalities that view sport infrastructure as an investment in the community, not simply an expenditure.

The vast majority of recent arena construction across the province has been in the form of multi-pad venues, including Sarnia's most recent arena (the multi-pad RBC Centre, built in 1998). Some of the notable benefits of multi-pad arenas and multi-purpose facilities include:

- **One-Stop Shopping:** The creation of a destination where residents can conveniently access recreation and/or other civic and social services (e.g., libraries, aquatic centres, older adult services, municipal information, etc.), making it particularly attractive for time-pressed individuals and multi-generational households.
- **Sport Development and Tourism:** Arena users may benefit from co-located spaces that allow for dry-land training, tournaments or banquets.
- **Operational Efficiency:** Multi-purpose facilities allow for the efficient use of operational resources through the economies of scale that are generated by sharing overhead costs such as staffing, utilities, maintenance, etc. These facilities are also well suited for the consideration of public-private partnerships.

To build upon the last point, the operational savings of moving from a single pad to a twin pad arena can be significant, due largely to the reduced per pad staffing complement (labour is the predominant cost factor in arena operations) and other economies of scale. Everything else being equal, the net operating deficit for a twin pad arena is typically the same as that for a single pad arena despite offering twice as much ice. Single-purpose facilities, such as single pad arenas, are no longer preferred unless justified by need (or lack thereof).

3.12 Green Construction

Today, energy efficiency and environmental sustainability are key considerations in renovation or new construction projects. Certain municipalities have adopted policies that establish specific LEED (Leadership in Energy and Environmental Design) construction and/or certification levels for particular types of buildings. Advances in capturing and reusing energy have made facilities more efficient and have helped to reduce utility consumption. While these approaches and techniques require additional capital investment during the construction phase of the project, there is normally a payback over time because of cost economies or expenditure avoidance. Consequently there are civic, social and financial benefits of the greening trend. The City of Sarnia has recently undertaken energy audits of all of its arenas, identifying possible capital projects and payback periods and works collaboratively with Bluewater Power to identify and implement energy savings and grant opportunities.

3.13 Cost Recovery

As operational costs rise, more municipalities are establishing cost recovery ratios to justify rental fees. Traditionally, municipalities have relied on historical precedent and regional benchmarking, but this is gradually being eliminated in favour of policy-driven pricing strategies. No such strategy exists in the City of Sarnia.

Financial performance targets based on annual operating expenses are the most common approach (generally ranging from 50% to 95% recovery for arenas, depending on the user type), but there are some municipalities that include small capital reserve contributions in their pricing strategies. For example, a municipality may contribute to an annual repair and maintenance fund that is considered as part of the operating budget; the pricing policy is then based on the hourly operating cost (including the reserve contribution), discounted by user type.

The matter of capital reserves is often addressed more directly through an hourly fee surcharge. Surcharges are commonly applied for a pre-determined number of years at a consistent rate. Typically, municipalities consider surcharges when there is an identified project on the horizon, which makes it more likely for users to support this form of capital fundraising. Depending on the charge, it may take several years for the contributions to accumulate, which is why alternate forms of funding and/or financing are required for major capital projects. The City of Sarnia and its user groups do not currently make regular contributions to a facility-specific capital reserve.

4.0 Sarnia’s Arena Inventory

The City of Sarnia operates 6 ice pads at 4 locations. Each arena facility is described briefly below and in the table that follows.

City of Sarnia - Arena Locations



Source: City of Sarnia, sarnia_arenas; sarnia_road_centrelines; sarnia_railway; sarnia_census_tracks © 2014.
 Demographic data source: Statistics Canada, 2011 Census of Population.
 Map prepared by Montelth Brown Planning Consultants, 2014.

RBC Centre

Located on municipally owned lands within the Lambton College campus, the RBC Centre is a twin pad sport and entertainment venue built by the City in 1998. Until the summer of 2014, the facility was privately operated, but was available for widespread community use; operations have recently been transferred to the City. The Sarnia Sting Ontario Major Junior A Hockey Club are a primary user and tenant within the main rink (RBC 1), which has seating for approximately 5,500 patrons in addition to approximately 42 suites. The second rink (RBC 2) is a community-level rink with limited seating. Both pads are NHL-size and offer ice during the summer (aside for a one-month period in RBC 1). The facility also contains a restaurant, Sting retail store, box office, several concessions, administrative area, multi-use room, boardroom, Sting offices, and area being used by the Sting for dryland training. In addition to ice events,

the RBC Centre hosts a wide range of concerts and special events from time to time. The parking lot is shared with Lambton College, which charges a fee for daytime use (tickets are validated for arena users). No significant renovations have been undertaken at this facility since it was built.

Sarnia Arena

Built in 1948, Sarnia Arena is one of the oldest arenas still in use in Ontario. This arena is used primarily for figure skating and ice hockey and is home to the Sarnia Legionnaires of the Western Junior B Hockey League. The arena has a capacity of 2,302 and includes two concession stands, four change rooms, and a community room. In 1981, a single storey addition was constructed on the south side of the building that included change rooms, washrooms, community room, mechanical room, and side entrances; the roof of this addition has subsequently been reinforced for snow loading. In 2009, interior renovations were completed and included new seating, higher glass around the rink, and roof repairs above the rink. The arena is served by an adjacent parking lot that is shared with the adjacent school; nearby lots are also available for evening event parking.

Clearwater Arena

Clearwater Arena is the City's other twin pad facility, built in stages by the former Town of Clearwater. Both the original ice pad (Blue rink, built in 1975) and newer pad (Red rink, built in 1989) are the same size (185 by 85 feet) and are served by a central corridor of change rooms located between the rinks. Ample parking is located in proximity to the arena's north entrance (shared with the adjacent YMCA); however, the lobby, concession, lower and upper community rooms, and Sarnia Sports Hall of Fame are all located at the south entrance to the facility. This facility is well used for a variety of community ice activities, as well as lacrosse and ball hockey in the summer. No significant renovations have been undertaken at this facility since it was built.

Germain Park Arena

Built in 1973 and renovated in 1995, Germain Park Arena is a single pad facility that is located within a large park neighbouring on a residential area. The rink itself is the smallest in the City, measuring 180 by 80 feet. The rink has a sand base and is not usable for non-ice uses. Due to lower demand, this facility is not typically open during weekday daytimes, but is well used by minor hockey organizations. The arena contains a concession and four change rooms, but does not have a community room or other activity space.

Description of Municipal Arenas

Arena	Year Built	Last Major Renovation	Size (sf)*	Size of Rink (ft)	Seating (approx.)	Change Rooms
Sarnia Arena	1948	1981 / 2009	53,794	190 x 80	2,302	4
Germain Park	1973	1995	24,160	180 x 80	~200	4
Clearwater – Blue	1975	n/a	53,794	185 x 85	~1,000	5
Clearwater – Red	1989			185 x 85	~300	5
RBC 1	1998	n/a	~95,000	200 x 85	5,500 (+42 suites)	4 (+2 team rooms)
RBC 2				200 x 85	~200	4

* Square footage figures from Building Condition Assessments, 2014

Based on existing research, visual observations, and input from user groups, it is clear that, while the City's arenas are generally well maintained on a day-to-day basis, the lack of sustained investment – coupled with the need for modern upgrades – is impacting their ability to meet today's expectations. Based on the experiences in other communities that the consultant has worked, the public's expectations are also rising and driving demand for higher standards in design and provision.

Further analysis of the condition and design of municipal arenas is contained in Section 8.

5.0 Public & Stakeholder Input

A key component of the Arena Management Study is its public engagement programme, which is intended to solicit input from residents, stakeholders, City staff, and Council. Guided by a Community Engagement Strategy, the primary components of the public engagement programme include the following:

- Stakeholder Worksheets and Focus Groups (ice users, turf users)
- Public Meetings (3)
- Meetings with the City's Project Team
- Staff Workshops
- Council Presentation

These various meetings and milestones were publicized through posters, email invitations, and a project website maintained by the City throughout the duration of the study. A summary of the public and stakeholder sessions completed to date is provided in **Appendix A**.

5.1 Stakeholder Input

Separate sessions were held with local ice and indoor turf organizations to discuss the current state of facility provision and utilization in Sarnia, trends in arena/turf usage, user needs, gaps in services, new and creative methods of utilizing existing facilities, and more. These sessions took place at the Kinsmen Centre on the evenings of November 12, 2014 (ice) and November 13, 2014 (turf). Prior to these sessions, brief worksheets were distributed via email to these organizations to collect preliminary information such as registration data, trends, and a general statement of facility needs.

A listing of meeting attendees and a complete summary of the focus group discussions and worksheet submissions are provided in **Appendix A**.

5.2 Public Meetings

A total of three public meetings were held at the Kinsmen Centre to present and receive feedback on the draft Arena Management Study and its sub-deliverables:

- December 3, 2014 to present the Arena Needs Assessment
- January 27, 2015 to present the Building & Operations Review
- February 24, 2015 to present the Facility Provisions Options Report

A summary of the input from these meetings is contained in **Appendix A**.

6.0 Arena Needs Assessment

This section identifies factors contributing to local ice needs, examines the utilization of municipal arenas and participation rates in local ice sports, and evaluates the overall supply of indoor ice pads in the City of Sarnia. In identifying current and future ice facility needs, a demand analysis was undertaken based on a combination of accepted standards of play, market-driven factors, and other local circumstances including trends and stakeholder input.

6.1 Arena Utilization

The data in this section has been provided by the City of Sarnia's Parks and Recreation Department and is based on specialized reports derived from arena usage over the past three seasons. While this data is highly useful in understanding trends over this time period and creating a usage profile for each arena, it must be interpreted with caution as the way in which the City has recorded usage has evolved over time and may not be fully consistent from year to year or rink to rink. When examining the data, it is also important to note that the City's supply of municipal ice pads has changed over this time period, with the City assuming operations at the RBC Centre prior to the 2014/15 ice season.

The City's arenas are generally available for booking between 7 am and 12 am, although there are no early morning bookings and very few weekday daytime rentals. Most City arenas are available for ice bookings from September/October to March/April, although this varies from rink to rink and year to year (some arenas open early/late or close early/late, and some are open year-round). It is acknowledged that the City accommodates a variety of local and regional users during the spring/summer at selected arenas and that this is likely to continue.

The focus of this analysis is on ice usage during the winter season as this is the time of year when demand for ice sports is greatest. More notably, this analysis focuses on the peak months of November and February only, as these are not impacted by program start-up, playoffs, or major holidays. The peak usage periods, rather than a broader seasonal perspective, form the basis upon which future facility needs are determined. It should be noted that the impact of any additional entertainment events scheduled at the RBC Centre between September and April (which could create occasional disruptions or displacement of ice users) have not been assessed as part of this analysis.

An examination of schedules and rental data supplied by the City for the past three seasons (during the peak months of November and February) reveals the following⁴:

- Usage of prime time hours (5pm to 10pm Monday to Friday, 7am to 10pm Saturday/Sunday) has been relatively steady over the past three ice seasons with an average of approximately 80%. The following table illustrates peak month usage of prime time hours for the past three seasons. The City’s prime time usage rate has increased modestly from 79% to 82% over this time period.

Prime Time Ice Utilization in Peak Months, 2011/12 to 2013/14

Peak Months	Prime Time Usage Rate	
November 2011	83%	79%
February 2012	75%	
November 2012	79%	80%
February 2013	81%	
November 2013	80%	82%
February 2014	84%	

Source: City of Sarnia rental data, 2014

- In 2013/14, prime time usage was highest at RBC 1 (87%) and both Clearwater Arena rinks (86% Red, 84% Blue); prime time usage was lowest at Germain Park Arena (79%).
- Across all rinks in 2013/14, prime time usage on weekdays was 92%, while prime time usage on weekends was 73%.
- Prime time hours that are commonly available include:
 - Friday evenings, particularly at Germain Park Arena
 - Saturday mornings, typically before 9am
 - Saturday evenings, typically after 6pm
 - Sunday mornings, typically before 12pm
 - Sunday evenings, typically after 6pm
- For the current 2014/15 season, it is estimated that approximately 75% of all hours used are prime time hours; the remaining 25% are non-prime hours.
- The number of non-prime hours used during peak months declined by 24% between the 2011/12 and 2013/14 seasons; the current schedule for 2014/15 suggests a further eroding of non-prime time demand.

⁴ All reporting for the RBC Centre prior to July 2014 was administered by a third-party and its accuracy cannot be verified, although there is no reason to believe it is not reliable.

- In 2013/14, general rentals (mostly adults) accounted for 24% of prime time rentals (including 35% on weekdays).
- The allotment of hours to regular users has been generally consistent over the past number of seasons, with only minor hockey (boys and girls) receiving a small increase.
- With the City taking over operations of the RBC Centre for the 2014/15 season, some adult usage has been shifted to this facility.

The following chart illustrates the number of hours typically rented to various groups on a weekly basis during the current 2014/15 season. Youth currently receive 62% of hours (71% if the two Junior teams are included), while adult rentals comprise 22% of all rented hours.

Typical Weekly Ice Allocation by Type of Group (Prime and Non-Prime), 2014/15 Winter Season, City of Sarnia

Type of Group	Percent of Total Hours (prime and non-prime)
Youth (boys and girls hockey, figure skating, Lambton Junior AAA, and high schools)	62%
Adult (leagues and pick-up/casual groups)	22%
Junior (Sarnia Sting and Sarnia Legionnaires)	9%
Other (public skating, sledge hockey, hockey schools, etc.)	6%
Total	100%

Data reflects all hours scheduled in a typical week (including prime and non-prime); some variation may occur from week to week

Source: City of Sarnia

The analysis of booking data indicates that prime time usage at City arenas has been steady over the past three seasons. However, the City has indicated in previous reports that arena usage declined by 17% between 2000 and 2010. The comparison of prime and not quite prime usage between 1998/99 and 2013/14 contained in the 2013 BMA Report identified that much of the decline was due to reduced usage by boys minor hockey, figure skating, and high school hockey. While this may have been the case, it would appear that these dramatic declines have now tapered off.

As noted, the 3-year average prime time usage rate at City of Sarnia arenas is 80%, with weekday prime time being 92% and weekend prime time being 73%. 100% utilization is not achievable due to remnant blocks of unbooked ice, last minute cancellations, and unforeseen maintenance issues or other conflicts. A usage rate in the order of 95% is being achieved by communities that are experiencing high demand for ice time, while 90% utilization of prime time hours tends to represent the industry norm in communities that are experiencing satisfactory levels of use in their arenas. With

Sarnia falling short of these rates, it would appear that there is capacity for greater usage, particularly on the fringes of prime time. However, the prime time window is shrinking, a trend that is not limited to just Sarnia. User groups are increasingly reluctant to utilize hours at the edges of prime time, thus scheduling groups in the early morning, later afternoon, and late night hours is becoming more difficult.

In Sarnia, early morning and late night bookings are low to non-existent, an uncommon sight in many communities where 7am ice rentals are the norm (particularly on Saturday mornings), as are 11pm rentals. When compared to traditional usage patterns seen in many other municipalities, the amount of adult usage during prime time hours is much greater in Sarnia. It is not uncommon for adults to be on the ice at 8pm in Sarnia, whereas in communities where ice demand is higher, adults would not begin playing until 10pm due to the need to accommodate youth within the full range of prime time hours. As discussed further in Section 6.4, the availability of ice time has led to a higher adult hockey participation rate in Sarnia and also allowed youth organizations to maximize their use of the choicest prime time hours.

Considerable availability exists during non-prime weekday times, however, these are challenging to rent as most residents are in school or at work at these times. With an aging population, hockey leagues for older adults 55+ may provide a modest opportunity for additional daytime usage.

When assessing the availability of ice time in the City of Sarnia, the supply of arenas in the region must also be considered. Most notable is the Point Edward Arena in the Village of Point Edward, a small community of 2,035 residents surrounded entirely by the City of Sarnia. The recently renovated Point Edward Arena serves Point Edward minor hockey and figure skating associations; however, according to the arena's online calendar, approximately one-half of its ice time is rented to adult groups, many of which are likely heavily comprised of Sarnia residents. It is anticipated that this usage pattern will continue, although declining registration at the youth level over time could free up a modest amount of ice time for other rentals.

A little farther away are arenas in communities such as Mooretown, Petrolia, Watford, Alvinston, Forest, and Thedford. As these facilities are farther away, they are less likely to accommodate Sarnia groups on a regular basis; however, some local organizations are known to use them. Many of these outlying communities are also dealing with aging population trends, raising the distinct possibility that additional ice time will become available over time. Adults and high performance youth teams have shown a willingness to travel greater distances to access ice time at better times and more affordable rates. This suggests that, over time, the supply of arenas in the secondary market may have greater capacity to accommodate Sarnia and area participants than in the past. We are not aware of any new arena developments or closures currently planned within the municipalities surrounding the City of Sarnia.

6.2 Pressures Impacting Ice Requirements

To assist in determining the appropriate provision of ice surfaces, input was solicited from major ice users in the City. Consultation is an important component of this study, as it provides insight into community perceptions and attitudes regarding facility demand and current and future requirements. Locally collected data – when combined with an analysis of national and provincial trends and other factors – facilitates the critical formulation of community-specific decisions.

Invitations to participate in this study were sent to all major arena users. The following 11 arena organizations completed a worksheet and/or participated in focus group sessions:

- Bluewater Regional Training Centre
- Bluewater Sharks
- Bluewater Sports Hockey League
- Lambton Jr. Sting AAA
- PMHL
- Sarnia Girls Hockey Association
- Sarnia Hockey Association
- Sarnia Ice Hawks
- Sarnia Legionnaires Hockey Club
- Sarnia Sting Hockey Club
- Skate Sarnia

The consultation was structured to solicit registration data, trends, usage profiles, and an understanding of current pressures and future needs from each of the groups. This information has been integrated into this report where appropriate and key pressures affecting ice needs are summarized below.

Note: The following summary represents the opinions of local ice organizations at the time of the consultation (see Appendix A for more detail). Confirmation of ice utilization and future ice needs is addressed through subsequent sections of this report; input from local groups is only one of several inputs used in the future demand model.

The arena organizations were in agreement that there is a need for 5 “full size” ice pads in the City, a solution that would still provide some room for growth.

In terms of arena usage and demand:

- most groups have a positive outlook for future participation, indicating that registration could be on the rise; some felt that there is a need to look for new opportunities that would further enhance arena utilization
- youth-serving organizations do not consider weekend mornings (Saturday before 9am and Sunday before noon) to be prime time; these are difficult hours to fill, as are late nights

- looking to the future, ice needs are not likely to decline at the same rate as the youth population due to the continued demand for ice time for Rep/Travel hockey teams (which will remain in similar numbers) and the increasing focus on skill development
- some groups (e.g., Lambton AAA Jr. Sting, PMHL, power skating, etc.) are expanding their programs and may be looking to add more ice time next year
- it has been the culture in Sarnia for adults to play at 10pm or earlier – playing at midnight may be the norm in other communities but this is not acceptable in Sarnia; adults need a place to play as well

In relation to future arena provision strategies and building / design practices, groups indicated that:

- Germain Park Arena could be closed without any major impacts on users (except for sledge hockey); groups do not consider it to be a full-size rink
- RBC Arena (rinks 1 and 2), Clearwater Arena, and Sarnia Arena should be retained, although updates are necessary to Sarnia and Clearwater Arenas
- all rinks require improved maintenance and investment – many feel that these facilities have been underfunded for the past 15 years, a fact that proven by the 2013 BMA Study that showed how low per capita spending was on the City's recreation facilities
- many existing change rooms are small and in low supply
- there is a need to consider the accessibility of arenas for persons with disabilities
- multi-pad arenas are essential for major tournaments and competitions

In total, local organizations indicate that they can utilize 14.5 hours of additional ice time on a weekly basis during the winter season to better accommodate their existing programs (requests include 6 hours for Lambton AAA, 6 hours for PMHL, 1.5 hours for Legionnaires, and 1 hour for Bluewater Regional Training Centre). Based on the anticipated user profile, not all of these hours need to be during prime times. An examination of registration levels and common standards of play suggests that the current amount of ice time allotted to ice users in Sarnia is reasonable; therefore, opportunities to use current ice times more efficiently should be considered before undertaking any significant restructuring of prime time hours involving youth priority users.

6.3 Benchmarking

For benchmarking purposes, we have examined municipal ice pad provision in relation to population. While it is recognized that every community has a slightly different socio-demographic composition and different sport participation rates, requests are often made to understand how one community compares to others. In the case of Sarnia, several comparator communities with similar characteristics (e.g., OHL teams, population size, urban/rural profile) and/or regional interest were chosen.

Market Research – Arena Provision in Comparator Municipalities

Municipality	Municipal Ice Pads				Non-municipal Ice Pads
	2011 Population	Number (Municipal)	Population per Ice Pad (total)	Population per Ice Pad (ages 5-19)	
Belleville	49,454	4	12,364	2,069	0
North Bay	53,651	4	13,413	2,253	0
Sault Ste. Marie	75,141	4	18,785	2,981	1
Peterborough	78,698	6	13,116	2,098	0
Windsor*	210,891	9	23,432	4,256	2
London*	366,151	23	15,920	2,787	3
Average	--	--	16,680	2,884	--
Sarnia	72,366	6	12,061	1,974	0

* Includes ice pads operated by outside partners, under agreement with the municipality (Windsor – 4, London – 5).

In terms of total population per ice pad, there is currently one municipal rink per 12,061 residents in Sarnia. This rate is more favourable than that of the comparator communities, which are currently providing ice pads at an average of one per 16,680. Non-municipal ice pads have been noted but not included in the analysis as many have different markets and operating profiles than municipal rinks.

These population-based standards, however, do not necessarily capture market-based demand considerations (such as changing participation rates, aging and diversity characteristics, geographic inequities, etc.). It is widely accepted that children and youth are the primary user of municipal arenas. Looking only at children and youth (ages 5-19), Sarnia's provision rate (one municipal ice pad per 1,974 youth) is also more favourable than the benchmark average (one per 2,884 youth). **Based purely on these per capita measures, the City of Sarnia has more ice pads per population than each of the comparator communities.**

6.4 Participation Rates

In addition to hours rented, another indicator of demand is the number of participants registered in ice sports, shown in the table below for the past five seasons (where available).

Registration in Organized Ice Activities – 2010/11 to 2014/15

Age Group	2010/11	2011/12	2012/13	2013/14	2014/15
Youth Registration					
Sarnia Hockey Association	1,199	1,133	1,137	1,156	1,142
Sarnia Girls Hockey Association	200	200	200	200	200
Lambton Jr. Sting AAA	136	136	136	136	139
Skate Sarnia	191	174	202	225	225**
Bluewater Regional Training Centre*	20	20	20	20	20
Sarnia Sting Hockey Club	25	25	25	25	25
Sarnia Legionnaires Hockey Club	20	20	20	20	20
Subtotal – Youth	1,791	1,708	1,740	1,782	1,771
Adult / Other Registration					
Sarnia Ice Hawks	17	17	22	25	23
PMHL	167	190	214	309	357
Bluewater Sports Hockey League	320	320	290	290	258
Micor Source for Sports Leagues**	n/a	n/a	n/a	n/a	192
911 Hockey League**	n/a	n/a	n/a	n/a	170
Sunday Night Hockey League**	n/a	n/a	n/a	n/a	100
Women's Hockey League**	n/a	n/a	n/a	n/a	96
Teachers Hockey League**	n/a	n/a	n/a	n/a	60
Pick-up Groups**	n/a	n/a	n/a	n/a	900
Subtotal – Adult / Other	n/a	n/a	n/a	n/a	2,156
TOTAL	n/a	n/a	n/a	n/a	3,927

Source: local user groups, unless otherwise noted

Note: Excludes spring/summer sessions

* Groups also make frequent use of Point Edward Arena. Figures shown are estimates for City of Sarnia arena users only.

