Attachment 1

Greater | Grand Sudbury

Aquatic Service and Facility Review

Phase 2: Assessments and Strategy Development

September 2024

mbpc
Monteith • Brown
planning consultants

AQUATIC DESIGN & ENGINEERING
Pool, Waterpark, & Natatorium Systems Design
A division of DEI & Associates Inc.

The JF Group

City of Greater Sudbury

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LIMITATIONS

This report was prepared by Monteith Brown Planning Consultants Ltd., Aquatic Design & Engineering, and The JF Group (herein referred to as "the Consulting Team") for the account of the City of Greater Sudbury. 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.

Acknowledgements

We are grateful for the many contributions to this Aquatic Service and Facility Review made by our engaged residents, community groups, and partners. We also acknowledge the thoughtful input from City of Greater Sudbury elected officials and staff. The study is designed to build upon our shared values and address our key priorities as a vibrant community of communities living together.

City of Greater Sudbury Council (2022-26)

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Ward 3 – Michel Guy Brabant
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Ward 12 – Joscelyne Landry-Altmann

In Memoriam - Michael Vagnini (Ward 2) and Gerry Montpellier (Ward 3)

Project Committee

Jeff Pafford, Director of Leisure Services
Jessica Watts, Manager of Recreation
Cindy Dent, Manager of Recreation (retired)
Krista Carre, Manager of GIS
Anne Gervais, Recreation Coordinator
Sacha Novack, Communications & Engagement Advisor
Christina Thibeault, Facility Pool Operator
Nick Najdenov, Capital Projects Coordinator

Project Consultants

Monteith Brown Planning Consultants Ltd.
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Land Acknowledgement

The City of Greater Sudbury acknowledges that we are on the traditional territory of the Anishnaabe peoples of the Robinson Huron Treaty, traditionally shared by the people of the Atikameksheng Anishnawbek, Wahnapitae First Nation and Sagamok Anishnabek. We honour and respect these Indigenous peoples as the ancestors and traditional stewards of the land upon which we stand today. May our relationships with the land teach us to live and work in good relationship with one another.

Section 1. Introduction

1.1 Project Overview

The City of Greater Sudbury Council has expressed interest in undertaking a comprehensive review to rationalize and modernize the City's aquatics facilities and services. The primary purpose of the Aquatic Service and Facility Review is to assess the current state of publicly funded indoor, beaches, and splash pads and to create a strategy informed by community engagement to guide the City's aquatic system for the next 25 years (to 2051).

The outcome is a series of short- and long-term strategic directions intended to ensure that Greater Sudbury's aquatic facilities remain relevant, responsive to changing needs, and sustainable into the future. The study seeks to support the City's goals of creating a healthier community, modelling asset management and service excellence, and incorporating climate change considerations. This study also makes recommendations related to aquatic services and programs where these directions may influence the capacity and relevance of facilities.

Specifically, this study assesses the following facility types[1] operated by the City of Greater Sudbury – for reference, a map illustrating the location of these assets is shown on the following page:

- **indoor pools**, including the proposed Lionel E. Lalonde Centre Therapeutic/Leisure Pool;
- **supervised waterfront beaches**, with consideration of the Kalmo Beach 10-Year Plan and the work of the Lively Recreation Advisory Panel; and
- **splash pads**.

Community partnerships play an important role in offering a full range of aquatics services and this review also considers non-municipal facilities – such as indoor pools owned and/or operated by the YMCA of Northeastern Ontario and Laurentian University – to understand how they contribute to the overall community aquatic delivery system. This review offers an opportunity to establish common principles and to enhance collaboration and planning between the City and community providers, recognizing that full implementation of the study will require the City to work with stakeholders and optimize external funding opportunities.

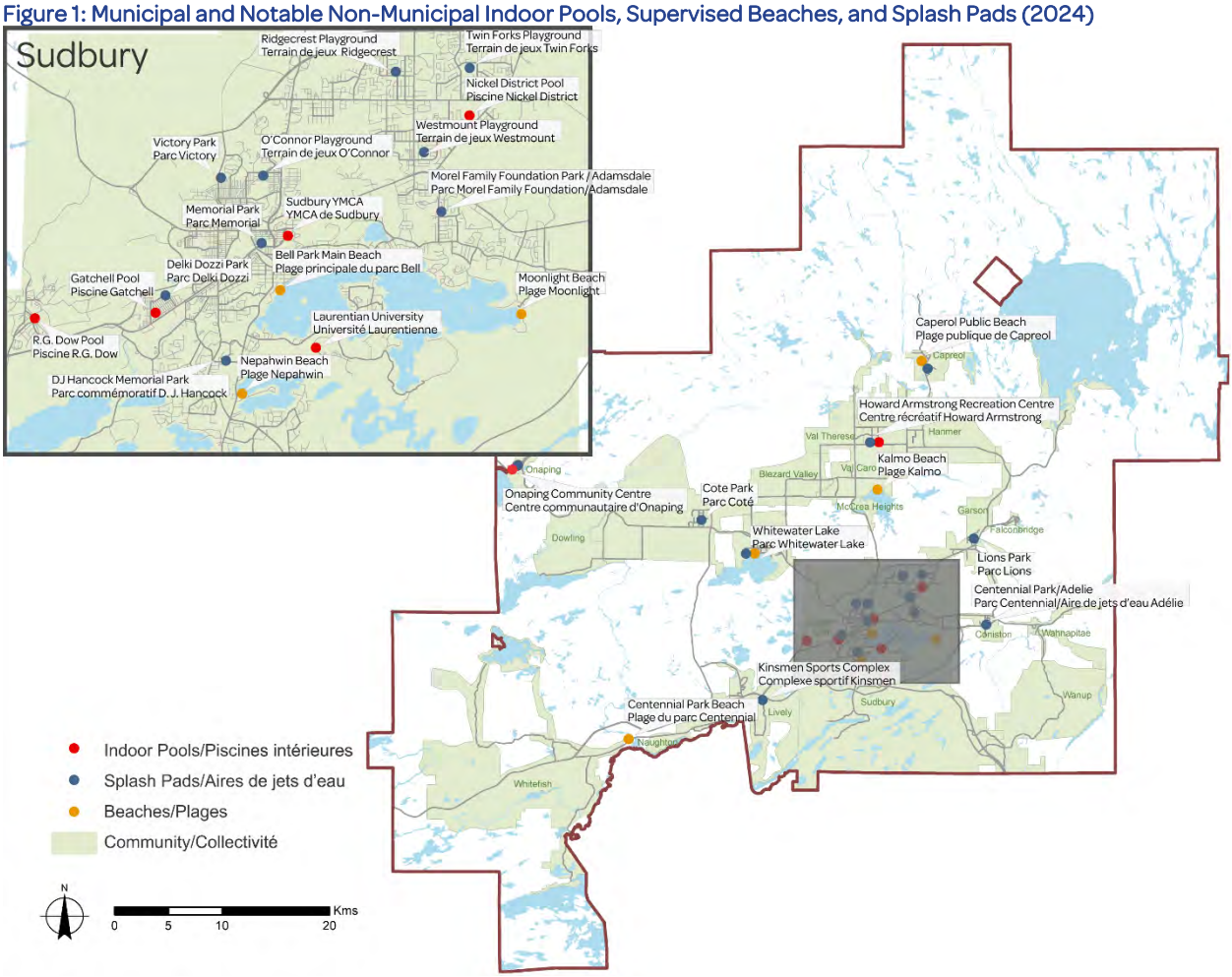
A note about non-municipal pools:

Greater Sudbury's aquatic system includes other pool operators beyond just the municipality. Obtaining information and input from these providers has been important to understanding past usage and potential current and future demand. The consulting team would like to thank Laurentian University and the YMCA of Northeastern Ontario for sharing information about their aquatic operations and levels of community usage.

This review anticipates the continued availability of these pools; any notable change in community access could significantly influence the overall level of service in the city and may require updates to the needs assessments and strategies herein.

[1] Note: Private and non-supervised public beaches, the Splash N Go inflatable water park on Ramsey Lake (operated by a third party), and the Northern Water Sports Centre (paddle sports venue) are beyond the scope of this study.

Figure 1: Municipal and Notable Non-Municipal Indoor Pools, Supervised Beaches, and Splash Pads (2024)




Gatchell Pool


Moonlight Beach


Onaping Splash Pad


Onaping Pool

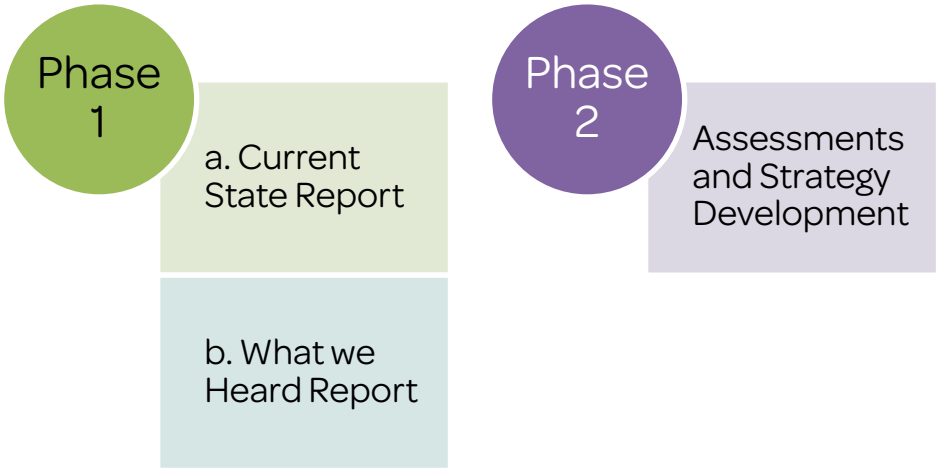

Whitefish Beach


Delki Dozzi Splash Pad

1.2 Project Phasing

The Aquatic Service and Facility Review was developed through a two-phased approach. Although all recommendations are contained in this Phase 2 Report, all three reports come together to form the basis for the Review.

Figure 2: Aquatic Service and Facility Review Phasing



Phase 1 (Research and Consultation) consisted of background research into local initiatives and past approaches to facility provision/investment, analysis of aquatic usage and trends, consideration of the City's current and future community profile, and the preliminary assessment of capital priorities through site visits and asset management data. This research is contained in the **Phase 1a Current State Report**.

Phase 1 also included a robust public and stakeholder engagement program that is documented in the **Phase 1b What We Heard Report**. This stage sought to better understand barriers to participation, potential gaps, and public priorities. Tactics included a community survey, pop-up input opportunities in facilities and parks, public information sessions, interviews and focus groups with key stakeholders (e.g., swim clubs, school boards, and facility operators), staff workshops, and interviews with members of City Council. Preliminary findings and directions for further consideration were identified at this stage.

This Phase 2 Report (Assessments and Strategy Development) consists of detailed facility needs assessments that consider geographical distribution and future service delivery, an implementation strategy for the strategic directions, and final public consultations[2], including presentation of a comprehensive Aquatic Service and Facility Review to City Council. Where available, the data presented within the study is based on several years of data pre-dating the COVID-19 pandemic, as well as more recent data generated following the pandemic.

[2] see **Appendix A** for a summary of input received via the in-person and virtual public information sessions

Section 2. Strategic Framework

2.1 Fundamentals-First Approach

The City's User Fee Framework (2021) demonstrates a thoughtful perspective about how services fit into the community's quality of life. As shown below, the framework is based on a set of principles reflected in cost recovery targets for each service that has a fee – the "equity" principle notes that costs should be shared accordingly so that taxpayer subsidies pay for the societal benefits and users pay for the individual benefits.

Figure 3: City of Greater Sudbury User Fee Framework (2021)

This "fundamentals first" approach can be adapted to this Aquatic Service and Facility Review by focusing on providing universal programs and facilities through which everyone can participate (characterized in the figure below), thereby reaching the widest number of residents across the entire age and ability spectrum.

Figure 4: Fundamentals First Approach to Service Delivery and Facility Provision

In this way, the City prioritizes introductory programs, general interest activities, and other services with wide community benefits above those that serve special interests and serve fewer people (e.g., advanced programming, elite athletics, higher level competitions, etc.). Further, those activities that have the widest social and community benefits are typically the most subsidized as this investment is spread across a wide population. As identified within the City's User Fee Framework, subsidies are typically less (or non-existent) for those activities that serve the individual needs of fewer people, such as elite athletics.

Applying this model to aquatic services and facilities:

- splash pads and beaches offer free and accessible opportunities for children and people of all ages to participate;
- the City's indoor pools support recreational swimming opportunities, as well as instructional learn-to-swim programs and aquafit classes that promote lifelong participation;
- while the City's pools may accommodate more specialized programming and rentals to clubs within lower-demand hours, these facilities are not developed primarily to serve these interests (but are designed with multi-functionality in mind);
- generally speaking, as the skill level required for an activity increases, the percentage of the population participating lessens, resulting in fewer City resources allocated to the activity.

Recreational opportunities are a shared responsibility between a wide range of providers, including the City, volunteers, non-profit organizations, schools and institutions, and the private sector. This culture has been embedded within Greater Sudbury's network of aquatic providers, where the City, volunteers, swim clubs, schools, Laurentian University, and the YMCA all have a meaningful role to play in the delivery of service. This approach has served the community well by maximizing the capacities and talents of all stakeholders and partners, while promoting the effective use of taxpayer funding. Partnerships will continue to be fostered where they align with the collective values of the City and community, and where public interests can be supported and protected.

2.2 Key Planning Principles

The City's aquatic service delivery mandate focuses on lifelong aquatic participation that enables active and healthy lifestyles for all residents, although this delivery system is a hybrid model that involves other partners. Given that Greater Sudbury is growing and its facilities are aging, there is a need to plan for changing demographics, facility investment, and emerging trends.

The following principles are high level, directional statements that were developed to provide overall direction for this study. They are intended to articulate what the City will strive to achieve through its continued provision of aquatic services and facilities. The principles were heavily informed by community input and the Phase 1 findings, as well as the strategic framework within the City's Parks, Open Space & Leisure Master Plan. They are largely complementary – no one principle takes priority over another – and should be read and interpreted as a set.

Table 1: Key principles that inform the provision of aquatic facilities and services in the City of Greater Sudbury

Principle	Description
1. Water Safety	Our aquatic services and facilities play a critical role in community safety and drowning prevention by safely introducing residents to water and providing learn to swim programs.
2. Healthy Communities	Our aquatic services and facilities promote and support personal health and wellness, physical activity, and opportunities for play and cooling off.
3. Equity & Inclusion	Our aquatic services and facilities are accessible and affordable to residents. They are designed to support lifelong participation for people of all ages and abilities.
4. Sustainability	We demonstrate innovation and cost-effective aquatic service delivery while optimizing environmental, operational, and financial sustainability.
5. Partnerships	We encourage community partnerships and funding that support the provision of high-quality aquatic services and facilities.
6. Sport Tourism & Athletics	We play a secondary role in providing aquatic services and facilities that support athletic training, high-level sport development, competition, and sport tourism.

Section 3. Indoor Aquatic Facilities

3.1 Key Findings from Phase 1 – Indoor Aquatic Facilities

Phase 1 of the Aquatic Service and Facility Review included extensive public and stakeholder engagement program to help better understand the opinions of residents and local user groups related to indoor pool usage and priorities.

What we Heard Summary (Phase 1 & 2)

- Upgrade indoor pool change rooms
- Increase programming (e.g., for children and seniors) and expand hours of operation
- Keep existing pools open, but modernize them (e.g., accessibility, warm-water, fun features, etc.)
- Work with Laurentian University to maintain a 50-metre pool for swim clubs, training, and competition
- Consider the need for a warmer-water pool in the Azilda/Chelmsford area
- Design new pools as part of multi-use facilities containing other recreational amenities
- Standardize aquafit fees and packages across all City pool sites

The initial phase of this project also examined available research on the current state of aquatic facilities, their usage levels, and other factors that will inform the analysis of needs and strategies through this Phase 2 Report.

Through the Phase 1 research and consultation, it was identified that most of Greater Sudbury's indoor pool venues:

a) Are approaching the end of the function lifespans and have increasing capital costs and deteriorating conditions.

b) Have limited designs and footprints that have lower customer appeal and cannot accommodate new uses or enhanced revenue sources.

c) Are not keeping up with modern pool designs being developed in other communities.

d) Are not multi-use (most are stand-alone and not part of multi-use recreation centres) and, therefore, are unable to offer program opportunities that foster health and wellbeing for all and serve as focal points of community life.

e) Do not appeal to all ages and capabilities.

f) Are not fully accessible and inclusive of all potential users.

g) Are not supported by new technologies that enhance and improve operational efficiency.

h) Have undersized support spaces and challenging entrances/exits that may present a liability to the City.

i) Are not candidates for expansion or major redevelopment due to age of building, site conditions, etc.

j) Are in locations that are not conducive to maximum participation, thereby limiting positive community impact.

k) Are above generally accepted supply/demand ratios compared to average Ontario municipalities.

l) As municipally-owned pools, they are focused on addressing community recreation and instructional needs, with sport training and competitions addressed by other operators.

m) Are complemented by other providers, such as the YMCA of Northeastern Ontario and Laurentian University.

This Aquatic Service and Facility Review aims to address several of these challenges by outlining a long-term strategy for enhancing public access to high quality indoor pool experiences for all residents and visitors.

3.2 Aquatic Facility and Program Types

Aquatic programming and uses are heavily influenced by the design characteristics, dimensions, and water temperature of a pool. Due to their era of construction, the City's indoor pools mostly have similar designs consisting of rectangular tanks with large deep ends. Many are undersized by today's standards and most are stand-alone facilities that are not well integrated with other recreational offerings. While these designs are well suited to certain activities, the lack of variety and modern amenities limits their customer appeal, usage rates, revenue potential, and ability to serve all residents. Given that recreational swimming activities account for about 50% of all indoor pool activity in most communities, having pools that are attractive to recreational users is imperative.

It is difficult to build a single pool to address the full range of aquatic needs, from community recreation and instruction to aquatic sport and training. Decisions need to be made regarding pool dimensions, water temperature, fittings, and support spaces – these decisions will influence the capacity of a pool and what type and level of activity for which it can be used. For example, aqua fitness and swim lessons for young children are best accommodated within shallower warm pools, while swim clubs require larger rectangular tanks with cooler water for training and competition. Water slides, climbing apparatuses, movable floors, diving boards, beach entry, and other modern amenities may also be considered to allow for expanded use, but each come with their own specifications and design considerations.

No one pool facility can meet the full range of aquatic requirements. A coordinated network of venues is required to address needs ranging from community recreation and instruction to aquatic sport and training.

The range of typical pool design types are identified below, followed by a table illustrating the minimum requirements for common aquatic activities.

Table 2: Typical Municipal Pool Designs

Pool Type	Description
Competition Pool	Large rectangular tank pool, potentially supported by separate warm-up pool. Provincial and national competitive swimming meets require a 50m tank with 8 or more lanes, while sport training and local competitive swimming meets require a 25m tank with 6 or more lanes (at minimum). Deeper tanks can accommodate synchronized swimming, water polo, diving, etc. Water temperature is cooler (e.g., 25 to 28 degrees Celsius or 76 to 82 degrees Fahrenheit). *Local example: Laurentian University*
Community Pool (25m)	Rectangular tank (25m) that can be used for instruction, recreational swimming, and training. May be used for regional or invitational competitions. Rectangular tank with a minimum depth of 1m (deeper at starting blocks). Water temperature can vary depending on programming (e.g., 28 to 29 degrees Celsius or 82 to 84 degrees Fahrenheit . *Local example: Gatchell Pool*
Fitness Pool	Used predominantly for length swimming, a fitness pool would be up to 25m in length, but only 3 or 4 lanes wide (not suitable for competition), possibly with a separate pod for recreational swimming. Water temperature is at most 28 degrees Celsius or 82 degrees Fahrenheit. *Local example: None*
Teaching Pool	Variable design that accommodates swimming lessons and classes, as well as casual play. May have movable floor to accommodate different depths. Water temperature is around 28 to 30 degrees Celsius or 82 to 86 degrees Fahrenheit. *Local example: None*
Leisure Pool	Typically, free-form tank intended for recreational play by children and families. Water depth may range from 0m to 1m or more. May incorporate features such as beach entry, sprayers, water umbrellas, bucket dumps, slides, climbing walls, etc. May be stand-alone or combined with fitness or therapeutic pool to create hybrid design. Water temperature is typically around 31 to 33 degrees Celsius or 88 to 92 degrees Fahrenheit. *Local example: Sudbury YMCA*
Wave Pool	Rectangular or free-form tanks with mechanically generated waves. Depth typically ranges from 0m (beach entry) to 1m or more. Often developed as part of larger aquatic or entertainment complex intended to attract children and families. Water temperature is typically around 30 to 32 degrees Celsius. *Local example: None*
Therapy Pool	Modestly-sized tanks used largely for self-administered rehabilitation or therapeutic purposes. Design can also accommodate older adult aqua-fitness classes and tot swim lessons. Water temperature is typically around 30 to 35 degrees Celsius or 86 to 95 degrees Fahrenheit, depending on programming. Accessible entry is a must. *Local example: Health Sciences North*
Hot Tubs / Whirlpools	Small tanks (generally with capacities of 12 people or less) with very warm aerated water (up to 40 degrees Celsius) intended for relaxation. Generally not suitable for children. *Local example: Howard Armstrong Recreation Centre (hot tub)*

Source: Adapted from City of Greater Sudbury, Therapeutic Pool Study (2014)

Table 3: Typical Pool Types for Common Aquatic Activities

Activities	Pool Type (minimum requirement)	Other Considerations
Recreational Swimming and Aquafit	Fitness Pool, Teaching Pool, Leisure Pool, Therapy Pool	Warmer water temperatures (28+ degrees Celsius) are preferred; may be supported by hot tubs/whirlpools
Instruction (lessons and aquatic leadership)	Fitness Pool, Teaching Pool, Leisure Pool	Warmer water temperatures (28+ degrees Celsius) and variable depths are preferred
Sport/Club Training	Competition Pool: 25m tank with 6+ lanes (preferred)	Provision of starting blocks, timing systems, etc.
Swimming – Regional Competitions	Competition Pool: 25m tank with 6+ lanes	
Swimming – Provincial Competitions	Competition Pool: 50m with 8+ lanes	Spectator seating, deck space, and support spaces increases with the level of competition
Swimming – National Competitions	Competition Pool: 50m with 10 lanes and 25M 8 lane warm-up pool	
Artistic/Synchro Swimming Competitions	Competition Pool: 50m with 8+ lanes (provincial); 50m with 10 lanes and 25m 8 lane warm-up pool (national)	Deeper water required
Water Polo Competitions	Competition Pool: 50m with 8+ lanes	Deeper water required
Lifesaving Sport	Competition Pool: 25m tank with 6+ lanes (preferred)	Deeper water required
Diving Competitions	Competition Pool: 50m with 8+ lanes	Diving boards and/or platforms required, along with appropriate depth

Sources: Adapted from Aquatic Sports Council (Ontario) – see **Appendix B** – and Swimming Canada Guidelines; reference should be made to source documents for additional details and technical requirements.

