

Background

The City of Greater Sudbury (City) initiated an Arena Renewal Strategy in 2010 that looked systematically at arena usage, cost recovery, participation trends and asset management requirements. This process also included extensive public and stakeholder input and identified strong support to maintain existing arenas through strategic investment. This report was delivered in 2013, including a variety of scenarios for arena repair, replacement and consolidation. To date, the City has renovated Chelmsford Arena and is proceeding toward the replacement of Sudbury Community Arena.

The Arena Renewal Strategy noted a current and long-term demand for 15 total indoor ice pads across the entire City (resulting in a surplus of one ice pad).

The Parks, Open Space and Leisure Master Plan Review (2014) recommended that the City continue to implement the Arena Renewal Strategy, which would require:

- continued focus on maintaining existing arenas in a safe and community responsive condition, with consideration to the City's recent building condition assessments;
- monitoring of usage trends and community demands to assess the possibility of decommissioning one existing ice pad; and
- continued progress on the eventual renovation or replacement of the Sudbury Community Arena.

The Leisure Master Plan Review also states that any future arena construction should give strong consideration to the benefits of multi-pad designs where supported by demand.

More recently, a report titled "Framework for Partnership Opportunities for Indoor Turf and Multi Purpose Facilities Interim Report" was presented to the Community Services Committee on June 19, 2017. As part of the report, current participation numbers and ice utilization was reviewed for the existing inventory of City arenas. The report identified a surplus of 1.8 ice pads at present and reiterated that new arena construction should be in the form of replacement facilities with consideration for multi-pad designs where supported by demand.

At the June 19, 2017 Community Services Committee meeting, resolution CS2017-16 was passed, stating *"that the City of Greater Sudbury Council directs staff to prepare a business case to replace various arenas and/or ice pads, with the build of a multi-pad/multi-purpose arena facility in Valley East, indicating the cost of the build, recommended location, efficiencies to be had, financial options for the build, and any/or all other information to assist Council with its deliberations, to be included in the 2018 budget process."*

Analysis

Supply and Participation Factors

The City of Greater Sudbury operates a total of sixteen (16) ice pads that are contained in fourteen (14) municipal arenas, with Capreol and Gerry McCrory Countryside Sports Complex are the only twin pad facilities. The average age of the ice facilities in the City is more than 40 years, with the majority being constructed between 1950 and 1978. In recent years, the City has been focused on renovations to several arenas, including Cambrian, McClelland and Chelmsford Arenas.

The 2013 Arena Renewal Strategy found that the prime utilization rate has been declining since the 2008-2009 season, with shoulder hours (those at the edges of prime time) mostly affected. A slight increase in 2014-2015 was due to the renovations taking place at the Chelmsford Arena, resulting in a reduction of one ice pad. The tables below identify the utilization by arena booking during prime and non-prime hours since the Arena Renewal Strategy was prepared and reveals a similar downward trend.

TABLE 1	Prime Time Utilization by Arena Monday to Friday from 5:00 to 10:00 p.m. and Saturday and Sunday from 7:00 a.m. to 10:00 p.m.				
	2013-2014	2014-2015	2015-2016	2016-2017	PROPOSED
Cambrian	98%	100%	100%	96%	96%
Capreol 1	76%	54%	58%	52%	CLOSED
Capreol 2	93%	84%	85%	74%	100%
Carmichael	100%	100%	100%	100%	100%
Centennial	96%	88%	87%	89%	CLOSED
Chelmsford	97%	RENOVATIONS	85%	88%	88%
Dr. Ed Leclair	96%	99%	95%	93%	93%
Garson	97%	97%	93%	93%	93%
Gerry McCrory Countryside 1	98%	98%	98%	96%	96%
Gerry McCrory Countryside 2	98%	96%	97%	96%	96%
IJ Coady	61%	79%	49%	68%	68%
McClelland	100%	100%	100%	100%	100%
Ray Plourde	98%	96%	96%	87%	CLOSED
Sudbury	96%	99%	98%	97%	97%
TM Davies	98%	100%	100%	100%	100%
Toe Blake	98%	98%	99%	98%	98%
CITY-WIDE	94%	93%	90%	89%	95%