** estimate

Based on data provided by the primary user groups, the total number of youth users in Sarnia (1,771 in 2014/15) has been remarkably steady over the past five seasons,

typically fluctuating by only 1-2% each year. The data suggests that participation rates have generally levelled out and, given the forecasted decline in the youth population over the next fifteen or more years, without positive interventions, similar declines in minor ice sport registration are anticipated.

With an estimated 11,250 residents in Sarnia's 5-19 age cohort (2014 estimate) and 1,771 registrants, this means that about 15.7% of children and youth participate in organized ice sports; this is near the lower end of the common range that we have observed in similar communities (typically between 15% and 25%), although the national average is closer to 9%. It also bears noting that this estimate includes non-City participants, which are drawn to programs such as Lambton AAA and Skate Sarnia that have catchment areas beyond the City's municipal boundaries.

While children and youth constitute the primary users of ice time in Sarnia, the adult market must not be overlooked. Reliable registration data for adult users is more difficult to collect, particularly for past seasons; thus participation in several organizations was estimated based on an examination of rental hours. It is important to note that many adult groups are quite mobile and are willing to rent time at other arenas in the area based on ice availability and rates.

In other municipalities we have analyzed, adult bookings typically comprise 20% to 35% of all usage, noting that adults typically require less ice time (e.g., no practices) and thus are able to accommodate more users during their allotted hours. As the population ages, it is possible that this percentage will increase. In Sarnia, adult bookings currently account for 22% of all usage (but approximately 50% at the nearby Point Edward Arena), suggesting that the allocation to the adult hockey community is within the typical range.

It is also noteworthy that provincial norms suggest that about 5% of adults ages 20 to 49 are involved in ice sports. We estimate that about 8.6% of Sarnia adults ages 20 to 49 are active users of the City's arenas, suggesting that **the local adult ice sport participation is substantially higher than the norm**. As was noted previously, adult groups tend to receive more favourable ice times at present in the City compared to many other communities. It is predicted that adult participation should fluctuate at a rate similar for population changes in this age cohort, all other factors being equal.

The projected number of ice participants is calculated by applying overall participation rates to the forecasted population of the identified age groups. In doing so, the needs assessment model makes a number of assumptions relating to participation and population growth. First of all, it is assumed that the City will grow at the rates identified in Section 2 of this Study. Changes in the population forecasts could impact the estimated ice demand for Sarnia; therefore, it is recommended that the population projections and their impact on the needs assessment be closely monitored over the coming years. In addition, except where otherwise noted, this report assumes that participation rates in hockey, figure skating, and their related disciplines will grow in proportion to population growth over the course of the planning period.

With this in mind, the following table illustrates the youth and adult registration levels forecasted for the City of Sarnia assuming that ice supplies are not unduly constricted.

Projection of Registered Ice Sport Participants, City of Sarnia (2014/15 to 2031)

Age Group	2014/15 (actual)	2016	2021	2026	2031
Youth/Core Registrants (based on a 15.7% participation rate for residents ages 5 to 19)	1,771	1,708	1,649	1,604	1,505
Adult/Other Registrants (based on a 8.6% participation rate for residents ages 20 to 49)	2,156	2,111	2,003	1,908	1,835
Total Registrants	3,927	3,819	3,652	3,512	3,340

Based on the extension of current participation rates, by 2031 overall registration in local ice organizations is anticipated to decrease from 3,927 users to 3,340 users – a 15% decline (587 registrants) between 2014 and 2031. This decline is projected to be shared equally between youth and adult users as both the youth (ages 5 to 19) and adult (ages 20 to 49) age cohorts are expected to decline at generally the same rate. This is not necessarily to say that ice demands will decrease by 15%, as the specific ice needs of users may change over time, rather that aging and declining population trends will have significant implications on the number of participants making regular usage of the City's arenas.

6.5 Arena Needs

A market-specific target is the preferred approach because it is able to consider the impact of participation trends, population growth, and demographic factors. It can also be set at a level that is consistent with local circumstances and public expectations, making it responsive to the specific needs of the City of Sarnia.

Before establishing the facility provision target, we must first look at the supply and how it is used. The City currently provides six ice pads. Based on the analysis in Section 6.1, the large majority of usage occurs through minor hockey, figure skating, and adult hockey rentals, all of which are subject to fluctuating participation based on a series of factors not the least of which is the size of the local market. Notable in Sarnia is the existence of two major junior teams (Junior A Sting and Junior B Legionnaires), which are largely unaffected by changes in the catchment population – these teams will continue to require generally the same amount of ice team year after year after year. For the most recent season, these two teams combined to use approximately 20 prime time hours per week, which accounts for 40% of an ice pad's available prime time. Thus, when applying the recommended provision target, the current supply should be discounted by 0.4 ice pads, leaving the City with an effective supply of 5.6 ice pads to serve its residents and community-based organizations.

The current estimated level of provision in the City of Sarnia is approximately 1 ice pad per 701 participants (based on 3,927 players for 5.6 ice pads). Looking just at youth, the City is currently providing one rink per 316 youth registrants at the present time. From our experience, this ratio of youth participants per ice pad is quite low; depending on the nature of the programming (most notably rep/travel hockey, which requires more ice time), we normally see a range of 400 to 600 youth per pad in most urban communities.

In establishing a locally responsive ice pad provision target, it is helpful to consider the various factors that are impacting ice utilization in Sarnia. Several of these factors were identified in Sections 3 and 4, but some key findings are summarized below:

- As a whole, youth registration has been steady for the past three years, but arena usage had dropped substantially prior to this time period. While some programs are showing modest growth potential, others are seeing small declines. Nearly 16% of local children/youth participate in organized ice sports. Overall, participation rates in ice sports are generally stable, although there are concerns that rising costs and interest in other activities could draw people away from ice sports over time.
- The number of youth living in Sarnia and the broader County have been in decline for several years now, reducing the size of the market from which ice organizations can draw. Both the youth (ages 5 to 19) and adult (ages 20 to 49) markets are expected to decline by a further 15% between 2014 and 2031 in both the City and County, suggesting that the future market for core arena users is shrinking.
- To remain competitive with other centres, there is a desire amongst youth hockey associations to increase practice time and offer additional skill development programs and tournaments. In many communities, shared practices are common at the house league level, sometimes in all divisions and at least up to and including atom; practices are not typically shared at the rep/travel level; practices are less common at the midget and juvenile house league levels.
- The prime time window is shrinking as groups are less willing to use ice time at the edges of prime time. Furthermore, usage during non-prime hours is quite low and declining, but is not currently out-of-line from the profiles of arenas in comparable communities.
- There is capacity for additional bookings in prime time (the 3-year average prime time usage rate is 80% in peak months), most notably on weekends. While some of these available hours may be difficult for certain groups to use (e.g., weekends), those communities where the supply and demand are in closer balance typically find a way to use 90 to 95% of prime time hours.
- Local organizations (mainly Lambton AAA and PMHL) estimated that ice requests for next season could increase by 14.5 hours per week (prime and/or non-prime). An examination of registration levels and common standards of play

suggests that the current amount of ice time allotted to ice users in Sarnia is reasonable; therefore, opportunities to use current ice times more efficiently should be considered before undertaking any significant restructuring of prime time hours involving youth priority users.

- The percentage of the adult population participating in ice sports in Sarnia (8%) is higher than in many comparable communities, suggesting that adults are receiving sufficient ice time. Given the availability of prime time hours, the times at which adults are playing (e.g., 8pm on weekdays and mid-evening on weekends) are more favourable to the users than is typical in many other communities. In 2013/14, adult rentals accounted for 24% of all prime time rentals in the City of Sarnia.
- The continued availability of arenas for major tournaments has been raised as a concern by user groups. For instance, the Silver Stick Tournament has been running in Sarnia for about 40 years, using rinks in the City and surrounding area. In 2014, it attracted 94 teams (up from 66 in 2013) and its economic impact has been previously estimated at over \$4 million. If fewer rinks were available, this would likely impact the number of teams and local organizers have expressed concern that arena closures might prompt the tournament director to consider relocating to another community. This would not be a significant issue if Germain Park Arena was made unavailable (as it is used only sporadically for the Silver Stick Tournament), but it would be more of a concern if one of the City's larger rinks was removed from the inventory. While this is a reasonable concern, it should be emphasized that municipalities do not typically build or maintain ice rinks only for the occasional tournament – the day-to-day and week-to-week usage by local residents is what sustains most rinks and should be the emphasis of any usage analysis.
- The supply of arenas in Sarnia is supplemented to a degree by the Point Edward Arena, which serves not only its in-house minor hockey and figure skating programs, but also several adult groups, many of which are likely heavily comprised of Sarnia residents. It is anticipated that this usage pattern will continue, although declining registration at the youth level over time could free up a modest amount of ice time for other rentals. The supply and changing usage patterns of arenas in other areas of the County may also have an impact on the regional availability of ice times.
- With the City now responsible for operations of the RBC Centre, some have expressed a desire to schedule additional entertainment events beyond the existing ice sports. The potential for scheduling additional entertainment events is beyond the scope of this analysis and not been assessed, although it is recognized that such events may create occasional disruptions or displacement of ice users.

Some municipalities utilize a provision target that blends youth and adult registrants together; however, these two groups utilize ice very differently. For example, adult

demand is more elastic (i.e., an ability to use non-prime hours or to discontinue play for seasons at a time) and there is greater mobility (i.e., they can use arenas outside the municipality), whereas youth are the dominant user of local prime time ice, which is in limited supply. Furthermore, as discussed in the previous section, the number of youth and adult ice sport participants are expected to decline at generally the same rate into the future. For these reasons, a youth-based target is the preferred metric for forecasting ice demand in Sarnia. The City is currently providing one rink per 316 youth registrants at the present time.

Based on the aforementioned factors, it is recommended that a provision target of 1 ice pad per 400 youth registrants (ages 5 to 19) be utilized for assessing City-wide ice pad needs. This target, which is a slightly more conservative version of one that has been successfully applied in several other communities, assumes the following:

- that youth will continue to use the large majority of prime time hours;
- that the City will attempt to accommodate the majority of adult ice groups in non-prime times, recognizing that certain prime hours not conducive to youth may be used for adult rentals;
- that the intent is to accommodate the needs of all local groups within City (i.e., not regularly renting time outside of the municipality); and
- that groups will be willing and able to pay for the entirety of their ice needs.

The following table illustrates application of the preferred provision target, assuming the existing rate of participation is maintained (i.e., at 16%) and that the youth market segment (age 5 to 19) changes at the forecasted rate.

Projection of Ice Pad Needs, City of Sarnia (2014/15 to 2031)

	2014/15	2016	2021	2026	2031
Forecasted Number of Youth Registrants	1,771	1,708	1,649	1,604	1,505
Number of Ice Pads Required (based a provision target of 1 ice pad per 400 youth registrants)	4.4	4.4	4.2	4.1	3.8
Surplus Ice Pads (based on a current supply of 5.6 ice pads*)	1.2	1.2	1.4	1.5	1.8

* Current supply has been discounted by 0.4 ice pads to account for major junior teams, which are unaffected by changes in the catchment population.

This analysis identifies a surplus of 1.2 ice pads at present, growing to 1.8 ice pads by 2031. If one ice pad was eliminated from the active inventory, the current number of youth participants per ice pad would be 354, still well within the recommended range. Eliminating two ice pads, however, would increase this ratio to one per 443 youth participants; this is not recommended at this time as it would create

substantial challenges for youth programming and cause adult rentals to occur almost exclusively within non-prime times (which could significantly impact adult participation). On a per capita basis, a supply of five ice pads would result in a provision level of one ice pad per 14,472 residents, which is below the benchmark average of 16,680 and within an appropriate range for communities with characteristics similar to Sarnia.

This analysis finds that there is currently a surplus of one ice pad in the City of Sarnia and that demand is likely to decline further as the years pass due to the City's aging and declining population. However, the forecasts do not predict that the City will reach a point where a second ice pad could be considered surplus until closer to 2031, if at all. **Barring any unforeseen developments, a supply of five ice pads will be adequate for meeting the needs of City of Sarnia residents for at least the next ten years and likely for some time beyond this period.** It is recommended that the City continue to monitor local participation and population forecasts, as well as the regional ice arena market as these factors could impact local demand and decisions regarding future facility provision.

Options and strategies to address the City's current and future supply of arenas are discussed in Section 10.

7.0 Indoor Turf Needs Assessment

The demand for indoor turf facilities is being assessed within this Arena Management Study for the sole purpose of examining the demand and viability of re-purposing an existing arena, should one be deemed surplus. The option of converting Germain Park Arena into an indoor turf facility has been discussed previously, although it is recognized that such facilities can take many different forms and can be operated by many different providers. **The provision of indoor turf space would represent a new service level in the City and – without the benefit of a process such as a comprehensive master plan – it is not possible to understand how this service fits in with the broader needs of the community.**

To inform future discussions, this section identifies factors contributing to local indoor turf facility needs and examines participation rates in local field sports, as well as the utilization of gymnasiums for winter activities. In identifying current and future indoor turf facility needs, a demand analysis was undertaken based on a combination of accepted standards of play, market-driven factors, and other local circumstances including trends and stakeholder input.

7.1 Indoor Turf Utilization

There are no indoor turf facilities, municipal or otherwise, in the City of Sarnia at present. All winter indoor soccer activities are offered out of school gymnasiums, as are several other sports such as football and baseball training. Box lacrosse is played out of arenas in the summer and there are currently no winter field or box lacrosse opportunities. The local rugby association has used private facilities in the past but will be looking for alternatives this year. In some communities, indoor turf is also appealing to cricket, field hockey, and ultimate frisbee; however, we are not aware of any such organized activities in Sarnia.

In most communities with indoor turf facilities, the usage profile is very heavily weighted toward soccer (often youth and adult in near equal amounts). Common soccer activities include a mixture of skill development, training, and leagues, as well as tournaments and special events. As soccer programs can span the entire indoor season (generally 24-weeks between October and April), they are a preferred use over most other field sports that are looking to rent time for shorter timeframes leading up to the outdoor season. Occasional rentals, however, are very important in filling vacant timeslots and efforts to design any indoor turf facility so that it can accommodate multiple activities is a must.

Locally, minor and adult soccer clubs are largely dependent on gymnasiums within elementary, secondary, and post-secondary schools. Soccer that is played in gyms is called futsal and, due to the hard playing surface and small dimensions, is a much different game from what is played on turf. As such, user groups have indicated that the skills developed while playing in gymnasiums do not transfer well to the outdoor game. In addition, school gyms are often too small for field sport activities and not conducive

for training for sports such as baseball, football, lacrosse, or rugby. Access to school gymnasiums (although generally affordable) is becoming increasingly difficult for many groups as the facilities are in high demand for school uses and court sports – this is an issue in both Sarnia and province-wide. As a result, some teams are travelling to other communities (e.g., London, Woodstock, etc.) to rent time at indoor turf facilities in order to support their increasing off-season training requirements.

7.2 Pressures Impacting Indoor Turf Requirements

To assist in determining the appropriate provision of indoor turf facilities, input was solicited from sport field user groups in the City. The following 11 sport field organizations completed a worksheet and/or participated in focus group sessions:

- Sarnia FC
- Sarnia Girls Soccer
- GallaDev's Soccer Academy
- Sarnia Women's Soccer Club
- Sarnia Men's Industrial Soccer Leagues
- Bluewater Football
- SMAA Lacrosse
- Field Lacrosse
- Sarnia Saints Rugby
- SMAA Baseball
- Sarnia Girls Fastball

The consultation was structured to solicit registration data, trends, usage profiles, and an understanding of current pressures and future needs from each of the groups. This information has been integrated into this report where appropriate and key pressures affecting indoor turf needs are summarized below.

Note: The following summary represents the opinions of local sport field organizations at the time of the consultation (see Appendix A for more detail). Confirmation of current facility utilization and future needs is addressed through subsequent sections of this report; input from local groups is only one of several inputs used in the future demand model.

In terms of indoor field sport usage and demand:

- There is substantial community interest in a multi-use indoor turf facility. The groups were unanimous and strong in their belief that the City needs and can sustain an indoor turf facility, possibly with multiple fields. This is based on the popularity of current programs (many of which are restricted by current space limitations), pent-up demand for new programs, the broad range of sports groups that are seeking access, and provision levels in other communities. An increased focus on skill development at both house league and competitive levels is also leading to growing demand, as is burgeoning interest in adult soccer.

- Many organizations would be interested in using an indoor turf facility, particularly during prime time. Sensitivity to rental rates would have a significant impact on field usage, as would any potential allocation policy.
- While summer usage would be much lower, field lacrosse indicated interest in using the facility.

In relation to future indoor turf facility provision strategies and building / design practices, groups indicated that:

- The continued use of school gymnasiums for field sport activities was not viewed by groups as a viable option.
- A variety of potential facility designs were discussed with the groups. The preferred form of development expressed by groups would be an air-supported dome, as this could be a seasonal operation, would be more cost effective than a permanent purpose-built facility, and could be designed to hold multiple fields.
- Should the development of a new facility not be supported by the City, interest was mixed for the potential re-purposing of Germain Park Arena. While most agreed that it would be better than nothing, many felt that it would only be a short-term solution as it is too small for older youth and adults, it would still require substantial renovations, and it would only provide for a single field.
- Municipal operation of such a facility was the option preferred by the groups (compared to being operated by a non-profit or private group).
- The groups felt that an indoor turf facility would have no negative impact on the City's outdoor turf field (Norm Perry Field) as it is already being used to capacity.

The development of indoor turf facilities is a widespread trend across Canada. The following points provide a brief overview of some of the key drivers behind this:

- Demand for soccer has risen dramatically over the past two decades, although this growth has recently fallen off. This rise can be attributed to the gender neutrality of soccer, its affordability, its relevance to a wide range of ethno-cultural groups, and increased exposure at all levels. Indoor soccer appeals to a smaller market segment than the outdoor game, but has been made a priority by many organizations as part of the sport's long-term athlete development model.
- The number one reason for not participating in sports activities is "lack of time". Indoor facilities are not affected by the weather the way that outdoor fields are and, as such, allow people to participate when they have the time.
- The capacity of many soccer organizations is maturing, resulting in a greater emphasis on year-round player development and training excellence.

- With soccer accounting for the majority of registered rectangular field users, it is highly likely that this sport will be the primary user of a future indoor turf field, should one be provided. However, sports other than soccer are also emerging and seeing the benefit of year-round play and training opportunities. Depending on their design, indoor turf facilities can be utilized for a number of sports in addition to soccer; including lacrosse, football, rugby, field lacrosse, ultimate frisbee, baseball training, lawn bowling, special events, and party rentals.
- The design of indoor field sports facilities is improving. For example:
 - the introduction of “field turf” technology provides a more natural, grass-like surface;
 - numerous construction options and facility components are available, including air supported domes (which are more affordable than pre-engineered structures and are gaining support in several communities), permanent buildings, or converted facilities (such as a re-purposed arena); and
 - many communities are building them as part of other community complexes to make use of economies of scale and to accommodate cross-programming opportunities.
- With sufficient demand levels, most indoor turf facilities generate strong cash flows, but can be challenged to maximize usage during the summer and daytime hours. While not necessarily a revenue generator, utilization of the field for pre-school and senior programs during the daytime can add significant benefit to the community.

Although not an approach preferred by local groups, indoor soccer facilities in some communities are operated in partnership with local soccer clubs or private organizations to reduce construction and/or operating costs and to maximize usage. A few years ago, Sarnia FC donated \$125,000 (which is being held in reserve by the City) for the future development of an indoor turf facility. Relationships between municipal governments, other public agencies, and community organizations have represented valuable ways to offer service delivery benefits for years. There may also be interest from the private sector and/or the education sector to consider a partnership of some form.

7.3 Benchmarking

For benchmarking purposes, we have examined indoor turf facility provision in relation to population. While it is recognized that every community has a slightly different socio-demographic composition and different sport participation rates, requests are often made to understand how one community compares to others. The same communities that were used to compare arenas has been used.

Market Research – Indoor Turf Facility Provision in Comparator Municipalities

Municipality	Indoor Turf Fields (Municipal / Non-profit)			
	2011 Population	Number of Fields (small-sided)	Population per Field (total)	Population per Field (ages 5-19)
Belleville	49,454	1	49,454	8,276
North Bay	53,651	0	--	--
Sault Ste. Marie	75,141	2	37,571	5,962
Peterborough	78,698	1	78,698	12,588
Windsor	210,891	1	210,891	38,304
London	366,151	6	61,025	10,684
Average	--	--	75,817	13,110
Sarnia	72,366	0	--	--

In terms of total population per indoor turf field, the current average of the benchmarked communities is **one small-sided field per 75,817 residents or 13,110 youth** (ages 5 to 19); this average includes municipal, non-profit, and privately-operated turf facilities. There are currently no indoor turf fields in the City of Sarnia, although the City does have a population closely approximating the average benchmark provision level.

7.4 Participation Rates

With no indoor turf facilities at present, one measure of demand is the number of participants registered in both indoor and outdoor field sports, most notably soccer activities which have the greatest ability to use turf fields for the duration of the winter season.

Based on information provided by local user groups, for the past 2014 summer season, there were about 3,225 outdoor soccer participants in the City of Sarnia:

- Sarnia FC (youth and adult): 1,000
- Sarnia Girls' Soccer Association (youth): 1,475
- GallaDev's Soccer Academy (youth): 350 (estimate)
- Sarnia Men's Industrial Soccer League (adult): 350
- Sarnia Women's Soccer Club (adult): 50

Based on information provided by local user groups, for the past 2013/14 winter season, there were about 960 indoor soccer participants in the City of Sarnia:

- Sarnia FC (youth and adult): 390
- Sarnia Girls' Soccer Association (youth): 280
- GallaDev's Soccer Academy (youth): 150 (estimate)
- Sarnia Men's Industrial Soccer League (adult): 100
- Sarnia Women's Soccer Club (adult): 40

There are approximately 2,775 youth playing outdoor soccer in Sarnia, about 1,000 more than the number playing ice sports. With an estimated 11,250 residents in Sarnia's 5-19 age cohort (2014 estimate) and 2,775 registrants, this means that about 25% of the City's children and youth participate in organized outdoor soccer, a rate that is substantially higher than the provincial average.