Various **sectors** are involved in the provision and operation of indoor aquatic facilities and certain aquatic facility designs are common within each sector. For example:

- **instructional and recreational pools** are typically provided by municipalities (consistent with program mandates that focus on introductory activities, children/youth, and seniors);
- **therapeutic pools** are often associated with the health care sector;
- **wave pools and indoor water parks** more often provided by the hospitality and private entertainment sector; and
- **specialized training and competition pools** are more frequently provided by post-secondary institutions and larger municipalities that can absorb their higher costs, although they can also be used for municipal recreation programs and activities when not in use for other activities (noting that the pool depth and temperature may be less than satisfactory for some uses/users).

As noted, most municipalities place a priority on meeting instructional and recreational swimming needs, with the needs of athletic training and competition being secondary as they do not have the demand, resources, or mandate to support the level of investment required for larger pools. However, in order to provide better outcomes for their communities, municipalities are looking beyond conventional designs and functions to create modern facilities that can accommodate multiple activities, often simultaneously. This involves assessing the impact on users, the broader network of facilities, evolving demographics and trends, the advantages of co-locating services, operational innovation, and long-term sustainability.

Municipalities typically provide pools to serve instructional and recreational swimming needs. Conversely, athletic training and competition activities are most often delivered by other sectors, sometimes in partnership.

Other **trends** lend support to expanding the variety of indoor aquatic experiences within Greater Sudbury. For example:

- Greater Sudbury's population is aging, and older adults and seniors now comprise a much larger portion of pool users – many are seeking activities within warmer water, shallower pools. As the City grows, demand for lessons and recreation swimming may remain relatively steady, but interest in fitness and warm-water swimming is projected to increase.
- Children and youth are the primary users of swimming pools. This age cohort generally participates in instructional programs (which generate the highest revenues for municipal pools) and generally surpasses adult participation rates for recreation swims. Industry studies frequently indicate that youth engage in swimming activities three to five times more often per year than adults.
- Recreational swimming has also been trending downward, suggesting that pool design and programming is not capturing recreational swimmers and their families. Design and operational considerations such as warmer water and shallower pools can help to support family fun and relaxation.
- The range of activities is limited by the design of pools, yet new forms of programming are needed. Many municipalities are introducing newer and more innovative activities such as aqua yoga, inflatables, ninja activities, dive-in movies, stand-up paddleboarding, water walking, expanded programming for persons with disabilities, and other forms of specialized programs to attract younger and broader clientele.

Increasing the quality and type of pools has the potential to encourage greater participation, increase the quality and benefit derived from each swim, capture the imagination of users, improve energy efficiency, and support higher revenues.

Strategic Directions – Aquatic Programs and Services
1. Acknowledge the delivery of **instructional and lifelong recreational aquatic programs and activities as a core service** of the City of Greater Sudbury. While the City also strives to accommodate aquatic sport, training, and competition uses within its pools, these specialized services are typically delivered by other organizations and institutions, sometimes in partnership with the City. 2. Increase the number of visits to City indoor pools by **expanding the range of aquatic programming** during available prime and non-prime time hours, as resources allow. Some options include new forms of aquatic exercise, youth programming, adaptive swimming (in partnership with others), and specialized programs that would help to increase participation rates. Beyond standard programs, the range of activities may vary between City of Greater Sudbury pool facilities. 3. Regularly review **staffing requirements** within the City's aquatics division to respond to pent-up demands and opportunities for more specialized programming. Continue to offer and support training and leadership development for lifeguards and instructors with the goal of bolstering the full-time staffing complement. 4. Develop an **aquatic allocation policy** to establish fair, equitable, and transparent guidelines for providing access to pool time in Greater Sudbury, ensuring that activities and organizations are aligned with the proper facilities and times in keeping with their requirements. 5. Regularly **review pool admission, program, and rental fees** to balance the overall goal of increasing participation while achieving revenue targets. Pool rental fees should be aligned with a cost recovery target that is linked to the cost to provide the service, in addition to comparisons to the market. Additionally, the review should address the standardization of aquafit fees and packages across all City pool sites in the short-term.

3.3 Existing Pool Facilities and Operations

Older single tank pools pose challenges with meeting multiple needs and requirements and – like much of the aquatic infrastructure ion Ontario – the City's pools are a product of their time. Although they are continuing to provide a valuable service to the community, most have reached an age (or will within the next ten years) where significant reinvestment and/or replacement is required. As area pools continue to age, the likelihood of future issues and service disruptions will increase. The City should work to mitigate the risks associated with continuing to operate these aging pools beyond their expected useful life.

Four of the City's five (80%) indoor pools have exceeded their lifespan and the fifth one will also reach this threshold within the next ten years.

The challenges with City of Greater Sudbury's indoor pools are thoroughly documented in the Phase 1 Current State Report, including a lack of full barrier-free accessibility, aging systems and equipment, undersized support spaces, antiquated designs that do not have broader appeal, etc. These and other challenges are summarized below according to location, along with a preliminary assessment of opportunities that may be considered further through the capital planning process.

Table 4: Notable Indoor Pool Challenges and Opportunities (may not be a complete list)

Pool	Challenges/Weaknesses	Opportunities/Strengths
Gatchell Pool	• land is owned by school board • parking is limited • lack of other recreation spaces limit appeal and efficiency • some barrier-free accessibility concerns • change rooms in need of upgrades • aging systems requiring increased maintenance – several leaks have been detected and remediated in recent years	• largest City-operated pool (6 lanes) • utilized by attached school • centrally located to serve the greatest number of Sudburians
HARC Pool	• combined pool/fitness membership can be a deterrent for casual users	• newest City pool (1983) • part of multi-use facility with cross-programming opportunities • highest use facility among City pools • only City pool with compliant accessibility ramp into pool and family change room • large viewing gallery for events • ample parking
Nickel District Pool	• lack of other recreation spaces limits its appeal and efficiency • some barrier-free accessibility concerns • pool has low visibility from the street and access/egress to parking lot can be a challenge • aging systems requiring increased maintenance (HVAC improvements currently on hold) • mechanicals in basement (operational challenge) • control challenges and disruption due to shared doors with school • change rooms in need of upgrades	• utilized by attached school
Onaping Pool	• pool was built by mining company as does not meet City standards (under-sized) • smallest market population of all City pools • reduced hours due to lower demand and pool size (cannot be used for full range of programming) • lack of barrier-free accessibility • aging systems requiring increased maintenance (lacks emergency stop, control, drain not functioning, ventilation) • change rooms in need of upgrades • 10-year capital costs are among the highest of all City pools	• facility serves as a community hub and is part of a larger community complex • community has shown support for this facility in the past when faced with potential closure

Pool	Challenges/Weaknesses	Opportunities/Strengths
R.G. Dow Pool	• lack of other recreation spaces limit appeal and efficiency • lowest use pool aside from Onaping • some barrier-free accessibility concerns • aging systems requiring increased maintenance (older lighting, etc.) • change rooms in need of upgrades	• community has shown support for this facility in the past when faced with potential closure
Sudbury YMCA Pool*	• YMCA (operator) has cited rising capital costs and is seeking financial assistance • YMCA membership model can be a deterrent for casual users • lap pool is undersized • lane pool lacks permanent chair lift (not fully barrier-free)	• high usage facility located downtown • some recent capital improvements completed (pool liner – grant-funded) • YMCA financial assistance programs help ensure affordability for all • facility is funded in partnership with City
Jeno Tihanyi Pool (Laurentian University)*	• capital renewal (aging systems requiring increased maintenance) – pool is currently closed • paid parking is a deterrent for some • lack of barrier-free accessibility • depth of shallow end does not meet regulations for double-ended events • support spaces (e.g., change rooms, etc.) also in need of renewal	• 50M, 8-lane pool (training and sport tourism venue) • offers localized service to South End • only 50m pool in Near North region, serving a very wide geographic area

* non-municipal pool facility

There is always a cost to maintaining the status quo. Investing today is likely cheaper than waiting until facilities fail or deferring decisions in the long-run – the challenges experienced at Laurentian University's Jeno Tihanyi Pool are a cautionary tale of what can happen as facilities age.

Investing in and/or replacing selected existing facilities is critical to achieving long-term community impact.

The community has indicted that they enjoy the pools the City currently provides, but that these facilities are showing their age (especially the support spaces). Further, programming is limited by the shape and size of the pools. Broader uses and users require more sophisticated designs (e.g., multi-tanks, different configurations, etc.) and a higher degree of functionality (e.g., different water temperatures). However, few if any of the City's indoor pools could feasibly support an expansion due to site sizes and land ownership constraints. The availability of suitable land is a challenge that may also influence possible future locations.

Improvements to the quality of pools has the potential to increase overall interest in swimming overall. **In-demand features** identified through the research and consultation include:

1. **Warmer water teaching pools** with non-traditional depths (zero depth entry, shallow water) that can be used by children, seniors, persons with limited mobility. These designs enhance comfort, enable swim instruction, are accessible, and have therapeutic benefits.
2. **Play features** that support a fun/recreational experience during family swims and help children build competence and comfort in aquatic environments.

3. **Larger pools (up to 50-metres and 10-lanes)** that support sport training and competition. While this role has traditionally been filled by the Jeno Tihanyi Pool at Laurentian University, the multi-year closure of this facility has severely restricted the ability of local swim clubs to offer these services.
4. **Improved change rooms** that are inclusive and accessible to all. In addition to finding lessons that fit with people's busy schedules, the size and cleanliness of change rooms is one of the most significant barriers to taking swimming lessons.
5. **Additional floor space** for dryland training activities, birthday parties, gatherings, and other programming. Pools that are combined with recreation centres can typically offer these benefits.
6. **Barrier-free spaces and features** are a must. Accessibility challenges are a particular concern as any significant capital work would likely trigger the need for larger accessibility improvements to the pool tanks, support spaces, building, and property. Furthermore, through the Accessibility for Ontarians with Disabilities Act (AODA), the Province has set a goal of an accessible Ontario by 2025. Retrofitting older buildings can be capital-intensive and sometimes impractical.

   Through this project, some residents expressed frustration with the current lack of fully accessible pools, change rooms, and washroom facilities. Requests for specialized programming for persons with disabilities and pre- and post-rehab activities have been growing. With an aging population and increasing number of residents with disabilities, the demand for accessible facilities and services will only grow into the future. To best address these needs, any accessibility improvements to facilities (older or new) should include discussion and consultation with residents that have lived experience in this area.

The design features noted above must be considered as the City modernizes its aquatics system through future capital development and redevelopment projects. At the same time, there will remain a need for traditional rectangular lane pools as these support greater use, capacity, and revenue, allowing more users to gain access to the pool at a time convenient to them. For this reason, most contemporary aquatic centres now have multiple tanks.

New aquatic centres typically have multiple tanks, allowing for different water temperatures and a greater variety of programming under the same roof.

As is the case in many communities, the City's historic levels of investment in maintaining the state of good repair of existing facilities have been inconsistent, resulting in a significant backlog of deferred maintenance and repairs. This backlog represents specific work items that are necessary to ensure that facilities remain in sound working condition and able to operate to their full level of performance, but that have been deferred to a future date often due to lack of funding.

Managing an aging recreation asset portfolio with an increasing repair and maintenance backlog is an ongoing challenge for the City and it is recognized that aquatic facilities represent only a portion of the City's overall infrastructure state of good repair requirements. As noted in the Phase 1 Report, these costs are increasing every year –the deferred and current investment requirement for all 5 pools and associated buildings equates to $10.1 million and estimated lifecycle costs for the next ten years represent an expenditure of $24.5 million across all five sites, for an average investment of $2.5 million per year, plus inflation. An estimated $865,925 per year is needed over the next ten years to maintain the five pools in fair condition. However, these costs do not include any of the recommended upgrades recommended in the Phase 1 Report. As four out of the City's five indoor

pools have reached their life expectancy, modifications to elevate them to current standards and code requirements may not be practical and may even outweigh the cost to build new.

The funding levels for pool improvements in the City's four-year capital forecast fall well below what is required to maintain the facilities in their existing condition.

On top of this, asset management figures exclude updates that would bring the pools in line with current standards.

Taken together, the cost to modernize the City's pools may outweigh the cost to build new.

Greater Sudbury is not alone –municipalities across the country are facing challenges for funding scheduled repairs for their recreational infrastructure. Increasing costs and previous municipal decisions to defer repairs to a later date have now resulted in many facilities outliving their intended lifecycle and closures due to an inability to fund repairs and upgrades (for example, several permanent outdoor pool closures have been reported in Southwestern Ontario in 2024).

Despite these challenges, it is vital that facility rehabilitation be prioritized as deterioration in the physical condition of facilities affects the quality of user experiences, impacts operational efficiency and customer service, creates risk and liability issues, and raises operating costs. In March 2024, the City dealt with a 7-day unplanned closure of Gatchell Pool due to leak in the pool tank. Earlier in the year, a leak in the roof was detected that will cost an estimated $250,000 to address outside of approved capital budgets. These types of events are more common in older facilities and more can be anticipated given the age of the City's pools.

Unplanned closures and emergency budget requests are more common in older facilities.

The City can anticipate more of these challenges in the years to come given the age of existing pools.

Additional resources will be needed to maintain municipal aquatic facilities in the future.

Limited funding requires decision-makers to prioritize capital expenditures and focus these resources where they will have the greatest positive impact. Due to changing needs, participation trends, and facility standards, reinvesting in all facility types equally may not be the best way to respond to current or future needs. In some cases, a facility may reach the point at which the magnitude of required repairs or inherent lack of functionality is so significant that it may be more effective to replace the facility rather than continue to invest in extending its lifespan. Options for selected facility upgrades, development, and re-purposing must all be considered so that the City invests in the right facilities at the right times. An increased spending target will help to ensure that funding is directed at high leverage improvements that are consistent with a city-wide strategy.

Through the application of an asset management plan, the City can improve its ability to anticipate and respond to necessary capital repairs and element replacements within its aquatic facilities. Experiences of other municipalities with asset plans have proven that capital maintenance strategies

together with adequately funded capital reserve funds result in direct benefits to the community. For example, there is higher consumer satisfaction with facilities that are constantly well maintained. Furthermore, the availability of secured repair and maintenance funds help to avoid quick "band-aid" or emergency responses to equipment or building failures that are generally short-sighted, can cause service interruptions. and are usually more expensive in the long-term.

Some municipalities decide to contribute annually to capital reserve funds to support pre-established asset management plans or to deal with major repairs or maintenance investments as they arise. Establishing a capital reserve fund and funding strategy as part of the City's capital asset management and replacement framework could help to proactively resolve asset failures or other concerns related to state of good repair issues.

Establishing a capital funding strategy could help to proactively resolve asset failures or other concerns related to state of good repair issues.

Going forward, it is essential that the City allocates adequate resources towards the repair, renewal, and replacement of its aquatic infrastructure. Opportunities to improve accessibility, increase utilization, improve energy management, and reduce operating and maintenance costs must also be considered.

The Canadian Infrastructure Report Card (2016) recommends an annual contribution target of 1.7% to 2.5% of replacement value for sport and recreation facilities. While current budget pressures and other fiscal demands would suggest that this would be an aggressive financial objective, repair and replacement pressures will intensify as the City's pools age.

Based on the audits undertaken in Phase 1, the recommendations identified in the following table have been established for each City indoor pool facility to improve overall lifespan and performance of mechanical systems. Renovations to existing pools can be complex exercises, both in terms of design and construction. Efforts should be made to address these items and other necessary repairs in a timely manner, unless there is a direction to dispose of the facility in the near-term. Where possible, multiple components should be grouped together into one project to minimize disruption and create economies of scale that can generate a larger impact across the entire facility.

Decisions around upgrades and improvements should be informed by the following **sequence of priorities**:

1. **First priority:** Projects that improve health/safety and accessibility across all pools.
2. **Second priority**: Areas where pools do not meet code (e.g., missing e-stop).
3. **Third priority**: Items such as filtration systems, HVAC, lighting, UV systems, and improved finishes (including change room upgrades) – items that make day-to-day operations easier and more efficient.
4. **Lower priority**: Pool accessories, such as diving boards, starting blocks, etc.

This priority order has generally been applied to the list of upgrades recommended for each pool based on our observations of the facilities and their operations (see table below).

Table 5: Priority Capital Improvements (source: asset management and pool systems)

Pool	Priority Improvements
Gatchell Pool	1) Replace stair/ramp access to pool 2) Replace existing accessibility lift 3) Replace deck mounted items 4) Install retro-fit low-level exhaust system 5) Upgrade filtration equipment 6) Replace pool tank and pool deck finishes (longer-term)
HARC Pool	1) Upgrade filtration equipment 2) Replace pool deck finishes 3) Replace pool tiles 4) Install retro-fit low-level exhaust system 5) Install ultraviolet (UV) system 6) Install an accessibility lift 7) Replace components of the filtration system
Nickel District Pool	1) Install a remote chlorine fill station 2) Install a larger CO2 tank 3) Upgrade filtration equipment 4) Replace existing accessibility lift 5) Install retro-fit low-level exhaust system 6) Install ultraviolet (UV) system 7) Remove starting blocks through attrition
Onaping Pool	1) Install emergency stop button on the pool deck 2) Install accessibility lift 3) Take steps to increase the flow rate 4) Upgrade filtration equipment 5) Install ultraviolet (UV) system 6) Replace pool tiles 7) Upgrade the dehumidification system 8) Install retro-fit low-level exhaust system
R.G. Dow Pool	1) Conduct major renovations to establish barrier-free access 2) Upgrade lighting within the pool enclosure 3) Replace pool tiles 4) Install retro-fit low-level exhaust system 5) Replace existing accessibility lift 6) Upgrade filtration equipment 7) Install ultraviolet (UV) system 8) Replace the diving board, remove starting blocks through attrition

For additional detail, see Phase 1a Report.

Strategic Directions – Existing Pool Facilities and Operations
6. Establish a **classification system** for City pools that allows for some differentiation in use, especially within the Sudbury urban area. Suggestions include: a) Classify a minimum of two existing pools as **"sport-friendly pools"** capable of hosting athletic training and local/regional meets when required. Each facility should be supported by a complete set of starting blocks, lane ropes, scoreboard, and sound system. These pools should be maintained at a temperature of 82 to 84 degrees Fahrenheit. b) Evaluate the potential to **increase the water temperature** at one municipal pool in the Sudbury urban area to better accommodate aquafitness, swimming lessons, and recreational swimming in one location as part of a pilot project. This pool should be maintained at a temperature of 88 to 90 degrees Fahrenheit. 7. **Increase spending on indoor pool capital repair and rehabilitation** to keep pace with rising needs. Annual funding levels for aquatic infrastructure should be aligned with asset-based lifecycle requirements. Prioritize features that support health and safety, accessibility (e.g., AODA-compliant spaces, etc.), asset management, modernization, sustainability (e.g., operational efficiency, technologies, etc.), and the user experience (e.g., support spaces, etc.). Where major facility rehabilitation is required, coordinate capital improvements within a single project to achieve efficiencies and create a greater impact for users. 8. Integrate **accessible design practices** and **innovative technologies** into all retrofitted and new pool facilities to improve customer service, operational efficiencies, and building sustainability (including reducing water and energy consumption). 9. Ensure that **pool operators** receive regular training on pool systems and initiatives that benefit the user experience and operational efficiencies (e.g., turnover rates, etc.). 10. Update and enhance **preventative maintenance plans** for all pools to help prevent costly repairs and breakdowns and to eliminate any potential health hazards. 11. Refine **annual performance measures** to track progress and efforts to continually improve service and efficiency at City pools.

3.4 Other Pool Providers and Partnerships

As noted, the City's complement of indoor pools is augmented by aquatic facilities operated by the YMCA of Northeastern Ontario and Laurentian University that also serve residents of Greater Sudbury and beyond. Input from the community suggests that both non-municipal pools are unique and valuable contributors to the overall aquatics system.

Both the YMCA and Laurentian University Pools are located within the Sudbury urban area and are situated within a 5 to 10-minute drive of three City indoor pools. Despite this proximity, these two non-municipal pools offer differentiated designs and programming (e.g., 50-metre long-course, warmer-water leisure pool, slide, membership models, etc.) that help to distinguish them from existing City pools.

Together, the City, YMCA, and University offer a varied range of aquatic services – these services should be viewed as complementary rather than competition.

The continued availability of the YMCA and Laurentian University pools is in the best interest of the community and the City. A closer working relationship and greater coordination between all parties will be required to sustain these services for long-term public benefit.

Laurentian University

The Laurentian University Jeno Tihanyi Pool has been closed since March 2020 due initially to the pandemic and then because of its deteriorating physical condition. The pool is part of the larger Ben Avery Sports Complex that contains other athletic facilities serving the University's student population. When operational, it is one of approximately nineteen 50-metre (Olympic-size) pools in Ontario (5 of which were built by municipalities, nine by universities, and five through international games bids[3]). The nearest Olympic pool is in Markham and Ottawa and Thunder Bay are the only other communities north or east of the Greater Toronto Area with 50-metre pools. Through its location in Sudbury, the Jeno Tihanyi Pool serves a large geographic region and population.

The Aquatic Sport Facility Infrastructure Report (2023) commissioned by the Aquatic Sport Council - Ontario notes that the Laurentian University facility is the only 50-metre pool in the Near North region of Ontario, serving a population of more than 2.2 million persons. Across the province, the average level of provision was one 50-metre pool per 750,000 residents in 2021.