Proposal 1: Capreol 1 groups were moved to Capreol 2, Centennial and Ray Plourde

TABLE 2	Shoulder Time Utilization - Sunday to Saturday from 10:00 p.m. to midnight				
	2013-2014	2014-2015	2015-2016	2016-2017	PROPOSED
Cambrian	61%	57%	50%	46%	46%
Capreol 1	21%	18%	21%	18%	CLOSED
Capreol 2	14%	11%	11%	7%	46%
Carmichael	57%	57%	57%	54%	54%
Centennial	43%	43%	57%	14%	CLOSED
Chelmsford	43%	RENOVATIONS	18%	21%	43%
Dr. Ed Leclair	50%	61%	50%	32%	43%
Garson	64%	64%	57%	50%	50%
Gerry McCrory/ Countryside 1	32%	54%	43%	43%	43%
Gerry McCrory/ Countryside 2	43%	39%	39%	36%	36%
IJ Coady	14%	43%	4%	4%	4%
McClelland	39%	39%	39%	32%	32%
Ray Plourde	36%	25%	57%	25%	CLOSED
Sudbury	71%	71%	68%	68%	68%
TM Davies	39%	0%	36%	43%	43%
Toe Blake	61%	61%	50%	61%	61%
CITY-WIDE	43%	43%	41%	35%	41%

The 2013 Arena Renewal Strategy established a market-specific demand target that reflected the City's unique geography and arena utilization profiles at that point in time. To identify needs at a city-wide level, the target was set at one ice pad per 405 youth registrants. Although somewhat conservative compared to other communities, a review of current utilization suggests that this remains a reasonable target for Greater Sudbury. Currently, with a supply of 16 rinks and 5,767 youth registrants, there is an average of 360 players per rink (the average was 451 per ice pad in 2008-2009 prior to the twinning of Gerry McCrory Countryside Sports Complex). Based on the recommended target of one pad per 405 registrants, there is a city-wide demand for 14.2 rinks, indicating a surplus of approximately two pads.

Projection of Ice Pad Needs, City of Greater Sudbury (2016 to 2036)

	2017	2021	2026	2031	2036
Forecasted Number of Youth Registrants (based on a 23.5% participation rate for youth ages 5 to 19)	5,767	5,380	5,460	5,540	5,720
Number of Ice Pads Required (based on 16 pads at present and a provision target of 1 ice pad for 405 youth registrants)	14.2	13.3	13.5	13.7	14.1
Surplus Ice Pads	-1.8	-2.7	-2.5	-2.3	-1.9

Population forecasts based on City of Greater Sudbury Growth Outlook to 2036. Draft, May 2013. Hemson Consulting Ltd.

This analysis identifies a surplus of 1.8 ice pads at present. Continued softening of demand is projected (up to 2.7 surplus rinks in 2021), before returning to near current demand levels in 2036.

The data shows insufficient support for expanding the supply of municipal arenas. A surplus of ice exists in the City, which is expected to worsen over the short-term. The impact of this surplus is affecting utilization of the City's outlying areas, however the desire for equitable geographic distribution is also a consideration.

Projection of Ice Pads Needs
(Based on New Twin Pad & Closure of Capreol Side 1)

	2017	2021	2026	2031	2036
Forecasted Number of Youth Registrants (based on a 23.5% participation rate for youth ages 5 to 19)	5,767	5,380	5,460	5,540	5,720
Number of Ice Pads Required (based on 15 pads at present and a provision target of 1 ice pad for 405 youth registrants)	14.2	13.3	13.5	13.7	14.1
Surplus Ice Pads	-0.8	-1.7	-1.5	-1.3	-0.9

Population forecasts based on City of Greater Sudbury Growth Outlook to 2036. Draft, May 2013. Hemson Consulting Ltd.