For every 3.4 outdoor soccer players, one is playing indoor soccer in the City; despite having to play in gymnasiums, this ratio is generally in line with trends seen across the province. Local participation rates indicate that there are six outdoor youth soccer players to every one outdoor adult soccer player; compared to provincial participation rates, this indicates that outdoor adult soccer in Sarnia may have room for future growth. Looking at indoor participation, youth currently outnumber adults more than three to one in Sarnia; provincial rates are closer to 1.5 youth to adult indoor players, again **suggesting that there may be pent-up demand for indoor adult soccer opportunities in the community.**

Looking back at available registration data from the past few years, it would appear that both outdoor and indoor soccer participation has been relatively steady in the City. As identified earlier, declining registration has been reported by Lambton Kent Soccer Association, which is the umbrella association for all affiliated Sarnia member organizations (including those in Lambton County and the Municipality of Chatham-Kent).

Complete participation data for other sports (e.g., baseball, football, lacrosse, etc.) is not currently available, nor is it necessary to project indoor demand as these sports tend to be secondary users of indoor turf facilities, with usage heaviest in the spring.

7.5 Indoor Turf Facility Needs

One of the key deliverables of this study involves an examination of the demand for a new multi-use indoor turf facility in Sarnia. The type of recreational spaces and activities proposed for the new facility must be examined closely to ensure that they are designed to meet needs over both the short and long-term without creating an unsustainable level of service. Our review is based on a series of inputs, including: background documents, demographic and trends data; participation data; and feedback from local stakeholders.

From the consultants' experience, we have found that nearly every urban community in Ontario with a population over 100,000 has at least one indoor sports field and some communities less than half this size are beginning to provide such facilities. It is not out of place for the City of Sarnia, with a population of over 70,000, to be considering such a facility (as indicated earlier, the benchmark average was one field for approximately every 75,000 residents). The decision to provide an indoor turf facility is driven by a variety of factors that may be unique to each community, including strength of local organizations, activity interests, demographic profiles, willingness to travel, regional supplies, construction and operating cost, etc. As a result, a per capita provision target is not the recommended approach for determining indoor sports field needs; rather, it is more appropriate to look at the usage potential from local sports organizations.

It is estimated that there are a total of 3,225 organized outdoor soccer players (youth and adult) in Sarnia. In addition, soccer is played at the high school and post-secondary levels. During the winter, 960 players are currently registered in indoor programs operating out of gymnasiums, a sub-standard facility type for this activity. Football, rugby, lacrosse, and baseball are other sports that have expressed interest in using an indoor sports field during certain times of the year. There may also be opportunities for other sports to utilize the space for training and special events.

In total, local soccer organizations indicate that they can utilize 48 to 62 hours on a weekly basis during the winter season to better accommodate their existing and expanded programs (Sarnia FC: 40 to 50 hours; Sarnia Men's Industrial Soccer League: 8 to 12 hours). This may be a conservative estimate of requested hours as other soccer groups also expressed interest (e.g., Sarnia Girls' Soccer Association, GallaDev's Soccer Academy, Sarnia Women's Soccer Club), but did not provide an estimate of demand. Based on the anticipated user profile, not all of these requested hours need to be during prime times.

Modest usage during the late winter / early spring was also expressed by some football, rugby, and baseball organizations; potential off-peak season usage is considerably lower and more variable as most activities shift outdoors. Some usage could also come from non-residents; however, this will depend on several factors and is likely to be a minor factor given the smaller population counts of surrounding communities.

Each indoor turf field has the capacity to offer 55 prime time hours per week (Monday to Friday from 5 to 10 pm and Saturday to Sunday from 7 am to 10 pm), in addition to non-prime hours. It is reasonable to expect that a one-field indoor facility could be used for over 60 hours per week (mostly prime time and evenings after 10pm), a two-field complex for over 120 hours per week, and so on; these figures do not include usage during the daytime (which would be sporadic).

It should be noted that indoor field dimensions can vary widely from facility to facility, but are similar to hockey rinks with widths generally ranging from 75 to 100 feet and lengths of 165 to 200 feet. Fields used for small sided soccer typically have modest play-out boundaries rather than boards. In larger communities, multiple fields can be combined to form a larger field, although the smaller fields are by far the most common rental unit.

Based on these requests, the current demand is equivalent to one indoor turf field in peak season. However, if additional requests for season-long contracts emerge and are validated – such as for girls' soccer, women's soccer, and soccer academy – the case for a second field could be considered.

While relying on stated requests from user groups is one approach to determining needs, these requests (and lack of response from some groups) can also be confirmed using a number of demand metrics. There are currently 2,775 youth registrants playing with local outdoor soccer clubs and these clubs are drawing a high percentage (25%) of local youth, suggesting no pent-up demand. Profiles of high-performing indoor turf facilities (with strong local soccer clubs) suggest that for approximately every three

outdoor youth soccer players, one will also play indoor soccer where the facilities are available (the current ratio for youth in Sarnia is 3.4 to 1). If this were the case in Sarnia, indoor youth soccer registration would be approximately 925, 25% higher than current levels (740 indoor participants).

There are currently 450 adult registrants playing with local outdoor soccer clubs; however, comparisons to other communities suggest that demand could be higher. Profiles of high-performing indoor turf facilities (with strong local soccer leagues) suggest that for approximately every 1.5 youth indoor soccer players, one adult will also play indoor soccer where the facilities are available (the current ratio in Sarnia is 3.4 to 1). If this were the case in Sarnia, indoor adult soccer registration would be approximately 620, 180% higher than current levels (220 participants).

Assuming that a high quality indoor facility and associated programming were available in the City, the projected demand for indoor soccer in the City of Sarnia is approximately 1,545 players (925 youth and 620 adults).

The average indoor soccer program requires 1 hour per week on an indoor field for approximately every 25 players; this ratio can vary depending on the age of the participant, the level of competition (e.g., rep/travel teams require more practice time), and the type of activity (e.g., skills training, game, etc.). Applying this ratio to the projected number of participants finds a demand for 61 hours per week for soccer activities, assuming that all groups would shift their indoor soccer programs away from gymnasiums (which is a common occurrence in communities that have indoor turf facilities). This calculation does not account for access by other sports. Profiles from other indoor facilities suggest that soccer will be far and away the predominant use. Unless there is a non-soccer group that requires significant access, the proportion of non-soccer usage is likely to be close to 10% or 15% (up to 9 hours per week).

Based on this demand methodology, the demand for indoor turf facilities (for all indoor field sport uses) in the City of Sarnia is currently assessed at 70 hours per week. Based on an average weekly capacity of 60 hours (mostly prime time and evenings after 10pm), this translates into a **current demand for 1.2 fields**.

Looking toward the future, it is important to note that the size of the market for indoor field sports likely peaked a few years ago. The City's aging and declining population (15% fewer youth and younger adults by 2031) does not lend support to providing a second indoor turf facility. Even with the development of new leagues, programs, or activities, **it is anticipated that the provision of a single indoor turf field would be suitable to meet local indoor field sport needs for the foreseeable future.** As identified earlier, should the City be unable to provide such a facility, a common approach in many communities is for indoor turf facilities to be operated by local soccer clubs or private sector companies.

Options and strategies to address the potential provision of an indoor turf facility, should Germain Park Arena be deemed surplus, are discussed later in this report.

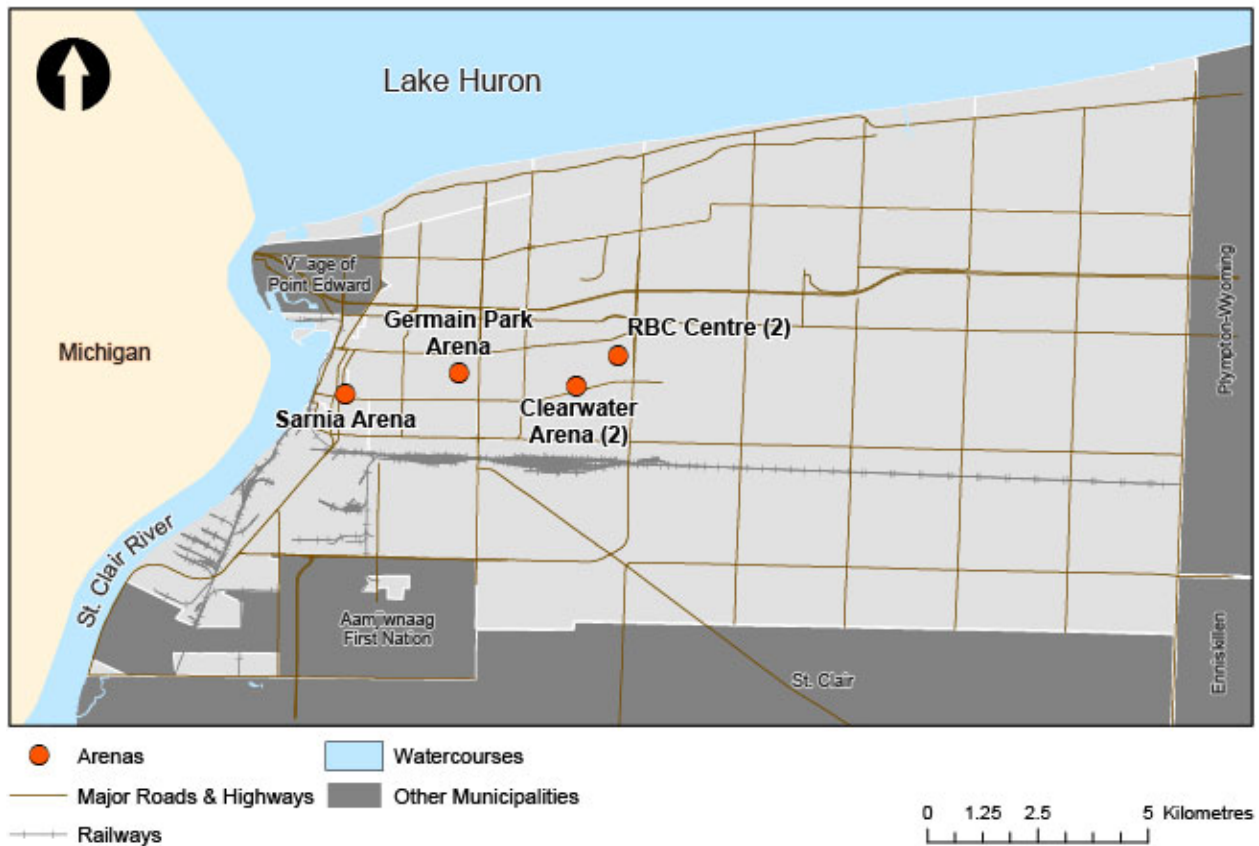
8.0 Building Assessment

This section includes a critical examination of the ability of each City of Sarnia arena to meet current and future needs based on visual inspection, recently completed condition and lifecycle assessments, and a high level comparison to contemporary accessibility design standards. Issues and opportunities with respect to facility upgrades have been identified.

8.1 Municipal Arena Inventory

The City currently operates six ice pads at four different sites (single pads at Germain Park and Sarnia Arenas, and twin pads at Clearwater Arena and RBC Centre); there are no other arena providers within the municipality.

City of Sarnia - Arena Locations



Source: City of Sarnia, sarnia_arenas; sarnia_road_centrelines; sarnia_railway; sarnia_census_tracts © 2014.
 Demographic data source: Statistics Canada, 2011 Census of Population.
 Map prepared by Montelth Brown Planning Consultants, 2014.

Description of Municipal Arenas

Arena	Year Built	Last Major Renovation	Size (sf)*	Size of Rink (ft)	Seating (approx.)	Change Rooms
Clearwater – Blue	1975	n/a	53,794	185 x 85	~1,000	5
Clearwater – Red	1989			185 x 85	~300	5
Germain Park	1973	1995	24,160	180 x 80	~200	4
RBC #1	1998	n/a	~95,000	200 x 85	5,500 (+42 suites)	4 (+2 team rooms)
RBC #2				200 x 85	~200	4
Sarnia Arena	1948	1981 / 2009	44,010	190 x 80	2,302	4

* Square footage figures from Building Condition Assessments (2014) and Electricity Survey and Analysis (2013)

8.2 General Facility Condition & Lifecycle

As part of the BMA Report commissioned by the City in 2013, it was revealed that the City of Sarnia's per capita spending on indoor recreation facilities (which include arenas, amongst other facilities) was the lowest among 24 comparable municipalities. In fact, the City's spending average of \$18 per capita was over three times lower than the average of the comparator municipalities (\$58 per capita). The next lowest amount spent was Peterborough at \$27 per capita while Newmarket was the highest at \$120 per capita. Clearly, the City of Sarnia's investment in its indoor recreation facilities is not keeping pace with that of other communities.

Based on this research, visual observations, and input from user groups, it is clear that, while the City's arenas are generally well maintained on a day-to-day basis, the lack of sustained investment – coupled with the need for modern upgrades – is impacting their ability to meet today's expectations. There has been no regular capital maintenance program and funding for work has been project-specific, often after the lifecycles have expired. Most notably, as discussed later in this section, some roof systems and physical plants are close to their end of lifecycle. Further, based on the experiences in other communities that the consultant has worked, the public's expectations are also rising and driving demand for higher standards in design and provision. Many of the City's arenas are dated and lack the amenities common in more modern facilities, particularly those related to user comfort, such as entrances, lobbies, concessions, washrooms, and change rooms.

Our experience leads us to believe that the City's arenas are in need of significant attention and investment. As it stands, service interruptions are becoming increasingly common in Sarnia due to mechanical failures, leaky roofs, and the need for reactionary repairs. As time goes by, the possibility of a catastrophic system failure becomes more pronounced, a circumstance that would cause the City to shutter a facility for a lengthy period of time. This is not hyperbole – other communities have experienced such

failures, and often the emergency repair is more costly than a proactive maintenance program.

To inform the Arena Management Strategy, the City has recently prepared a number of capital lifecycle assessments for its arenas, including Asset Sustainability and Electrical Surveys for all arenas (completed by Ameresco Canada in 2013), as well as Building Condition Assessments for RBC and Sarnia Arenas (completed by NA Engineering in 2014). These studies have assisted in identifying current deficiencies, deferred maintenance items, and long-term capital requirements. In turn, these tools help to prioritize needs over wants, manage risks, and maximize investments by making improvements before most costly deterioration sets in. Proper asset management planning is becoming a larger component of successful applications for federal and provincial capital funding.

In 2012, the City retained Ameresco Canada to provide an arena building assessment (including the maintenance building in Germain Park), a process that included detailed building system lifecycle⁵ and energy audits. Most of the City's arena portfolio is over 40 years old and the City has been unable to keep pace with the rising maintenance and capital renewal needs, leaving a growing backlog of deferred capital projects. As stated in Ameresco's 2013 Asset Sustainability Report:

“As facilities age they require increased maintenance and ‘Capital Renewal Investment’. As building systems near their ‘end of life’, the risk of failure, and dissatisfied customers, increases. Aging buildings generally become more expensive to maintain and the level of funding for maintenance and building renewal directly impacts the quality and overall condition of the portfolio. In addition, functional needs can shift as user demands change over time, requiring renewal investment to adapt facilities for new uses.”

The audits found that the City had accumulated \$3.1 million in accumulated deferred renewal for its four arena facilities (excluding the Germain Park Operations Building) and that this amount was estimated to grow to nearly \$9 million in 5 years, if all arena facilities were maintained. The City has allocated approximately \$500,000 annually for capital repairs and replacements in its long-term capital forecast (\$575,000 was budgeted in 2015), a funding level that is insufficient to address the deferred maintenance and short-term renewal requirements. This scenario is not unusual for most municipalities, many of which are currently in similar situations due to the lack of established reserves. Going forward, the Ameresco report recommended that 2% of current replacement values should be allocated for annual renewal, assuming that the backlog of deferred maintenance is addressed. 2% of the replacement value of City arenas (\$45.7 million) translates into an

⁵ Lifecycle audits included non-invasive assessments of structural systems, building envelope systems, interior systems, mechanical and electrical systems, and general grounds and site.

annual funding level of \$914,000. **To maintain the City’s arenas in a “fair” state of repair, an annual funding level of \$558,000 would be required.**

The Ameresco report utilizes a Facility Condition Index (FCI) metric that manages overall building risk and ensures continued asset sustainability. FCIs are calculated by dividing the capital renewal cost backlog by the replacement value of the facility (based on the current size, design, and level of amenity). In general, the higher the FCI, the more immediate and significant the capital improvements are. The following are the ratings applied to various FCI levels:

- less than 5% = Good
- 5% to 9.9% = Fair
- 10% to 29.9% = Poor
- 30% or greater = Critical

Facilities with a “critical” FCI tend to share the following characteristics:

- high probability of unplanned component failure
- high operational costs, including emergency repair and maintenance
- the asset exhibits serious signs of deterioration
- functionality of the entire asset has been compromised in one or more ways

The following table illustrates how the FCI compares across the City’s arenas. The Germain Park Arena is already well into the “poor” range. The other arenas are currently in “fair” condition, but all migrate to the “poor” range by 2017 or earlier without remediation. A facility with a rating of good or fair is being sustained at an acceptable level of risk, whereas a facility categorized as poor or critical carries additional liability.

Facility Condition Index (FCI) Comparison, City of Sarnia Arenas

FCI	2013	2017	2022	2027	2032
Clearwater Arena	6.9% Fair	19.0% Poor	28.2% Poor	34.5% Critical	31.8% Critical
Germain Park Arena	13.2% Poor	21.8% Poor	22.4% Poor	28.0% Poor	31.7% Critical
RBC Centre	5.4% Fair	13.9% Poor	23.4% Poor	32.4% Critical	33.6% Critical
Sarnia Arena	6.0% Fair	16.3% Poor	16.8% Poor	17.6% Poor	23.8% Poor

Source: Asset Sustainability Report, Ameresco Canada, 2013

Estimated Capital Backlog by Arena

	Estimated Capital Backlog (2013)	Existing Structure Replacement Value	Facility Condition Index	Annual Funding Required to Maintain Asset in Fair Condition over 30 years
Clearwater Arena	\$840,000	\$12.2 million	Fair (6.9%)	\$188,000
Germain Park Arena	\$728,000	\$5.5 million	Poor (13.2%)	\$58,000
RBC Centre	\$1,002,500	\$18.5 million	Fair (5.4%)	\$240,320
Sarnia Arena	\$573,500	\$9.5 million	Fair (6.0%)	\$71,680
TOTAL*	\$3,144,000	\$45,700,000		\$558,000
Average per Facility	\$786,000	\$11,425,000		\$139,500

* Excludes Germain Park Operations Building

Source: Asset Sustainability Report, Ameresco Canada, 2013

The Ameresco report suggests that the City could realize significant operational cost savings through the closure of Germain Park Arena and energy-efficient capital improvements to its other arena facilities (e.g., lighting, mechanical equipment, HVAC systems, building automation systems, accessibility upgrades, interior improvements, etc.). These annual savings could then be reinvested in facility upgrades in order to reduce the unfunded renewal amount. The City has yet to begin implementation of the recommendations contained in the Ameresco report.

While the lifecycle data provides a powerful illustration of the City's capital backlog for arenas and an indication of which arenas require additional investment, it must be considered in the context of many other factors that are more difficult to quantify in monetary terms, such as level of amenity, usage, community benefit, etc. For instance, the lifecycle data does not consider functional or accessibility improvements, rather they only account for necessary structural, mechanical, and electrical requirements that will allow facilities to operate in their current form – this is addressed in the following section of this Arena Management Study. Further, the statement of capital costs includes direct costs associated with capital works, but it is not clear if soft costs associated with project management, design, related fees, and contingencies are also included. As a result, the capital renewal costs may be underestimated.

8.3 General Facility Design Characteristics

Many of the City's arenas lack the following attributes that are common in modern facility design:

1. Appropriately sized ice surfaces

The modern standard is 200 by 85 feet; smaller ice surfaces can create safety concerns for older youth and adult players/skaters; many smaller surfaces also have more limited space in player benches, penalty boxes, etc. The City's smallest rinks include:

- Germain Park Arena (180 x 80 feet)
- Sarnia Arena (190 x 80 feet)
- Clearwater Arena (185 x 85 feet, both pads)

2. Seating and/or heated viewing areas

Municipal rinks without heated viewing areas (separated from rink) include:

- Sarnia Arena
- RBC 1 and 2 (restaurant only)

3. Appropriately sized and sufficient number of change rooms

The number and size of change rooms is becoming more important, with a minimum of 5 to 6 change rooms per pad (each being 650 to 700 square feet; the large majority of change rooms in the City's arenas are well below this size).

Municipal rinks with less than 5 public change rooms include:

- RBC 1 and 2, which has 4 change rooms per pad (excluding dedicated team rooms for the Sting and AAA team)
- Sarnia Arena, which has 4 change rooms (excluding dedicated team room)
- Germain Park Arena, which has 4 change rooms

4. Dedicated showers and washrooms for each change room

Shared facilities can create challenges when scheduling mixed teams; some or all change rooms at the following arenas contain shared washrooms and/or showers:

- RBC 1 and 2
- Sarnia Arena

5. Barrier-free access

Examples include such as elevators to second floors, wider hallways, motion-activated doors, etc. Facilities with public areas that are only partially barrier-free include:

- Sarnia Arena (e.g., limited accessibility within viewing areas and concession, showers are not accessible, no patron drop-off, etc.)
- RBC Arena (e.g., both pads lack a fully accessible washroom, no accessible height transaction counters, etc.)
- Germain Park Arena (e.g., showers are not accessible and door/corridor widths are narrow, lacks barrier-free seating options, etc.)
- Clearwater Arena (e.g., showers and washrooms are not accessible and door/corridor widths are narrow, etc.)

None of the City’s arenas currently have motion-activated doors.

6. Energy-efficient structures and/or systems

All rinks have low-e ceilings (except for RBC 1 and 2) that result in an improved insulation factor, as well as dehumidification, and ammonia compressors. Recent energy audits found several areas where further improvements could be made. Based on these energy audits (Ameresco, 2013), the arenas requiring the most energy-related improvements are:

- Clearwater Arena (approximately \$850,000, primarily related to replacement of compressors)
- RBC Arena (approximately \$800,000, primarily related to replacement of HVAC units)

7. Community rooms, office and storage space for organizations, or other joint facility development with community recreation spaces that provide a mix of uses that promote the concept of a ‘community hub’

Arenas without attached community rooms or other recreational components include:

- Germain Park Arena
- RBC Arena

Arenas without adjacent open space to allow for future programmatic growth include:

- Sarnia Arena

8. Off-street parking

Municipal rinks with smaller than average parking areas include:

- Sarnia Arena
- Germain Park Arena

8.4 Clearwater Arena – Condition & Opportunities



Clearwater Arena is the City's other twin pad facility, built in stages by the former Town of Clearwater. The arena is located within a large park (Clearwater Community Centre Park, which contains four baseball diamonds and two tennis courts, as well as several civic service sheds northwest of the arena) and adjacent to the YMCA of Sarnia-Lambton. Both the original ice pad (Blue rink, built in 1975) and newer pad (Red rink, built in 1989) are the same size (185 by 85 feet) and are served by a central corridor of change rooms located between the rinks. Ample parking (approximately 300 cars) is located in proximity to the arena's north entrance (shared with the adjacent YMCA); however, the lobby, concession, lower and upper community rooms, and Sarnia Sports Hall of Fame are all located at the south entrance to the facility. This facility is well used for a variety of community ice activities, as well as lacrosse and ball hockey in the summer. No significant renovations have been undertaken at this facility since it was built.