The Jeno Tihanyi Pool was built in 1972 and is the primary venue for sport training and competition in Greater Sudbury and Northeast Ontario. The pool has been used to host several local and regional organizations, in addition to community recreation use, instructional swimming, and varsity and student athletics. Prior to its closure (2019), it is estimated that the Laurentian pool drew about two to three times as many recreational swimmers (predominantly lane swimming) as a typical City pool, but accommodated about two to three times fewer swim lesson participants as this was not a core function of the pool at the time. The number of rental hours was estimated to be similar between the University pool and a typical City pool, focussing on those organizations (e.g., synchro and swim clubs) that required larger, deeper pools. Although pool programming varied from year to year, given its larger size, it is understood that the Jeno Tihanyi Pool was not being used to its full capacity.

Since its closure, most user groups have been utilizing City of Greater Sudbury pools to the degree possible. Long-course competitions can no longer be offered within the city and training has been

[3] According to the Aquatic Sport Facility Infrastructure Report (2023) commissioned by the Aquatic Sport Council – Ontario, aging infrastructure is an issue for 50-metre pools across Ontario. Only 4 of Ontario's 19 50-metre pools have been built since 2000 and these were all attached to international games bids.

heavily modified. Without a facility capable of hosting higher-level competitions, sport training opportunities will decline and Greater Sudbury will miss any future hosting opportunities that may arise.

When available to the public, the University pool can host long-course training and competitions and support aquatic clubs in ways that City pools cannot. As a result, the pool is a driver of sport tourism in the community. Traditionally, the largest annual event at the Laurentian University Pool was the three-day Jeno Tihanyi Regional Meet, attracting roughly 600 swimmers from northeast and central Ontario. The University pool also hosted NEOR meets twice a year, which typically attract 50 to 60 swimmers per event. The pool is also able to host the OUA Championships or Division II/III team meets about once every four to five years, bringing in 300-400 swimmers. Additionally, the pool has supported meets for Synchro Swimming, Ontario Summer Games, and other groups in the past. Additionally, the pool has a 10-metre diving tower as well as a movable bulkhead that allows the pool to be divided into two separate sections.

The University has been undertaking a series of due diligence investigations as it works to re-open the pool. In February 2024, the Board of Governors of Laurentian University passed a motion to "...initiate discussions with the City of Greater Sudbury for the creation of a joint planning committee that will be responsible for the creation of a plan and funding model for the renewal of Laurentian's athletic facilities (including the pool)". Further, the Board also directed University management to engage in discussions on the future of the pool and athletic facilities as part of the University's strategic plan on campus renewal. The future of the Jeno Tihanyi Pool remains uncertain until this process unfolds.

The Need to Diversify Programming with 50-metre Pools

50-metre competition pools can be used for a wide range of activities, from community swim lessons to provincial meets. However, as these specialized facilities are the only venues designed for higher level training and competition, much of their use is typically spread over fewer participants that use the facility on a frequent basis. This can limit revenue potential and dampen overall usage metrics, but also contributes toward sport tourism.

Programming models focussed on both ensuring access for priority users and optimizing pool usage may result in improved performance for the Jeno Tihanyi Pool once it reopens. A strategic and targeted approach will help to not only accommodate many of the sport rentals currently using City of Greater Sudbury pools (allowing the City to introduce new programming and/or seek efficiencies), but also to enhance participation for the general community.

The City should continue to work with Laurentian University in attempts to reopen of the pool and to support its long-term viability. The Aquatic Sport Facility Infrastructure Report (2023) commissioned by the Aquatic Sport Council – Ontario indicates that "municipalities no longer fund, own or operate 50-metre complexes on their own". It is noted that, historically, most municipalities with 50-metre pools have developed these facilities in partnership with others, involve shared funding, or were developed to accommodate a major international event (e.g., Toronto, Markham, Windsor, etc.). Due to the high capital costs of renovating an existing long-course pool or developing a new 50-metre aquatic facility, these unique pool types are regularly developed through the use of cost-sharing arrangements with partners and/or other levels of government (sport development is a Provincial responsibility). This project could represent a significant undertaking and cost for a community of Greater Sudbury's size.

The City of Greater Sudbury's Partnership Framework identifies nine potential benefits linked to the municipality working with outside groups to either develop or maintain sport and recreation infrastructure. A selection of these benefits appears to be specifically applicable to a possible collaboration for the Laurentian pool.

These benefits include:

- cost effectively creating or maintaining (public) infrastructure;
- provide public agencies or community groups with greater access to sources of capital;
- capitalize on collective energies and expertise of participating groups;
- optimize the use of public sector resources; and
- effectively undertake major social or economic initiatives.

The City's Partnership Framework also presents foundational principles that help to pre-determine the municipal response to issues that will likely emerge during discussions with potential partners – in this case, the University. In essence, the partnership principles lay out the City's position regarding significant partnership elements. These principles could be usefully applied in any future discussions with Laurentian University regarding the municipality's potential involvement in the future of the University's pool.

Given the age of the Jeno Tihanyi Pool and other campus athletic facilities, it is also important to consider longer-term replacement strategies. Most notably, a decision will need to be made as to the future provision of a competition and training pool for swim clubs, meets, lane swimming, etc., as well as the desired level of service (e.g., 25-metre tank, 50-metre tank, warm-up pool, programming, rentals, etc.). Typically, these facilities are designed to provincial or national standards for a variety of aquatic sports, which requires a 50-metre pool with eight or more lanes. For certain types of provincial and national level competitions, a separate 25-metre warm-up pool may also be required, as well as additional spectator seating and deck space for events, plus dryland training opportunities. Understanding the impact of a new or revitalized facility on other indoor aquatic facilities would also need to be considered as it may impact investment priorities and strategies. Current indications are that access to government grant funding will be essential to the long-term revitalization and/or redevelopment of a 50-metre pool in Greater Sudbury.

Current indications are that access to government grant funding will be essential to the long-term revitalization and/or redevelopment of a 50-metre pool in Greater Sudbury.

As a starting point, preliminary assessments, along with a context and approach to consider such a facility, are outlined in this report. One example that Greater Sudbury can monitor and learn from is in Ottawa. In July 2024, the **City of Ottawa and Carleton University** began a process to explore the potential for a new joint aquatic sports centre on the University's campus, to include a 50-metre and 25-metre pool that would replace two 50-metre pools run by the City and University. A new facility in Ottawa would serve to modernize local aquatics infrastructure and support community use, university use, and sport tourism and events. A joint feasibility study to determine details around specifications, governance, costs, and funding is just getting underway.

With many existing university and municipal pools across Canada having reached the end of their design life, there are several other examples of **joint ventures** that may be considered further by Greater Sudbury and Laurentian University, such as (but not limited to):

- City of Fredericton and University of New Brunswick (joint venture);
- City of Corner Brook and Memorial University/Grenfell Campus (joint venture);
- City of Toronto and University of Toronto/Scarborough Campus (joint venture); and
- City of Windsor and University of Windsor (community access).

YMCA of Northeastern Ontario

The YMCA of Northeastern Ontario offers access to a multi-tank leisure tank and lane pool with slide to YMCA members and day pass users of the Sudbury YMCA. The pools are different water temperatures, which assist the organization in offering a wide range of instructional and recreational swimming activities. Having opened in 2000 the YMCA's downtown pool is the newest aquatic facility available to Greater Sudbury residents. The facility serves approximately 5,000 members, nearly 70% of which are children, youth, young adults, and families. Many members also qualify for financial assistance as part of the YMCA's equitable access policy.

Although the YMCA is a well used facility, for a variety of reasons, the organization has been unable to achieve its revenue targets. The pandemic exacerbated this situation and further impeded the YMCA from realizing its financial objectives. With a slow recovery and mounting capital requirements, the YMCA has had difficulty meeting its financial obligations to sustain operations and to fund facility maintenance obligations. To address these challenges, the YMCA is working to increase membership levels, make better use of the building's square footage, and create a more effective partnership with Parkside Older Adults Centre. The YMCA also has indicated an interest in re-opening its financial arrangement with the City regarding the Centre of Life building. City Council has deferred a decision on the matter until this Aquatics Service and Facility Review has been completed.

Strategic Directions – Other Providers and Partnerships
12. Recognizing that **Laurentian University** and the **YMCA of Northeastern Ontario** are important contributors to the City's aquatic network, consider establishing **"service agreements"** with these key pool operators. Among other issues, provisions in the agreements could specify which services are to be provided by the partner, how service qualities are controlled, relevant facility management expectations, and applicable operating procedures. The City and each partner should regularly and jointly coordinate cooperative services to maximize the community benefits of the partners' roles in the delivery of community-based aquatic services.
13. Encourage **Laurentian University** to begin planning for the major revitalization or replacement of the Jeno Tihanyi Pool within the 25-year horizon of this plan. A **business plan** may be prepared to more fully define aquatic programming, public access, design considerations, location options, operating model, and capital and operating cost-sharing options. An economic impact assessment would also assist in identifying the facility's overall contribution to local tourism and spending, helping to make the case for grant funding.
14. Continue to support and enhance **relationships with school boards** to bolster the delivery of a spectrum of aquatic opportunities on co-located sites and through programming (e.g., Swim to Survive).

Strategic Directions – Other Providers and Partnerships
15. Given the important role of the **YMCA pool** in contributing to aquatic services within Greater Sudbury, and recognizing the existing relationship between the City and the YMCA of Northeastern Ontario through their condominium agreement, establish a **communications framework** through which the YMCA and the City can share relevant information about YMCA's aquatic program accomplishments, challenges, and mitigation strategies, as well as plans for future program growth and development.

3.5 Indoor Pool Demand Analysis and Future Needs

This section takes a methodical approach to answering the question of how many (and what type of) pools are needed to serve Greater Sudbury now and into the future.

The City's 2014 Parks, Open Space and Leisure Master Plan used a population-based metric of one indoor pool location (municipal and non-municipal) per 25,000 persons, which partially reflects the current level of provision and accounts for Greater Sudbury's large geographic area. With seven pool locations (including the Sudbury YMCA and Laurentian University), application of this target suggests that the city is well supplied for its current population, but may have demand for a new indoor pool facility as it approaches 200,000 persons.

However, there are limitations to using simple population-based provision targets. Most notable is that this measure is unable to fully account for the variation in facilities; for example, there is a significant difference in size, capacity, and function between the Onaping Pool and the Jeno Tihanyi Pool at Laurentian University. Furthermore, it can be challenging to calibrate these targets to local demand factors; for example, targets used in more densely populated areas in Southern Ontario tend to be in the range of one pool per 40,000 to 45,000 persons, which would lead to a much lower level of provision if applied to Greater Sudbury. While benchmark comparisons are interesting, there are no commonly accepted standards for indoor pool provision. Unique community needs related to access and program requirements, along with considerations of facility age, condition, and functionality should be at the forefront when assessing service requirements.

New and more precise measures for assessing pool demand are considered through this review, including:

Swims per Capita: This measure identifies the number of times that people within a pool's catchment area swim in the pool each year. Pools with more swims per capita are more effective at capturing the local population, while those with fewer may indicate that there is duplication in service.

Pool Capacity and Area: This measure examines the ability of each pool to physically accommodate users based on its size and depth, irrespective of programming decisions and local demand. These figures can then be compared to actual usage to determine the amount of additional use that may be possible.

Travel Time and Markets: This measure considers the number of people that reside within the catchment area of a pool (based on travel time factors) and the potential overlap or gaps between pool facilities. Accessibility of pools to the population must be considered as the City makes decisions on future facility investments.

Swims Per Capita

There are many factors that contribute to the overall usage of individual pools. Some pools, like the one in Onaping, have a smaller market from which to draw. The Onaping Pool is also undersized (limiting the range and capacity of programming) and operates under more limited hours, both of which impact usage levels. The co-location of Howard Armstrong Pool with the recreation centre, as well as its unique membership model, may contribute to its overall performance. Although each 25-metre pool offers similar activities, program choices made by the City may also influence usage levels.

Appendix C includes mapping prepared by the City showing the area of residence of all 2023 registered pool users (excludes drop-in recreation users). The following observations have been derived from this data:

- Most pools draw users from across the entirety of Greater Sudbury, although the Onaping Pool has the most localized market.
- Both R.G. Dow and Gatchell pools are drawing registered users from similar geographic markets as there is significant overlap between these two locations, suggesting some level of duplication.
- The Howard Armstrong Recreation Centre Pool (which includes a fitness centre) has a strong local draw, but also attracts some users from nearby communities, including urban Sudbury.
- Users from the Chelmsford and Azilda areas are relatively evenly served by four City pools (Gatchell, HARC, Onaping, R.G. Dow).

Most pools draw users from across the entirety of Greater Sudbury, although the Onaping Pool has the most localized market.

Our research suggests that there is capacity for greater usage of existing City pools, yet there is little evidence of latent demand for existing pools and programs. While there are certain swim lesson types and times that are in high demand (such as Saturday morning pre-school classes), this is common across most municipalities. A multi-tank pool could help to address waitlists, but peak times are in demand for a reason. Most communities do not align facility provision with peak times, but rather strive to support an inventory that strikes a balance between market demand and financial sustainability.

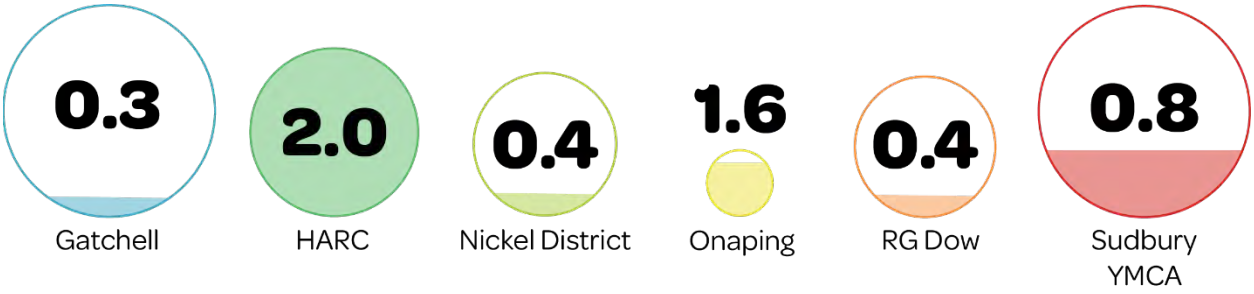
The number of swims per capita can also be an indicator of the effectiveness of a municipal aquatics system. In our experience, a ratio of 1.0 to 2.0+ swims per capita is common in Ontario, although regional variations do exist. In 2023, the City of Greater Sudbury attracted approximately 170,500 visits to its five municipal pools, for an average of 1.0 swims per person. This figure climbs to 1.5 swims per capita when the Sudbury YMCA pool is included. As these figures are at the lower to middle of the benchmark, the City should seek to increase the number of people swimming and their frequency of visits over time.

Table 6: Estimated Number of Swims per Capita by City of Greater Sudbury Pool Facility (2023)

City Pools	Annual Visits (2023)	Estimated Population within 15-minute drive (2021)**	Annual Swims per Resident
Gatchell	36,100	105,485	0.3
HARC	54,500	26,955	2.0
Nickel District	36,000	98,825	0.4
Onaping	7,500	4,740	1.6
R.G. Dow	36,400	91,120	0.4
All City of Greater Sudbury Pools	**170,500**	**166,004**	**1.0**
Sudbury YMCA Pool*	86,000	110,340	0.8

* Estimated based on data provided by YMCA of Northeastern Ontario.
** Source: 2021 Census of Canada, Statistics Canada; excludes undercount. Note: Data is based on a best-fit of the 2021 Census Dissemination Areas corresponding to the drive time radius. Prepared by the GIS Solutions Section, Data Analytics & Change Division, City of Greater Sudbury, November 16, 2023

Figure 5: Estimated Number of Swims per Capita by City of Greater Sudbury Pool Facility (2023)



Note: The size of the circles above is proportional to size of pool, with the Sudbury YMCA and Gatchell pools being the largest, and Onaping pool being the smallest. Swim visit data was not available for the Laurentian University pool.

In looking at specific pool locations, both the Howard Armstrong and Onaping Pools are operating above the city-wide ratio (2.0 and 1.6 swims per capita, respectively), while the three City pools in Sudbury (Gatchell, Nickel District, and R.G. Dow) are much lower at an average of 0.4 swims per capita. While the degree to which the data is affected by the closure of the Laurentian University pool is hard to determine, it is evident that there is substantial duplication of market within the Sudbury urban area. This overlap is examined further in a subsequent section of this report.

On this point, in 2023 the Sudbury YMCA pool (with its two tanks) accounted for one-third of all indoor swim visits in Greater Sudbury (approximately 86,000 swims), more than twice as many as the average visitation to a City-run 25-metre pool. While the Sudbury YMCA operates under a membership model and there are other differences in programming, the attraction of a second warmer-water leisure tank and slide are a notable differentiator than help to support the facility's higher usage levels, particularly for recreation swimming.

In 2023 the Sudbury YMCA pool (with its two tanks) accounted for one-third of all indoor swim visits in Greater Sudbury, more than twice as many as the average visitation to a City-run 25-metre pool.

Pool Capacity and Area

Looking solely at water surface area, the City's 5 indoor pools account for 49% of all available pool area in Greater Sudbury (1,250m^2), with Laurentian University (35%) and Sudbury YMCA (16%) pools together accounting for the balance (1,300m^2). The total system of pools provides nearly 2,550 m^2 (27,426 sf) of pool area, for an average of 69 persons per square metre of pool area (or 6.4 persons per square feet) based on an estimated population of 175,250.

Table 7: Water Surface Area and Usage Levels of Area Indoor Pools (2023)

Indoor Pools	Pool Size	Pool Area (m^2)	% of System	Annual Visits (2023)	Visits per m^2
Gatchell	25m x 15m	375	15%	36,100	96
HARC	25m x 11.6m	290	11%	54,500	188
Nickel District	25m x 10m	250	10%	36,000	144
Onaping	15m x 5.5m	83	3%	7,500	90
R.G. Dow	25m x 10m	250	10%	36,400	146
All City Pools	**n/a**	**1,248**	**49%**	**170,500**	**134**
Sudbury YMCA	lane and leisure tank	400*	16%	86,000**	215
Laurentian University	50m x 18m	900	35%	n/a	n/a
Total – All Pools	**n/a**	**2,548**	**100%**	**170,500**	**156**

* Estimated
* Estimated based on data provided by YMCA of Northeastern Ontario.

Due to their depth and other factors, not all pools are designed to accommodate the full range of aquatic activities. Calculating the capacity of indoor pools can also be done through a formula that considers the varying depths across the water surface area of each pool, then comparing this against usage. This approach requires some additional interpretation as community pools like those in Greater Sudbury rarely achieve utilization levels above 50% due to the programming mix and lower use during non-prime times. As such, 50% of the maximum design capacity is generally considered to be at the upper end of the comfortable capacity.

Data from 2023 (approximately 170,500 swims per year across 5 pools) suggests that the City's pools are operating at about 56% of their theoretical capacity (representing 28% of their maximum design capacity), indicating that there is capacity for additional usage within the City's pool supply. The Howard Armstrong is the highest performing pool at 76% of its theoretical capacity. With several swim clubs requiring more time in City pools, the capacity calculations at Gatchell and Nickel District Pools decreased in 2023 as the City has shifted time away from lessons and recreational swimming. The average amongst the three Sudbury pools was 50% in 2023, just slightly higher than Onaping at 47%.

Table 8: Estimated Capacity and Usage Levels of City of Greater Sudbury Indoor Pools (2023)

City Pools	Pool Size	Maximum Design Capacity (swims/yr)*	Percent of Total System	Annual Visits (2023)	Percent of Maximum Capacity Used	Percent of Theoretical Capacity Used
Gatchell	25m x 15m	191,000	31%	36,100	19%	**38%**
HARC	25m x 11.6m	143,000	23%	54,500	38%	**76%**
Nickel District	25m x 10m	128,000	21%	36,000	28%	**56%**
Onaping	15m x 5.5m	32,000	5%	7,500	23%	**47%**
R.G. Dow	25m x 10m	115,000	19%	36,400	32%	**63%**
All City Pools	n/a	609,000	100%	170,500	28%	56%

* Capacity estimated based on pool size/depth (65 annual swims per square foot of water shallower than 5 feet, and 25 annual swims per square foot of water 5 feet or deeper).
Data not available for YMCA and University pools.

It is evident from this and supplementary analysis in this section that there is unused capacity within the Greater Sudbury pool system (including the YMCA and University pools, when operational). The degree of this capacity is difficult to quantify as it is heavily influenced by program offerings, pool design, and usage/demand. The aforementioned analysis sets the high end of this excess capacity at 44% for City pools (which are used to 56% of their theoretical capacity). Comparable data is not available for the YMCA and University pools; however, stakeholder input and available data would suggest that usage of the YMCA pool exceeds that of the typical City pool, while usage of the University pool may have been similar to municipal operations.

There is unused capacity within the local pool system, indicating that current and future levels of demand can be supported by fewer pools.

As a starting point for the analysis, it is assumed that the degree of actual excess pool capacity across the system is one-half of the theoretical excess pool capacity – being 22%. Cutting this amount in half provides some flexibility for the City and other operators to increase usage of existing facilities through programming and other decisions without exceeding available capacity.

Following this logic means that Greater Sudbury has a 22% over-supply of pool capacity at this time. As each pool is different, this does not mean that there are 22% too many pool locations, but rather that the capacity of pools (as calculated using a formula that considers pool area and depth) is over-supplied for the current level of demand.

For greater ease of projecting current and future needs, this capacity figure will be translated back to pool area (water surface only) in order to establish provision targets. Increasing the average of 69 persons per square metre of pool area by 22% equals 85 persons per square metre of pool area (rounded). This target is applied to the City's current and future population in the following table to determine a range of pool area

Based on assumptions linked to actual usage and allowing for greater use in the future, a target of "one square metre of pool surface area per 85 residents" can be used to project current and future indoor pool needs.

provision that more strongly aligns with community needs.