Capital Requirements for Existing Arena Inventory in Valley East

Raymond Plourde Arena

The Raymond Plourde Arena is a single-pad indoor arena complex located at 1195 Helene Street, Val Caron. A building condition assessment was performed in November 2012 and updated in 2017 for this report. The arena was originally constructed in 1974. This building has received various renovations over the past few years (heater trench in 2002, condenser in 2004, compressors in 2006 and 2011, shell upgrades in 2008, dehumidifier in 2011) and most of the building components are considered to be in fair to poor condition overall. \$2,185,000 in capital upgrades are required in the next 10 years to maintain the facility.

Centennial Community Centre and Arena

The Centennial Community Centre and Arena facility is a single-pad indoor arena complex located at 4333 Centennial Road, Hanmer. A building condition assessment was performed in November 2012 and updated in 2017 for this report. The arena was originally constructed in 1972. This building has received various renovations over the past few years (heater trench in 2002, roof restoration in 2004, chiller and condenser replacement in 2006, door replacements in 2008, furnace room fire separation in 2010, dehumidifier in 2011) and most of the building components are considered to be in fair to poor condition overall. \$1,495,000 in capital upgrades are required in the next 10 years to maintain the facility.

Capreol Arena Side 1

The Capreol Community Centre and Arena is a two-pad indoor arena and community hall complex located at 20 Meehan Street, Capreol. The original ice pad was built in 1960 and is located to the north, side 1. The south rink, or Side 2, was constructed in 1974. This report recommends Side 2 remaining open. A building condition assessment was performed in November 2012 and updated in 2017 for this report. This building has received various renovations over the past few years (roof over side 2 in 2000, suspended heaters in 2004, chiller in 2004, and ventilation upgrades in 2008) and most of the building components in side 1 are not in a state-of-good repair. Finishes and equipment are in need of significant updating. \$2,990,000 in capital upgrades are required in the next 10 years to maintain the facility.

Below is an opinion of probable costs for each arena from the Building Condition Assessment formats from 2012, and updated in 2017.

Building Condition Assessment – Opinion of Probable Costs

Raymond Plourde Arena 2017

Section and Description	Immediate (1 to 5 Year)	Long Term (6 to 10 Year)
General requirements (excluded)		
Exterior walls - canopy refurbishment	\$5,000	
Windows - replacement	\$16,000	
Doors - refurbishment and replacement	\$25,000	
Roofing - replacement of metal roof	\$450,000	
Structural main and secondary framing (excl)	\$400,000	
Exterior and interior block partition - repairs	\$100,000	\$150,000
Ice pad-replacement including apron & header		
Dasherboard and shielding systems - replacement		\$275,000
Bleachers – retrofit	\$15,000	
Change room benching and clothing hooks - replace		\$25,000
Elevator - N/A		
Ice pad refrigeration system - repairs	\$6,000	
Ice pad refrigeration system - overhaul		\$70,000
Sanitary and storm drainage - investigation and repairs	\$30,000	
Plumbing fixtures and accessories - replacement	\$60,000	
Domestic hot and cold water systems - backflow prevention, insulation/demarcation, repairs	\$40,000	
Domestic hot and cold water systems - water heaters		\$25,000
Fire detection and suppression systems	\$5,000	\$15,000
Fire safety - repairs	\$5,000	
Heating - terminal unit replacements	\$90,000	
Ventilation – Replacement	\$100,000	
CO Detection - replacement		
Air Conditioning - localized cooling provisions	\$15,000	
Electrical Service (excluded)		
Electrical Distribution (excluded)		
Lighting - arena lighting replacement and painting		
Lighting - general lighting updating	\$10,000	
Lighting - exterior lighting updating	\$7,000	
Emergency lighting and exit lighting - updating		\$15,000
Security - updating		\$7,000
Audio - updating		\$20,000
Finishes (excluded)		
Accessibility - provisions for interior and exterior	\$204,000	
Total	\$1,583,000	\$602,000
	Total 10 Year Capital Investment	\$2,185,000