Clearwater Arena is an unremarkable facility that has major flow issues and the arena spaces represent the lowest common denominator (i.e., pre-engineered, with minimal finish). These arenas are very replaceable and are certainly able to be re-purposed (e.g., indoor soccer), but the building organizational/finish issues will remain.

Current Condition

General

- The Arena complex presents a brick lower and metal cladding upper façade to Wellington Street. The other facades are painted block with metal cladding at the upper level.
- The facility is sprinklered throughout.
- In general, the building appears well maintained but the interior upper wall systems are showing some sagging, the interior finishes are heavily worn, and the interiors of the pre-engineered arena spaces are unexceptional.

Accessibility

- There is an accessible entrance.
- There are no dedicated barrier-free washrooms.
- The facility has an elevator to access the second level, but the size does not meet current standards.
- The warm viewing areas have small temporary wood ramps and platforms to allow for a patron in a wheelchair to see the ice surface. These do not meet current standards.
- None of the public counters have accessible height transaction areas.
- None of the washrooms or change rooms are barrier-free.
- The cold seating areas for the Red and Blue Arenas have no barrier-free seating.

Public Space and Circulation

- Lobby and support spaces are in the front (south), but primary entrance off parking lot is in the rear (north). Patrons from parking lot must use change room corridor to access warm viewing, public washrooms, concessions, and multi-purpose rooms.
- Building lacks designated patron drop-off area.
- Main public area (off of Wellington Street) is a wide public space with warm viewing into both Red and Blue rinks.
- An upper Community Hall overlooks the Blue rink; room has capacity of 282 persons, full catering kitchen, washrooms, elevator, and air conditioning.
- A lower Community Room off of the main public lobby has a 125 person capacity.

Spectator Seating and Viewing

- There are bench type seats for both Red and Blue Arenas. Blue rink has seating for approximately 1,000 (5 rows on each side), while the Red rink has seating for approximately 300 (3 rows on one side).
- The bench seats in the Red Arena are consistent with those found in a community ice pad – bench type seats on one side of the ice.
- The bench seats in the Blue Arena are arranged on both sides of the ice, and are suitable for accommodating home and away patrons.

Change Rooms and Washrooms

- There are 10 change rooms between both pads.
- Typical Arena change rooms are small by current standards and are not adequately baffled for views from the corridor.
- Typical public washrooms are adequately baffled from views.

Ice Plant and Rink Surface

- Ice plants for Red and Blue Arenas are in separate mechanical rooms.
- Red and Blue arenas both utilize reciprocating compressors. Both plants are past the end of their lifecycle expectation, with the Blue rink in particular operating very inefficiently due to age of the equipment.
- Both ice surfaces are 185 by 85 feet – not standard NHL.
- Both arena spaces have good ceiling heights (approximately 24 feet at the lowest point over the ice).
- Board systems in both rinks have plywood backing and are clad with HDPE (1/4" plastic sheets). The board system in the Blue Rink is quite worn and the board system in Red Rink is in reasonable condition.
- The facility has no internal snow dump pit.
- Ice resurfacers must exit the building to access the other rink.

Opportunities

Upgrades

- The Ameresco Report recommended upgrades to the refrigeration plant with a high efficiency system, among other items. The use of a pre-manufactured refrigeration system could mean that 'Class B' refrigeration technicians would not be required to monitor the plant, resulting in annual operational savings.
- Possible upgrades include mechanicals, boards (Blue pad), rubber flooring, and parking lot. The general interior finishes are also worn and could be upgraded.

Expansion / Reconfiguration

- There is room on the site for building both south toward Wellington Street and north toward the parking lot (although this option would require the removal of the civic storage buildings).
- Both Red and Blue Arenas are reasonable candidates for conversion from ice to alternate uses.

8.5 Germain Park Arena – Condition & Opportunities



Built in 1973 and renovated in 1995, Germain Park Arena is a basic single pad facility that is located within a large park (containing several baseball diamonds, soccer pitches, and tennis courts) and neighbouring on a residential area. The rink itself is the smallest in the City, measuring 180 by 80 feet. The rink has a sand base and is not usable for non-ice activities. Due to lower demand, this facility is not typically open during weekday daytimes, but is well used by the younger age groups within minor hockey organizations. The relative accessibility of the facility and smaller ice surface are also attractive for sledge hockey and less competitive hockey activities. The arena contains a concession, small warm seating area that is part of the main entrance, and four change rooms, but does not have a community room or other activity space. There is a small parking area (approximately 80 cars) that is shared with the park.

Germain Park Arena is an unremarkable building in a park setting, easily replaceable, but could also be adaptively re-used as ‘shell’ space assuming some upgrades.

Current Condition

General

- The facility is a simple brick and metal clad building with load bearing block walls and limited windows.
- The facility is not sprinklered.
- In general, the building is well maintained, but the finishes are worn and the interior spaces are unexceptional.

Accessibility

- The entrance lacks automatic openers.
- There is a barrier-free washroom area.
- The warm viewing area does not meet barrier-free accessibility standards.
- None of the public counters have accessible height transaction areas.
- None of the change rooms are barrier-free.
- The cold seating areas have no barrier-free seating.

Public Space and Circulation

- There is a patron drop off at main entrance.
- Lobby and public circulation space are minimal.

Spectator Seating and Viewing

- There are bench type seats for arena, with seating for approximately 200 (2 rows / bleachers along one side).
- There is a small warm viewing area at the main entrance.

Change Rooms and Washrooms

- The facility contains 4 change rooms.
- Typical arena change rooms are small by current standards and are not adequately baffled for views from the arena.
- Public washrooms are small.

Ice Plant and Rink Surface

- Two 50HP reciprocating compressors serve this arena. Refrigeration equipment is generally in good condition (per Ameresco Report).
- Ice surface is 185 by 80 feet – not standard NHL.
- The arena space has limited clear height (currently 18.7 feet to the beams).
- Board system is finished in HDPE; in reasonable shape.
- The facility has no internal snow dump pit.

Opportunities

Upgrades

- The simple nature of the building structure could easily accommodate new high level glazing for natural light.
- There have been no capital upgrades in the last 10 years.
- An updated roof assessment would be required to ascertain the lifespan of this asset.

Expansion / Reconfiguration

- There is very limited room to expand this building as it is bound on the north by the parking area, on the south by residential houses and on the west by Sycamore Drive.
- Germain Park Arena is a reasonable candidate for conversion from ice to turf, but the ceiling height in the arena hall is low at 18.7 feet for indoor sports.
- There is also the possibility for converting the ice to alternate uses, such as pickleball courts, multi-purpose space, and other ‘wellness’ related uses; however, mechanical upgrades (HVAC and sprinkler) would be required.

8.6 RBC Centre – Condition & Opportunities



Located on municipally owned lands within the Lambton College campus, the RBC Centre is a twin pad sport and entertainment venue built by the City in 1998. Until the summer of 2014, the facility was privately operated, but was available for widespread community use; operations have recently been transferred to the City. The Sarnia Sting Ontario Major Junior A Hockey Club are a primary user and tenant within the main rink (RBC 1), which has seating for approximately 5,500 patrons in addition to approximately 42 suites. The second rink (RBC 2) is a community-level rink with limited seating. Both pads are NHL-size and offer ice during the summer (aside for a one-month period in RBC 1). The facility also contains a restaurant (the Hive), Sting retail store, box office, several concessions, administrative area, multi-use room, boardroom, Sting offices, and area being used by the Sting for dryland training. In addition to ice events, the RBC Centre hosts a wide range of concerts and special events from time to time. The large parking lot (in excess of 1000 cars) is shared with Lambton College, which charges a fee for daytime use (tickets are validated for arena users). No significant renovations have been undertaken at this facility since it was built.

RBC 1 is a good example of a ‘modern’ OHL arena that can accommodate many shows and events (although promoters / organizers have identified limitations) and is not easily

replaceable. RBC 2 is unremarkable and could be converted to another use (e.g., indoor soccer, gymnasium, etc.), but this would impact its operational efficiency and attractiveness as a multi-pad arena facility.

Current Condition

General

- RBC 1 operates as an entertainment and sports venue and RBC 2 serves as a community arena. RBC 1 has been designed to accommodate shows; and has ice level exiting, show power, and truck access.
- The complex presents a modern highly articulated façade of a mix of materials, coloured block, metal cladding, precast, and window wall.
- There is a lack of a single unifying entrance to the facility, rather entrance ‘gates’ are distributed along the façade at regular intervals.
- The facility is sprinklered throughout.
- In general, the building appears to be well maintained and RBC 1 has a complete and handsome spectator bowl.

Accessibility

- There is an accessible entrance (secondary entrance) and the main public areas of the building are generally accessible, although the main entrance and ticket booth are not accessible from the exterior.
- There is elevator access to the ice level and the box level from the main floor.
- Many of the concessions do not have accessible height transaction counters.
- Gate 1 (with direct access to RBC 2) is accessed only by a stair. Elevator access to RBC 2 can be gained through the accessible entrance into RBC 1.
- RBC 2 was designed to be an accessible rink by 1996 standards, but in need of several upgrades to meet current accessibility requirements for sledge hockey.
- There are no dedicated barrier-free washrooms.
- The barrier-free stalls provided in public washrooms are small for current Facility Accessibility Design Standards (FADS) although they may meet the requirements for the Ontario Building Code (OBC).
- Shower areas typically have a fold down seats but not the required handheld shower head required by the OBC.

Public Space and Circulation

- There is no central ‘entrance’ to the facility and primary access to the ice level and RBC 2 is via a stair that does not pass a control point.
- Ticket booth is at the ice level near Gate 1 – not in a central and accessible location.
- There is a restaurant that affords views into both rinks.

Spectator Seating and Viewing

- The general concourse and circulation around RBC 1 and the seating serving RBC 1 are in good shape, offer good views, are served by concessions and washrooms, and are consistent with the expectations of a well appointed OHL arena. The area is served by individual seats.
- The box level for RBC 1 offers good views, is served by dedicated concessions and washrooms and is consistent with the expectations of a well appointed OHL arena. The area is served by individual seats.
- Beyond the restaurant, there is no warm area for viewing into RBC 2.
- The bench seats in RBC 2 are consistent with those found in a community ice pad – bench type seats on one side of the ice.

Change Rooms and Washrooms

- There are 4 change rooms per pad (8 in total), in addition to dedicated team rooms for the Sarnia Sting and AAA team.
- Typical arena change rooms share washroom and shower areas. This is not consistent with current practice where the each change room is fully equipped.
- Typical public washrooms and change rooms are adequately baffled from adjacent spaces and are well sized.

Ice Plant and Rink Surface

- Ice plant is a common refrigeration plant for both arenas, with two reciprocal compressors and 150 HP motors. The plant is generally in good condition (per Ameresco Report).
- Ice surfaces are both 200 by 85 feet (standard NHL dimensions).
- Both arena spaces have good ceiling heights (approximately 36 feet in RBC 1 and 28 feet in RBC 2).
- Board systems in both rinks are finished in high-density polyethylene (HDPE) and in good condition.
- There is a common internal corridor for the ice resurfer and the facility has an internal snow dump pit.

Opportunities

Upgrades

- Currently the access for shows on RBC 1 is compromised by the location of the Siamese connections that result in the fire route taking up most of the exterior marshalling area. The Siamese connection could be moved and an additional annunciator added to move the fire route to the west or north face of the building
- Additional repairs may be required to sprinkler system in RBC 2 due to rusting.
- The centre ice scoreboard unit in RBC 1 is original to the facility and outdated by modern standards; an updated video board would improve the in-game experience consistent with many other rinks in the OHL.
- The Ameresco Report recommended upgrading or replacing the building automation system (\$169,000), replacing the existing roof-mounted HVAC units (\$281,000), installing low-e ceilings (\$198,000), among other items.

Expansion / Reconfiguration

- There is room on the site for building expansion but this would have to be negotiated with Lambton College. The general building and site configuration would permit expansion.
- RBC 2 is a reasonable candidate for conversion from ice to alternate uses.

8.7 Sarnia Arena – Condition & Opportunities



Built in 1948, Sarnia Arena is one of the oldest arenas still in use in Ontario. This arena is in a mixed-scale residential neighbourhood in downtown Sarnia and is used primarily for figure skating and ice hockey (including the Sarnia Legionnaires of the Western Junior B Hockey League). The arena has a capacity of 2,302 and includes two concession stands, four change rooms, washrooms, and a community room. In 1981, a single storey addition was constructed on the south side of the building that included change rooms, washrooms, community room, mechanical room, and side entrances; the roof of this addition has subsequently been reinforced for snow loading. In 2009, interior renovations were completed and included new seating, higher glass around the rink, and roof repairs above the rink. The arena is served by a small parking area (approximately 70 cars) and users have access to a shared parking arrangement with the adjacent school and retirement home.

It is clear that the Sarnia Arena is a notable example of civic arena construction, in a developed downtown area (the only arena in the western part of the City), and has a strong and important civic presence. It is not a building that could easily be replaced, but could be adaptively re-used (e.g., lacrosse, indoor soccer, assembly venue, etc.).

Current Condition

General

- The building is a mix of brick, block and metal cladding, with a handsome formal brick clad front facing Brock Street South.
- The arena hall is structured with arched trusses that make a remarkable interior hall, with full bowl seating and a continuous top concourse.
- The facility is sprinklered.
- In general, the building is well maintained and the main arena hall and front façade are iconic examples of an Ontario arena. The interior finishes are worn.

Accessibility

- There is an accessible entrance.
- There is no barrier-free washroom area.
- There is a ramp to the change rooms on the south side.
- None of the public counters have accessible height transaction areas.
- None of the washrooms or change rooms are barrier-free.
- The concourse and seating are not barrier-free, there is some limited barrier-free seating at the ice level.

Public Space and Circulation

- There is a large public lobby at the entry level with access to concessions, offices, washrooms, and a large multi-purpose room with a warming kitchen.
- There is a public entrance to the lobby both from the parking area and Brock Street South.

Spectator Seating and Viewing

- There are individual seats for the arena, in a full bowl configuration.
- There is a no warm viewing area.

Change Rooms and Washrooms

- Facility has 4 change rooms, as well as a dedicated team room for the Junior B team.
- Typical arena change rooms are small by current standards and are not adequately baffled for views from the corridor.
- Typical arena change rooms share washroom and shower areas. This is not consistent with current practice where the each change room is fully equipped.
- Public washrooms are generously sized.

Ice Plant and Rink Surface

- Arena is served by three reciprocating compressors. Refrigeration plant is in good condition (per Ameresco Report).
- Ice surface is 190 by 80 feet – not standard NHL.
- Board system is finished in HDPE; in reasonable shape.
- The facility has no internal snow dump pit.

Opportunities

Upgrades

- Notable capital upgrades completed in the last 10-years include new boards and glass, new seats, safety netting, and new clock.
- Possible upgrades include roofing, brickwork, rubber flooring, electrical, and concession/lobby renovation (the latter was identified in City's 2010 Arena Review). The community room could also be upgraded with windows to allow for some daylighting. In general, the interior finishes of this facility are worn and could be upgraded.
- A 2014 Condition Assessment Report was prepared by NA Engineering to complete a visual structural condition assessment and a roofing assessment of the Sarnia Arena. The report noted that a building of this age requires continued maintenance. Key findings from the report include:
 - The existing block walls from the original part of the building require repairs because of cracks throughout; the brick on the front of the building also needs repair and re-pointing of mortar joints; additional exterior repairs are required to stone sills and details, eave troughs and downspouts, wood soffits and fascia, wood infill, caulking, and the steel lintels above doors; on the interior, cracks in the block should be repaired and a record made of these repairs; the above noted repairs will cost in the range of \$150,000 to \$175,000.
 - The facility consists of three different roof systems; the asphalt shingle roof above the rink was recently replaced and should last another 10 to 15 years; the other roof systems are original to the 1981 additions and have held up quite well considering their age; nevertheless, it is recommended that the roof over the western and southern facility additions be replaced over the next 2 to 5 years at an estimated cost of \$240,000 to \$265,000.

Expansion / Reconfiguration

- There is no room for expansion of this building.
- The Sarnia Arena is a reasonable candidate for conversion from ice to other uses, but 2,300 seats represents a larger spectator accommodation than typically required for most alternate uses.

8.8 Recommendations – Building Assessment

The following are preliminary recommendations relating to the maintenance and design of the City's physical arena infrastructure. These recommendations are subject to change based on public and staff input and will be integrated as appropriate into the final Arena Management Study. They are listed in general order of priority.

1. **Review importance of architectural character and stature of arenas as public buildings (i.e., how replaceable are the buildings and how does that affect re-purposing potential?).**
2. **In order to generate short- and long-term operational savings, improve the user experience, and generally ensure the long-term viability of required municipal arenas, a greater focus on asset management is required. Phased implementation of the higher priority projects identified in this Study and the 2013 Ameresco report is recommended. This will require additional capital funding for arena renewal beyond current levels. Higher priority projects include (but may not be limited to) lighting, mechanical and HVAC systems, building automation systems, accessibility upgrades, interior and exterior improvements, roofing, etc. It should be noted that decisions relating to the continued operation of specific arenas will impact the implementation of these projects (i.e., closure may negate the need to undertake improvements).**

Clearwater Arena – Recommended Major Capital Projects

Ref.#	Major Capital Project	Rationale	Priority
1.1	upgrade refrigeration plant (as per Ameresco Report)	operational efficiency	high
1.2	replace the rubber flooring	user comfort	high
1.3	undertake finish upgrades to public spaces, community rooms, and arenas to improve and update the look of the facility	user comfort	medium
1.4	upgrade to high efficiency lighting (as per Ameresco Report)	operational efficiency	medium
1.5	replace the boards in the Blue pad	user comfort	medium
1.6	upgrades to the parking lot	operational efficiency	medium
1.7	replace elevator to meet new barrier-free standards	accessibility	medium

Ref.#	Major Capital Project	Rationale	Priority
1.8	major renovations to change areas and public washrooms to allow for barrier-free access; add two new change rooms at rear of building (north)	accessibility	medium
1.9	renovations to main lobby to allow for barrier-free warm viewing and to concessions/ticketing to allow for barrier free access	accessibility	medium

RBC Centre – Recommended Major Capital Projects

Ref.#	Major Capital Project	Rationale	Priority
1.10	complete upgrades to sprinkler system in RBC 2	operational efficiency	high
1.11	upgrade to high efficiency lighting (as per Ameresco Report)	operational efficiency	medium
1.12	upgrade/replace building automation system (as per Ameresco Report)	operational efficiency	medium
1.13	replace roof-mounted HVAC units (as per Ameresco Report)	operational efficiency	medium
1.14	install low-e ceilings in RBC 1 and 2 (as per Ameresco Report)	operational efficiency	medium
1.15	major renovations to change rooms in order to provide dedicated shower areas for each	user comfort	medium
1.16	improve access for shows and persons with disabilities by moving the fire route and/or adding a ramp at main entrance (east)	accessibility	medium
1.17	revisions to concessions to allow for barrier-free access to counters	accessibility	medium
1.18	addition of dedicated barrier-free washrooms	accessibility	medium
1.19	install new video board on RBC 2	user comfort	low

Sarnia Arena – Recommended Major Capital Projects

Ref.#	Major Capital Project	Rationale	Priority
1.20	restoration of façade and repairs to exterior (e.g., brick and block walls, eave troughs, soffits and fascia, lintels above doors, etc.) (as per NA Engineering Report)	operational efficiency	high
1.21	replace the roof over the western and southern facility additions (as per NA Engineering Report)	operational efficiency	high
1.22	upgrade to high efficiency lighting (as per Ameresco Report)	operational efficiency	medium
1.23	major renovations to concessions and front lobby to allow for improved flow, upgraded finishes to improve and update the look of the facility, and barrier-free access to services	accessibility / user comfort	medium
1.24	major renovations to change rooms to allow for barrier-free access	accessibility	medium
1.25	install windows in the community room	user comfort	low
1.26	interior renovations to arena (e.g., repainting, upgrading of end walls) to improve and update the look of the facility	user comfort	low

Germain Park Arena – Recommended Major Capital Projects

Ref.#	Major Capital Project	Rationale	Priority
1.27	undertake an updated roof assessment	operational efficiency	high
1.28	upgrade to high efficiency lighting (as per Ameresco Report)	operational efficiency	medium
1.29	major renovations to change rooms and public washrooms to allow for barrier-free access	accessibility	medium
1.30	install windows in arena space to allow for controlled natural light	user comfort	low
1.31	undertake finish upgrades to main entrance to improve and update the look of the facility	user comfort	low

Building on the Facility Needs Assessment (sub-deliverable #1) and Building & Operations Review (sub-deliverable #2), further analysis of facility provision options and capital cost estimates will be contained in **Sub-deliverable #3**.

9.0 Operations Assessment and Financial Analysis

The following analysis has been undertaken to identify key outcomes and necessary adjustments in the staffing, finances, and operations of the City's arenas. This analysis provides recommendations toward the most effective and efficient operations, including:

- compliance with legislative requirements
- robust policies and procedures
- well trained, informed, and customer-driven staff
- greater accountability and continued community engagement
- best use of human and financial resources
- timely facility and equipment repairs and replacements

The review of operations and finances was completed using various inputs, including:

- key opinion leader interviews with City staff
- two staff workshops that served to evaluate current operations against high performance standards and best practices in other jurisdictions
- a review of staff reports to Council over the course of the last 4 years with respect to arena operations, possible savings, and better use of facilities
- an assessment of the policies and procedures currently in place to oversee operations, safety, cash management, and customer service
- an assessment of budget projections and budget actuals over the last 5 years, hours of operation, operational cost per hour, and pricing methodologies
- a meeting with the new Director of Parks and Recreation to analyze operations against an audit tool depicting standards of high performing parks and recreation operations in Canada (summarizing input from five other staff members)

The organizational / operational, financial analysis, and respective recommendations assumes that arena operations will remain under the purview of the City of Sarnia for the foreseeable future.

9.1 Arena Policy Framework

The current policy framework for arenas has been developed over time to respond to changing needs and conditions. The review of the policy framework and subsequent recommendations have been derived through staff input, comparison to best practices in other jurisdictions, and knowledge of arena operations. The Consulting Team are not risk management experts and, therefore, a more detailed review of safety-related policies, risk prevention, and legislative compliance is recommended annually. The policy and procedural data is categorized in the three subject areas of human resources, operations, and customer service and are highlighted in the following table. The table identifies what currently exists in terms of policies and procedures, as well as any gaps that should be addressed either departmentally or through the arena operations manual.