Figure 6: Current and Recommended Provision Measure for Indoor Pool Space

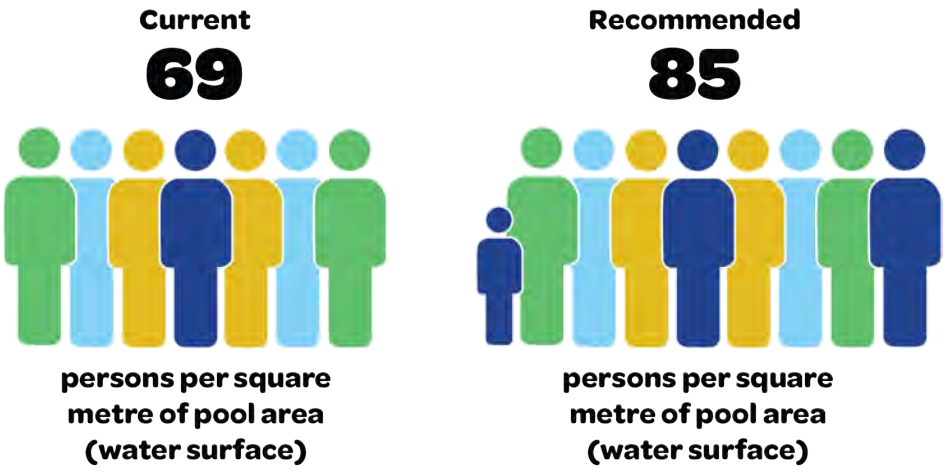


Table 9: Projection of Pool Area Needs, 2021 to 2051 and Beyond

Year	Population	Pool Area Needs (m^2), based on Target of 1 m^2 per 85 persons	Excess Capacity (m^2), based on Current Supply (2,548m^2)
2021	170,250	2,005	**545**
2031	177,080	2,085	**465**
2041	182,780	2,150	**400**
2051	188,530	2,220	**330**
Future	200,000	2,355	**195**

Figures rounded.
Population source: Hemson Consulting Ltd. (2023). City of Greater Sudbury Population Projections Report.
Note: Laurentian University Pool (competition pool) and Onaping Pool (local pool) were excluded from the calculation of the average size of a community pool.

The analysis finds that as of 2021, Greater Sudbury has an over-supply of 545 square metres of pool area, which is equivalent to approximately 1.8 pools based on the average size of a typical community pool. By 2051, this over-supply is forecasted to be reduced through population growth to 330 square metres (for a system-wide total of 2,220 square metres) .

There is an excess of approximately 545 m^2 of pool area presently, declining to 330 m^2 by 2051.

This supports the previous finding that current and future needs can be supported by one to two fewer indoor pools (depending on their size). Strategies for pool provision are discussed in Section 3.6.

Travel Time and Markets

In order to understand pool distribution across Greater Sudbury's unique geography, travel time analysis was completed for the five City and two non-municipal indoor pools. The community survey completed for this study found that nearly all residents would be willing to drive 15 minutes, and most would be willing to drive 20 minutes to access an indoor pool. Currently, 88% of the City's residents live within 15-minutes of a municipal or non-municipal indoor pool; this increases to 96% when considering a 20-minute drive time.

Nearly 9 out of every 10 residents (88%) live within 15-minutes of a municipal or non-municipal indoor pool.

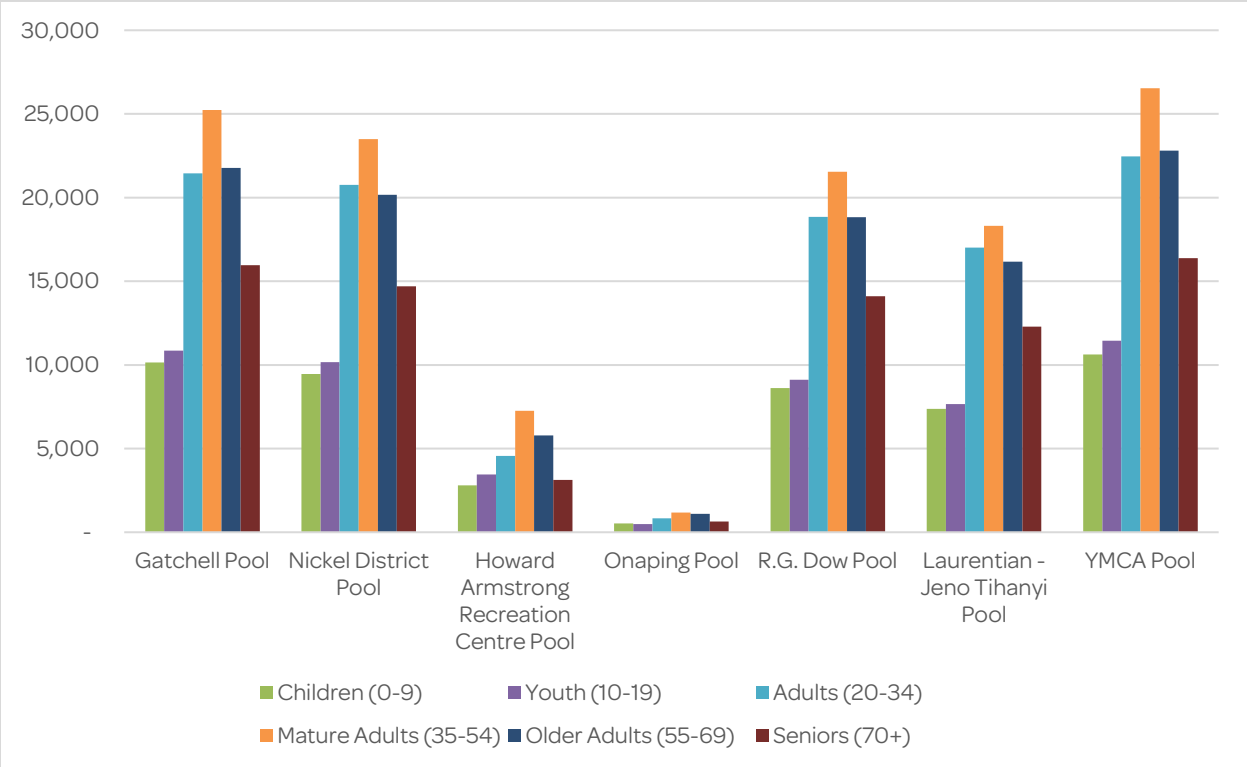
The population served by existing pools varies (see **Appendix D**). There are five indoor pools within the Sudbury urban area, the city's most populated community. Each of these pools has the ability to serve 48% to 66% of all Greater Sudbury residents within a 15-minute drive – an average of 96,900 persons. Conversely, the Howard Armstrong Recreation Centre Pool has a catchment population of approximately 27,000 persons and the Onaping Pool serves a population of 4,740 persons (9,165 if extended to a 20-minute drive time). It is noted that travel time modelling has its limitations, as times may be negatively affected by time of day/week (e.g., peak times), mode of transportation (e.g., public transit), road conditions (e.g., snowy/icy roads), and road construction projects.

Table 10: Population within 15-minute drive of Pool Facilities, 2021 (actual) and 2051 (forecasted)

Location	Total Population (2021 Census)	% of City-wide Population (2021)	Total Forecasted Population (2051)	% of City-wide Forecasted Population (2051)	Population Change (2021-2051)
Gatchell Pool	105,485	64%	115,310	61%	9,825
Howard Armstrong Recreation Centre Pool	26,955	16%	30,770	16%	3,815
Nickel District Pool	98,825	60%	108,490	58%	9,665
Onaping Pool	4,740	3%	5,240	3%	500
R.G. Dow Pool	91,120	55%	100,180	53%	9,060
Laurentian – Jeno Tihanyi Pool	78,905	48%	86,030	46%	7,125
YMCA Pool	110,340	66%	121,320	64%	10,980
All 7 Pools	146,905	88%	162,340	86%	15,435
City-wide Population	166,004	100%	188,510	100%	22,506

2021 data source: 2021 Census of Canada, Statistics Canada; excludes undercount.
2051 data source: Population Projections Report, Prepared by Hemson for the City of Greater Sudbury. May 2023.
Note: Data is based on a best-fit of the 2021 Census Dissemination Areas corresponding to the drive time radius
Prepared by the GIS Solutions Section, Data Analytics & Change Division, City of Greater Sudbury, November 16, 2023

Figure 7: Population by Age Living with 15-minute Drive of Indoor Pools (2021)



Data source: 2021 Census of Canada, Statistics Canada
Note: Data is based on a best-fit of the 2021 Census Dissemination Areas corresponding to the drive time radius. **Analysis does not factor in time of day, day of week, or season (i.e. traffic and road conditions).**
Prepared by the GIS Solutions Section, Data Analytics & Change Division, City of Greater Sudbury, November 16, 2023

The following map illustrates the substantial degree of overlap between the five indoor pools in the Sudbury urban area due to their relative proximity. Based on a 15-minute catchment radius, Chelmsford is the most notable gap area (2021 population of 6,200 persons), although this represents a relatively small area from a population standpoint given that there are four pools within approximately a 20-minute drive.

There is a substantial degree of overlap between the five indoor pools in the Sudbury urban area due to their relative proximity.

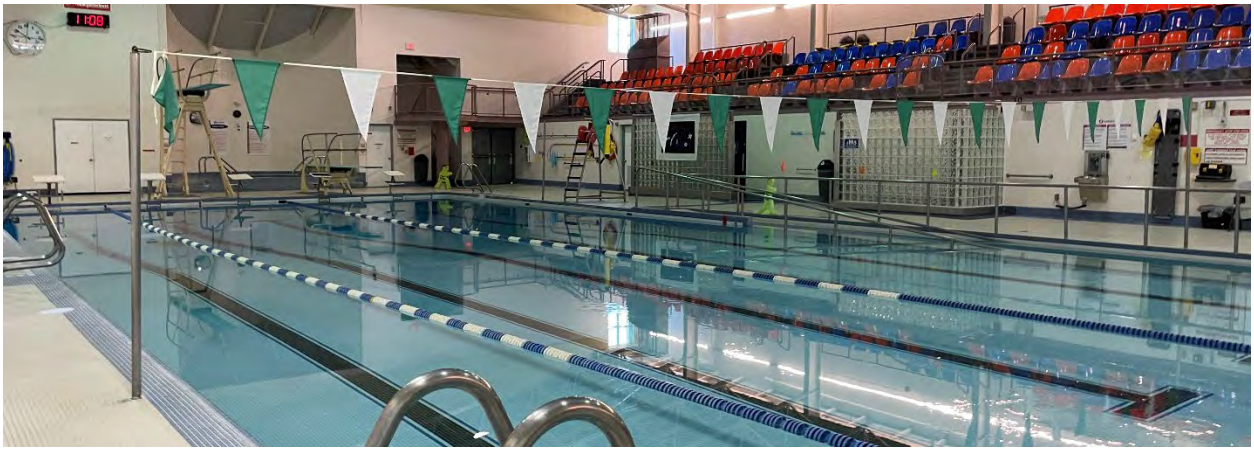
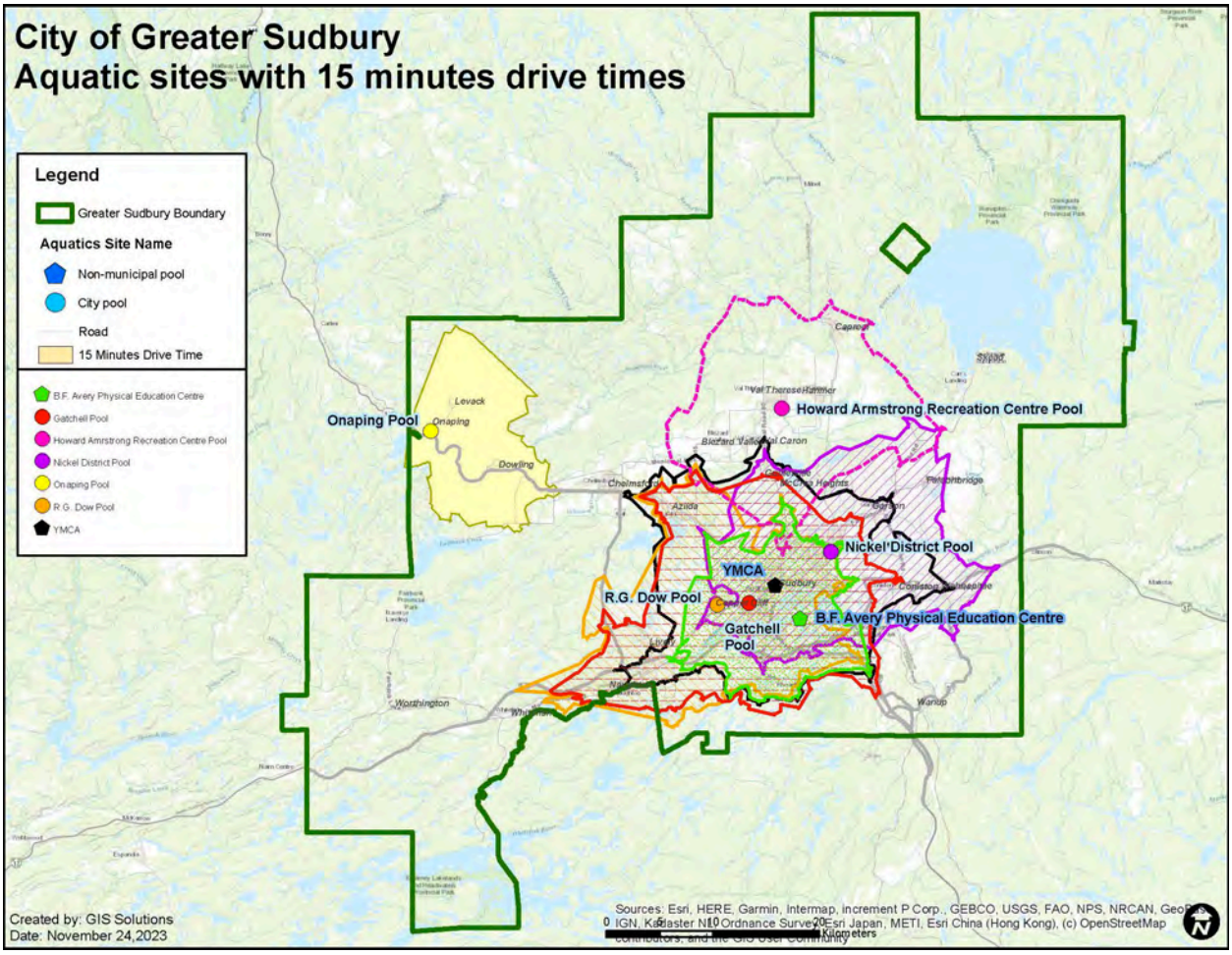
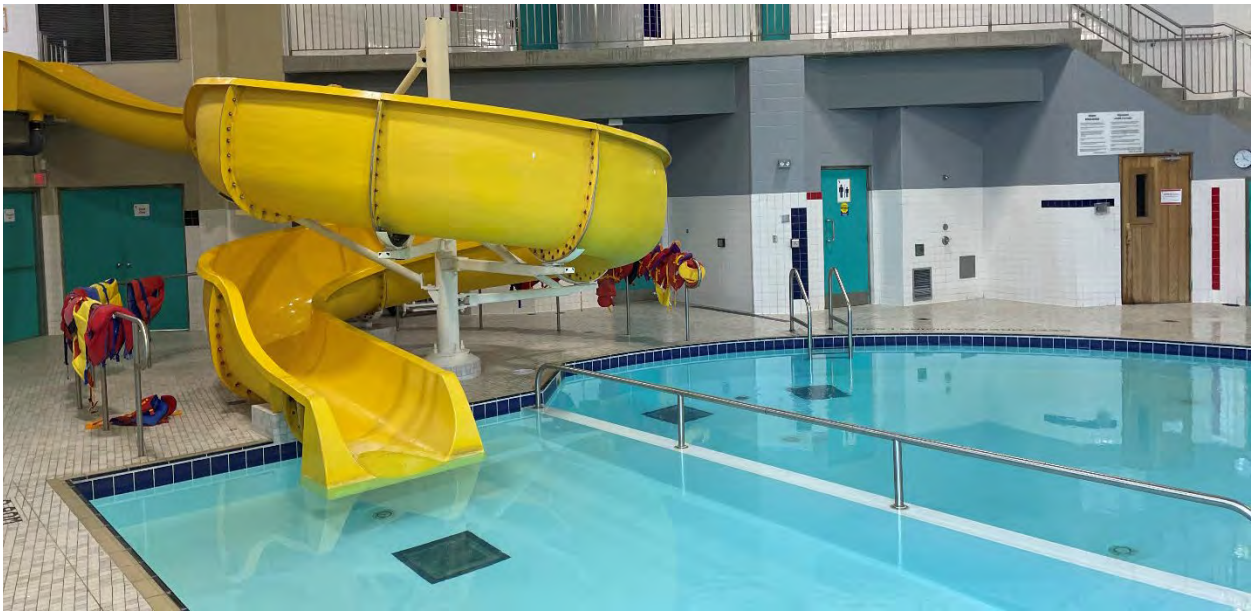


Figure 8: Indoor Pool Catchment Areas based on 15-minute travel times





Indoor Pool Demand Summary

Key findings from the various measures for assessing pool demand can be summarized as follows:

- There is available capacity within the City's system of indoor pool facilities and the City can accommodate current and projected needs within a reduced number of pools, now and into the future (2051).
- Utilization is likely impacted by aging facilities that do not fully meet program requirements and lack the accessible and multi-functional features required for broader participation.
- There is substantial overlap and duplication amongst pools in the Sudbury urban area (Gatchell, Nickel District, R.G. Dow, Sudbury YMCA, and Laurentian University) that is leading to lower usage in relation to the population served. Depending on the continued availability of non-municipal pools (both of which operate under a different model from City pools), there is sufficient available capacity to reduce the overall supply by at least one pool in the Sudbury urban area.
- The Onaping Pool serves a very small market relative to other City pools.

A long-term roadmap for indoor pool provision is identified in the next section of this report.

Strategic Directions – Demand Analysis and Future Needs
16. **Monitor usage trends and population forecasts** over the 25-year time frame of this Review and update the needs assessment as appropriate.

3.6 Indoor Pool Provision Strategies

The success and performance of indoor pools is driven largely by their proximity to people, functional and multi-use designs that can accommodate a range of activities, high quality programming aligned with demand, and co-locations with other municipal and recreational facilities (e.g., libraries, arenas, gymnasiums, etc.). As noted, the city has an over-supply of fitness and 25-metre community pools for its current and long-term needs. However, other than the Sudbury YMCA, there are no leisure pools that offer opportunities for warmer, shallower water or therapeutic activities to the public.

It is critical that pool design and function be aligned with needs. There is an over-supply of fitness and 25-metre community pools, but a lack of warm-water leisure pools.

Not only will new pool infrastructure be required to serve changing demographics and aquatic programming demand, but there will be a need to replace multiple existing pool tanks and/or buildings within the next 25 years given the age of the City's pools. By investing in new pools, the City will:

- increase in the quality of swimming experience, generating greater public benefit;
- create more capacity for future growth and new/expanded activities;
- have the potential to be more cost effective in the longer-term;
- reduce the environmental impact through modern operations and technologies; and
- extend building lives for 40-50+ years, compared to 10-20 years for substantially renovated facilities.

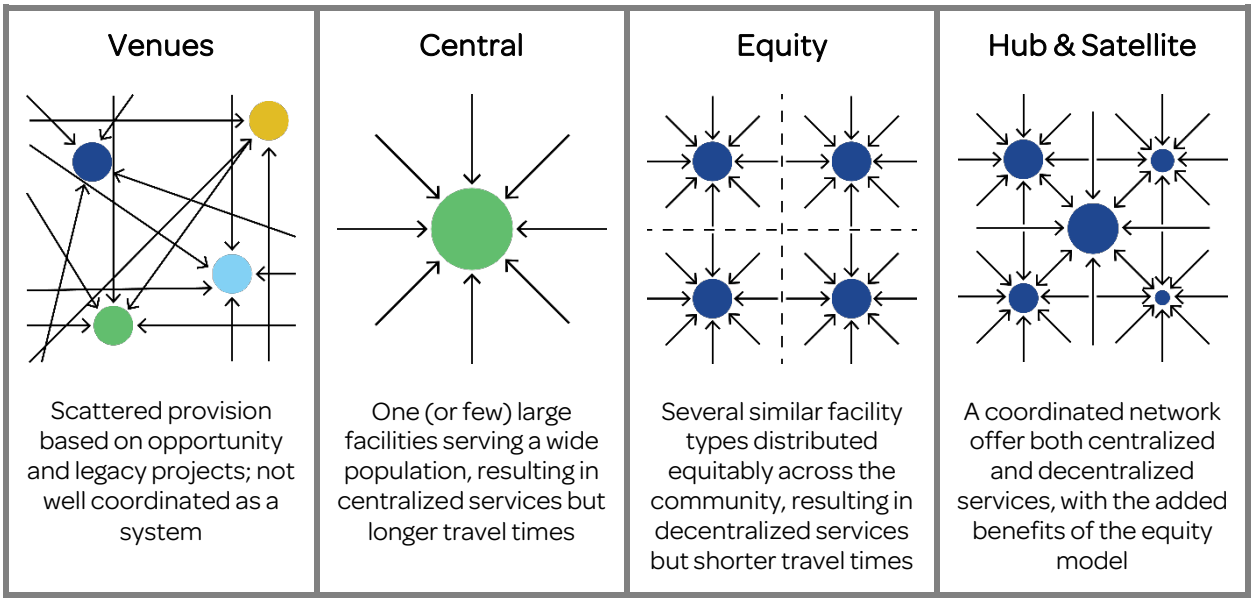
The previous analysis has found that the City requires fewer, but more updated aquatic facilities. At minimum, 5 publicly-accessible indoor pool locations are required, which is 2 fewer pools than are currently provided (including the University pool that is temporarily closed).

It is recommended that the City – along with other providers – contribute to a system that supports a minimum of 5 publicly-accessible indoor pool locations by 2051, including updated and/or expanded pools that achieve the target of one square metre of pool area per 85 persons (for a total of 2,220 square metres by 2051).

Pool Provision and Distribution Models

There are several approaches that the City can take to deliver an effective and sustainable aquatic facility network over the longer-term. Below are four conceptual distribution models that vary in approach and philosophy.

Figure 9: Conceptual Models for Aquatic Facility Distribution



The model that best describes the City's current aquatic provision is the "venues" model as the current stock of facilities were developed organically over the course of time, sometimes in response to opportunity but largely without a long-term vision or model in mind.