Centennial Arena 2017

Section and Description	Immediate (1 to 5 Year)	Long Term (6 to 10 Year)
General requirements (excluded)		
Exterior walls - canopy refurbishment	\$200,000	
Windows - replacement		\$20,000
Doors - refurbishment and replacement	\$15,000	\$5,000
Roofing - refurbishment of metal roof	\$100,000	
Structural main and secondary framing (excl)		
Exterior and interior block partition - repairs	\$50,000	
Ice pad-replacement including apron & header		
Dasherboard and shielding systems - replacement		\$275,000
Bleachers - retrofit	\$35,000	
Change room benching and clothing hooks - replace		\$25,000
Elevator - refurbishment	\$35,000	
Ice pad refrigeration system - repairs		\$85,000
Ice pad refrigeration system - overhaul		\$70,000
Sanitary and storm drainage - investigation and repairs	\$30,000	
Plumbing fixtures and accessories - replacement	\$60,000	
Domestic hot and cold water systems - backflow prevention, insulation/demarcation, repairs	\$60,000	
Domestic hot and cold water systems - water heaters	\$50,000	
Fire detection and suppression systems	\$5,000	
Fire safety - repairs	\$10,000	
Heating - terminal unit replacements	\$71,000	
Ventilation - improvement provisions	\$50,000	
CO Detection - replacement		
Air Conditioning - localized cooling provisions	\$15,000	
Electrical Service (excluded)		
Electrical Distribution (excluded)		
Lighting - arena lighting replacement and painting		
Lighting - general lighting updating	\$10,000	
Lighting - exterior lighting updating		\$7,000
Emergency lighting and exit lighting - updating		\$5,000
Security - updating		\$7,000
Audio - updating		\$20,000
Finishes - excluded	\$10,000	
Accessibility - provisions for interior and exterior	\$170,000	
Total	\$976,000	\$519,000
	Total 10 Year Capital Investment	\$1,495,000

Capreol Arena Side 1 2017

Section and Description	Immediate (1 to 5 Year)	Long Term (6 to 10 Year)
General requirements (excluded)		
Exterior walls - canopy refurbishment	\$280,000	
Windows - replacement		\$10,000
Doors - refurbishment and replacement	\$50,000	
Roofing - refurbishment of metal roof	\$450,000	
Structural main and secondary framing	\$103,000	
Exterior and interior block partition - repairs	\$90,000	
Ice pad-replacement including apron & header	\$45,000	
Dasherboard and shielding systems - replacement	\$275,000	\$275,000
Bleachers - retrofit	\$175,000	
Change room benching and clothing hooks - replace	\$35,000	
Elevator - refurbishment		\$35,000
Ice pad refrigeration system - repairs	\$10,000	\$70,000
Ice pad refrigeration system - overhaul	\$20,000	
Sanitary and storm drainage - investigation and repairs	\$50,000	
Plumbing fixtures and accessories - replacement	\$85,000	
Domestic hot and cold water systems - backflow prevention, insulation/demarcation, repairs	\$60,000	\$25,000
Domestic hot and cold water systems - water heaters		\$25,000
Fire detection and suppression systems	\$25,000	
Fire safety - repairs	\$20,000	
Heating - terminal unit replacements	\$75,000	\$25,000
Ventilation - improvement provisions	\$60,000	
CO Detection - replacement		
Air Conditioning - localized cooling provisions	\$15,000	
Electrical Service	\$80,000	
Electrical Distribution	\$30,000	
Lighting - arena lighting replacement and painting	\$80,000	\$100,000
Lighting - general lighting updating	\$35,000	
Lighting - exterior lighting updating	\$10,000	
Emergency lighting and exit lighting - updating	\$5,000	\$15,000
Security - updating		\$7,000
Audio - updating	\$20,000	\$20,000
Finishes - excluded		
Accessibility - provisions for interior and exterior	\$200,000	
Total	\$2,383,000	\$607,000
	Total 10 Year Capital Investment	\$2,990,000

Site Selection

Three potential locations within Valley East were identified as possible sites for a new twin pad arena. Each site contains both advantages and disadvantages. Six criteria were used to evaluate each site to establish degree of suitability. Co-ordination with the City's Department of Real Estate assisted in the vetting process.