Summary of Existing Policies/Procedures and Potential Gaps

Subject Area	Existing Policies	Existing Practices/ Procedures	Operational Gaps
Human Resources	<ul style="list-style-type: none"> The Department aligns its human resource policies with those provided corporately 	<ul style="list-style-type: none"> Joint Labour Management Committee Job Descriptions Lead hand requirement to have Cardio Pulmonary Resuscitation (CPR) and First Aid 	<ul style="list-style-type: none"> Review job descriptions to include all full and part-time positions and pre-requisites Arena Training Requirements (Policy) Part-Time Pay Scale and Compensation Requirement for all arena staff to obtain First Aid, CPR, and operation of automated external defibrillators Develop a Staff Engagement Policy
Operations	<ul style="list-style-type: none"> Spectator Heater Use TSSA Record of Maintenance Guidelines for Refrigeration Systems 	<ul style="list-style-type: none"> Arena Opening and Closing Protocols Maintenance Log for each shift (including a requirement to log any safety issues and forward directly to the Lead Hand) Ice Clearing and Maintenance Procedures Joint Health and Safety Inspection Form and Process Propane Tank Handling Procedure Blade Changing Procedure 	<ul style="list-style-type: none"> Policy re: Annual Audit of Legislative Compliance Workplace Hazardous Materials Information Systems (WHMIS) Requirements Pricing Policy re: cost recovery, subsidization of rates and operational cost per hour Discrimination and Harassment Policy Vulnerable Sector Policy

Subject Area	Existing Policies	Existing Practices/ Procedures	Operational Gaps
		<ul style="list-style-type: none"> • Daily Duty Requirements for Each Arena • Speedi-Memo to Foreperson re: Critical Issues Process • Maintenance Request Form to Arena Supervisor • Workplace Inspections Process and follow-up • Facility Emergency Closure Process 	<ul style="list-style-type: none"> • Environmental Sustainability • Code of Behaviour • Tournament and Events Policy
Customer Service	<ul style="list-style-type: none"> • Ice Allocation Policy • Public Skate Policy/ Maximum Participants 	<ul style="list-style-type: none"> • Accident/Injury Forms • Critical Injury Report Form • Free Access for Caregivers of Patrons with Disabilities • Requirement for First Aid and Cardio-Pulmonary Resuscitation (lead hands) • Public Skate Entrance Procedures • Float/Cash Handling Procedures • Lost and Found Record Form 	<ul style="list-style-type: none"> • Building Evacuation Protocols (greater detail) • Customer Service Policy • Complaint Tracking and Reporting • Cash Handling Audit and Point of Sale (POS) system • Helmets for Ice Users Policy • User Satisfaction Policy • Online availability and bookings

Recommendations – Arena Policy Framework:

1. Identify technology solutions to create efficiencies in arena operations, including but not limited to: online ice availability and booking options, staff communications, staff scheduling, continued efforts in energy management, security and safety, daily logs, inspection forms, accident and incident forms, stakeholder suggestions and complaints, staff-driven league scheduling, etc.
2. Refresh the Policy and Procedures supporting arena operations through the use of a common template addressing the gaps as outlined in the Arena Management Study (give priority to health, safety, and risk-related policies).
3. Post all policies and procedures online to ensure that all staff have right of entry and, further, that forms and daily logs are housed on the City's computer system.
4. Complete an annual audit of the compliance of arena operations with legislative requirements by accessing the legislative audit tool on the Leisure Information Network (LIN).
5. Revise the Ice Allocation Policy to base pricing on the actual cost of an hour of ice and the benefit to the community and individual good in terms of subsidization of ice.
6. Identify the standards for various age and competition levels in terms of levels of subsidization in the Ice Allocation Policy.
7. Develop and implement a Cash Management Policy to ensure that any cash handling is completed with safeguards in place including the use of Point of Sale (POS) systems.

9.2 Arena Asset Management

All of the arenas in the City of Sarnia are considered aging plants as compared to newer arena stock in Ontario. While this can be challenging in terms of repairs, replacements, and refurbishments, a planned approach for the care of arenas is recommended for the future to avoid downtime due to repairs and to extend the lifespan of the facilities and equipment as much as possible.

Preventative Maintenance Program – Extending the Lifespan of Equipment and the Building Envelope

A planned approach is required to extend the life of arena facilities to meet their maximum lifespan. Often preventative maintenance and minor repairs and replacements will extend the lifespan of equipment and building components and serve to avoid costly repairs in the long-run. Downtime can also occur if minor adjustments are ignored, thus affecting the use of the facility and respective revenues. The City of Sarnia has regular maintenance contracts in place for equipment and building

components with licenced contractors which have maximized the longevity of existing equipment and allowed many of them to surpass lifecycle expectations where funds for replacement equipment were unavailable.

While an Arena Asset Management Program (AMP) is better implemented when a facility is first built, it is still a best practice to develop a plan that will inform operating and capital budgets over the course of the life of facilities. The development of an AMP first looks to itemize all of the internal and external assets within a facility and determine their likely lifespan; many manufacturers can provide this information. The data per each piece of equipment includes lifespan, current replacement costs, and what regular inspection and minor repair measures will extend the lifespan. Further, the plan will itemize what needs to be replaced in what year with inflationary calculations applied to the replacement cost. The advantages of the AMP are the extension of the lifespan of equipment and assets, as well as an informed approach to what will need replacement within a 20-year timeframe. This is beneficial from an operating and capital budget planning perspective.

In 2013, the City of Sarnia engaged Ameresco Canada to develop Asset Sustainability and Electrical Surveys for its arenas. These assessments examined lifecycle requirements from the perspective of identifying potential energy efficiencies. It is not clear if the details of this exercise have been properly vetted and integrated into an Asset Management Program that the City can use moving forward or if additional assessments are required.

25-year Capital Plan

Asset Management Plans identify the orderly replacement of equipment and minor assets and this approach should be applied to all municipal recreation and parks assets, including community centres, pools, playgrounds, trails, outdoor amenities, equipment, etc. 25-year Capital Plans address partial or full replacement of recreational facilities and assets. Municipal Parks and Recreation Master Plans address changing demographics, socio-economic factors, trends, and community-specific issues and priorities by mapping out facility needs over the course of the next 25 years. Ideally, the City of Sarnia would seek to develop a full Parks and Recreation Master Plan, with proper consideration given to the Arena Management Study.

Annual Contribution to Arena Asset Funding

Industry standards in asset management dictate that 1.5% to 2% of the asset worth should be set aside annually for future major asset repairs and replacements (the 2013 Ameresco Canada study recommended an annual funding level of 2%). This funding – which is not currently being set aside by the City of Sarnia – is generally supplied through the operating budget into a capital asset reserve fund to assist in funding asset refurbishments. While this is a best practice, only a small number of municipalities actually place funding aside annually for these purposes. The disadvantage in not thinking proactively is that minor repairs are delayed until they become major repairs at a greater cost. It is recommended that the City of Sarnia consider the feasibility of

partially funding asset repairs, refurbishments, and replacements through the annual budget process. Furthermore, any savings from arena decommissioning or the installation of energy-efficient systems should remain within the arena business unit (after the payback of any capital refurbishments to obtain energy savings) to fund arena-related capital renewal projects and to reduce the unfunded renewal amount.

Recommendations – Arena Asset Management:

8. Develop and implement an Arena Preventative Maintenance Program in order to extend the lifespan of equipment and amenities and to determine a timely replacement program. This will require the use of key protocols, such as regular roof maintenance programs, building condition audits, etc.
9. Develop a 25-Year Capital Plan in order to determine when assets will need repairs, refurbishments, and replacements in order to develop funding mechanisms.
10. Develop a Parks and Recreation Master Plan to identify community-specific issues and priorities across all municipal leisure facilities and program areas. The Master Plan should consider the findings of this Arena Management Study and prioritize its recommendations amongst the broader scope of public needs.
11. Where feasible, seek opportunities to re-use viable equipment from decommissioned facilities into retained facilities (e.g., re-purpose the Germain Park Arena refrigeration system components at Clearwater Arena).

9.3 Human Resources and Organizational Effectiveness

Staffing Levels

With staff costs currently representing 60% of the City’s arena operating budget, it is critical to ensure that staffing levels are appropriate and as efficient as possible. The following depicts the current staffing levels at City of Sarnia Arenas:

- Council recently approved a General Manager position at the RBC Centre given the specialized nature of this facility. This position has been filled with a current staff member in an acting capacity until the organizational review is complete.
- The Supervisor of Facilities oversees other City-owned and operated arenas, outdoor sports facilities and two public pools.
- Arena Full-time Staff: 23 (3 Lead Hands, 20 Operators)
- Part-time Staff: Each arena facility operates with the assistance of a part-time employee complement to assist with public skating and events. Part-time staff are assigned as per the respective scheduling requirements.

The staffing levels are reflective of industry standards to ensure safe and effective operations. Once needed repairs are completed and equipment is replaced on a timely basis, there will be an opportunity to complete another arena staffing review. Lead Hands are often assigned to completing unforeseen breakdowns and emergency repairs and are not allocated to ongoing maintenance and cleaning most often. One example of this reality is the chronic leaking from roof top units at Clearwater Arena. The Lead Hand is often utilized to mop up after these leakages and replace the water stained ceiling tiles. A planned equipment maintenance program would help to prevent these ongoing issues and save staff time.

There is an agreement with the Local to allow part-time Refrigeration B staff to cover off on weekends at the RBC arena only. These staff cannot be assigned more than 24 hours per calendar week. It must be noted that the Arena Study comments specifically on arena operations, while the overall Departmental organizational study (currently underway) will look at all departmental functions and the respective staffing complement.

Articulated Skills and Competencies

Part-time staff become the source for the recruitment for full-time positions based on seniority versus the skills and competencies needed to respond to the needs of the various vacant positions. A succession plan needs to be developed whereby potential employees are job interview ready and properly trained (ideally through professional development and training opportunities before the position starts). During the staff workshops, the frontline staff expressed many concerns and examples whereby staff received positions with little or no apparent aptitude or readiness. This may have safety and labour/management implications and requires further discussions to maintain safe and effective arena operations.

Training and Development

Innovations often stem from learning more about operations and being exposed to leaders in various and related fields. The expectation is that a greater amount of learning will translate into shared leadership and improved practices and innovation within the arena operations. There are many skills and competencies that are required to operate arenas. New developments in terms of effectiveness and efficiencies are frequently introduced through publications, conferences, and webinars, making training and professional development more accessible to frontline staff. Undertaking a skills gap analysis and the subsequent development of a professional development and training plan will undoubtedly improve customer service and arena operations in general.

Staff Engagement, Empowerment, and Internal Communications

The frontline staff workshops undertaken for this Study served to engage staff in the discussions regarding improvements to arena operations. The results of the workshops were very telling and staff contributed to the eventual recommendations to a great extent. This demonstrates that staff at the frontline serving the public have valuable insights and can suggest and implement ways and means of improving the arena operations. The public often have conversations with staff and also suggest likely improvements. A shared leadership practice would engage staff on a regular basis to problem solve and suggest and assist in implementing improvements. Arena staff indicated that they have seldom been engaged in ongoing communications and improvement strategies in the past and they would very much like that opportunity in the future.

Recommendations – Human Resources and Organizational Effectiveness:

12. Begin discussions with the Labour Management Committee with respect to the qualifications of part-time staff entering the full-time labour pool and ways to increase qualifications and training.
13. Develop a Training and Professional Development Program to enhance the skills and competencies of arena-related staff and to gain from shared expertise and knowledge.
14. Develop a Staff Engagement, Communications, and Recognition Program that seeks to engage staff in operational improvements, recognize impressive contributions, and support increased communications.
15. Ensure that stakeholder and participant satisfaction levels are tested on an annual basis and that staff act on consistent comments on identified areas of improvement.

9.4 Financial Management

Arena Budget Overview

A comparison of the City's arena budget actuals (combining all arena budgets plus the arena central administration budget) indicate that the arenas are operating according to industry standards, while addressing the ongoing issues of aging arena plants. Additional funding will be required in the future to implement the recommended preventative maintenance program, training program, and revenue enhancements.

The following table includes an analysis of 2014 operating budget actuals for Clearwater Arena, Germain Park Arena, and Sarnia Arena, as well as 6-months of operation of the RBC Centre, combined with the operating budget projections for all arenas for 2015. Additional refinements to the budget data may be realized as a result of a full year of operations of the RBC Centre.

City of Sarnia Arena Budget Summary (2015 Budget compared to 2014 Actuals)

	2014 Budget	2014 Actuals	2015 Base Budget Projections
Revenues	\$1,165,700	\$1,905,600	\$2,817,400
Expenditures	\$1,639,200	\$2,397,100	\$3,475,100
Net Operating Deficit	\$473,500	\$491,100	\$657,700

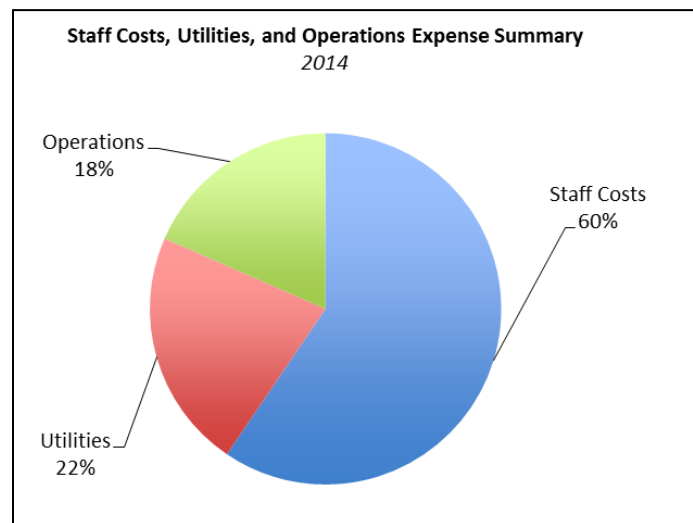
All numbers are rounded to the closest \$100

Source: City of Sarnia, 2015

Key observations:

- The actuals for 2014 reflect a \$17,600 or 4% variance in the net deficit for arenas. This figure includes the 6-month operations of the RBC Centre.
- The base budget projections for 2015 show an increase in the deficit that arenas generate due to a projected deficit at the RBC Centre. Recommended enhancements for the arenas have not been included in these projections as the Council review and approval of these enhancements has not yet occurred.

It must be noted that this Study recommends the implementation of a Asset Management Plan that will require further investment to increase the lifespan of arenas through expenditures in annual maintenance as well as an annual capital contributions. If approved, this investment will increase the annual funding required for arenas.



The City’s arenas are operating at a net deficit – this is consistent with nearly all municipally operated arenas in Ontario. Across the Province, many arenas are experiencing declining use of ice and staff-driven strategies to increase revenues and ice use are evident.

The City's budget analysis shows that the greatest cost in the arena operations is staffing for the most part. The staff cost percentage of 60% is very consistent with other arena operations in Ontario. The indicators of efficiencies in staffing rest with the hours of operation, the use of full and part-time staff, and the amount of overtime being generated through absenteeism, vacation coverage, emergency situations, events and tournaments.

City staff have reduced the exposure to greater costs within arena operations. The hours of operation have been reduced to accommodate the hours of ice that are generally utilized. Two shifts per day for seven days per week requires three full-time staff at single pad arenas with an overlap of one shift per week for ice maintenance and other duties. 3 Lead hands are utilized at the double pad arenas and the Sarnia arena. Two of the three lead hands are also utilized for minor repairs and replacements in the arenas. Typically there is one full-time staff person during the day and evening shifts with part-time staff augmenting ice clearing, additional cleaning, public skate admission, and skate patrol on the weekends. Staff have reduced the arena staffing costs to demonstrate efficiencies and the cleanliness and operations have not suffered as a result. The overtime costs for all arenas (including six months of operation at the RBC Centre) in 2014 was over \$100,000. This is reflective of the one-time costs to ensure that the RBC Centre complied with legislation and standards when the City took over its operations. It is anticipated that the overtime amount will reduce significantly in 2015. The overtime amount includes staff costs for statutory holidays and emergencies, covering off for employee absenteeism and vacations. An analysis of absenteeism and resultant overtime would be appropriate to undertake on a seasonal basis. If this amount of overtime continues as a result of normal operations, consideration for a Floater Position (from the existing complement) to cover off for absenteeism and vacation time should be evaluated.

Based on municipal budget figures, the City of Sarnia's arena facilities recover a good proportion (81%) of their expenses, largely through ice rental income. Arenas, like most all community services, rely on user fees and the balance is subsidized through taxation. As such, any changes to the arena supply, demand factors, pricing, and operations can have a substantial impact on annual budget requirements. It should be noted that many direct costs (e.g., staffing, utilities, and operations) will still remain should an arena facility be repurposed; these costs will need to be determined as a direct impact of any potential facility changes.

The City has continuously addressed expenditure reductions – to the point that emergency repairs are what determines capital plans – which should be remedied by taking a more planned approach to major repairs and replacements. The key response is not reducing expenditures to a point where the facilities are sub-standard and not appealing, but rather **increasing the use of the arenas and ice pads with revenue producing programs and recreational opportunities to assist in offsetting the financial bottom line**. Arenas have the opportunity to become community hubs filled with activity year-round. Arenas need to be viewed as community assets and not just for ice use seven months of the year.

To date, City of Sarnia staff have implemented measures to increase revenue and decrease expenditures. Some of these strategies have included energy management initiatives, arena advertising, contracting out the concession operations, streamlined staffing and hours of operation, reduced ice rates to become more competitive, and efficiencies in concession operations. Additional revenues are also being sought as part of the restructured deal with the Sarnia Sting.

Alternate Revenue Strategies

Other municipalities are introducing leagues in arenas and dry ice pads to offset arena costs. These leagues do not compete with current user groups but look to the gaps such as recreational and social leagues for adults and older adults (males, females and mixed). Often these groups can take up non-prime time ice that is difficult to book. The emergence of programs gaining in popularity include PA day programs and events, Parent and Tot Learn to Skate, Children and Adult Learn to Play Hockey, Parent and Child Shinny, Adult Fitness Cardio Skate, etc. Many recreation departments are also offering learn to skate lessons to better include diverse populations in traditional sports and ensuring that persons with disabilities and other marginalized populations can be included in on-ice opportunities as well.

In Sarnia, interest was expressed at the first public meeting for: (a) an adult hockey tournament – there are none at present; and (b) organized hockey for seniors in the daytime – current use is rental only. It must be stated that staff should not set about to duplicate what exists, but rather look at any areas that are not addressed and test those possibilities.

Other revenue producing opportunities include the offering of additional programs and services in the community spaces available in arenas. This approach is in existence to a certain extent in Sarnia but there is still capacity to expand (e.g., summer sports camps). The proviso would be that any new revenues generated should be shared and used to offset arena operational costs and enhance operations.

Arenas as Community Hubs

The notion of arenas contributing to the strength of communities and neighbourhoods is beginning to gain traction in Ontario. Municipalities are utilizing these assets as gathering places with welcoming spaces and facilitating self-driven community groups and associations. An arena facility is more than an ice surface: it is a community meeting place with indoor and outdoor public activity spaces. It is part of the neighbourhood, a community asset, and can assist in strengthening local pride and cohesion.

Everyone can play a role in strengthening their neighbourhood. City staff could host a few meetings so that residents can get to know each other and talk about what is going on in the neighbourhood: what is going well and what are some of the issues that can be addressed together. Community members can weigh in and discuss what their priorities are. Usually at this point some residents volunteer to help organize some

further opportunities. The spaces both indoor and outdoor can be utilized to host neighbourhood events, enhance the gardens, start a walking club, host drop-ins for caregivers and babies, and maybe yoga classes or a coffee get together. It all starts with discussing what the strengths and issues are and how the Centre can provide spaces so that self-determining groups can organize and utilize these community assets to their maximum.

For example, Ajax has a Strong Neighbourhood Plan that promotes neighbourhood discussions as to how arenas and community centres can address issues in the surrounding community. The Cities of London and Mississauga have created welcoming spaces for youth and families alike to become more engaged in the development of opportunities for families and the development of children and youth and support of older adults (e.g., London has dedicated space to community gardening and food preparation for children and youth). Many exciting developments are evident as a result of staff facilitating discussions as to how to better use publically funded assets; some ideas generated to date include installing Wi-Fi in Sarnia's Arenas, meeting room enhancements, and wider promotion and awareness initiatives (in partnership with community partners).

This study presents an ideal time for the City and Sarnia residents to “think beyond the rink” by enhancing these public spaces with programs and events to support the surrounding neighbourhoods.

Naming Rights

While naming rights in arenas is not a widespread practice in Canada; there are some very successful examples where they have served municipalities well in offsetting costs and enhancing arena operations. The RBC Centre is one such example in Sarnia (note: the agreement with Royal Bank is due to expire in 2015 and the City is expected to pursue long-term naming rights at that time). Other regional and provincial examples – most of which tend to apply to multi-pad facilities – include the Flight Exec Centre in Dorchester, Libro Credit Union Centre in Amherstburg, Atlas Tube Centre in Lakeshore, Heinz and Unico Arenas in the Leamington Kinsmen Recreation Complex, Timken Community Centre in St. Thomas, Activa Sportsplex in Kitchener, Iroquois Sport Complex in Whitby (which has a sponsor for each of its six ice pads), and more. The potential of success in Sarnia for realizing sponsorships for its other arenas would need to be studied further before a stronger recommendation could be made.

Operating Budget Development

Presently, the City's arena operating budgets are developed based on the bottom line requirements and not from a zero-based perspective. The analysis shows that the actuals from the previous year in many line items did not necessarily change the projection based on needs and changing conditions. It is recommended that staff take a zero-based budget approach each year, with each line item being justified through changing conditions and new and varied approaches.

Pricing Based on Actual Costs of an Hour of Ice

In an effort to be transparent and defend ice rates, many municipalities have determined the actual cost of an hour of ice. Some include all direct costs in the operation of arena facilities, others include all direct and indirect costs including a portion of the support department's time (e.g., Finance, CAO office, etc.). The fairest approach is to include the actual cost of operations and any support functions within the department.

The cost of one hour of ice can be determined by:

- Calculating the number of all available and saleable ice (weeks in a season multiplied by the number of likely saleable hours available per week); and
- Dividing the gross operating costs of the arenas by the number of hours available in the season to arrive at an operational cost per hour for one hour of ice.

Applying this approach to the Sarnia arenas would result in the following operational cost per hour of ice:

- Gross Operating Cost (2015 Budget): \$3,475,100
- Hours of Operation (103 prime and non-prime saleable hours per week for 6 ice pads over a 6-month season): 16,068 hours
- Operational Cost Per Hour (gross operating cost divided by hours of operation): \$216.27 per hour
- The operation of full year ice on some pads will change the calculation and result of the operational cost per hour

Knowing and communicating the true operational cost per hour allows the City to develop their pricing policy of arena rates based on true costs and in a transparent manner.

Pricing

Pricing is also completed in a transparent fashion and is based on the philosophy of Council and the Department around accessibility, affordability, subsidizing certain age groups (e.g., children and youth). The value of the community good largely determines how much an asset is subsidized. Where all residents can experience an asset, it is often completely subsidized by the broad tax base; an example of this approach would include the free use of trails, parks, playgrounds, open spaces, and outdoor amenities. Conversely, when an asset is used by a specific interest group (individual good) a balance of user pay and tax subsidy is typically applied. The costing and pricing of arena ice rates based on the true costs and value to the community and individual good is a timely and appropriate way of demonstrating transparency in arena operations to the public.