The preferred model for indoor pool provision in Greater Sudbury is the **"hub & satellite"** approach, as this:

- reflects a planned network of facilities that are designed to work together and achieve efficiencies, while maximizing access for residents;
- offers convenient access to several areas of the City through community-based pool sites ("satellites") that provide more common and higher demand activities such as swimming instruction, aquafitness, and recreational swimming; and
- recognizes the need for a larger and more centralized pool facility that offers a broader range of activities and services serving most populations, including sport training and competition – in this model, the "hub" would be a 50-metre competition pool.

The preferred model for indoor pool provision in Greater Sudbury is the "hub & satellite" approach.

A minimum population of 20,000 persons (and ideally 30,000 or more) within the primary market is required to achieve sustainable usage levels and operations.

For community-based pool sites ("satellites"), a minimum population of 20,000 persons (and ideally 30,000 or more) within the primary market (approximately a 15-minute drive) is recommended to achieve sustainable usage levels and operations. The more people that are drawn to a pool, the greater the program potential and financial performance. Experience has shown that pools within under-populated areas – even those designed to operate on a smaller template – will typically be unable to meet minimum municipal standards for service and financial sustainability.

As noted in the following table, there are only three Greater Sudbury communities (or collections of communities) with a population of 20,000 or more, either now or forecasted into the future.

Table 11: Indoor Pool Assessment for Greater Sudbury's Largest Communities

Community	Population within Market Area (2021)	Indoor Pools in Market Area	Strategic Direction
Sudbury Urban Area	Approximately **110,000 persons** live within a 15-minute drive of the downtown area.	This area is currently served by 3 municipal pools and 2 non-municipal pools.	There is significant overlap of service areas and an over-supply of pools in this area. The existing level of service should be rationalized.
Azilda & Chelmsford	Approximately **50,600 persons** live within a 15-minute drive of the Lionel E. Lalonde Centre.	This area is currently partially served by 2 municipal pools and 1 non-municipal pool. Chelmsford is outside the service area of an existing indoor pool.	Indoor pool provision in this community requires further rationalization and study as the community is already well served by nearby pools. If pursued, a new pool should be linked to the closure or re-purposing of an under-utilized pool in the vicinity.

Community	Population within Market Area (2021)	Indoor Pools in Market Area	Strategic Direction
Valley East	Approximately **27,000 persons** live within a 15-minute drive of the Howard Armstrong Recreation Centre.	This area is currently served by 1 municipal pool.	The existing level of service should be maintained. No additional pools are required.

Additionally, the **Onaping, Levack & Dowling area** has an existing municipal indoor pool, but falls well short of the minimum population threshold as less than 5,000 persons live within a 15-minute drive of the Onaping Pool. The Onaping Pool is under-sized by today's standards and is the oldest within the City's inventory. Any decision to provide indoor aquatic services in this area once the facility reaches the end of its functional life would be done so based on historic levels of service and/or political will.

There is no rationale for continued provision or investment in the Onaping Pool based on conventional demand metrics – it is not a pool that would be built today. This pool may be maintained with minimal investment for the time being, but requires a firm decision surrounding its future once it reaches the end of its functional life.

All other communities (or collections of communities) in Greater Sudbury fall well below the 20,000-resident threshold and should not be considered further for indoor pool provision.

Therapeutic/Leisure Pool Proposal

A feasibility study was completed in 2014 to examine the potential for a therapeutic/leisure pool at the Lionel E. Lalonde Centre in Azilda. The barrier-free facility was envisioned to accommodate children's swim lessons, aquatic fitness, and post-rehabilitation programs for the general population within a pool that is approximately 32 to 34 degrees Celsius. The preferred pool option was intended to support the City's aging population, offer an aquatic program that is unique to the City, and introduce indoor aquatic services to Azilda and surrounding area. For reference, the pool tank was estimated at 135 square metres (1,450 sf), which is nearly half the size of the R.G. Dow and Nickel District pool tanks and is under-sized compared to the types of pools typically being built today.

During 2021 budget deliberations, a business case to construct the Therapeutic/Leisure Pool at the Lionel E. Lalonde Centre was approved. The business case estimated the project cost at $5.69 million. The City had been awarded a $1 million grant from the Government of Canada's Enabling Accessibility Fund (EAF) for the project and there has been $100,500 raised through community fundraising efforts. The balance of the project is anticipated to be funded through municipal capital dollars.

In June 2021, a Request for Proposal for architectural services was awarded to Architects Tillmann Ruth Robinson. In the Fall of 2022, the City received design briefs and a Class D estimate for the project. The total project cost estimate received was $7.65 million (excluding professional fees, permits, furnishings & equipment escalation contingencies). Given recent cost escalations, the city should update this project estimate to current year dollars and apply an appropriate inflationary

factor. Council has deferred a decision on the Therapeutic/Leisure Pool to this Aquatic Service and Facility Review.

Through this Review, it is evident that the City's aquatic system is lacking a pool with this particular function and that a warmer-water pool would allow for much needed programming and activities to priority populations. The question is not whether or not a therapeutic/leisure pool should be considered further, but rather where the best location is for a facility of this nature, how it would complement the balance of the City's indoor pool provision strategy, and how best to maximize the impact of this investment.

In support of a pool in this location is that Azilda is approximately a 15 to 20-minute drive to its closest pools (HARC, R.G. Dow, and Onaping). While this is within a reasonable catchment area, it is near the outer edge of the preferred drive time thresholds. Data provided by the City suggests that a pool in Azilda would have the potential to serve a population of 50,600 within a 15-minute drive (growing to 54,800 by 2051).

However, contemporary pool designs include multiple tanks under one roof, such as a 25-metre pool (with deeper water and a water temperature of 28 degrees or less) and a smaller warm-water or therapy tank (with shallower water and a water temperature of 30 degrees or more). The potential financial performance of a multi-tank pool in one location is greater than if the pools were provided within two separate locations. A multi-tank aquatic centre would serve as a draw for the entire City of Greater Sudbury and is preferred over a smaller project with more limited benefit. The initial therapeutic pool proposal did not include multiple tanks and expanded programming that have become the norm in new aquatic facility design.

With a primary market population of 9,720 within Azilda and Chelmsford (as of 2021, growing to 11,030 by 2051), the area lacks the primary market to support a multi-tank facility. Given the high cost of new pool infrastructure, an investment of this nature which would be best situated in the Sudbury urban area, where it would serve a much larger population (approximately 100,000 to 110,000 persons).

On this basis, it is recommended that the therapeutic pool project be recategorized as a "warm-water/leisure" pool capable of meeting a broad range of needs, including but not limited to therapeutic recreation. Further, the scope of the project should be expanded to include a separate 25-metre community pool capable of offering complementary programming, and be positioned as a replacement facility for one or more aging pools. The location of the proposed aquatic centre should be examined further, with consideration of a location that would maximize accessibility to all Greater Sudbury residents.

The benefit of the proposed Lionel E. Lalonde Centre therapeutic/leisure pool project will be limited due to its small size and local market.

A multi-tank aquatic centre in a location that would maximize accessibility to all Greater Sudbury residents is preferred.

Recommended Long-term Indoor Pool Provision Strategy

Based on the key findings of this report – including the projected need for 2,220 square metres of pool area (municipal and non-municipal) by 2051 – the recommended provision approach includes a reduced level of provision mixed with strategic investments to improve the quality and longevity of offerings. The following may be achieved through a blend of pool re-purposing, revitalization, and development strategies. Where possible, new pools should be co-located with other public facilities.

Table 12: Recommended Long-term Indoor Pool Provision Strategy

Pool Type	Pool Description	Current Locations	Number of Locations by 2051	Approximate Size (total)
50-metre Competition Pool	50-metres, 8-10 lanes	1 (Laurentian University Pool)	1 (Laurentian University Pool)	900 m^2
Direction: Advocate for the revitalization or replacement of the Laurentian University Pool. The City's role in this initiative (if any) will be determined through a separate process.				
25-metre Competition Pool	25-metres, 6-8 lanes	1 (Gatchell Pool)	1 (to be determined)	375 m^2 (8 lanes would be 450 m^2)
Direction: Prepare a feasibility study to consider a new or revitalized 25-metre competition pool to replace one existing City pool. A site will be determined through future study.				
Community Pool and/or Leisure Pool	25-metre, 4-5 lanes with separate warm-water leisure tank (where possible)	3 (HARC, Nickel District, and R.G. Dow Pools)	2 (HARC and one to be determined)	580m^2
Direction: Prepare a feasibility study to consider a new multi-tank community and warmer-water leisure pool to replace two (2) existing pools. the proposal to build a therapeutic/leisure pool in Azilda should be re-evaluated as part of this study. Continue to maintain the Howard Armstrong Recreation Centre in a state of good repair.				
Fitness and Leisure Pool	20+ metres, 4-6 lanes with separate warm-water leisure tank	1 (Sudbury YMCA Pool)	1 (Sudbury YMCA Pool)	400 m^2
Direction: Work with the YMCA of Northeastern Ontario to ensure the continued availability of the Sudbury YMCA Pool.				
Teaching Pool	small pool less than 20-metres	1 (Onaping Pool)	0	n/a
Direction: Maintain the Onaping Pool with minimal investment for the short-term, but do not revitalize or rebuild the facility once it reaches the end of its functional life.				
Totals	--	7	5	2,265 m^2

These strategies will provide an estimated 2,265 square metres of pool area by 2051 to align with demand (2,220 square metres). No municipal pools in the Sudbury urban area should be removed from service until the long-term viability of the Laurentian University pool is resolved.

It is anticipated that the City will work with other key providers and stakeholders to leverage resources and implement the recommended provision strategy. This may be achieved through re-purposing and/or renovating existing aquatic facilities, building new aquatic facilities, and/or through institutional partnership arrangements that bring multiple parties together to shares costs and responsibilities for pools. Location assessments will need to be completed to identify options for development and redevelopment, with the goal of utilizing highly-accessible sites that serve the greatest number of residents. The re-purposing of selected pool sites will also be required, focusing on those sites that are at the end of their functional life and that are unable to meet key performance-based criteria.

The evaluation of pool provision strategies may consider the following criteria.

Table 13: Proposed Criteria for Evaluating Potential Pool Provision Strategies

Criteria	Description
Population served (current and future)	Considers whether there is insufficient local demand for the pool based on the current and forecasted population (based on travel time, market size, and capacity of nearby pools).
Pool condition	Considers the remaining functional life of the pool, level of required repairs/investment, and operational efficiency of the pool.
Pool design and accessibility	Considers the pool's accessibility to persons with disabilities and any design limitations that impede full programming or negatively affect the user experience.
Access to other pools	Considers the ability of the existing market to be served by other public indoor pools in the vicinity (15 to 20-minute travel time), with considerations of public transit.
Community impact	Considers the role the pool plays in the local community and the potential impact of any changes to the facility.
Financial viability	Considers the pool's financial performance and whether it represents an efficient use of public resources.

Cost Estimates for a New Multi-tank Aquatic Centre

The pandemic has had a dramatic effect on costs across all aspects of construction, from material and labour increases, as well as supply and demand. As inflation has risen and appears to be holding with minor corrections, the costs associated with construction have not receded. Post-pandemic budget costs for a traditional 25M pool have more nearly doubled in some cases to $750 to $950 per square foot. Site and soft costs can increase the overall project costs by approximately 30%. Costs can also vary due to the level of design, quality of materials, labour market, sustainability and environmental goals, and other factors. Escalating costs are causing many communities – including Greater Sudbury – to lose purchasing power on grants, reserves, and other static funding sources.

To inform Greater Sudbury's long-term strategies, the estimated cost to develop a new multi-tank aquatic centre (25m and warm-water pools) is approximately $33.8 million in current year dollars. This amount could vary by 20% in either direction, creating a range of $27.0 to $40.6 million depending on design decisions and other factors such as co-location. Land and remediation costs are excluded from this estimate.

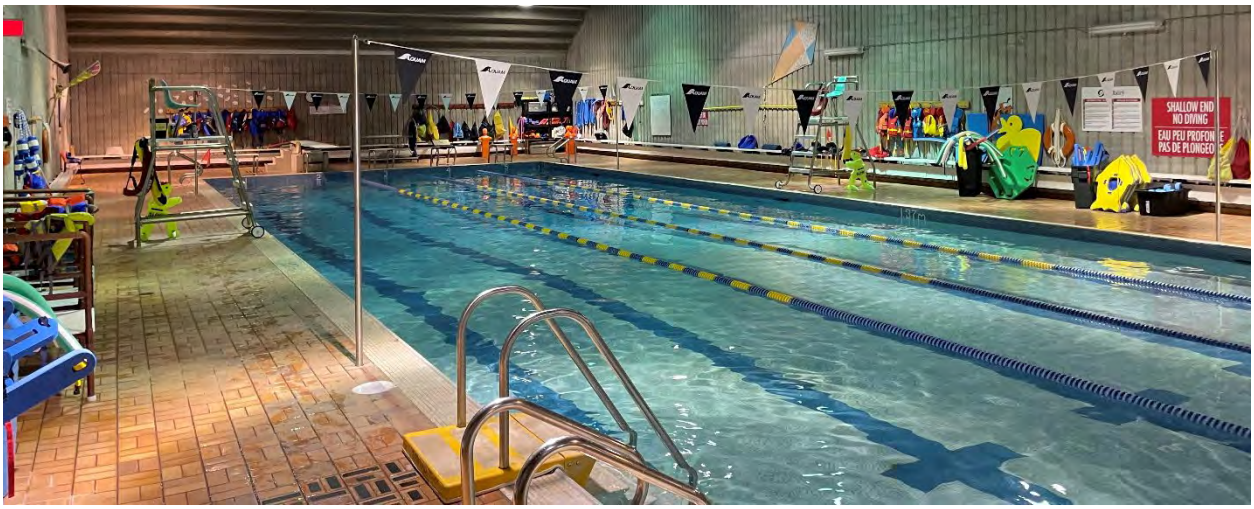
Estimated Capital Cost for Multi-Tank Aquatic Centre (25m and warm-water pools)

Component	Area (sf)	Estimated Cost
Natatorium (25M & Leisure Pool Basins)	9,800	$8,820,000
Change Rooms and Offices	6,000	$4,800,000
Public Circulation/Lobby	4,000	$2,800,000
Multi-purpose Rooms	1,500	$1,125,000
Mechanical and Service	4,500	$2,250,000
Gross-up Area (30% of above)	7,700	$5,900,000
Total Building (sf)	**33,500**	**$25,695,000**
Site Costs	n/a	$2,000,000
Construction Contingency (5%)	n/a	$1,400,000
Soft Costs and Contingency	n/a	$3,700,000
Project Total	**n/a**	**$32,795,000**

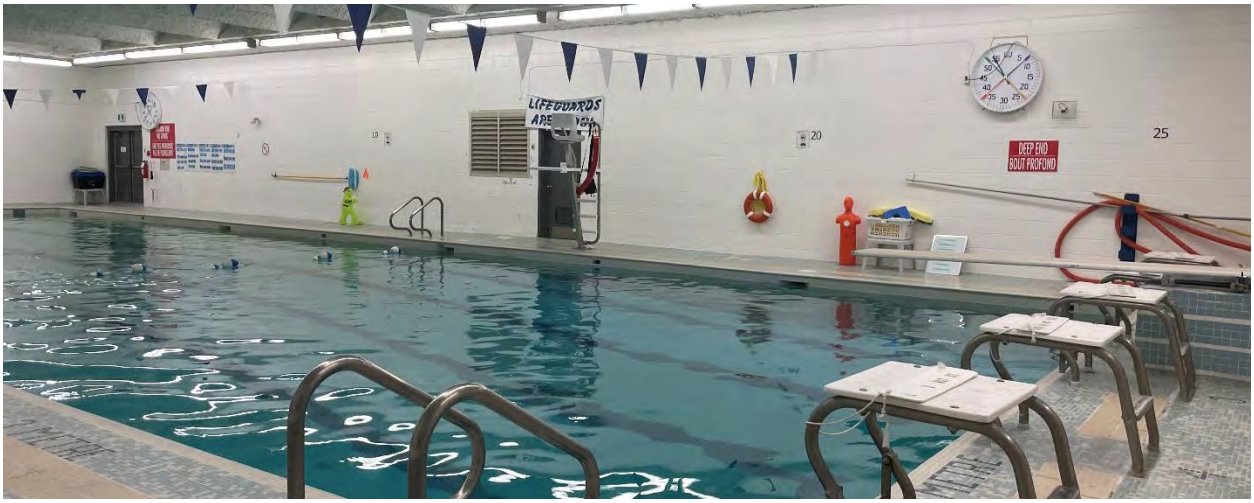
Notes: Figures shown in 2024 dollars. Includes LEED designation above Silver. Assumes Stipulated Sum Tender. Specific exclusions: Land Costs, Legal Costs, Environmental Remediation, On-Site Storm Water Management, Project Management.

Note: The preliminary Class D cost estimate (+/- 20%) for a multi-tank aquatic centre (25m and warm-water pools) is provided for illustrative purposes only and is to be confirmed through future study using market conditions at that time. Construction costs can vary significantly due to instability of material costs, labour costs, and other economic factors. The City is encouraged to include appropriate contingencies and account for inflation through its budget estimates, which should be refined through more detailed design processes closer to the time of implementation.

Additional cost and design examples are shown in **Appendix E**, which contains a high-level scan of recently built or renovated indoor pools in Ontario.



Strategic Directions – Indoor Pool Provision Strategies
17. Reduce the indoor pool supply to a minimum of **five (5) publicly-accessible indoor pool locations by 2051** (including both City and non-municipal pools) through attrition, capital improvement, and partnership opportunities. The goal should be to provide approximately 2,220 square metres of pool surface area within the aquatics system through a variety of pool types in accessible locations. This is two (2) fewer pool locations and approximately 330 square metres less than the present inventory. Achieving this will require a variety of strategies that maintain, revitalize, replace, and/or re-purpose existing pools. Criteria have been established to assist the City in evaluating specific projects. 18. Prepare **feasibility studies to develop two (2) new or expanded aquatic centres over time** to replace up to four (4) existing City pools. The proposal to build a therapeutic/leisure pool in Azilda should be re-evaluated as part of these studies. The two new aquatic centres may include: (1st priority) a multi-tank community/leisure pool with warmer-water options to allow for multi-level learn to swim, family swim, and fitness programming; and (2nd priority) a 25-metre competition pool with 6-8 lanes. Locations that maximize accessibility to Greater Sudbury residents should be made a priority and secured well in advance of construction. Where possible, new pools should be co-located with other public recreation facilities. 19. Maintain the **Onaping Pool** with minimal investment for the short-term, but do not revitalize or rebuild the facility once it reaches the end of its functional life. Consult with the public to identify and evaluate options for enhancing access to recreation programming. including but not limited to aquatic activities. 20. Evaluate options to **convert any decommissioned pools** to other community assets so that these sites can continue to serve the public in new ways.



Section 4. Supervised Waterfront Beaches

4.1 Key Findings from Phase 1 – Supervised Waterfront Beaches

With an abundance of natural assets across the city, there has been a reliance on supervised beaches to provide outdoor aquatic opportunities. Each of the City's seven (7) supervised waterfront beaches offer a designated swimming area marked by buoys. These areas focus on shallow water that provide free water orientation for small children and recreational swimming opportunities for all users. With rising summer temperatures, these locations have become an important part of the City's response to heat emergencies.

What we Heard Summary
(Phases 1 & 2)

- Address impacts from algae and geese
- Improve accessibility and shade
- Consider larger beach areas

Through Phase 1, residents offered their opinions on the City's supervised beaches and information was presented as to key amenities and recent usage patterns.

4.2 Beach Activities and Amenities

Activity at beaches occurs both in the water and on land. The sandy beach and adjacent open spaces and amenities are just as important to the overall beach experience as the water itself. Cleanliness, shade, grassy open space, seating, washrooms, changerooms, and other support amenities (e.g., beach volleyball courts, playgrounds, etc.) are key considerations in this regard. Being shoreline properties, some beaches also have steep slopes and limited parking areas, which can create accessibility challenges. Public feedback identified the importance of beaches along with a desire to find solutions to closures related to poor water quality and the need for improved accessibility, shade, parking, change rooms, washrooms, and other recreational amenities. Input from City staff also identified the need for upgraded equipment at some sites (e.g., lifeguard chairs) and improvements to lifeguard buildings (e.g., ventilated, air-conditioned spaces).

Table 14: Notable Supervised Beach Location Challenges and Opportunities (may not be a complete list)

Supervised Beach	Challenges & Opportunities
Bell Park Main Beach (Ramsey Lake, Sudbury)	• This beach is on public transit or active transportation routes, making it one of the City's most accessible locations; it is Blue Flag certified • A common public request was for larger beach areas – opportunities to safely extend the beach area should be considered
Capreol Public Beach (Marshy Lake, Capreol)	• The pool building is a temporary structure (trailer); a permanent building may not be viable due to site limitations; active maintenance of the trailer will help to support continued use of this beach • Location lacks shade; potential to install shade sail and/or trees should be considered
Centennial Park Beach (Vermilion River, Whitefish)	• This is a temporary beach location, created through the closure of Meatbird Lake Beach in Lively; additional direction on the continuation of aquatic services in this area will be provided through the Lively Recreation Advisory Panel

Supervised Beach	Challenges & Opportunities
Kalmo Beach (Whitson Lake, Val Caron)	• Implement the ten-year master plan prepared for this site, with a focus on improvements to circulation, accessibility, parking, wayfinding and support facilities
Moonlight Beach (Ramsey Lake, Sudbury)	• This beach is the City's busiest and has recently undergone a number of improvements; it is Blue Flag certified • The City could consider broadening the range of activities at this location, such as though offering kayak and paddleboard rentals
Nepahwin Beach (Nepahwin Lake, Sudbury)	• The support building at this location is the oldest amongst all City beaches (1966); despite recent improvements, replacement of this structure should be considered within the timeframe of this plan
Whitewater Lake Park (Whitewater Lake, Azilda)	• This site is well used and has newer supporting amenities for users

To address these and other challenges, it is recommended that the City undertake scoped site planning exercises (such as the one recently completed at Kalmo Beach) at its beach locations. The aim is to improve safety, accessibility, and sustainability of the sites and to ensure that appropriate amenities (e.g., changerooms, washrooms, staff space, shelter, parking, etc.) are provided. Priority candidates include Nepahwin Beach, Bell Park Main Beach, and Capreol Beach.