- **Site Dimension:** Minimum of 8 acres
- **Access:** Level of difficulty for vehicular, pedestrian and transit
- **Parking:** Minimum of 225 spots
- **Ease of Development:** Geotechnical and morphological makeup of site
- **Complimentary Benefits:** Potential for synergies with adjacent neighbors
- **Cost:** Purchase of property, if necessary, versus construction costs based on infrastructural needs and geotechnical costs. Also consideration of "curb appeal", benefit of location economically, socially and culturally.

Of the three potential sites, only the Howard Armstrong Recreation Centre parkland is municipally owned property. This area also meets the site selection criteria identified above. There is approximately 28 acres of natural parkland at the site.

The City is in the process of considering the proposal to declare 10 acres of the municipally owned parkland at the Howard Armstrong Recreation Centre surplus and offering it for sale to Conseil scolaire catholique du Nouvel-Ontario (CSCNO) for the construction of a new elementary school. Initial site plans developed by CSCNO for the proposed school incorporate the potential of a city owned twin pad facility on the property as well. A twin pad facility is assumed to require an additional 8 acres. This would leave approximately 10 acres of natural parkland at the site. There are benefits of having the development of the elementary school and twin pad facility on site, such as opportunities for shared parking.

Design Elements

Based on new twin pad construction across Ontario and experience with the Gerry McCrory Countryside Sports Complex, the following design elements are recommended for construction of new twin pad facilities:

- A twin-pad or triple-pad facility (2 NHL size 85' x 200' ice surfaces) with capability for summer ice. One ice surface designed for people with disabilities (i.e. see through benches, level with ice, etc). May also look at one ice pad being full Olympic size, especially to aid with speed skaters.
- Eight (8) secure dressing rooms per ice surface (with stick holders and white boards), plus one additional dressing room per ice surface dedicated to be identified as alternate dressing room, for a total of nine (9) rooms. At least two (2) dressing rooms associated with one of the ice surfaces to accommodate persons with disabilities.
- An ample lobby with food court/cafe, social space/sitting areas, views of the ice surfaces, information boards/electronic signs and water bottle refill stations.
- Comfortable seating for 300-400 per ice surface and depending on intended use, more seating may be required in one pad.
- Running/walking track around the top of one of the pads.
- Offices and storage for major user groups.
- First aid room.

- Referee rooms of sufficient size to accommodate four-person crews. Referee's rooms should be located in isolation of dressing rooms.
- Multi-purpose/gymnasium space and meeting rooms (initial allowance of 4,000 square feet).
- Wide hallways and automatic sliding doors (main entrance and dressing rooms).
- User friendly public address system, sound system and scoreboards.
- Air conditioning to encourage summer non-ice uses in one or more ice surfaces.
- An energy-efficient facility.
- Adequate parking with a drop-off zone (including bus parking).

Scenarios

Financial data regarding the operations of the existing arenas in the Valley East/Capreol area as well as projected operational costs associated with the development of a new twin pad.

The following scenarios are examples of potential actions to consider regarding the building of a new twin pad in the Valley East area.

Scenario	Arenas	Close	Savings net levy impact	Total Operating Savings	Capital Requirement (1 – 10 year)	Capital Savings	Total (Total Operating Savings + Capital Savings)
Scenario 1 – Close Raymond Plourde and Centennial Arenas	Centennial Arena	Yes	\$199,989	\$407,744	\$1,495,000	\$3,680,000	\$4,087,744
	Raymond Plourde Arena	Yes	\$207,755		\$2,185,000		
Scenario 2 – Close all three arenas (Capreol, only pad 1)	Centennial Arena	Yes	\$199,989	\$521,294	\$1,495,000	\$6,670,000	\$7,191,294
	Raymond Plourde Arena	Yes	\$207,755		\$2,185,000		
	Capreol Arena – pad 1	Yes	\$113,550		\$2,990,000		

Scenario 1 proposes to close the two existing arenas in Valley East (Centennial Arena and Raymond Plourde). The total operating savings to the levy would be \$407,744. Total 10 year capital savings would be \$3.7M for a total savings of \$4.1M.