In order to increase usage, the City had adjusted its rates for part of the 2013/14 season as a pilot project, which in turn generated an additional \$4,500 in revenue. The success of this initiative led Council to adopt a similar program for the 2014/15 season. At its meeting on March 24, 2014, City Council passed the following resolution:

“That ice rates in all City arenas be maintained at the 2014 level until reviewed by Council in the 2016 budget process and, in addition, the following levels of ice rental rates be established to increase usage at all times during the ice season:

- That any minor group (recognized by a provincial or national association) can rent available ice time at the rate paid by City of Sarnia minor groups;
- That daytime ice of \$60.00 plus HST be available to groups between 9:00 a.m. and 5:00 p.m. Mondays to Fridays at Clearwater Arena;
- That the ice rental charge for all user groups booking ice time after 10:00 p.m. daily shall be \$150.00 plus HST for each hour of use in City arenas;
- That between December 22 and January 6 of each year, all unreserved ice shall be available at \$125.00 plus HST per hour regardless of time of availability.”

As shown in the following table, the City of Sarnia’s ice rental rates are generally higher than the rates in adjacent municipalities. The cost and demand factors are unique to each municipality and these factors should be regularly monitored and communicated to stakeholders.

Hourly rates at City and Nearby Arenas, 2014/15 (HST excluded)

Rate Category	City of Sarnia	Point Edward	St. Clair / Mooretown
Prime Time (M-F 5pm-10pm, S-S 7am-10pm)	\$161 (subsidized) \$214 (general)	\$160	\$118 (subsidized) \$150 (general)
Non-Prime Mornings (M-F 6am-9am)	\$80 (subsidized) \$107 (general)	\$50 (subsidized, Monday to Thursday 6am to 8am) \$95 (general)	\$100
Daytime – RBC only (M-F 9am – 5pm)	\$45 (subsidized) \$60 (general)		
Evenings (after 10pm)	\$113 (subsidized) \$150 (general)	Not offered	\$130
Off Season Ice – Prime (M-F 5pm-10pm, S-S 7am-10pm)	\$134 (subsidized) \$178 (general)		
Off Season Ice – Non-Prime (M-F 6am-5pm)	\$80 (subsidized) \$107 (general)	\$70	\$100
Summer Floor	\$65 (subsidized) \$86 (general)		\$55 (general) \$45 (minor)

Recommendations – Financial Management:

16. Build the 2016 arena operating budgets from a zero-based perspective, justifying each revenue and expenditure item and utilizing actual budget performance from the previous year.
17. Calculate the operational cost per hour (for one hour of ice) on an annual basis, both on a gross operating budget basis with a view toward reducing the costs through operational efficiencies and revenue enhancements.
18. Continue to monitor the impact of reduced ice rates and report out annually to the public, stakeholders, and Council. Consider a reduced last minute ice rental rate in order to maximize otherwise unused ice.
19. Expand on-ice and off-season programs, camps, and casual/drop-in opportunities to increase revenues and facility use.
20. Engage neighbourhoods and the community in discussions surrounding the use of arena facilities as community hubs and gathering places.
21. Consider the implications of extending naming rights to other community facilities and assets.
22. Develop a listing of sponsorship opportunities within the arena operations (e.g., public skating, programs and events, etc.) and procure sponsorships in a transparent manner.
23. Consider annual contributions from operating budgets to fund planned arena asset repairs and replacements.
24. Any operational savings from arena decommissioning or the installation of energy-efficient systems should remain within the arena business unit to fund arena-related capital renewal projects and to reduce the unfunded renewal amount.
25. Complete an annual assessment and implement measures to better manage the costs of overtime and employee absenteeism (e.g., scheduling, the use of float positions, etc.).

9.5 Accountability and Performance Measurement

This Arena Management Study positions Sarnia's arenas in a new light in terms of measured efficiencies and effectiveness. Financial measures alone will not tell the whole story as the Study is implemented and time passes. Continued monitoring of ice utilization (and collection of registration data) is vital now that City has centralized booking for all local arenas. Annual reporting will ensure that staff are held accountable for effective arena operations and, further, that the public can be kept informed as to the

successes as the various recommendations are implemented. Benchmarking with other arenas in other similar jurisdictions is useful to a certain extent, however, it is difficult to ascertain exactly what is included, making “apples to apples” comparisons difficult. A more useful approach is to compare arena operations within Sarnia year to year using common measures. The following framework of performance measures is offered for consideration.

Proposed Performance Measures Framework

Performance Measure Category	Measures	Description
Inputs	<ul style="list-style-type: none"> • gross operating budget • net operating budget • staffing in full-time equivalents • number of ice surfaces • investment per capita in arena operations 	This data provides an overview of the municipal investment in arenas.
Outputs	<ul style="list-style-type: none"> • number of ice hours and hours of community spaces available for use (facility capacity) • % of ice hours and community spaces actually used (fill rates) • age groups and abilities served • number of users of the facilities 	This information compares the return on the investment year to year. How have these factors increased through staff and stakeholder efforts?
Efficiencies	<ul style="list-style-type: none"> • operational cost per hour/facility and overall average (using gross and net operating costs) • % of expenditures recovered annually • revenue generation as a result of enhancements • facility use as a result of enhancements • efficiencies (reduced costs) 	This data will demonstrate what has been done to become more efficient. How have expenditures been reduced through efficiencies and revenues been increased by increasing the use of the facility?

Performance Measure Category	Measures	Description
Effectiveness	<ul style="list-style-type: none"> • user and visitor satisfaction levels 	User and visitor satisfaction levels can indicate what staff are doing well and what can be done to improve the users' experience.

Public Engagement in the Implementation of the Arena Management Study

Community members and especially ice user stakeholders have taken great interest in the arena operations in the City of Sarnia over the last few years. There is a shared interest and ownership between staff and the public to offer the best service with the interests of the users in mind. An ongoing dialogue would be helpful in keeping the public informed and key stakeholders engaged – annual meetings with users are recommended to discuss scheduling, allocation, capital improvements, status of the Arena Management Study, etc.

Furthermore, it is recommended that an Arena Advisory Committee be struck of not only stakeholders, but also residents with the skills and competencies needed to implement the plan. The development of a terms of reference, an open call for participants based on needed skills, competencies and backgrounds, and a transparent selection process would support the value-driven relationship that is gaining momentum around arena operations in Sarnia.

Recommendations – Accountability and Performance Measurement:

26. Review the suggested Performance Measures Framework, which identifies inputs, outputs, efficiency, and effectiveness measures. Implement and report to stakeholders and Council on annual findings and any remedial measures.
27. Meet annually with arena users to discuss scheduling, allocation, capital improvements, and more.
28. Consider the creation of an Arena Advisory Committee to assist staff in overseeing the implementation of the City of Sarnia Arena Management Study recommendations.

10.0 Facility Provision Options

This section builds upon the Study's findings and prior recommendations by identifying the preferred facility provision options and order of magnitude costs for City of Sarnia arena facilities.

10.1 Facility Provision Strategy

A primary purpose of this report is to identify strategies and a phasing plan to meet current and future arena provision needs, with consideration of arena renovation, expansion, development, or closure. The needs assessment provides direction on the total number of ice pads required in the City to 2031; combining this with data on facility condition, level of amenity, and usage allows for the identification of a locally responsive and forward-looking arena provision strategy.

By modern standards, single pad arenas are generally considered to be outdated designs that are increasingly unable to meet growing expectations. In a City the size of Sarnia, new single pad development is not recommended. Multi-pad designs offer operating efficiencies and have the ability to serve as a greater community destination. In addition, many new arenas are incorporating design amenities such as more and larger change rooms, as well as indoor walking tracks that can be used year-round. Retention of the multi-pad RBC Centre and Clearwater Arena is recommended.

It should be noted that in January 2015, Lambton College formally withdrew its proposal to takeover RBC 2 for a recreational and fitness complex. This proposal would have removed one of the City's newest rinks from its inventory and eliminated the efficiencies inherent in a multi-pad facility. The College's decision is in keeping with the direction of this Arena Management Study. It is understood that the College is examining options for developing a new athletics complex on its campus and the City will continue to hold discussions with the College to explore opportunities to work together on realizing this vision.

The City has two single pad arenas and a surplus on one arena; therefore, **one of Germain Park Arena or Sarnia Arena would be potential candidates for re-purposing or closure.** These two arenas are the City's oldest, but otherwise are very different facilities.

In evaluating which arena to consider for closure/re-purposing, the following criteria should be considered (at a minimum):

- Facility condition and amenity level, in relation to other arenas.
- The amount of capital investment required for the arena in the short to medium-term.

- Whether the rink is contained in a stand-alone arena or as part of a multi-use community centre (recognizing there is merit and challenges in repurposing both types of facility configurations).
- The capital and ongoing operating costs required to re-purpose an arena as compared to retaining the facility for ice usage.
- Distance to the next closest arena(s), and whether that facility could reasonably accommodate additional use during prime and shoulder hours.
- Proximity to concentrated population base (e.g., market size within its catchment area).

In terms of facility condition, the 2013 assessment completed by Ameresco Canada identified that Germain Park Arena (rated in “poor” condition) has a larger backlog of necessary capital repairs and replacements than Sarnia Arena (rated in “fair” condition). Sarnia Arena is a much larger and more architecturally significant building. Comparatively, Germain Park Arena is a pedestrian facility with few user comforts, although its simplicity also makes it one of the more accessible (i.e., barrier-free) arenas in the City. Both arenas have ice pads that are under-sized by modern standards, although the rink at Germain Park Arena is ten feet shorter than Sarnia Arena. Both rinks lack an adequate number and properly-sized change rooms and require a number of upgrades to address their continued functionality. While Germain Park Arena does not contain a multi-use community room like Sarnia Arena, it is located within a community park and provides washroom facilities during the summer months.

Built in 1948, Sarnia Arena is one of the oldest arenas still in use in Ontario. The arena has a capacity of 2,302 and includes two concession stands, four change rooms, washrooms, and a community room. The facility has undergone a number of expansions and renovations during its time, the most recent being in 2009 (e.g., new seating, new glass, roof repairs, etc.). Sarnia Arena is a notable example of civic arena construction, in a developed downtown area (the only such facility on the west side of the City), and has a strong and important civic presence. It is not a building that could easily be replaced, but could be adaptively re-used for activities requiring larger spectator accommodation (e.g., lacrosse, indoor soccer, assembly venue, etc.); it does not have any notable expansion potential. **Based on its architectural character and stature, Sarnia Arena is a facility that is worthy of revitalizing, not closing or re-purposing.**

Based on a visual observation, **Germain Park Arena would appear to be a reasonable candidate for re-purposing to alternate uses.** It is a simple brick and metal clad building with load bearing block walls that could be re-used as ‘shell’ space assuming some upgrades. The facility has a primary arena volume of approximately 18.7 feet to the steel beams, and a lower secondary volume containing the entrance, change rooms and washrooms of approximately 10 feet to the underside of the decking. The dimensions of the primary arena are conducive to a variety of indoor recreation uses (e.g., youth soccer, tennis, pickleball courts, multi-purpose space, and other ‘wellness’ related uses) or potentially as a public works or storage depot. However, the

ceiling height would pose a potential issue for certain types and levels of use, such as basketball, volleyball, and adult indoor soccer.

While there may be interest in re-purposing Germain Park Arena into new uses, the City should exercise caution and due diligence in evaluating such options. In order to repurpose the facility to accommodate alternate recreational uses, the following improvements would be required, at a minimum:

- the existing refrigeration system would need to be decommissioned, the cooling coils below the existing sand floor removed, and some areas of the existing concrete apron and header trench reconfigured
- depending on the desired use, the installation of a concrete floor over the existing sand base may be required
- a new HVAC system would be required and new insulation would be required to accommodate winter use
- substantial improvements to the lobby, viewing area, washrooms, and change rooms would be required to make the facility barrier-free
- an updated roof assessment is recommended to ascertain the lifespan of this asset
- there are great possibilities to enhance the possibilities for daylight in the arena space through the introduction of glazed openings in the perimeter walls.

In many cases, re-purposing can be nearly as costly as building new and often results in a compromised design that may not meet the full extent of needs for the new use. Order of magnitude cost estimates for re-purposing this arena are examined in the following section.

Further, it bears noting that the City of Sarnia does not have a current Parks and Recreation Master Plan to help guide its investment in community infrastructure or programming (the last one was prepared in 1989, prior to amalgamation). Limited direct knowledge of other community needs and requirements has been solicited through this Arena Management Study process, making it premature to decide on specific uses for the re-purposed arena. **The City should give consideration to a wide range of options for the Germain Park Arena site in order to prioritize needs and options for the re-purposing and/or decommissioning of the facility.**

For the retained arenas – Clearwater, RBC Centre, and Sarnia Arenas – the capital improvements recommended in Section 8 should be pursued. Order of magnitude cost estimates for these improvements are examined in the following section.

The option of adding two ice rinks to Clearwater Arena to make it a quad pad facility (and closing both Germain Park and Sarnia Arenas, as well as transferring RBC 2 to Lambton College) was introduced through a staff recommendation to Council in April 2014. This option is no longer relevant due to a City-wide need for 5 ice pads and the retention of RBC 2. For comparison purposes, the options of adding one ice pad to

Clearwater Arena (in place of Sarnia Arena) and replacing Clearwater Arena with a new twin pad are examined in the following section; note: these options are not being recommended.

This Study also examined the demand for an indoor turf facility in the City, through the perspective of a potential arena conversion. While we anticipate there to be sufficient demand for such a facility in the City of Sarnia, Germain Park Arena poses certain restrictions for indoor field sports due to its dimensions, particularly its low ceiling height. **As such, conversion of Germain Park Arena into an indoor soccer facility is not recommended. With an indoor turf facility representing a new level of service for the City, a facility provision scenario that does not require the municipality to be the primary funding or operating agent – such as provision by a non-profit or private operator – is recommended.** Such a project may be referred to a City-wide Master Plan or related process for further examination.

10.2 Facility Options

As discussed in the previous section, it is recommended that the City close Germain Park Arena as an indoor ice venue and undertake necessary improvements to the remaining arenas. For comparative purposes only, costs have also been identified for re-purposing Germain Park Arena into alternate uses (such as a community hub), replacing Clearwater Arena with a new twin pad, and replacing Sarnia Arena with a third ice pad at Clearwater Arena.

Recommended Option:

1. Undertake phased improvements to RBC, Clearwater, and Sarnia Arenas; close Germain Park Arena. Specific capital recommendations are identified in Section 8 and are summarized below:

RBC Centre

In mid-2014, the City took over operation of the RBC Centre from a third-party operator associated with the Sarnia Sting, the City's major junior A hockey club. This sport and entertainment complex was built by the City in 1998 and houses a twin pad arena, one with seating for approximately 5,500 patrons in addition to approximately 42 suites. The facility is located within the Lambton College campus, a partnership that has great potential to be strengthened through cross-programming and marketing opportunities.

The two NHL-size ice pads are well used by the community, although the number of special events and shows is limited due to the size of the local market, its proximity to other centres, physical / design limitations, etc. No significant renovations have been undertaken at this facility since it was built and, given the facility's age, a number of systems are due for replacement, such as HVAC units and the main video board. Additional recommended improvements include the completion of the sprinkler system installation in

RBC 2 and barrier-free improvements (including adding a ramp at the main entrance).

Clearwater Arena

As a twin pad facility, Clearwater Arena is in demand for minor hockey and tournaments, but is generally an unremarkable facility that will require substantial upgrades over the short and medium-term. Most notably, with the main entrance being off the rear and the lobby, meeting rooms, and concessions being at the front – all accessed via a narrow hallway shared with the change rooms – this arena has major flow issues. The number of change rooms are generally adequate, but the rooms themselves are small by current standards.

Although a multi-pad arena, the ice-making system currently requires two separate ice plants (RBC Centre features a shared plant, which is more efficient), both of which have surpassed their anticipated lifespans. Despite this, the costs to move toward a single ice plant would be considerable and not in the City's best interests; rather it is recommended that the City pursue upgrades to the existing refrigeration system, including the transfer of the ice-making equipment from Germain Park Arena (which is in better condition) once it is closed. A future priority should also be to reconfigure the backend of the building to accommodate accessible change rooms for sledge hockey and other users. Furthermore, the finishes within the building are basic and many are in need of renewal and/or replacement, including the HVAC system in the upper community hall. Additional priority upgrades include new rubber flooring, new boards (Blue rink), barrier-free improvements, and parking lot upgrades.

Sarnia Arena

Sarnia Arena embodies “hockey heritage” in Canada and is currently the home of the Legionnaires (one of the most successful teams in Canadian junior hockey history) and several other local sports organizations. Similar architectural styles can be seen in the Galt Arena Gardens (Cambridge) and William Allman Arena (Stratford), both of which have hip-style roofs and were built in the 1920s. These Canadian landmarks (often used as backdrops for television productions and commercials) have been substantially renovated in order to meet changing ice sport needs and expectations, an opportunity that has not been fully captured in the Sarnia Arena.

Built in 1948 and one of the oldest arenas still in use in Ontario, Sarnia Arena's main bowl is a true gem that cannot be replaced in a new structure. The Arena remains very functional (thanks in part to recent upgrades), but is in need of improvements to its façade (among other exterior repairs) and major renovations to its concessions, front lobby, and change rooms. Future capital investment should recognize that Sarnia Arena is the only municipal

recreation facility in the downtown area and has the potential to serve as a vibrant hub for this community for decades to come.

William Allman Memorial Arena – Stratford (1924)



Galt Arena Gardens – Cambridge (1921)



Other Options (for comparative purposes):

2. Replace Clearwater Arena with a new twin pad with walking track and multi-purpose rooms
3. Close Sarnia Arena and add one ice pad to Clearwater Arena
4. Re-purpose Germain Park Arena into alternate uses, such as a community hub

10.3 Capital Cost Estimates

Order of magnitude capital costs have been estimated for each of the aforementioned options. These figures are based on preliminary concepts only and should be considered as Class D budgets (+/- 20%). It bears noting that construction costs can vary significantly due to instability of material costs, labour costs, and other economic factors. As a result of these factors, sizable contingencies have been applied which, depending on the City's expectations and external pricing factors, may be able to be refined at the next stage of the process.

The capital costs identified in this report are shown in current year (2015) dollars and are not adjusted for inflation. Unless otherwise stated, they also specifically exclude HST, land costs, legal costs, environmental remediation, project management, and financing.

Option 1 (recommended) – undertake phased improvements to existing arenas (excluding Germain Park)

A number of projects – such as equipment replacement, major repairs, renovations, etc. – were recommended in Section 8.8. Order of magnitude capital costs have been developed for each project and are shown in summary form in the table below. A complete listing of the major recommended capital projects for each arena and their associated costs can be found in **Appendix B**.

The recommended capital projects and costs are based on visual inspections, industry costs, and past reports prepared for the City of Sarnia (e.g., Ameresco Canada, 2013; NA Engineering, 2014; etc.).

The identified projects exclude unknown repairs, unexpected failures, and minor capital projects. The Arena Preventative Maintenance Program recommended in Section 9.2 may identify additional improvements to the facilities, equipment, and amenities based on a more detailed lifecycle analysis. Further, each of the recommended projects should be closely examined as part of an asset management program and integrated into a long-term capital forecast, with funding to be determined through the budget process.

In total, **\$10.48 million** in capital projects have been identified across the three arena facilities: **\$4.89 million for Clearwater Arena, \$3.15 million for RBC Arena, and \$2.44 million for Sarnia Arena.** Of this, approximately:

- **\$1.68 million** in projects have been identified as **high priorities** for the City – most of these projects involve operational efficiency improvements that should be undertaken in the near term (approximately the next three years) to address immediate needs and/or realize operational savings.
- **\$7.42 million** in projects have been identified as **medium priorities** for the City – many of these projects involve accessibility improvements that should be undertaken in the near to medium term, with timing dictated by need, opportunity, and funding availability.
- **\$1.39 million** in projects have been identified as **low priorities** for the City – many of these projects involve user comfort improvements that should be undertaken as funding allows, but generally no later than ten years from now.

Summary of Costs – Recommended Major Capital Projects

Arena	High Priority	Medium Priority	Low Priority	Total
Clearwater Arena	\$932,000	\$3,957,200	\$0	\$4,889,200
RBC Arena	\$45,000	\$2,107,200	\$1,000,000	\$3,152,200
Sarnia Arena	\$705,000	\$1,351,600	\$385,000	\$2,441,600
Total	\$1,682,000	\$7,416,000	\$1,385,000	\$10,483,000

Costs are in 2015 dollars and not adjusted for inflation. See Appendix B for listing of projects and costs

It should be noted that an Asset Management Plan prepared for the City’s arenas by Ameresco Canada in January 2013 found that the City was facing a \$2.4 million shortfall in capital funds to update Clearwater, RBC, and Sarnia Arenas and that this shortfall would grow to \$7.5 million in five years’ time. These figures are generally in line with the high and medium priority projects recommended in this Study.

As stated earlier in the report, the City has allocated approximately \$500,000 annually for capital repairs and replacements in its long-term capital forecast, a funding level that is insufficient to address arena funding requirements. **An average of \$1.05 million (not adjusted for inflation) would need to be allocated annually to address the major capital items recommended in this Study over a ten-year time period.** At the current level of funding, it would take approximately 21-years for the City to address the major capital items recommended in this Study, excluding any costs associated with the future use of Germain Park Arena. The asset management industry recommends that 2% of facility replacement values should be allocated for annual renewal, which – for

the three City arena facilities to be retained – translates into an annual funding level of \$800,000 (not adjusted for inflation).

Option 2 (not recommended) – replace Clearwater Arena with a new twin pad facility

For comparative purposes, order of magnitude costs for building a new twin pad arena as a replacement for Clearwater Arena have been developed. This facility concept would utilize a pre-engineered building form and consist of two NHL-size ice pads, change rooms, lobby, warm viewing area, community-level bleacher seating, walking track, program rooms, etc.

The estimated total project cost for this option is **\$24.52 million**; of this, the total construction cost is estimated at \$18.86 million. Actual costs may be higher or lower depending on the nature of the facility design and related works.

Capital Cost Estimate – New Twin Pad Arena

	Cost Factors	Cost
New Twin Pad Arena	82,000sf @ \$230/sf (including site development)	\$18.86 million
Subtotal (Construction Cost)		\$18.86 million
Soft Costs (professional fees, FFE, etc.)	30%	\$5.66 million
Total Project Cost		\$24.52 million

Specific exclusions: HST, Land Costs, Legal Costs, Demolition, Environmental Remediation, Project Management, Financing

Option 3 (not recommended) – close Sarnia Arena and add one pad to Clearwater Arena

For comparative purposes, order of magnitude costs for adding a third pad to Clearwater Arena as a replacement for Sarnia Arena have been developed. This facility concept would utilize a pre-engineered building form and consist of one NHL-size ice pad, change rooms, small lobby, warm viewing area, community-level bleacher seating, etc.