Improvements to support amenities (e.g., changerooms, washrooms, staff space, shelter, parking, etc.) at key beach locations should be prioritized to enhance safety, accessibility, and sustainability.

Greater Sudbury's beaches are not typically used for lessons or formal aquatic training as this service is provided by indoor pools. However, this is a common option in many communities within the near north. For example, Parry Sound, Huntsville, Gravenhurst, and Orillia are among the many municipalities that offer swimming lessons at selected beach locations. While there is capacity for lessons within indoor pools during the summer, the opportunity to introduce swimming classes at public beaches at locations without nearby access to indoor pools may be piloted on an as-needed basis.

4.3 Beach Locations – Current Gaps and Future Needs

The City's 7 supervised beaches are distributed throughout Greater Sudbury, providing equitable access to most communities. These beaches are especially important in outlying areas where drive times are typically longer to other aquatic facilities.

As a general principle, the City should not decrease the current number of supervised beach locations. These sites are becoming more important given the warmer summer weather and increased immigration and tourism within Greater Sudbury – the importance of safe environments for water play is critical in this regard. In 2023, City lifeguards recorded a total of 33 safety incidents, including 4 rescues at supervised beaches.

In terms of distribution, outlying communities without public supervised beaches all have populations below 5,000 persons:

- **Lively** – this area is currently served by a temporary beach location at Centennial Park in Whitefish; the Lively Recreation Advisory Panel is currently considering options to develop new recreational opportunities (including the possibility of aquatic facilities) in the area using proceeds from the sale of Meatbird Lake Park;
- **Garson/Falconbridge** – the closest options for this area are Kalmo and Moonlight beaches; this area is lacking larger lakes and properties that could feasibly serve as public beaches; and
- **Onaping/ Levack/Dowling** – this area is also served by the Windy Lake Provincial Park (containing a large, buoyed swimming area; requires paid admission) and Onaping Pool.

No new supervised beaches are recommended at this time, but may be considered within the communities identified above on a case-by-case basis, evaluated against **criteria** such as:

- gaps in service (geographic location, catchment population);
- proximity to other opportunities (unsupervised public beaches, indoor pools, splash pads);
- site ownership and suitability (e.g., accessibility, supporting amenities, parking, compatibility, etc.);
- environmental conditions and implications (e.g., water quality, etc.);
- community engagement;
- costs and financial viability.

Supervised beaches provide equitable access to residents across the city and are well situated to serve the highest priority needs.

4.4 Beach Management and Operations

Although the City's seasonal beaches do not offer any direct revenue, they are critical supports that have a relatively low carrying cost. Promotion and marketing of these locations should be reviewed and enhanced to ensure that they are well known to visitors and new residents.

Furthermore, staffing and compensation levels for the waterfront program should be reviewed to ensure that there are sufficient supervisory and front-line staff. Attracting and retaining enough lifeguards for the City's supervised beaches has been a challenge, partly due to the seasonal nature of the work and the pay scale (e.g., lifeguards at beaches are paid less than lifeguards at pools). As certifications can be expensive, some municipalities are actively seeking to reduce these costs and/or offer free training opportunities as an incentive to attract and retain qualified staff – this may be an option for the City to consider further. Coordinating the lifeguard rotations at beaches with those at Camp Sudaca (which is currently managed by a separate unit) may also help in this regard.

The consultation program found concern over water quality issues (e.g., algae blooms) and geese droppings in some locations, which has negatively impacted participation. These conditions are affected by many factors, including higher summer temperatures. In order to maintain the beach program, continued water quality monitoring and solutions to improve water quality and the goose population are required.

Strategic Directions – Supervised Waterfront Beaches

21. Implement the recommendations of the **Kalmo Beach 10-year Plan**, prioritizing those projects that improve circulation, accessibility, parking, wayfinding and support facilities (washrooms and changerooms).
22. Undertake **scoped site planning exercises** (such as the one recently completed at Kalmo Beach) at existing beach locations to improve safety, accessibility, and sustainability of the sites and support buildings. Priority candidates include Nepahwin Beach, Bell Park Main Beach, and Capreol Beach.
23. Work with the Lively Recreation Advisory Panel to maintain and enhance public outdoor swimming opportunities within the **Lively/Walden area**, informed by the findings of this Aquatic Service and Facility Review.
24. Explore options for **enhancing the range of services and experiences at selected beach locations**, such as offering water sports equipment rentals at Moonlight Beach.
25. Conduct a review to determine the viability of **piloting swim lessons** at public beach locations in areas without access to indoor pools.
26. Continue to **collect beach visitation and rescue data** to inform future planning and service reviews.
27. Enhance the City's beach program through continued water quality monitoring and solutions to **improve water quality and reduce geese impacts**, in partnership with aligned agencies.
28. Regularly review **staffing levels and compensation** for the waterfront program and explore initiatives aimed at attracting and retaining qualified staff.
29. Review and enhance **promotion and marketing** of the City's supervised beaches to ensure that they are well known to visitors and residents.

Section 5. Splash Pads

5.1 Key Findings from Phase 1 – Splash Pads

Splash pads are free, accessible, neighbourhood-level amenities that offer children and their families an introduction to water and opportunities to cool off on warm days. As cooling features, they also form an important part of the City's heat emergency action plan. These amenities are scalable in size and can offer a variety of designs and features including ground sprays, interactive play, overhead sprays, themed or sculptural elements, different zones, and spray pressures for different ages.

What we Heard Summary
(Phases 1 & 2)

- Consider larger, more creative splash pad designs
- Ensure an appropriate distribution (within walking distance of homes)
- Continue to ensure safe spaces for children

Splash pads are part of a network of outdoor aquatic facilities which also includes supervised beaches. Prior to the 2014 MP, the City had 8 splash pad sites – 9 have been built since that time, for a total of 17 locations.

5.2 Splash Pads – Current Gaps and Future Needs

Splash pads provide opportunities for unstructured, spontaneous play, and are a great way to activate public spaces. Most municipalities strive to provide them in higher-order parks that serve multiple neighbourhoods and are complementary to other on-site facilities such as playgrounds, washrooms, shade, seating, and off-street parking. At minimum, access to water and wastewater infrastructure is a requirement.

The City does not have usage data for its spray pads as they are casual use amenities. Nevertheless, capacity and usage seldom influence the decision to install new splash pads, but rather municipalities tend to prioritize accessibility to children and the overall play value. The number of children (ages 0 to 9 years) increased by 3% in Greater Sudbury between 2011 and 2021 and are further expected to increase by 7% by 2051, suggesting slow growing demand for facilities of this type.

Splash pads are best provided in areas with higher residential densities, lower household incomes, and more children. Areas that lack public beaches may also be considered higher priorities. Locations should align within community park sites with supporting amenities (e.g., washrooms, parking, shade, seating, etc.) that can serve a larger population catchment. The survey found that a lack of shade and lack of washrooms were among the top things keeping families from using splash pads more.

Splash pad needs were last studied as part of the City's 2014 Parks, Open Space & Leisure Master Plan, which used a 1.5 km service radius and identified a series of localized gaps to be addressed through future capital projects. Recommendations from 2014 included adding 7 to 8 new splash pad locations, 6 of which have since been completed:

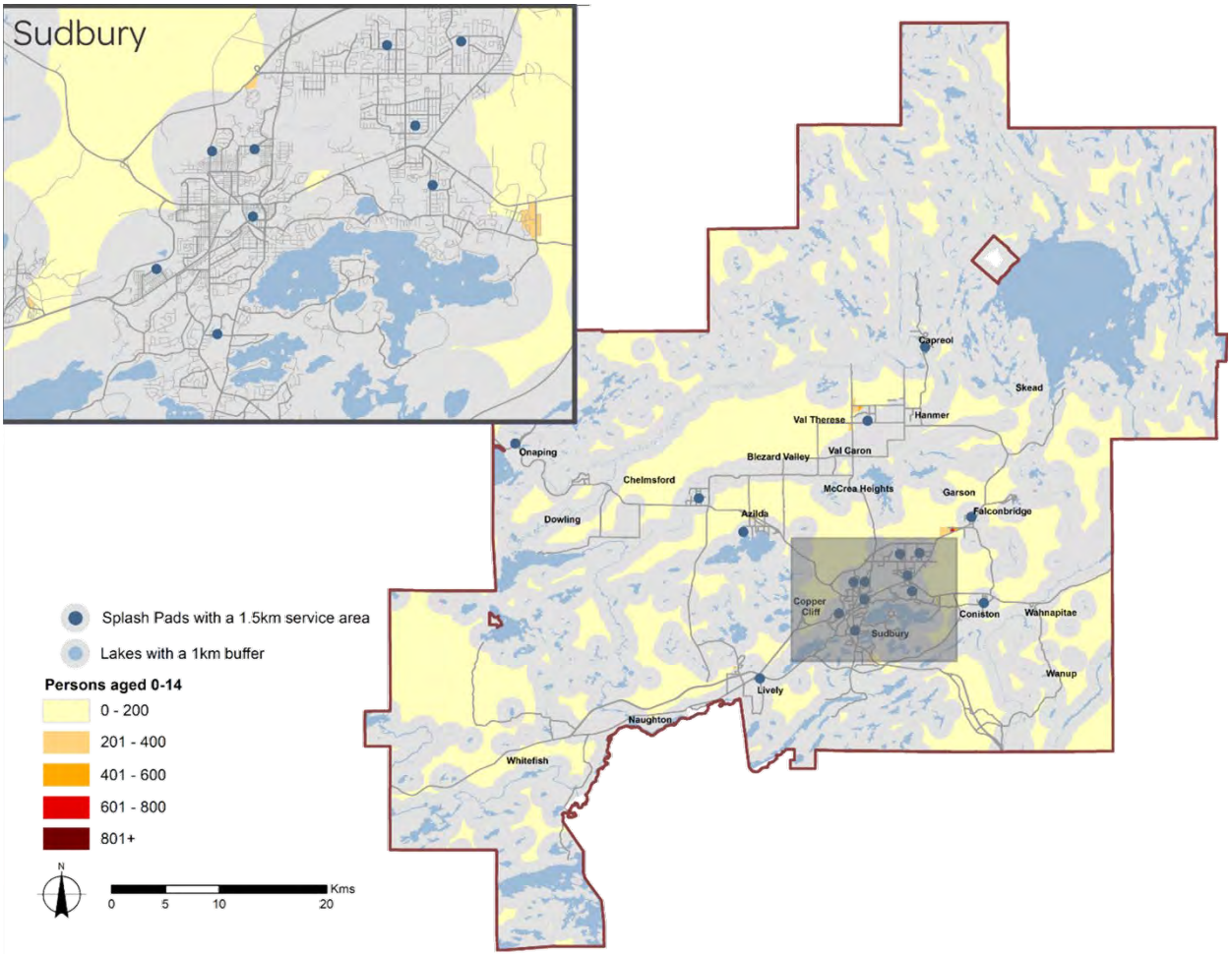
- Garson (built at Lions Park);
- Onaping/Dowling (built at Onaping Community Centre)
- Capreol (built at Doug Mohns Park)

- Sudbury, South End and/or Bell Park (built at DJ Hancock Memorial Park);
- Sudbury, Minnow Lake (built at Morel Family Foundation Park / Adamsdale)
- Azilda (built at Whitewater Lake) – lower priority, to be evaluated further; and/or
- Val Caron (no site identified) – lower priority, to be evaluated further if supported by public demand at the time of a park redevelopment project.

The following map illustrates the distribution of the child population in relation to splash pads and lakes, which combine to provide swimming and cooling off opportunities in the summer. Based on these distances, there are no significant gaps in distribution that would warrant the provision of a splash pad at this time.

Splash pads are well distributed and there are no significant gaps. The City should strive to maintain its inventory of 17 sites moving forward.

Figure 10: Coverage of Splash Pads and Lakes in Relation to Child Population



Another way to examine equity is using per capita provision levels. Using the population data collected in Phase 1, the following table illustrates the provision of splash pads within each community by population. The City is currently providing splash pads at a rate of one per 10,015 residents. Every group of communities has at least one splash pad; only rural areas are without as they do not have the water services and population density required for provision. On the basis of this analysis, no new

splash pads are recommended at this time and the City should strive to maintain its inventory of 17 sites moving forward.

Table 15: Splash Pad Per Capita Provision Rates (all ages) by Community

Community	Existing Splash Pads	2021 Population	2021 Per Capita Ratio
Sudbury	9	87,950	9,772
Valley East & Capreol	2	17,450	8,725
Azilda & Chelmsford	2	9,720	4,860
Garson & Falconbridge	1	6,950	6,950
Lively & Whitefish	1	4,530	4,530
Onaping, Levack & Dowling	1	2,920	2,920
Coniston & Wahnapitae	1	1,640	1,640
Outside of a Settlement Area	0	39,090	--
Entire City	**17**	**170,250**	**10,015**

Population Source (all ages): Hemson Consulting Ltd.

Lastly, although outdoor wading or swimming pools are sometimes viewed as an alternative to splash pads or beaches, their provision is not recommended due to the availability of indoor pools and natural lakes, as well as their operational challenges (e.g., short season, lifeguarding, etc.) and high costs.

5.3 Splash Pad Design and Operations

As shown in the table below, each of the city's 17 splash pad locations are in parks with a playground, which help to solidify them as destinations for children and families. Off-street parking is available at most sides (only Centennial Park and Victory Park are without). Approximately half of the sites have permanent washrooms, with the remaining using portable washrooms. Shade and seating are available to varying degrees at most parks, but stand out as areas that could be improved, with approximately 30% to 40% of sites only having partial coverage. Furthermore, most sites do not have accessible pathways leading from the parking lot or sidewalk to the splash pad.

Table 16: Listing of Amenities at Splash Pad Locations
Legend (● = Yes/Present; O = Partial/Temporary; ⊘ = No/Absent)

Splash Pad / Amenities	Playground	Washrooms	Off-street Parking	Shade	Seating
Centennial Park / Adélie (Coniston)	●	O	⊘	●	⊘
Doug Mohns Park (Capreol)	●	O	●	●	O
Côté Park (Chelmsford)	●	O	●	●	●
DJ Hancock Memorial Park (Sudbury)	●	O	●	●	●
Delki Dozzi Park (Sudbury)	●	●	●	●	●
Lions Park (Garson)	●	O	●	⊘	O
Howard Armstrong Recreation Centre (Valley East)	●	●	●	●	●

Splash Pad / Amenities	Playground	Washrooms	Off-street Parking	Shade	Seating
Kinsmen Sports Complex (Walden)	●	●	●	○	●
Memorial Park (Sudbury)	●	●	●	●	●
Morel Family Foundation Park / Adamsdale (Sudbury)	●	●	●	⊘	●
O'Connor Playground (Sudbury)	●	○	●	●	●
Onaping Community Centre (Onaping)	●	○	●	●	●
Ridgecrest Playground (Sudbury)	●	○	●	○	○
Twin Forks Playground (Sudbury)	●	●	●	○	○
Victory Park (Sudbury)	●	○	⊘	●	●
Westmount Playground (Sudbury)	●	●	●	●	⊘
Whitewater Lake (Azilda)	●	●	●	●	○

Relative to other infrastructure in the City, Greater Sudbury's splash pads are generally younger as a group. However, based on Canada's 2020 Core Public Infrastructure Survey, the average expected useful life of a new outdoor splash pad is 23 years. The City's oldest facility was installed at Memorial Park in 1999 (which also serves as a decorative water feature) and it has already reached this age. The City can expect several other splash pads to require replacement in the coming years.

Redevelopment of aging splash pads will present an opportunity for the City to upgrade older systems to modern standards. Many of the City's older splash pads are small and simple, and do not include designs that would fully engage a child's imagination or offer opportunities for intergenerational participation. The survey found that the City's larger splash pads are the best used locations. Greater variety in scale and design is recommended as splash pads are redeveloped, particularly those at destination parks.

Greater variety in scale and design is recommended as splash pads are redeveloped, particularly those at destination parks.

Mechanical systems are another consideration for redeveloped splash pads. Currently, the City's splash pads operate on an "on demand" cycle using hand activated sensors that help to minimize water use. Greater Sudbury's splash pads are "flow through / drain to waste" water management systems, meaning that water is directed to sewers. Technologies for these systems are constantly evolving, now focussed more on efficiency and lower environmental impacts. Grey water systems that allow for the discharge to be used for irrigation purposes may be worth investigating in the future through redevelopment projects at selected sites.

Strategic Directions – Splash Pads
30. Maintain the current **number of splash pads** (17) moving forward. A new installation may be considered at Val Caron in the longer-term if supported by public demand at the time of a park redevelopment project. 31. Complete **shade and accessibility audits for all splash pad sites.** Identify priority sites in need of site amenity upgrades (e.g., accessible paths, seating, shade, etc.). 32. Conduct lifecycle audits and determine **preliminary replacement schedules for all splash pads**. Incorporate these capital replacement priorities into the City's long-term capital forecast. Further, evaluate options for recycling splash pad water outflows for grey water purposes (e.g., irrigation) at time of replacement. 33. Upgrade and enhance **splash pads at destination locations** (such as Howard Armstrong Community Centre, Memorial Park, Coté Park, etc.) at the time of replacement. Seek **community fundraising and sponsorship** to assist in elevating these key sites beyond a basic level of service**.**

Section 6. Study Implementation

This Aquatic Service and Facility Review is a multi-year phased strategy intended to guide the actions, responsibilities, and budget decisions of the City relating to aquatic infrastructure and improvements. This section establishes a clear action plan for implementing the report. All strategic directions are summarized herein, along with priorities, timelines, and high-level costs. Funding sources and partnership considerations are also discussed.

6.1 Summary of Strategic Directions, Timing, and Cost Estimates

By approving this Review, the City is not bound to implementing every strategic direction or providing facilities/services in the order, amount or timing indicated; rather, this Plan provides guidance on community priorities and sets a general course for meeting the needs as they are presently defined. As part of the annual budget process, lead departments will review this report to confirm priorities and areas where the availability of resources may affect the timing of implementation. Analysis of options and budget implications should be undertaken prior to approving major projects. The timelines, order of tasks, and costs are subject to change based on new information or alterations to project scope.

The City has limited resources and cannot afford to implement this plan all at once. The timing of the proposed projects recognizes the need for phased implementation as some strategic directions are based upon what is needed and not necessarily what is financially achievable at the present time. The full implementation of this Plan will require the use of a variety of municipal funding sources, grants, fundraising, and assistance from partners and the community.

Determining priorities is an exercise that should be revisited each year prior to the City's budget development exercise. **It is expected that the City will make decisions on individual projects and funding sources through the annual budget process.**

In addition to funding availability, factors that might affect priorities may include:

- capital lifecycle and considerations of safety;
- legislation and mandated requirements;
- changes to service standards;
- public input and community interests;
- emerging trends and changes in participation rates;
- availability of alternate providers and/or partnership opportunities; and
- socio-demographic changes and growth forecasts.

Priority is often, but not always, synonymous with timing – the higher the priority, the sooner the recommendation should be implemented. Priority has been determined based on an assessment of need, as identified throughout the planning process (including public engagement, trend and demographic analysis, assessments of amenities and services, etc.). Generally, municipalities seek to address the widest range of needs and achieve maximum community benefit through the efficient use of resources.

Within the tables that follow, the timing and priority of strategic directions are organized into the following categories:

Timing
(aligned with 4-year Council terms)

- **Short-term:** 2025 to 2034
- **Mid-term:** 2035 to 2042
- **Longer-term:** 2043 to 2051
- **Ongoing:** Guidelines and practices to be followed on a continual basis

Priority

- **High Priority:** Immediate attention is recommended during the timeframe recommended.
- **Medium Priority:** Attention is required when high priority recommendations have been initiated or completed, or when suitable partners have been identified for funding.
- **Lower Priority:** Attention is required when high and medium priority recommendations have been initiated/completed.

The strategic directions in the following tables are numbered according to the order in which they are presented in the body of this report. They are not listed in priority order.