Scenario 2 proposes to close the two existing arenas in Valley East (Centennial Arena and Raymond Plourde) and pad 1 at the Capreol Arena. The total operating savings to the levy would be \$521,294. Total 10 year capital savings would be \$6.7M for a total savings of \$7.2M.

New Twin Pad Financial Projections – Cost Recovery Based on Current Ice Utilization

New VE Twin	Projection
Revenues	\$746,750
Expenses	\$949,679
Salaries & Benefits	\$385,795
Operating Expenses	\$136,059
Energy Costs	\$395,000
Internal Recoveries	\$ 32,825
Net Levy Impact	\$202,929
Recovery %	79%

When developing the financial projections for the new Valley East twin pad, revenue data from the arenas proposed to be replaced was used and for expenses, historical data from the operations of the Gerry McCrory Countryside Sports Complex was used.

The above table indicates that the net levy projected at \$202,929. This translates into an operational savings of approximately \$318,365 per year. For comparison, the 2017 budget for the Gerry McCrory Countryside Sports Complex is noted below.

Gerry McCrory Countryside Arena	2017 Budget
Revenues	\$1,048,989
Expenses	\$963,073
Salaries & Benefits	\$356,639
Operating Expenses	\$136,945
Energy Costs	\$436,894
Internal Recoveries	\$ 32,594
Net Levy Impact	(\$85,917)
Recovery %	109%

Projected Construction Estimate - Class "D" Estimate

This estimate was generated using 2015 Industry Standard square foot pricing for an indoor hockey rink. The square foot price range is \$175- \$250 per square foot with a median of \$218.50 per square foot.

Based on the above recommended design elements a square foot range for the twin pad facility is 100,000 -125,000 square feet. Using the median average a Class D construction estimate for a new twin pad arena is \$22-\$27M.

Northern Ontario sees construction costs on the higher end of the per square foot range, and as such budgets should allow for this. A higher range estimate for the same size twin pad is \$25-\$30M.

An estimated construction budget of \$24-\$26M is estimated for a new twin pad arena in Valley East based on inflation since 2015 rates and local market and construction conditions. Estimates should be updated yearly as market conditions can cause fluctuations well above +/- 5% of overall construction costs.

The estimated annual payment of the new Valley East twin pad if debt financed would be \$1,611,957 at 3.7% interest over 25 years, less the net operating savings related to the closure of the three facilities identified. If CSCNO were to be successful in acquiring lands at the Howard Armstrong Recreation Centre site, funds received as part of the parkland disposal could be used towards the project.

Next Steps

A Business Case for the development of a new twin pad facility has been included as part of the 2018 budget process. The Business Case submitted identifies debt financing for the project to be started in 2020.

The Parks, Open Space and Leisure Master Plan states that the decision to close any arena should be accompanied by a community engagement process, capital lifecycle analysis, evaluation of alternate uses, and options for the continued delivery of leisure services within the affected community. Upon Council's approval of a new twin pad facility in Valley East a community engagement process would be initiated as per the Parks, Open Space and Leisure Master Plan.

References:

Arena Renewal Strategy, Community Services Committee (January 21, 2013)
<http://agendasonline.greatersudbury.ca/index.cfm?pg=feed&action=file&agenda=report&itemid=3&id=585>

City of Greater Sudbury Parks, Open Space & Leisure Master Plan Review (2014)
<https://www.greatersudbury.ca/play/parks-and-playgrounds1/parks-open-space-and-leisure-master-plan-review-2014/>

Framework for Partnership Opportunities for Indoor Turf and Multi Purpose Facilities Interim Report, Community Services Committee (June 19, 2017)
<http://agendasonline.greatersudbury.ca/index.cfm?pg=feed&action=file&agenda=report&itemid=3&id=1152>