The estimated total project cost for this option is **\$13.33 million**; of this, the total construction cost is estimated at \$10.32 million. Actual costs may be higher or lower depending on the nature of the facility design and related works. Costs associated with the re-purposing, decommissioning, and/or future sale of Sarnia Arena are not included in this estimate.

Capital Cost Estimate – Addition of Single Pad Arena to Clearwater Arena

	Cost Factors	Cost
Addition of Single Pad Arena to Existing Facility	43,000sf @ \$240/sf (including site development)	\$10.32 million
Subtotal (Construction Cost)		\$10.32 million
Soft Costs (professional fees, FFE, etc.)	30%	\$3.01 million
Total Project Cost		\$13.33 million

HST, Land Costs, Legal Costs, Environmental Remediation, Decommissioning, Project Management, Relocation of Amenities, Financing

Option 4 (for consideration) – re-purpose Germain Park Arena into alternate uses, such as a community hub

Germain Park Arena is surplus to the City’s needs as an indoor ice arena. It is recommended that the City consider alternate uses for this facility.

To provide context for further discussion, order of magnitude costs for re-purposing this arena to alternate occupancy-based uses, such as a community hub, have been identified based on 24,160 sf of renovation area (current building footprint) and consisting of new flooring, new roofing, new electrical fixtures, new mechanical systems (HVAC), and revised washroom areas.

The estimated total project cost for re-purposing Germain Park Arena to alternate occupancy-based uses (e.g., community space) is **\$3.57 million**; of this, the total construction cost is estimated at \$2.75 million. Actual costs may be higher or lower depending on the nature of the renovation and intended use.

Capital Cost Estimate – Re-purposing of Germain Park Arena

	Cost Factors	Cost
New Mechanical/Electrical	24,160sf @ \$50/sf	\$1,210,000
New roofing	24,160sf @ \$20/sf	\$485,000
New slab and floor finish	20,000sf @ \$20/sf	\$400,000
New walls (internal)	allowance	\$500,000
New W/C areas	500sf @ \$300/sf	\$150,000
Subtotal (Construction Cost)		\$2.75 million
Soft Costs (professional fees, FFE, etc.)	30%	\$825,000
Total Project Cost		\$3.57 million

Specific exclusions: HST, Land Costs, Legal Costs, Environmental Remediation, Project Management, Financing

10.4 Operating Cost Estimates

The comparison of the operating costs of the arena provision options are presented in this section. The baseline costs are provided by the City of Sarnia in the form of the projected operating costs for 2015. All projected costs are shown in current year (2015) dollars and are not adjusted for inflation. The costs are considered the baseline operating costs and do not account for the enhancements that are recommended in Section 8 of this Study. Further study is needed by staff to articulate the specific needs and funding requirements and their implementation is critical to the success of the continued arena operations.

The recommendations with cost implications include:

- a) the use of technology to create efficiencies in communications and operations;
- b) an audit of arena operations with legislative compliance (this may need to be completed by a compliance expert the first time it is completed);
- c) the development of a 25 year capital plan considering the needed investments to repair, refurbish, and replace all capital equipment;
- d) the development and implementation of a professional development and training program for staff;
- e) the development of alternate revenue strategies, including leagues, naming rights, sponsorships, additional programs in arenas and tournaments, etc.;
- f) the development of arenas as local community hubs to build cohesion and pride in neighbourhoods; and

- g) the development and the funding of an asset management plan and a preventative maintenance program that will extend the lifespan of equipment and replace assets in a timely manner.

Ice Capacity and Availability Assumptions

In examining the arena provision options, the availability of ice as well as the fiscal implications of each option must be considered. The following table reflects ice use in November of 2014; there were 51 prime time hours still available and 174 non-prime hours available within the current supply of arenas. Of the 174 non-prime hours, 152 are considered daytime use which is Monday to Friday from 7:00 am to 5:00 pm. The current available ice hours that could be used to accommodate displaced ice users reasonably equals to 52 hours of prime time and 18 hours of useable non-prime hours (Monday to Friday 6:00 to 8:00 am and 4:00 to 5:00 pm). 70 hours per week are available within the current (November 2014) ice schedule to accommodate rescheduling and the equitable sharing of prime and non-prime hours amongst the ice users. Any arena closures or repurposing of arenas must consider the impact on ice usage and the respective revenue stream.

Current Ice Time Usage, City of Sarnia (rounded to the closest hour)

Prime Time (hours)	Clearwater	Germain	RBC	Sarnia	Total
Capacity	110	55	110	55	330
Booked	96	37	96	50	279
Available	14	18	14	5	51
Non-Prime Time (hours)	Clearwater	Germain	RBC	Sarnia	Total
Capacity	100	10	100	50	260
Booked	24	1	54	7	86
Available	76	9	46	43	174

Source: City of Sarnia, 2014

2015 Current Projected Budget for Arena Administration and Operations

The City’s 2015 budget projections depict the status quo whereby all arenas are maintained and experience the existing revenue streams. The projected net deficit for all arenas is \$657,700 including a full year of operation for the RBC Centre. This figure includes the arena administration costs but excludes the debt financing charges attributable to the RBC Centre. It should be noted that the City has not experienced a full year of operation at the RBC and, therefore, true actuals will not be known until year-end 2015.

2015 Budget Projections, City of Sarnia Arenas

2015 Projections	Administration	Clearwater	Germain	RBC	Sarnia	Total
Revenues	\$12,500	\$711,000	\$146,500	\$1,619,200	\$328,200	\$2,817,400
Expenditures	\$155,800	\$918,000	\$267,200	\$1,646,400	\$487,700	\$3,475,100
Net Cost	\$143,300	\$207,100	\$120,600	\$27,200	\$159,500	\$657,700

Source: City of Sarnia, 2015

Option 1 (recommended) – reduce the number of ice pads to 5 and redistribute ice utilization from Germain Park Arena to other arenas

Germain Park Arena is surplus to the City's needs as an indoor ice arena. To provide context for further discussion, operating cost estimates for eliminating this facility from the active arena inventory and shifting uses to other City arenas have been identified.

The following table depicts the operating budget impacts of closing Germain Park Arena, accommodating the majority of the revenue stream and maintaining the full-time staff expenditure. The impact of this option is estimated to result in net savings to the City of \$118,700 annually.

Estimated Financial Impact of Redistributing Ice Utilization from Germain Park Arena

Estimates	Administration	Clearwater	Germain	RBC	Sarnia	Total
Revenues	\$12,500	\$711,000	--	\$1,619,200	\$328,200	\$2,670,900
Redistribution of Germain Ice Rentals	\$145,000	--	--	--	--	\$145,000
Total Revenues	\$157,500	\$711,000	--	\$1,619,200	\$328,200	\$2,815,900
Expenditures	\$155,800	\$918,000	--	\$1,646,400	\$487,700	\$3,207,900
Re-allocation of Germain Staff	\$147,000	--	--	--	--	\$147,000
Total Expenditures	\$302,800	\$918,000	--	\$1,646,400	\$487,700	\$3,354,900
Net Cost	\$145,300	\$207,000	--	\$27,200	\$159,500	\$539,000

Assumptions Revenue

- All ice rentals would be redistributed amongst the other ice surfaces and the re-allocation would need to involve an equitable sharing of both prime and non-prime times in the other arenas.
- 100% of ice rental revenues would be able to be accommodated in other arenas ensuring that \$145,000 is retained in the overall arenas budget. This amount has been captured within the Arena Administration budget so as not to pre-suppose where revenues would be re-allocated.
- It is not assumed that \$1,500 in Germain Park Arena concession revenue will be maintained and this figure is not identified within another arena cost centre.

Expenditure Assumptions

- The 2 Arena Operators at Germain Park Arena would be re-allocated and the arena operator complement would be right-sized (reduced by 2 operators) through attrition. A possible strategy would be to appoint one operator as a floater to cover off sick time and over-time to reduce the 2014 expenditure of \$102,000 in overtime costs. It should be noted that a significant amount of the overtime costs were due to ensuring that the RBC Centre met legislative requirements before the 2014/15 ice season began.
- Initial savings to arena operations would be generated through cost savings in overtime, casual wages, fuel, electricity, water, insurance contract work, maintenance, and supplies.

Net Impact to Arena Budgets

An initial net arena budget reduction of \$118,700 could be realized as a result of reducing the arena stock to 5 surfaces. A reduction of overtime by assigning one staff person to float between facilities to cover off sick and over time could be realized in years one and two. Additional savings of \$145,000 would be realized over time through the attrition of two arena operator staff positions. A reduction in salary and fringe benefits could be realized sooner if two staff persons fill vacancies in other departments or units within the Parks and Recreation Department and the complement is subsequently reduced. This would be done by respecting the guidance of the Collective Agreement.

Option 2 (not recommended) – replace Clearwater Arena with a new twin pad facility (and close Germain Park Arena)

For comparative purposes, operating cost estimates for building a new twin pad arena as a replacement for Clearwater Arena have been developed.

The following table provides a summary of the operating costs of replacing Clearwater Arena with a twin pad, walking track and community rooms, as well as closing Germain Park Arena. The impact of this option is estimated to result in net savings to the City of \$35,600 per year compared to Option 1.

**Estimated Financial Impact of Replacing Clearwater Arena with a New Twin Pad
(and closing Germain Park Arena)**

Estimates	Administra- tion	Clearwater	Germain	RBC	Sarnia	Total
Revenues	\$12,500	\$711,000	--	\$1,619,200	\$328,200	\$2,670,900
Reallocation of Germain Ice rentals	\$145,000	--	--	--	--	\$145,000
Total Revenues	\$157,500	\$711,000	--	\$1,619,200	\$328,200	\$2,815,900
Expenditures	\$155,800	\$882,400	--	\$1,646,400	\$487,700	\$3,172,300
Re- Allocation of 2 Germain Operators	\$147,000	--	--	--	--	\$147,000
Total Expenditures	\$302,800	\$882,400	--	\$1,646,400	\$487,700	\$3,319,300
Net Cost	\$145,300	\$171,400	--	\$27,200	\$159,500	\$503,400

Revenue Assumptions

- All revenues for ice rentals can be accommodated.
- It is assumed that all revenues for the walking track and/or additional community rooms will be detailed in the Program Services budget at a break-even mandate.

Expenditure Assumptions

- Staffing Allocations – One Germain Park Arena operator could be reassigned to accommodate additional square footage of the walking track and community rooms and the other to a floater position.
- A 10% reduction in utilities has been calculated to account for upgraded high-efficiency systems, lights, boilers, and roof top units.

Option 3 (not recommended) – close Sarnia Arena and add one pad to Clearwater Arena (and close Germain Park Arena)

For comparative purposes, operating cost estimates for adding a third pad to Clearwater Arena as a replacement for Sarnia Arena have been developed.

The table below depicts the operating budget implications of adding one ice pad to Clearwater Arena as a replacement for Sarnia Arena and closing Germain Park Arena. The impact of this option is estimated to result in net cost to the City of \$31,700 per year compared to Option 1.

Financial Impacts of Closing Sarnia Arena and adding One Ice Pad to Clearwater Arena (and closing Germain Park Arena)

Estimates	Administra- tion	Clearwater	Germain	RBC	Sarnia	Total
Revenues	\$12,500	\$1,039,200	--	\$1,619,200	--	\$2,670,900
Re-allocation of Germain Ice Rentals & Revenues	\$145,000	--	--	--	--	\$145,000
Total Revenues	\$157,500	\$1,039,200	--	\$1,619,200	--	\$2,815,900
Expenditures	\$155,800	\$1,437,700	--	\$1,646,400	--	\$3,239,900
Allocation for 2 Germain Operators	\$147,000	--	--	-	--	\$147,000
Total Expenditures	\$302,800	\$1,437,700	--	\$1,646,400	--	\$3,386,600
Net Cost	\$145,300	\$398,500	--	\$27,200	--	\$570,700

Revenue Assumptions

- It is assumed that through equitable sharing of ice that the current ice needs can be accommodated in this option. Germain Park Arena rentals could be allocated to other arenas through an equitable effort to share prime and non-prime hours.
- Sarnia Arena revenues have been included in the Clearwater Arena projections where practicable.
- All other revenue streams could be accommodated within the triple pad.

Expenditure Assumptions

- Lead hands would be required for all shifts on the triple pad (which equals 14 shifts per week) due to the volume of traffic expected during evening and week-ends. Therefore, 3 Lead Hands would be required at the triple pad.

- 2 Operators would be required during Monday to Friday on the day shift as there is lighter schedule during the weekdays.
- 3 Operators are required for evenings and weekends due to the higher volume of ice use and traffic in the facility.
- The suggested full-time complement is 3 Lead Hands, 10 Operators, and 1 Floater Position to cover off for sick time, vacations (the aging workforce have earned longer vacations), and overtime.
- It is assumed that the triple pad development and construction would include a requirement for energy-efficient lighting systems, boilers, and roof top units, thus generating energy and fuel efficiencies. A respective savings of 10% has been included to provide a conservative estimate (Fuel: \$6,500; Electricity: \$23,000; Water: \$2,300).

Option 4 (for consideration) – re-purpose Germain Park Arena into alternate uses, such as a community hub

To provide context for further discussion, operating cost estimates for re-purposing Germain Park Arena to alternate occupancy-based uses, such as a community hub, have been identified. Re-purposing Germain Park Arena into a Community Hub will involve building community capacity to enable groups to provide self-directed programs and events within the facility. Directly offered programs and camps as well as room rentals would provide a new revenue stream for the re-purposed facility.

The table below provides a summary of the estimated fiscal implications of utilizing Germain Park Arena as a community hub. The impact of re-opening Germain Park Arena as a community hub is estimated to result in a net cost to the City of \$240,600 per year compared to Option 1.

Estimated Financial Impact of Re-Purposing Germain Park Arena into a Community Hub or Alternate Use

Estimates	Administra- tion	Clearwater	Germain (Community Hub)	RBC	Sarnia	Total
Revenues	\$12,500	\$711,000	\$132,600 (new revenues)	\$1,619,200	\$328,200	\$2,803,500
Redistribution of Germain Ice Rentals	\$145,000	--	--	--	--	\$145,000
Total Revenues	\$157,500	\$711,000	\$132,600	\$1,619,200	\$328,200	\$2,948,500
Expenditures	\$155,800	\$918,000	\$447,700	\$1,646,400	\$487,700	\$3,655,600

Estimates	Administra- tion	Clearwater	Germain (Community Hub)	RBC	Sarnia	Total
Re-allocation of Germain staff	\$72,500	--	--	--	--	\$72,500
Total Expenditures	\$228,300	\$918,000	\$447,700	\$1,646,400	\$487,700	\$3,728,100
Net Cost	\$70,800	\$207,000	\$315,100	\$27,200	\$159,500	\$779,600

Assumptions Revenue

- It must be noted that the following are reasonable assumptions for depicting options for using Germain Park Arena as a community hub. These assumptions do not replace the need for a feasibility study that would be required before Council has the comprehensive data in order to make an informed decision.
- Program Revenue – It is suggested that 20 hours of programming be reasonably offered per week (4 program sessions each offered for 10 weeks). An average 45 minute classes with an average of 10 registrants per class. 27 classes could be offered weekly at an average program rate of \$45/session per person.
- Camp Revenue – A camp program could be offered in the summer time for 8 weeks (1 week sessions). 2 camps could be offered at 50 participants per camp at an average rate of \$100/week per camper.
- A room rental program could be initiated in the first year at a reasonable rental program to start of 4 rentals per week for 40 weeks (excluding summer). 160 rental hours at an average of \$25/rental is estimated in the first year of operation.

Assumptions Expenditures

- In the first year of operation the facility would operate Monday to Friday from 9:00 a.m. to 9:00 p.m. and Saturdays and Sundays from 9:00 a.m. to 4:00 p.m. The facility would need full and/or part-time coverage for 74 hours per week.
- Staffing is required for a full-time Program Coordinator (\$65,000) and a full-time Operator (\$53,100), complemented by part-time Program Facilitators (30 hours / week @\$12/hour) and Cleaners (34 hours per week @ \$11/hour).
- One staff position (of the 2 surplus generated through the closure of Germain Park Arena) would be allocated to the Germain Community Hub and the other would be utilized to offset overtime costs and sick time throughout the arena system.
- Camp staff are calculated at 1 Lead Camp Supervisor (12 weeks @\$12/hour) and 10 camp staff (9 weeks @ \$11/hour).
- Part-time Program staff are calculated at an average rate of \$12/hour. An amount for training and set-up of classes is calculated at \$4,400 annually.

- Statutory benefits are calculated at 21% of the full-time wage and 12% of part-time rates.
- Non-statutory benefits are calculated at 16% of the full-time salary/wage.
- The facility is estimated to be a 24,160 square foot community space. Utility (hydro, gas and water) estimates are calculated at \$3.25 per square foot and maintenance and supplies are estimated at \$2.00 per square foot.
- A \$40,000 allotment is estimated in year one for program and camp equipment at the centre.

10.5 Summary of Cost Estimates

The following table summarizes the capital and operating cost impacts of the various options presented. Again it must be noted that the enhancements critical to successful arena operations (recommended in Section 9) require more study from a staff perspective and have not been added to each arena budget. The cost of these enhancements will be brought forward to Council for future consideration.

Summary of Financial Impacts of Various Options (2015\$, not adjusted for inflation)

Budget Element	2015 Projected Baseline	Option 1 (recommended)	Option 2	Option 3	Option 4
Description	Status Quo	Close Germain Park Arena and Undertake Arena Renewal Program	Replace Clearwater Twin Pad and Close Germain Park Arena	Add a 3 rd Pad to Clearwater Arena; Close Sarnia and Germain Park Arenas	Re-purpose Germain Park Arena into a Community Hub
Net Capital Cost	\$0.5 million per year (approx.)	\$1.05 million per year for 10 years	\$24.52 million (one time cost)	\$13.33 million (one time cost)	\$3.57 million (one time cost)
Net Operating Cost (annual)	\$657,700	\$539,000	\$503,400	\$570,700	\$779,600

In summary, each of the options accommodates current ice requirements, although be it with a fair amount of re-distribution of ice and equitable use of limited non-prime time hours. The refurbishment of Germain Park Arena to a community hub gained support in the consultation as residents and staff saw it as a centre for all ages and abilities, although there are a number of other options and considerations for the City to examine after the facility is decommissioned as an arena.

APPENDIX A: Record of Public Input

City of Sarnia – Arena Management Study

Ice Users Focus Group

November 12, 2014

Attendees

12 attendees from 9 groups

- Bluewater Sport Hockey League: Kevin Fitzpatrick & Heather Fitzpatrick
- Sarnia Hockey Association: Linda Lauzon & Mike Johnson
- Skate Sarnia: Doug Jackson
- Sarnia Girls Hockey: Dale Kerslake
- Sarnia AAA Hockey: Mike Kelly
- Bluewater Regional Training Centre: Sonya Rivard & Mark Moore
- Sarnia ice Hawks: Ron Rivait
- Sarnia Sting: Mark Glavin
- Sarnia Legionnaires Jr. B Hockey Club: Tom Knight
- City of Sarnia: Rob Harwood
- Monteith Brown Planning Consultants: Todd Brown & Steve Langlois

Invited but did not attend: Burgess Goalie Camp, Lambton College Athletics, Micor Source for Sports League, PMHL, LKSSAA High School Hockey, Teachers Hockey League

General Discussion

- Do the population forecasts take into account the possibility of new employment opportunities within the City?
- Some organizations also draw from other areas in the County – need to account for population trends in these areas as well
- Lambton College proposal – have been told that ceiling is 4 inches too short for some sport standards

Topic #1: Trends & Demographics

1. How (and why) are your registration and ice usage patterns changing? Are you getting the amount of hours that you require?

- Lambton Jr AAA – ice time needs are increasing due to expanded program development (skills – currently use 6 hours/wk) and possible opportunity to add a Major Midget team (this would have them on the ice every day similar to the Sting – would double their ice time needs)

- Bluewater Regional Training Centre – run from April to September (use Point Edward during winter season) – this past year, took an additional week in the Spring partially due to a Strathroy group moving to farther away to Komoka; offering more programs that have cross-over appeal with other sports
- Skate Sarnia – have seen growth in power skating (coach is well received and word of mouth has been effective) – added an additional power skating session this past year
- Sarnia Minor Hockey – have been pretty steady, but increasing skills development – increased Novice division by 2 teams this year and had to cap another age group
- Indoor soccer might be drawing kids away from ice sports

2. Do you currently use arenas outside the City? If so, how much and why?

- Sarnia Minor Hockey is renting 4.5 hours per week in Thedford (partly to create inroads in the event that local rinks are closed); Wed night 8:45 to 10:30pm and Sunday 4-7pm – this is all they could get
- Watford and Petrolia arenas are full
- Bluewater Regional Training Centre – Use Point Edward Arena, but not a full size rink
- Girls Hockey – Using Mooretown and Walpole Island a bit this year, mostly because it was available but also because it is cheaper (\$150/hr)
- Point Edward Arena – relies heavily on Sarnia users – only have 210 children in K-8 grade school

3. If you had to make do with less, how would you modify your programs? How would less ice time affect tournaments?

- No matter what population forecasts say, they will still have the same number of rep/travel teams (and they are needing more time due to their increased focus on skill development)
- BSHL – it has been the culture in Sarnia for adults to play at 10pm or earlier – playing at midnight may be the norm in other communities but this is not accepted here; bumping turns players off
- Jr AAA program wouldn't exist if they had less ice time (could use more ice time as it is and also interested in summer programming)
- 82 teams in Silver Stick down from 94 last year – use as many rinks as they can get access to, including Germain Park Arena and many others out of town
- Girls Silver Stick could do without Germain Park Arena

Topic #2: Aging & Surplus Infrastructure

4. How many ice pads are required to meet current and future needs?

- Arena users have already indicated that Germain Park could be closed without major impact on users – arena is not full size and is not vital for Silver Stick
- Need 5 “full size” ice pads (don’t consider Germain Park Arena to be full-size)

5. Which arenas would be the best candidates for removal? Why?

- Germain Park Arena (although it is the most barrier-free) – could be re-purposed to indoor soccer (but need to be clear on the operating and capital costs – who would operate it?)

6. Which arenas should be retained?

What improvements should be considered for these arenas?