Table 17: Indoor Pools – Implementation Strategy

#	Strategic Directions	Timing	Priority
1.	Acknowledge the delivery of **instructional and lifelong recreational aquatic programs and activities as a core service** of the City of Greater Sudbury. While the City also strives to accommodate aquatic sport, training, and competition uses within its pools, these specialized services are typically delivered by other organizations and institutions, sometimes in partnership with the City.	Ongoing	High
2.	Increase the number of visits to City indoor pools by **expanding the range of aquatic programming** during available prime and non-prime time hours, as resources allow. Some options include new forms of aquatic exercise, youth programming, adaptive swimming (in partnership with others), and specialized programs that would help to increase participation rates. Beyond standard programs, the range of activities may vary between City of Greater Sudbury pool facilities.	Ongoing	High
3.	Regularly review **staffing requirements** within the City's aquatics division to respond to pent-up demands and opportunities for more specialized programming. Continue to offer and support training and leadership development for lifeguards and instructors with the goal of bolstering the full-time staffing complement.	Ongoing	High
4.	Develop an **aquatic allocation policy** to establish fair, equitable, and transparent guidelines for providing access to pool time in Greater Sudbury, ensuring that activities and organizations are aligned with the proper facilities and times in keeping with their requirements.	Short-term	Medium
5.	Regularly **review pool admission, program, and rental fees** to balance the overall goal of increasing participation while achieving revenue targets. Pool rental fees should be aligned with a cost recovery target that is linked to the cost to provide the service, in addition to comparisons to the market. Additionally, the review should address the standardization of aquafit fees and packages across all City pool sites in the short-term.	Short-term	High

#	Strategic Directions	Timing	Priority
6.	Establish a **classification system** for City pools that allows for some differentiation in use, especially within the Sudbury urban area. Suggestions include: a) Classify a minimum of two existing pools as **"sport-friendly pools"** capable of hosting athletic training and local/regional meets when required. Each facility should be supported by a complete set of starting blocks, lane ropes, scoreboard, and sound system. These pools should be maintained at a temperature of 82 to 84 degrees Fahrenheit. b) Evaluate the potential to **increase the water temperature** at one municipal pool in the Sudbury urban area to better accommodate aquafitness, swimming lessons, and recreational swimming in one location as part of a pilot project. This pool should be maintained at a temperature of 88 to 90 degrees Fahrenheit.	Short-term	Medium
7.	**Increase spending on indoor pool capital repair and rehabilitation** to keep pace with rising needs. Annual funding levels for aquatic infrastructure should be aligned with asset-based lifecycle requirements. Prioritize features that support health and safety, accessibility (e.g., AODA-compliant spaces, etc.), asset management, modernization, sustainability (e.g., operational efficiency, technologies, etc.), and the user experience (e.g., support spaces, etc.). Where major facility rehabilitation is required, coordinate capital improvements within a single project to achieve efficiencies and create a greater impact for users.	Ongoing	High
8.	Integrate **accessible design practices** and **innovative technologies** into all retrofitted and new pool facilities to improve customer service, operational efficiencies, and building sustainability (including reducing water and energy consumption).	Ongoing	High
9.	Ensure that **pool operators** receive regular training on pool systems and initiatives that benefit the user experience and operational efficiencies (e.g., turnover rates, etc.).	Ongoing	High
10.	Update and enhance **preventative maintenance plans** for all pools to help prevent costly repairs and breakdowns and to eliminate any potential health hazards.	Short-term	High
11.	Refine **annual performance measures** to track progress and efforts to continually improve service and efficiency at City pools.	Short-term	Medium

#	Strategic Directions	Timing	Priority
12.	Recognizing that **Laurentian University** and the **YMCA of Northeastern Ontario** are important contributors to the City's aquatic network, consider establishing **"service agreements"** with these key pool operators. Among other issues, provisions in the agreements could specify which services are to be provided by the partner, how service qualities are controlled, relevant facility management expectations, and applicable operating procedures. The City and each partner should regularly and jointly coordinate cooperative services to maximize the community benefits of the partners' roles in the delivery of community-based aquatic services.	Short-term	High
13.	Encourage **Laurentian University** to begin planning for the major revitalization or replacement of the Jeno Tihanyi Pool within the 25-year horizon of this plan. A **business plan** may be prepared to more fully define aquatic programming, public access, design considerations, location options, operating model, and capital and operating cost-sharing options. An economic impact assessment would also assist in identifying the facility's overall contribution to local tourism and spending, helping to make the case for grant funding.	Short-term	High
14.	Continue to support and enhance **relationships with school boards** to bolster the delivery of a spectrum of aquatic opportunities on co-located sites and through programming (e.g., Swim to Survive).	Ongoing	High
15.	Given the important role of the **YMCA pool** in contributing to aquatic services within Greater Sudbury, and recognizing the existing relationship between the City and the YMCA of Northeastern Ontario through their condominium agreement, establish a **communications framework** through which the YMCA and the City can share relevant information about YMCA's aquatic program accomplishments, challenges, and mitigation strategies, as well as plans for future program growth and development.	Short-term	High
16.	**Monitor usage trends and population forecasts** over the 25-year time frame of this Review and update the needs assessment as appropriate.	Ongoing	Medium

#	Strategic Directions	Timing	Priority
17.	Reduce the indoor pool supply to a minimum of **five (5) publicly-accessible indoor pool locations by 2051** (including both City and non-municipal pools) through attrition, capital improvement, and partnership opportunities. The goal should be to provide approximately 2,220 square metres of pool surface area within the aquatics system through a variety of pool types in accessible locations. This is two (2) fewer pool locations and approximately 330 square metres less than the present inventory. Achieving this will require a variety of strategies that maintain, revitalize, replace, and/or re-purpose existing pools. Criteria have been established to assist the City in evaluating specific projects.	Ongoing	High
18.	Prepare **feasibility studies to develop two (2) new or expanded aquatic centres over time** to replace up to four (4) existing City pools. The proposal to build a therapeutic/leisure pool in Azilda should be re-evaluated as part of these studies. The two new aquatic centres may include: (1st priority) a multi-tank community/leisure pool with warmer-water options to allow for multi-level learn to swim, family swim, and fitness programming; and (2nd priority) a 25-metre competition pool with 6-8 lanes. Locations that maximize accessibility to Greater Sudbury residents should be made a priority and secured well in advance of construction. Where possible, new pools should be co-located with other public recreation facilities.	Short-term	High
19.	Maintain the **Onaping Pool** with minimal investment for the short-term, but do not revitalize or rebuild the facility once it reaches the end of its functional life. Consult with the public to identify and evaluate options for enhancing access to recreation programming. including but not limited to aquatic activities.	Short- to Mid-term	Medium
20.	Evaluate options to **convert any decommissioned pools** to other community assets so that these sites can continue to serve the public in new ways.	Ongoing	Medium

Table 18: Supervised Waterfront Beaches – Implementation Strategy

#	Strategic Directions	Timing	Priority
21.	Implement the recommendations of the **Kalmo Beach 10-year Plan**, prioritizing those projects that improve circulation, accessibility, parking, wayfinding and support facilities (washrooms and changerooms).	Short-term	High
22.	Undertake **scoped site planning exercises** (such as the one recently completed at Kalmo Beach) at existing beach locations to improve safety, accessibility, and sustainability of the sites and support buildings. Priority candidates include Nepahwin Beach, Bell Park Main Beach, and Capreol Beach.	Short-term	High
23.	Work with the Lively Recreation Advisory Panel to maintain and enhance public outdoor swimming opportunities within the **Lively/Walden area**, informed by the findings of this Aquatic Service and Facility Review.	Short-term	High
24.	Explore options for **enhancing the range of services and experiences at selected beach locations**, such as offering water sports equipment rentals at Moonlight Beach.	Ongoing	Lower
25.	Conduct a review to determine the viability of **piloting swim lessons** at public beach locations in areas without access to indoor pools.	Short- to Mid-term	Medium
26.	Continue to **collect beach visitation and rescue data** to inform future planning and service reviews.	Ongoing	Medium
27.	Enhance the City's beach program through continued water quality monitoring and solutions to **improve water quality and reduce geese impacts**, in partnership with aligned agencies.	Ongoing	High
28.	Regularly review **staffing levels and compensation** for the waterfront program and explore initiatives aimed at attracting and retaining qualified staff.	Ongoing	High
29.	Review and enhance **promotion and marketing** of the City's supervised beaches to ensure that they are well known to visitors and residents.	Ongoing	Medium

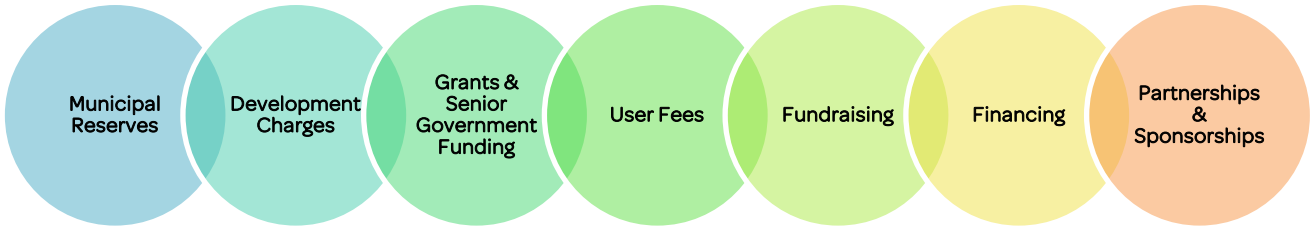
Table 19: Splash Pads – Implementation Strategy

#	Strategic Directions	Timing	Priority
30.	Maintain the current **number of splash pads** (17) moving forward. A new installation may be considered at Val Caron in the longer-term if supported by public demand at the time of a park redevelopment project.	Ongoing	Lower
31.	Complete **shade and accessibility audits for all splash pad sites.** Identify priority sites in need of site amenity upgrades (e.g., accessible paths, seating, shade, etc.).	Short-term	High
32.	Conduct lifecycle audits and determine **preliminary replacement schedules for all splash pads**. Incorporate these capital replacement priorities into the City's long-term capital forecast. Further, evaluate options for recycling splash pad water outflows for grey water purposes (e.g., irrigation) at time of replacement.	Short- to Mid-term	Medium
33.	Upgrade and enhance **splash pads at destination locations** (such as Howard Armstrong Community Centre, Memorial Park, Coté Park, etc.) at the time of replacement. Seek **community fundraising and sponsorship** to assist in elevating these key sites beyond a basic level of service.	Ongoing	Medium

6.2 Funding and Partnership Considerations

At this time, the City does not currently have sufficient financial reserves to implement the options presented in this report. To move forward, a financial strategy that leverages a range of funding sources will be required, the scope of which will depend on the option(s) that the City endorses. Several of these funding tools are discussed below.

Figure 11: Potential Capital Funding Sources



Municipal Reserves

New and/or redeveloped aquatic facilities centres are sizable capital projects. As part of its funding strategy, the City is encouraged to establish capital reserves to fund municipal contributions, so that funds can accrue in the years leading to facility development.

Development Charges

Development charges (DCs) collected from the development community can be applied towards aquatic facilities required to meet growth-related needs. DCs cannot be used to fund replacement infrastructure offering the same level of service. Several changes have been made to the Development Charges Act in recent years, which cumulatively have the effect of reducing the amount of growth-related funds payable to the municipality.

Grants & Senior Government Funding

Major municipal capital projects often receive financial support from senior levels of government. In 2019, the Provincial and Federal Governments launched a grant program for municipalities seeking capital assistance with recreational and other forms of infrastructure (Investing in Canada Infrastructure Program, ICIP). Should there be a future intake to the ICIP grant program, or a different funding stream announced, this Aquatic Services and Facility Review could play a large part in supporting a successful application.

User Fees

User fees for individual drop-in and organized activities represent a small portion of revenue generation for most community facilities, and are typically allocated to the operating budget. Occasionally municipalities will establish a capital surcharge added to the rental terms to underwrite the cost of higher-order facility improvements (e.g., scoreboards, starting blocks, etc.) or long-term capital replacement projects. In this way, residents who directly benefit from the facility's services contribute to support its maintenance and/or improvement. While facility rental rates are generally tied to factors influencing affordability, surcharges (if employed) are typically small , but could accrue over the long-term.

Fundraising

Funding required to support new or rehabilitation infrastructure projects is substantial – the magnitude of which can strain municipal capital budgets. Seeking assistance from the community to contribute funds towards facility projects can be an effective means of providing recreation facilities and community spaces that meet the varied needs of the City's residents. For example, fundraising has been an important factor in advancing many of the City's recent splash pad projects.

Raising funds to support capital developments is generally more productive when the community gets behind a project, which requires a well planned, multi-faceted communication strategy tied to financial goals in concert with staged or staggered financial targets. Partnering with respected local N-F-P groups is also an affective method to generate enthusiasm and momentum towards fundraising goals. Lastly, the City should be aware of the timing of other organization's fundraising initiatives so as not to conflict with other local campaigns – such as Hospital Foundation annual financial appeals.

Financing

Another funding option would be to finance a portion of one or more capital projects. This option is the most expensive funding alternative and could be limited by the municipality's borrowing capacity.

Partnerships & Sponsorships

As outlined in the City of Greater Sudbury's Partnership Framework, relationships with outside groups may be another means of accessing capital funding assistance for a community asset. Funding options and partnering benefits are generally driven by local circumstances and are usually specific to a particular project.

There are three types of relationships that are generally available to municipalities interested in pursuing alternative approaches to deliver, operate, or program recreation and sport infrastructure:

- A Public/Private Partnership (P3) – a relationship between the municipality and a private sector entity;
- A Public/Public Partnership (P2) – a relationship between the municipality and public sector agency such as another municipality, post-secondary institution, or a school board; and
- A N-F-P Partnership – a relationship between the municipality and a not-for-profit organization such as a YMCA or local sports organization.

Some municipalities are gradually shifting from a traditional direct delivery model to one of these structured relationships. Within certain jurisdictions creative approaches has resulted in:

- the development "core facilities" that would not have been possible had the municipality addressed the project on its own (e.g., Vaughan's arrangement with the Ontario Soccer Centre);
- the provision of "non-core" facilities that represent new levels of service available to local residents (e.g., Mississauga's arrangement with the Mississauga Gymnastics Club);
- operating results that are beyond the usual performance thresholds of a municipally delivered service (e.g., Hamilton's arrangement with a private arena operator); and
- the transfer of operating liabilities to a third-party service provider (e.g., various municipal arrangements with YMCAs).

Appendix A: Public Input from Phase 2 Consultations

Residents were invited to attend information sessions as part of Phase 2 of the Aquatic Service and Facility Review. These sessions provided an opportunity to review preliminary findings and provide input used to inform the final study.

Information Sessions:

- Wednesday, June 19 – 2 to 4 p.m. – Chelmsford Community Centre and Arena
- Wednesday, June 19 – 6 to 8 p.m. – Minnow Lake Place
- Thursday, June 20 – 12 to 2 p.m. – Valley East Public Library and Citizen Service Centre
- Thursday, June 20 – 4 to 6 p.m. – T.M. Davies Community Centre and Arena
- Wednesday, June 26 – 7 to 8 p.m. – Virtual Information Session

Total attendance across the five sessions was estimated at **70 persons**. Key themes from these sessions are summarized below.

Aquatic Programming

Swimming lessons and Swim to Survive were identified as essential components of water safety in Greater Sudbury, and aquafit programming also provides benefits to many. These programs need to be kept affordable and accessible to keep residents engaged, healthy and safe. Concerns were raised regarding the registration processes and waitlists (i.e., aquafit), including a desire for standardized fee models across multiple pools.

50-Metre Indoor Pool Demand

Closure of Jeno Tihanyi Olympic Gold Pool at Laurentian University has impacted the training of competitive swim clubs in recent years, with many clubs seeing reduced participation and members having to travel more frequently to pools in the Greater Toronto Area. The provision of an Olympic sized pool in Greater Sudbury could also be an opportunity for sport tourism.

Indoor Pool in Azilda / Chelmsford

Attendees expressed a desire for a warm-water indoor pool facility in Azilda or Chelmsford, bringing indoor swimming opportunities to this area. It was suggested that a new indoor pool in this area should be build large enough to support future growth. It was suggested that any new indoor aquatic facilities include multiple tanks (i.e., 25-metre and warm water) and the City should promote the health and wellness benefits that warmwater pools offer.

Retain and Upgrade Existing Indoor Pools

Some indicated that changerooms at indoor pools need to be upgraded, including more showers and washrooms. Specific concerns included the cleanliness of facilities, the condition of pool tiles, lack of starting blocks in pools, and a lack of wayfinding signage. Attendees also expressed concern about closing existing facilities (e.g., Onaping Pool, R.G. Dow Pool) and spoke to the importance of these facilities to their respective communities; suggestions were also received for keeping Onaping Pool open during the summer. Questions were also raised about the long-term viability of aging pools (e.g., Gatchell Pool, etc.).

Splash Pads and Beaches

Splash pads and supervised beaches need to be frequently cleaned and made accessible with shade.

Appendix B: Standards and Programming Considerations by Pool Type

Pool Standards for Sport Training and Regional Competitions

To meet the broadest range of aquatic sport needs, the Aquatic Sport Council (Ontario) recommends that new pools be designed to the following minimum specifications, with consideration of an adjacent second tank with warmer water and shallower depth to help accommodate the full range of recreational and instructional activities:

- Width: 8-lanes (20 metres) and outside lane rope buffer
- Length: 25 metres plus the width of a bulkhead and timing equipment
- Depth (shallow end): 1.5 to 2.0 metres (depending on availability of teaching pool or movable floor)
- Depth (deep end): 2.5 metres (no diving) to 5 metres (with diving)

The following are minimum standards recommended by the Aquatic Sport Council (Ontario) for local club training and regional competitions.

Pool Standards (selected) for Local Club Training and Regional Competitions – Swimming

Specification	Club Training	Regional Competition
Number of Pool Tanks	1 tank	1 tank, with preference for an adjacent warm-up pool with a minimum of 3 lanes by 25m
Main Tank Dimensions	25m minimum length 8 lanes (10m) width (though 6 lanes may allow for some local competitions) 1.35m minimum depth at ends	25m minimum length 10 lanes (25m) width 1.35m minimum depth at ends
Deck Space	450 sqm minimum	550 sqm minimum
Spectator Seating	not specified	retractable bleachers or upper gallery to accommodate 300 people (280 sqm)
Technical, Mechanical, Design Features	Toe-hold grip on side wall, where water is 1.5m or deeper Flowover gutter systems Flat walls at turning ends Option to be able to adjust pool temperature Capacity to be able to add additional fresh air Bottom return lines preferred	
Fittings and Equipment	Lane ropes secured with recessed anchor brackets Starting blocks Scoreboards at each end Sound System	
Changerooms	Both Male and Female, minimum 150 square metres (capacity to process up to 200 competitors)	
Support Spaces (selected)	Washrooms, including off-deck washroom for officials Boardroom for 30-60 people First Aid Room Kitchen Hospitality (dining) space for 60-100 people Space for ticket sales, sale of programs, cash handling Space for admitting large groups Storage	

Source: http://aquaticsportontario.ca/poolstandard.php

Notable standards for other forms of aquatic competition are listed below (note: national and international level competition requirements typically require larger tanks and support amenities):

Diving (regional competitions):

- Springboards: One 3m springboard and two 1m springboards, ideally mounted on concrete stands. All springboards should use Durafirm shortstands and be situated a minimum of 2.75m apart.
- Tank Depth: 4m optimum, 3.65m minimum for 3m spring board. Maximum slope in deep end 17%.
- Tank Length and Width: 25m long (using deep end) and 6 lane minimum (18m) wide.
- Other Spaces: Dryland training area.

Synchro/Artistic Swimming (regional competitions):

- Tank Depth: At least 12m of water 2.75m deep.
- Tank Length and Width: 25m long (using deep end) and 8-lane (20m).
- Other Requirements: Underwater speakers (required) and underwater lights (desirable). Good quality acoustics. Water clarity is paramount. Attention should be paid to windows on the pool deck and the creation of glare on the water surface.
- Other Spaces: Judges platforms with at least 12 high chairs. Space for medal ceremonies, spotlight platform, etc. Dryland training area.

Water Polo (regional competitions):

- Tank Depth: 2m depth for regional competition pool, minimum 1.5m for 8 lane pool.
- Tank Length and Width: 25m long (using deep end) and 8-lane (20m).
- Other Requirements: Sufficient space to install a temporary referee catwalk for competitions.
- Other Spaces: Storage (for nets).

Guidelines for sanctioned provincial, national, and international competitions are available from Swimming Canada (2023). Notable differences include (but may not be limited to):

- A preference for starting pool depths of 2.0 metres (extending from 1 to 6 metres from end wall);
- A requirement for an additional 25 or 50-metre warm-up pool for sanctioned national competitions; and
- A requirement for a 50-metre competition pool (with 2.5-metre lane widths) and an additional 50-metre warm-up pool for sanctioned international competitions;
- Additional deck space, spectator seating (minimum 750 people), and meeting space;
- Other technical requirements (e.g., video backup system, video board, lighting, etc.).

Pool Features Options Based on Facility Type

	25 Metre Lane	50 Metre Lane	Diving Pool	Leisure Pool	Teaching Pool	Warm Pool	Therapy Pool	Hot Tub	Sauna
Accessible Lift	●	●	●	●	●	●	●	●	
Bulkhead*		●							
Diving Springboard*	●	●	●						
Diving Tower*		●	●						
Headwalls*	●	●							
Hot Water								●	
Hydro Jets						●	●	●	
Inflatables*	●	●	●	◐	◐				
Moveable Floor*		●							
Ninja Cross*	●	●	●	◐	◐				
Ramp	●	●		●	●	●	●	●	
Spectator Viewing	●	●	●	●	●	●	●	●	
Tarzan Rope*	●	●	●						
Underwater Camera	●	●	●	●	●		●		
Warm Water						●	●		
Waterslide	●	●	●	●	●				

Source: Aquatic Sport Facility Infrastructure Report (2023) commissioned by the Aquatic Sport Council – Ontario

Legend

◐ school aged children, non-swimmers and swimmers with limited swimming skills

● all ages

program could be delivered but not in an ideal setting based on depths, water temperature, accessibility, etc.