- All arenas other than Germain Park Arena
- Multi-pad arenas are essential for major tournaments and competitions, such as synchronized skating
- Sarnia Arena is not accessible for sledge hockey; RBC is best suited (but parking is a challenge as it is farther away); Germain Park Arena is also a good fit for sledge hockey – need to make accessibility improvements to whatever rinks are retained (including sled storage)
- Many groups would be willing to pay more if new arenas were developed
- The City had talked about selling RBC 2 for about \$2 million, but replacing it would cost at least \$12 million – this doesn’t make sense
- Better general maintenance is needed at all rinks – cleaning, working toilets, etc. – they have been underfunded for 15 years
- Change rooms – many are small (Clearwater)
- Stratford is a good example of a community that takes pride in their arenas and has reinvested in them
- Groups are eager to help to apply for grants for arena improvements
- Sarnia Arena – bowl is a great atmosphere that can’t be replaced – Junior B games are very well attended – needs more updates similar to Allman and Galt Arenas, including front-end concession – also, it is the only arena in this area

Topic #3: Sustainability

7. How can we boost usage of weekend prime time and non-prime time?

- Don't consider Saturdays before 9am to be prime time, as well as Sunday mornings
- Issue is not usage from 5-10pm M-F, it's the City's ability to promote and sell the shoulder hours (e.g., 9pm to midnight); glad that consultants are looking at weekday and weekend usage separately
- Can rent weekend evening ice at Point Edward or Mooretown much cheaper
- Minor Hockey – hard for rep/travel teams to use Friday night and Saturday ice as many are playing in tournaments or out of town league games; would rather use ice time Monday to Thursday up to 10pm (however, this may push out some adult groups)
- Better awareness / advertising of new ice times (e.g., through schools)
- Reciprocal use agreements with schools
- Look at last minute ice rental rates (e.g., 48 hours or less)
- Online availability calendar – many groups support this idea (City is looking into this with new software module)
- Online payment and point of sale technology (City is looking into this with new software module)

8. Is the City's Ice Allocation Policy working well?

- Policy has never been applied as they are in a surplus scenario and no new groups have joined
- Sarnia Minor Hockey was the only group that provided input into the policy (no one else showed up to meeting)
- Curious to know how it would apply to sledge hockey (mostly adults)

9. Are the City's revised ice rates responsive to your needs?

- Rates have skyrocketed over past 6 years
- Coaches looking to develop skills are willing to pay
- Appreciate the cheaper daytime ice rates, but bumping due to World U17 tournament led one group to use Point Edward at that time
- Was nice to see that rates did not increase this past year

10. How would you rate the level of customer service that you receive from arena staff? What about staff at City Hall?

- Better at RBC now that City has taken over – phenomenal staff
- Germain Park staff are great – go out of their way
- Staff are very helpful, including City's booking clerk

11. What improvements would you suggest for enhancing the financial and operational performance of City arenas?

- Would like to see more events and concerts at RBC (but only if they make money or spin-off is substantial)
- Concessions and restaurant hours don't always align with use (but City working on this)
- City has made choices not to invest in its arenas – this was proven by BMA Study that showed how low the per capita spending was on the City's recreation facilities
- Sponsoring, partnerships, fundraising – user groups are willing to help out

Wrap-up – What is your best advice to City staff and Consultants as they go about developing recommendations for the future?

- Keep us involved and keep talking (sentiment was supported by many; groups were angry that they weren't consulted during the previous process in 2013/14)
- Tonight is a great first step – objective process
- Look at future opportunities – What can we attract to the community (e.g., tournaments, events, new programs)?
- Use the right information and we will support it – last report had a lot of holes in it
- Find a way to use arenas in the summer – sport tourism (border city)
- Promote the Study on the City's website
- Don't get too caught up in the population forecasts because users are using more ice time and are more willing to pay
- No one wants to close an arena, so must be sure that it doesn't result in reduced participation (e.g., adult hockey)
- Adults need a place to play as well – all part of an active community
- Great decision to hire consultants
- Still need to provide room for growth
- Consider accessibility for persons with disabilities
- Remember that programs run on volunteers

City of Sarnia – Arena Management Study
Indoor Turf Users Focus Group
November 13, 2014

Attendees:

17 attendees from 11 groups

- Sarnia Saints Rugby: Chris Groombridge
- Sarnia Men's Industrial Soccer Leagues: Les Thomson & Keith Henry
- Sarnia FC: Christian Williamson & Paul Burke
- Sarnia Girls Fastball: Bonnie Young
- SMAA Lacrosse: John Ritchie & Brian Snider
- New Lacrosse group: Kevin Fines
- SMAA Baseball: Ron Smith
- Sarnia Girls Soccer: Sue Tombak & Pete Thomas
- GallaDev's Soccer Academy: Jamie Gallacher & Brian Devlin
- Sarnia Women's Soccer Club: Gord Lamb
- Bluewater Football: Dave Stewart & Marg Stewart
- City of Sarnia: Rob Harwood
- Monteith Brown Planning Consultants: Todd Brown & Steve Langlois

Invited but did not attend: Sarnia Braves Baseball, SMAA Football, and Sarnia Imperials

General Discussion

- City doesn't invest in its arena facilities; doesn't have a lifecycle replacement reserve

Topic #1: Trends & Demographics

1. Current indoor programming:

a) What activities do you offer and where?

b) Are existing facilities suitable for your needs?

- Sarnia Girls – skills programs for ages 5 to 15, indoor leagues, training for travel and select teams – use school gyms; one team going to London BMO Centre to rent field turf
- Sturgeons Football – have tried indoor training/conditioning in the past, but limited as to what they can do in gyms (not doing it this year); 40 kids on a team, so gyms can get crowded – would like to run program in April
- SMAA Girls Baseball (20 girls) started up again this year – have to use soft balls, etc.

- Sarnia Rugby uses riding centre from mid-January to March – works fine for them but likely won't be available this year
- Sarnia FC – same problems as Girls Soccer – zero transfer of skills over to outdoor game
- GallaDev Soccer – using schools that are too small – access to schools is limited as they are a private group
- Men's League – use Lambton College, which is adequate – biggest problem is access to time (get 2 hours twice a week)
- Many players are going to London to play lacrosse (better facilities) – can't even get access to school gyms
- Ran lacrosse programs on the Reserve in the past (October to March) – many schools don't allow it because of possible damage from lacrosse balls
- High schools with bigger gyms not allowing indoor soccer and other outside users – too much red tape and access is unpredictable
- Gyms are too small – have to modify game substantially
- Cannot get any more time at gymnasiums – they are at capacity or restricted

2. How can an indoor turf facility be justified with declining registration and an aging population?

- There are so many different user groups that require access
- Seeking one facility – there are none at present
- Some groups seeing steady increase in registration (e.g., lacrosse, rugby, etc.)
- Seeking more access to indoor space for different programs
- Despite population declines, will still have the same number of travel and select teams – these are the ones that want the time
- Losing athletes to other communities that can offer better facilities and associated programs
- Maybe soccer is declining, but there are many other opportunities for youth (e.g., rugby, lacrosse, etc.)
- Investment in quality of life amenities (e.g., sport infrastructure) helps to attract people to the community
- Tournaments and facilities bring revenue through economic activity
- If youth registration declines, this may create opportunities for more adult participation (over 35 soccer is fastest growing market and they won't play in small gyms) – adult market is not currently well served
- Firmly believe that if we build it, they will come
- Cost of hockey registration is quite high – might make winter soccer more popular if affordable
- Moving turf groups out of gymnasiums helps to free up time for core court users, such as volleyball, basketball, etc.

3. Future indoor programming:

a) What new programs or activities could be offered at an indoor turf facility?

- Would like to start a winter house league for lacrosse (skills, 3 on 3 league, camps); hybrid between field and box lacrosse
- Possible use for men's field lacrosse
- Lawn bowling for seniors during the day
- Cheerleading
- Many groups are running programs that are restricted / self-limited by space constraints – programs would grow exponentially with a new facility
- Adult soccer is currently under-served (including retirees, who could use non-prime hours)

b) How would an indoor facility affect usage of the City's outdoor artificial turf field?

- No impact – there is already enough demand for a second outdoor turf field

Topic #2: Facility Options

4. What is your preference between the following options:

a) converting Germain Park Arena

- Would be of little use to most groups – too small for older age groups and more competitive streams (would rather have RBC 2 for indoor soccer, or even Clearwater Arena)
- Ceiling height would be limiting – what would cost be to raise the roof?
- This option would be “making due” – it is a short term solution that might alienate users
- Would be a great satellite facility
- Difficult to split into more than one field – demand is greater than just one field – would not meet everyone's requirements
- Would not allow for tournaments

b) new structure (permanent or dome)

- Decision on preferred building type would depend on what rental rates are – dome would be more affordable to build than a permanent structure and thus would be the preferred option
- Could consider a dome at the back field at Norm Perry Field (but parking would be a significant issue) – this would be more affordable than a permanent structure; clubhouse at Norm Perry needs to be upgraded anyway (new facility could kill two birds with one stone)
- Must allow for multiple fields, multiple programming

- If the City is building new arenas, would be great to have some pads with ice and some with turf
- Could look at Woodstock indoor soccer facility model (nearly full size) – no reason Sarnia couldn't have something like this (or better)

c) continuing to use gymnasiums

- This is not the preferred option

5. What would have to be done to Germain Park Arena to convert it to an indoor turf venue? Please distinguish between mandatory and “nice to have” items.

- Would have to ensure that it is safe structurally
- Would have to completely redo change rooms – 2 to 4 change rooms per field would be necessary for lacrosse, football – change rooms are less critical for soccer, especially at younger ages
- Large field space is more important than ancillary amenities – focus on playability first
- Accessible washrooms
- Heated area for parents
- Would like some dedicated storage (“nice to have”)

6. What would be your advice if the conversion of Germain Park Arena is found to be not viable?

- Re-purposing Germain Park Arena is not the preferred option – support is greatest for purpose-built facility

Topic #3: Sustainability

If sufficient demand is found for an indoor turf facility...

7. What are your group's expectations for access?

- Problem will be that all groups will want to use weekday prime time
- Demand is enough that facility would be fully booked from 8am to 11pm on weekends – this would even be true if facility was divided into multiple fields
- Field lacrosse would be interested in using it during the summer
- Rugby – would be looking for access to indoor facility for second half of off-season (basic structure) and capable of hosting tournaments; willing to use after 9pm
- Men's Soccer – have younger and older divisions; would be interested in using facility after 9pm
- GallaDev Soccer – although they are for-profit, would want fair access to facility (but pay more than non-profit groups when renting school gymnasiums, so they are familiar with tiered pricing)

- Groups would be willing to consider a Facility Allocation Policy
- Would groups that contribute financially to new facilities receive more favourable access? This may become a source of conflict

8. What would be a fair rental rate for this type of facility?

- If cost is too high, groups won't be able to afford to use it
- Rental rates at many other indoor turf fields in Ontario are in the \$100 to \$125+ per hour range – can we afford that?
- Rates should be comparable to those in comparable communities
- Current rental rate for lacrosse (arena floors) is much higher than other communities in the region
- Currently pay anywhere from \$0 to \$80 for access to school gyms
- Higher rates are justified if the facility can offer a better experience and registrants see value for their money

9. What sources should be considered for capital funding?

- Sponsorships through local companies, refineries
- Provincial and Federal grants
- Trillium grants (but they are redesigning the program)
- Some groups have capacity to donate, but would want to see value for their contribution – however, would this shut some groups out?

10. What are the pros and cons if the facility is operated by (a) the City; or (b) a third-party?

- City-operated
 - Subsidized (but City doesn't have the best history in facility management)
 - Stability (but many other priorities)
 - Already has insurance, liability safeguards, etc.
- Third-party
 - Less accountability, more unknowns
 - Sport organizations are run by volunteers – they are not willing to take this on (would need a management company)
 - What if there are cost over-runs? Groups don't have resources to absorb any losses
 - Might be able to run it more effectively and leaner than City, but don't have the time
 - Field allocation would be very difficult – operator would expect priority
 - Private sector has investigated possibility of providing indoor turf in Sarnia in the recent past

City of Sarnia – Arena Management Study
Public Meeting #1
December 3, 2014 (Kinsmen Centre)

Meeting was facilitated by Monteith Brown Planning Consultants and attended by approximately 30 residents.

General Discussion

- Concerned about how ice is booked and the way that ice utilization is calculated by the City. Will be interesting to see how the City taking over the RBC Centre affects how utilization is assessed (i.e., through a centralized booking system). Thought City was going to re-evaluate after one full year of operation.
- Concerned about arenas being closed at the end of the regular season as many groups need early spring ice time for 3-on-3 hockey, training, and try-outs. How much ice will be available for off-season users?
- 3 years ago sent a letter to City complementing them on the bike paths at Canatara Park along with arenas and ball diamonds; however, when looking at page 6 of the report, concerned that the City is not keeping pace with improvements as it does not spend enough money to maintain facilities as compared to other benchmarked communities.
- Many years ago, it used to be hard to find the ice time needed for youth. There could be a potential user group that got pushed out back then that may now be looking at opportunities to get back in and need ice time.
- When moving to 5 ice pads, there still may be the odd gap during year when a group may not need their allotted time. Is there a way to offer those spaces to occasional user groups (perhaps at a reduced rate) so that some revenue can be received?
- There was a public meeting at City Hall some time ago and user groups got together; there were a lot of people at Council Chambers with interest in arena provision. The proposal from Lambton College was not made public until after the public meeting – there should have been another public meeting to deal with their proposal. At that time they were also talking about closing 2 ice pads and then the potential of 2 new ice pads being developed was identified. Things were changing too fast for user groups to respond and the process was not constructive.
- How did the report estimate elite athletic needs with regard to hockey and turf groups, such as demand for skill development coming from the private sector?
- Felt that turf groups indicated that they were able to use more than 1 field – feel demand will continue to grow.

- Very pleased with the transparency of this process and glad that it will continue into the next two reports and public meetings.
- Last minute changes to the previous study process made it hard for user groups to speak to Council in an informed manner about potential impacts as they had little time to be review and respond to issues and options raised at the last minute (e.g., College proposal, building 2 new ice pads, etc.). Council seemed to agree with staff without any additional input from the groups, so there are concerns about transparency – what will Council say?
- Requested that user groups receive an e-mail from the City to indicate when new information is posted on the City’s website and future public meetings are advertised.
- Older adults have an interest in using daytime ice and need to know what is available – could the City help to organize a daytime hockey league?
- In January 2014, user groups were invited to a meeting and presented with revised arena schedules. An ice allocation policy was also created by the City. Have not heard of any mention of how one could shift groups around to better utilize ice (and maybe increase utilization).
- At a previous meeting, someone spoke to the point that she moved to Sarnia because of its facilities. City needs to think big picture and find ways like investing in recreation facilities to attract people to City. Closing arenas is not the answer.
- If the City only provides 5 arenas, what is the impact on the Silver Stick tournament? Losing arenas would make the City look less attractive for tournaments, but actual impact is uncertain – at the very least, they would host fewer teams and would not generate the same economic impact. Ice size is less of a factor as groups can program smaller pads for younger participants. Silver Stick is run by minor hockey with 92 hockey teams coming last year (using all of the City’s ice pads, as well as others in the County). For this coming year, they will have to drop to 82 teams as they have lost access to one arena outside the City due to impact of the World U17 event. Concerned that if they cannot accommodate an age group, they will not have the opportunity to get that particular age group back in the future. It is also hard to find hotels in City, which can also have a huge impact on tournaments.

City of Sarnia – Arena Management Study
Public Meeting #2
January 27, 2015 (Kinsmen Centre)

Meeting was facilitated by Monteith Brown Planning Consultants and Tucker-Reid & Associates and attended by approximately 50 residents.

General Discussion

- Are the capital costs going to be greater than the Amerseco report?
- Facility Condition index – question as to rating of facilities was calculated
- Has lack of funding contributed to the ratings of the facilities? Is it better to replace older facilities with new or expanded facilities?
- RBC Centre – are the suggested upgrades newer requirements or was the facility not of a good standard to begin with?
- Will the next iteration of the study isolate the costs to get the RBC Centre up and running efficiently in 2015?
- Will you be benchmarking in terms of investments in arenas per capita?
(Councillor)
- What will it take to make the areas attractive to tournaments in the future?
- Did the costs for Clearwater Arena include the parking lots?
- The City needs a 25-year master plan before they can make decisions on arenas.
- Final report needs to weigh-in options for Germain Park Arena. (Councillor)

City of Sarnia – Arena Management Study
Public Meeting #3
February 24, 2015 (Kinsmen Centre)

Meeting was facilitated by Monteith Brown Planning Consultants and attended by approximately 25 residents.

General Discussion

- Where we are now compared to 6 months ago is a miracle – with thanks to the consultants.
- Is the 2% of facility replacement value guideline in addition to the \$1.05 million per year?
- What is the per capita cost for \$1.05 million per year based on the City's population? What is the impact of this level of funding on the tax levy?
- Important for Council and public to know that this is not a cost to bring the facilities up to a “gold” standard, but rather that the plan deals with the “essentials” to keep the facilities in a reasonable working order.
- The report notes that women's hockey has been growing which suggests different demands or amenity needs within arena facilities. (Councillor)
- Agree with the “Think beyond the rink” philosophy and the need to consider other interests like speed skating, ringette, and other different things that the arenas can be used for. (Councillor)
- Does the \$1.05 million per year capital requirement include ongoing improvements to each facility (e.g., unexpected or on-going maintenance/repair)? (Councillor)
- Need to also think about costs for the unanticipated – how to deal with these costs as they arise.
- Heritage or historic aspect of the Sarnia Arena – “hockey heritage” – do any arena facilities in other communities have a heritage designation – does this create an opportunity for grants?
- How were Germain Park Arena users consulted during the process and what was their reaction? (Councillor); Sarnia Sledge Hockey noted that they are a user of Germain Park Arena and that they were adequately consulted
- Should the study include a capital cost for the provision of multi-use community rooms at the RBC Centre?

- Comment and discussion on fire service improvements at the RBC Centre, including the standpipe location which restricts access to the rear of the facility.
- The City needs to attract more entertainment events to the RBC Centre.
- The Sarnia Hockey Association noted an interest in participating on the proposed Arena Advisory Committee and thanked the Consultants on the report, noting that they were very happy with the results.

APPENDIX B: Arena-Specific Major Capital Project Costs

The following represent a preliminary list of upgrades and replacements for each City arena recommended to be retained, as recommended in Section 8.8. Order of magnitude capital costs (Class D +/- 20%) have been estimated for each major capital item. The costs are shown in current year (2015) dollars and are not adjusted for inflation.

The recommended capital projects and costs are based on visual inspections, industry costs, and past reports prepared for the City of Sarnia (e.g., Ameresco Canada, 2013; NA Engineering, 2014; etc.).

The identified projects exclude unknown repairs, unexpected failures, and minor capital projects. The Arena Preventative Maintenance Program recommended in Section 9.2 may identify additional improvements to the facilities, equipment, and amenities based on a more detailed lifecycle analysis. Further, each of the recommended projects should be closely examined as part of an asset management program and integrated into a long-term capital forecast, with funding to be determined through the budget process.

Clearwater Arena – Recommended Major Capital Projects

Ref.#	Major Capital Project	Rationale	Priority	Estimated Cost
1.1	upgrade refrigeration plant	operational efficiency	high	\$587,000*
1.2	replace the rubber flooring	user comfort	medium	\$150,000 (14,000sf @ \$11/sf)
1.3	undertake finish upgrades to public spaces, community rooms, and arenas to improve and update the look of the facility	user comfort	medium	\$195,000 (4,000 sf – assumes \$50,000 flooring, \$25,000 painting, \$25,000 ceiling, \$50,000 mech/elec with 30% for soft costs)
1.4	upgrade to high efficiency lighting	operational efficiency	medium	\$172,200*
1.5	replace the boards in the Blue pad	user comfort	medium	\$260,000
1.6	upgrades to the parking lot	operational efficiency	medium	\$100,000 (10,000sf @ \$10/sf)
1.7	replace elevator to meet new barrier-free standards	accessibility	medium	\$300,000 Lump sum estimate

Ref.#	Major Capital Project	Rationale	Priority	Estimated Cost
1.8	major renovations to change areas and public washrooms to allow for barrier-free access; add two new change rooms at rear of building (north)	accessibility	medium	\$2,800,000 (7,200sf @ \$300/sf with 30% for soft costs)
1.9	renovations to main lobby to allow for barrier-free warm viewing and to concessions/ticketing to allow for barrier free access	accessibility	medium	\$325,000 (\$100,000 glazing, \$100,000 ramps, \$50,00 finishes) with 30% for soft costs
Total				\$4.89 million

* Source: Ameresco Canada (2013)

RBC Centre – Recommended Major Capital Projects

Ref.#	Major Capital Project	Rationale	Priority	Estimated Cost
1.10	complete upgrades to sprinkler system in RBC 2	operational efficiency	high	\$45,000 Based on recent quote
1.11	upgrade to high efficiency lighting	operational efficiency	medium	\$349,200*
1.12	upgrade/replace building automation system	operational efficiency	medium	\$169,000*
1.13	replace roof-mounted HVAC units	operational efficiency	medium	\$281,000*
1.14	install low-e ceilings in RBC 1 and 2	operational efficiency	medium	\$198,000*
1.15	major renovations to change rooms in order to provide dedicated shower areas for each	user comfort	medium	\$585,000 (Assume 1,500sf @ \$300/sf with 30% for soft costs)
1.16	improve access for shows and persons with disabilities by moving the fire route and/or adding a ramp at main entrance (east)	accessibility	medium	\$150,000 Lump sum estimate
1.17	revisions to concessions to allow for barrier-free access to counters	accessibility	medium	\$125,000 Lump sum estimate

Ref.#	Major Capital Project	Rationale	Priority	Estimated Cost
1.18	addition of dedicated barrier-free washrooms	accessibility	medium	\$250,000 Assumes 650sf @ \$300/sf with 30% for soft costs)
1.19	install new video board on RBC 2	user comfort	low	\$1,000,000 Lump sum estimate (variable according to scope)
Total				\$3.15 million

* Source: Ameresco Canada (2013)

Sarnia Arena – Recommended Major Capital Projects

Ref.#	Major Capital Project	Rationale	Priority	Estimated Cost
1.20	restoration of façade and repairs to exterior (e.g., brick and block walls, eave troughs, soffits and fascia, lintels above doors, etc.)	operational efficiency	high	\$455,000** (27,500sf @ \$10/sf pointing, \$75,000 for eave trough / fascia repair with 30% for soft costs)
1.22	replace the roof over the western and southern facility additions	operational efficiency	high	\$250,000** 12,000sf @ \$20/sf)
1.21	upgrade to high efficiency lighting	operational efficiency	medium	\$65,600*
1.22	major renovations to concessions and front lobby to allow for improved flow, upgraded finishes to improve and update the look of the facility, and barrier-free access to services	accessibility	medium	\$350,000 (5,100 sf – assumes \$64,000 flooring, \$75,000 millwork, \$35,000 painting, \$26,000 ceiling, \$70,000 mech/elec, with 30% for soft costs)
1.23	major renovations to change rooms to allow for barrier-free access	accessibility	medium	\$936,000 (2,400sf @ \$300/sf with 30% for soft costs)
1.24	install windows in the community room	user comfort	low	\$150,000 Lump sum estimate

Ref.#	Major Capital Project	Rationale	Priority	Estimated Cost
1.25	interior renovations to arena (e.g., repainting, upgrading of end walls) to improve and update the look of the facility	user comfort	low	\$235,000 (new end walls above block \$50,000, new low-e ceiling \$90,000, paint \$40,000 with 30% for soft costs)
Total				\$2.44 million

* Source: Ameresco Canada (2013)

** Source: NA Engineering (2014)