Programming Options Based on Facility Type

	25 Metre Lane	50 Metre Lane	Diving Pool	Leisure Pool	Teaching Pool	Warm Pool	Therapy Pool	Hot Tub	Sauna
Aquafit	●	●	●	●	●	●	●		
Aqua Cycle	●	●		●	●	●	●		
Aqua Jogging	●	●	●	●	●	●	●		
Aqua Circuit Training	●	●		●	●	●	●		
Artistic Swimming	●	●	●	◐	◐				
Canoeing	●	●	●	●	●	●			
Competitive Swimming	●	●		◐	◐				
Diving - Springboard	●	●	●						
Diving - Tower		●	●						
Learn to Swim	●	●	●	◐	◐	●	●		
Lifeguard / Instructor / Leadership	●	●	●	●	●				
Lifesaving Sport	●	●		◐	◐				
Rowing / Paddling	●	●	●	◐	◐				
SCUBA Diving	●	●	●						
Snorkelling	●	●	●	◔	◐				
Therapy	◔					●	●	●	
Underwater Rescue e.g., Pilot / Oil Rig / Coast Guard / Military	●	●	●						
Underwater Sports e.g., Hockey	●	●	●	◐	◐				
Water polo	●	●	●	◐	◐				

Source: Aquatic Sport Facility Infrastructure Report (2023) commissioned by the Aquatic Sport Council – Ontario

Legend

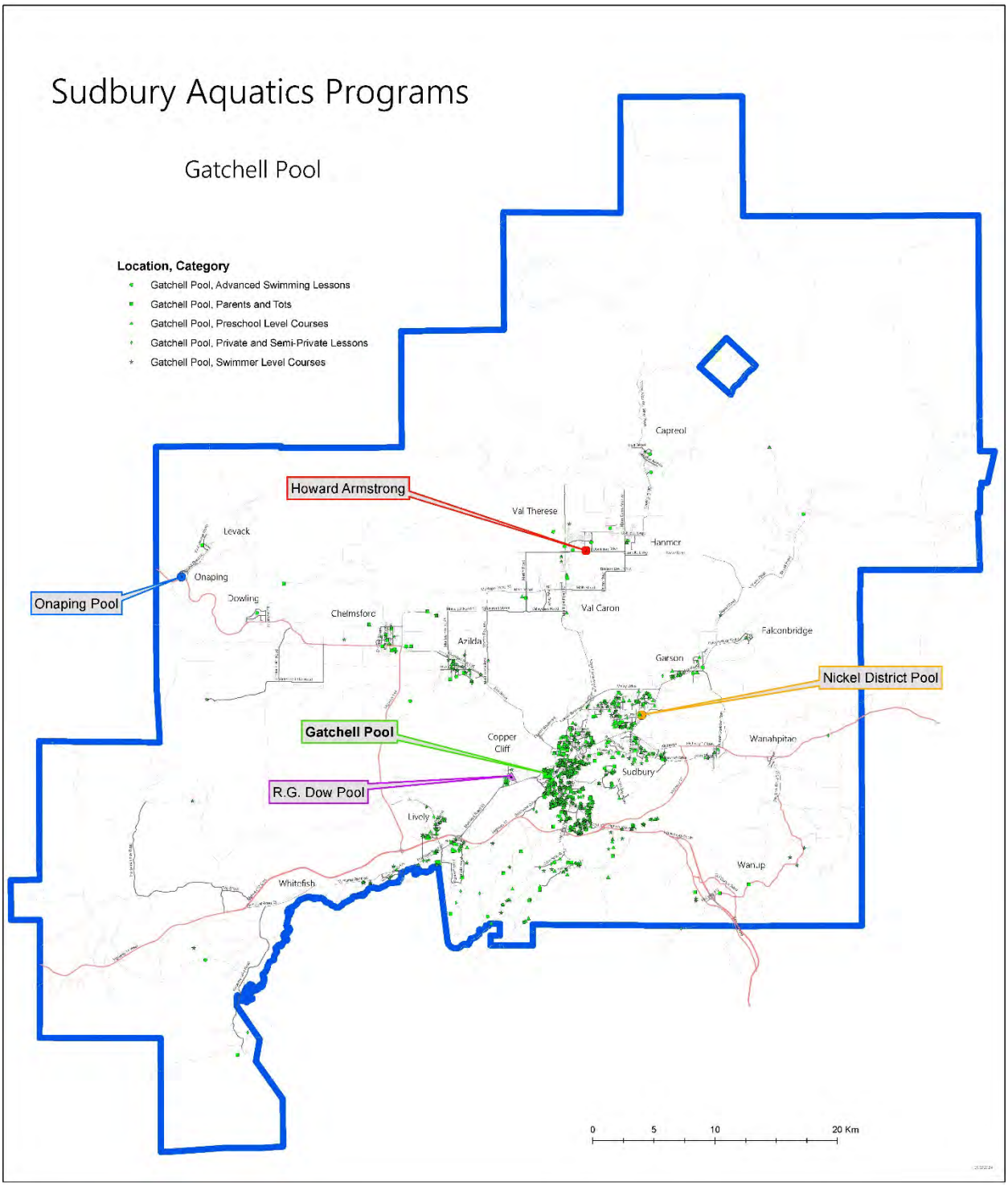
◐ school aged children, non-swimmers and swimmers with limited swimming skills

● all ages

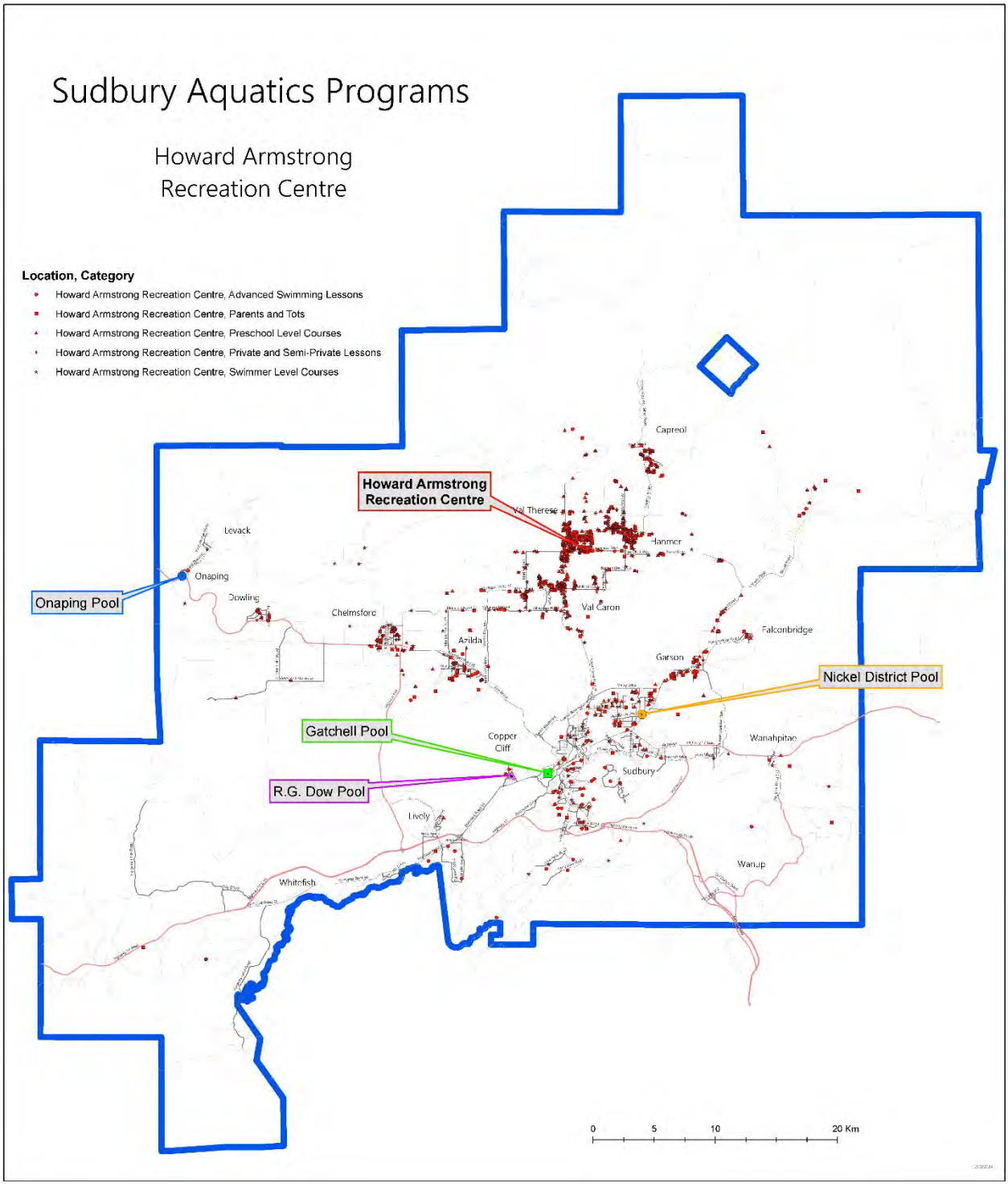
◔ program could be delivered but not in an ideal setting based on depths, water temperature, accessibility, etc.

Appendix C: Location of 2023 Registered Pool Users

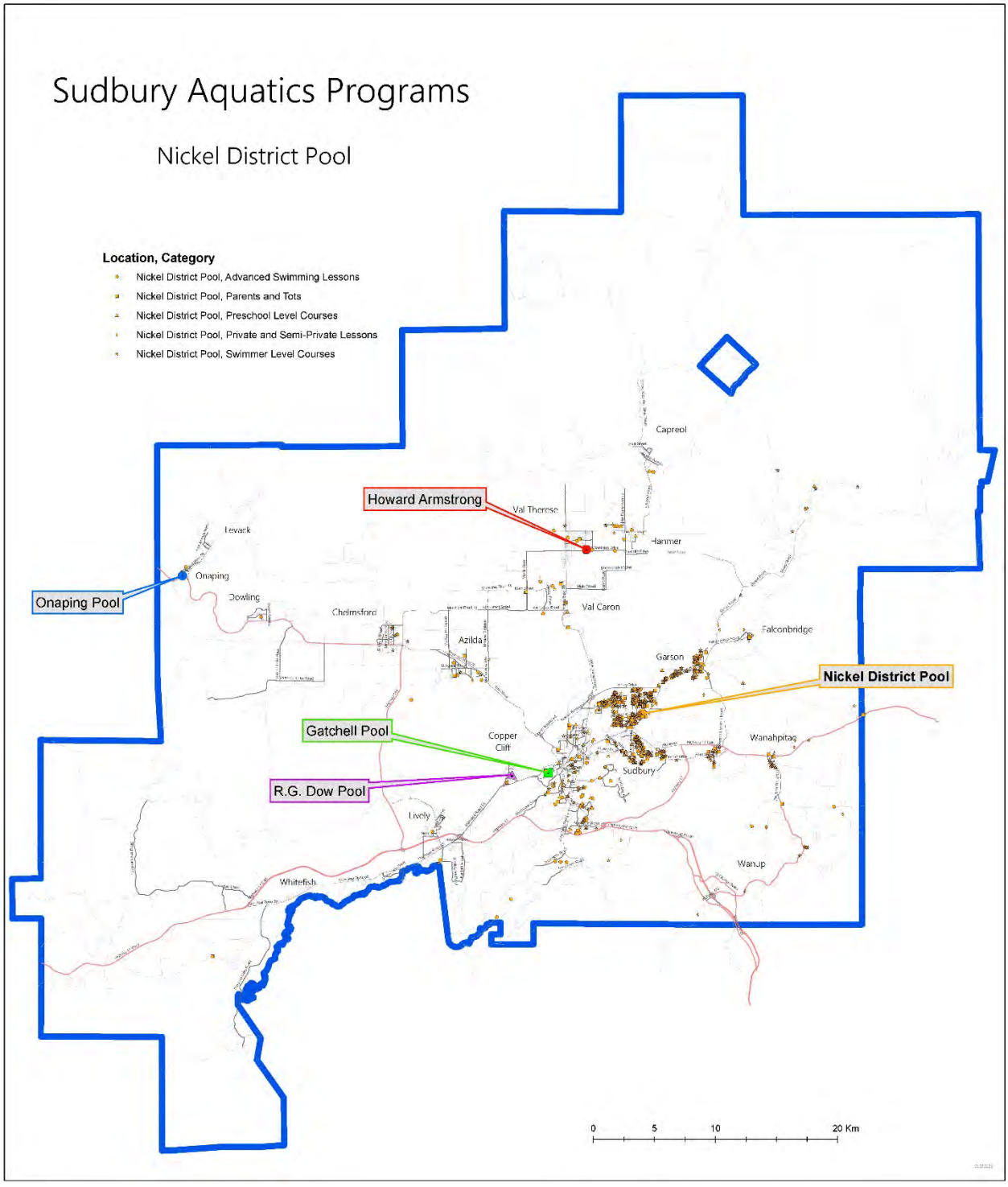
Gatchell Pool



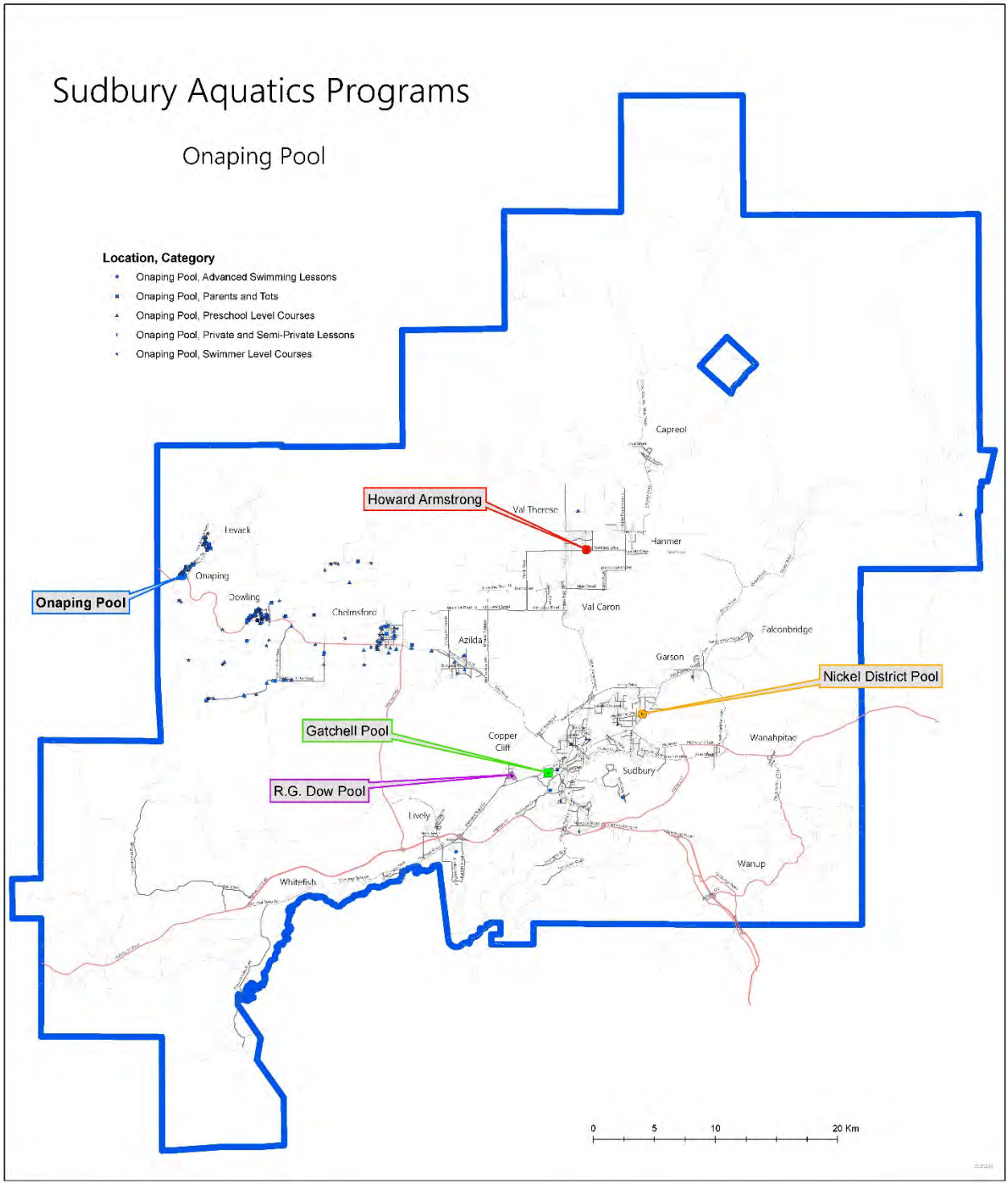
Howard Armstrong Recreation Centre Pool



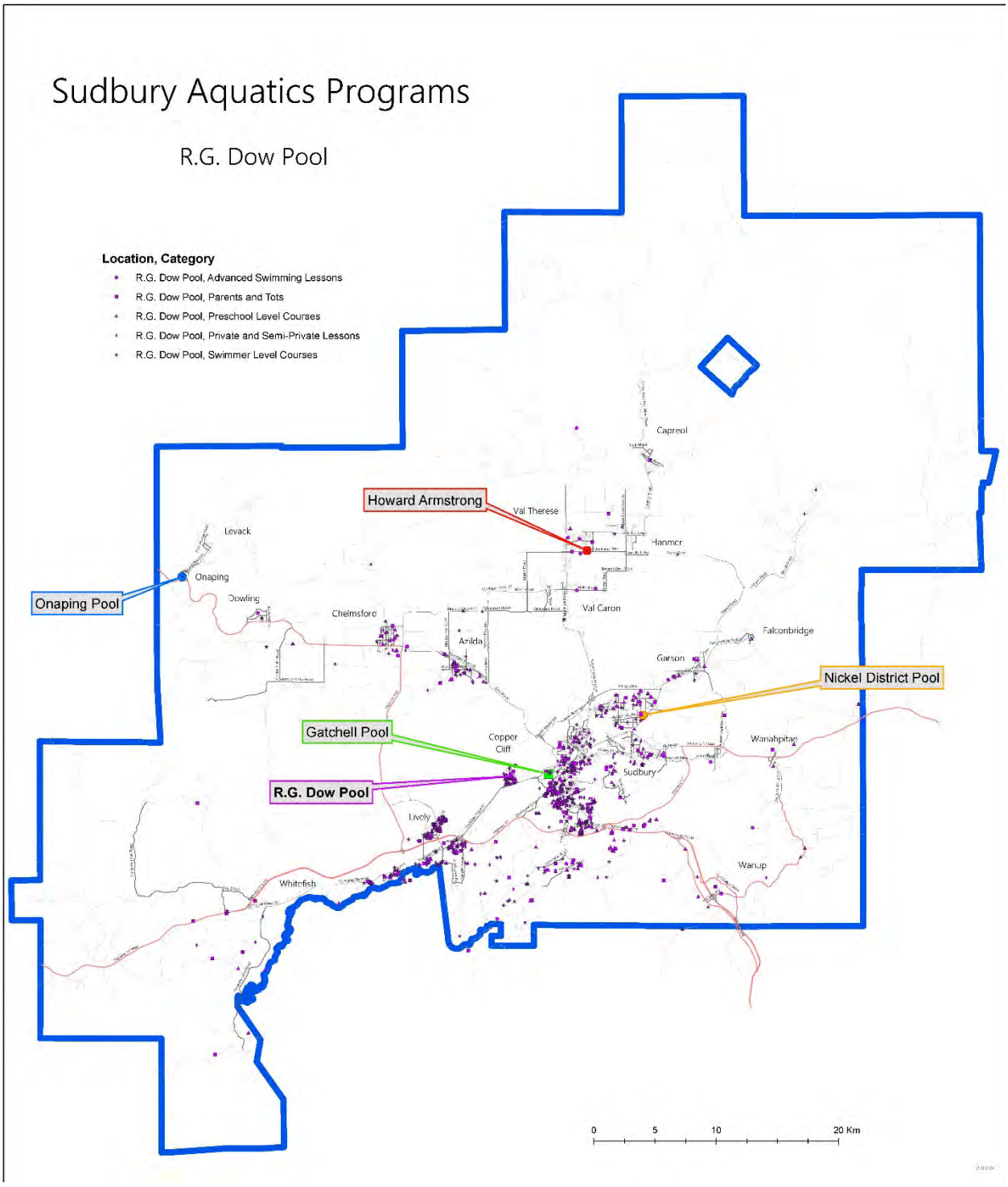
Nickel District Pool



Onaping Pool

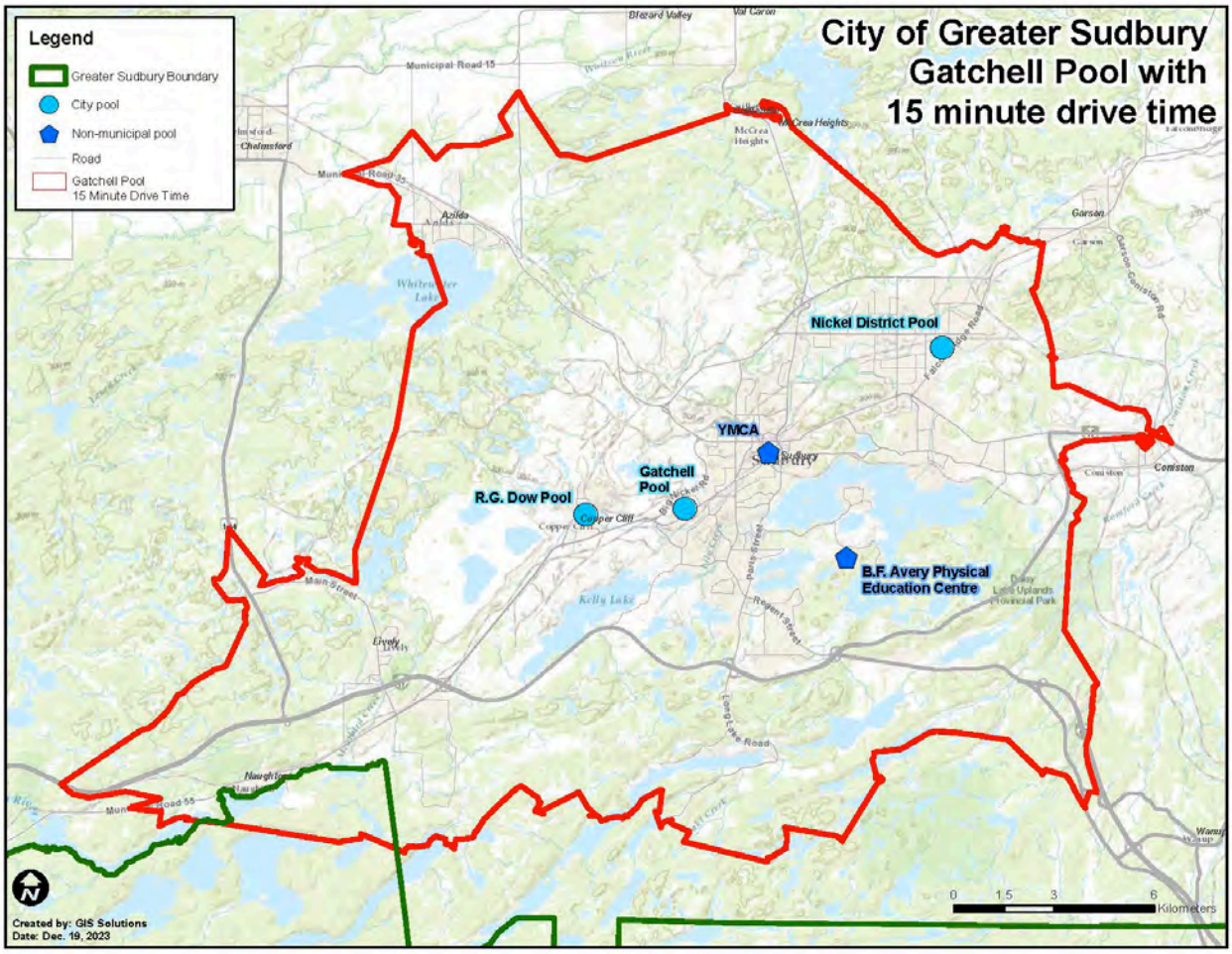


R.G. Dow Pool

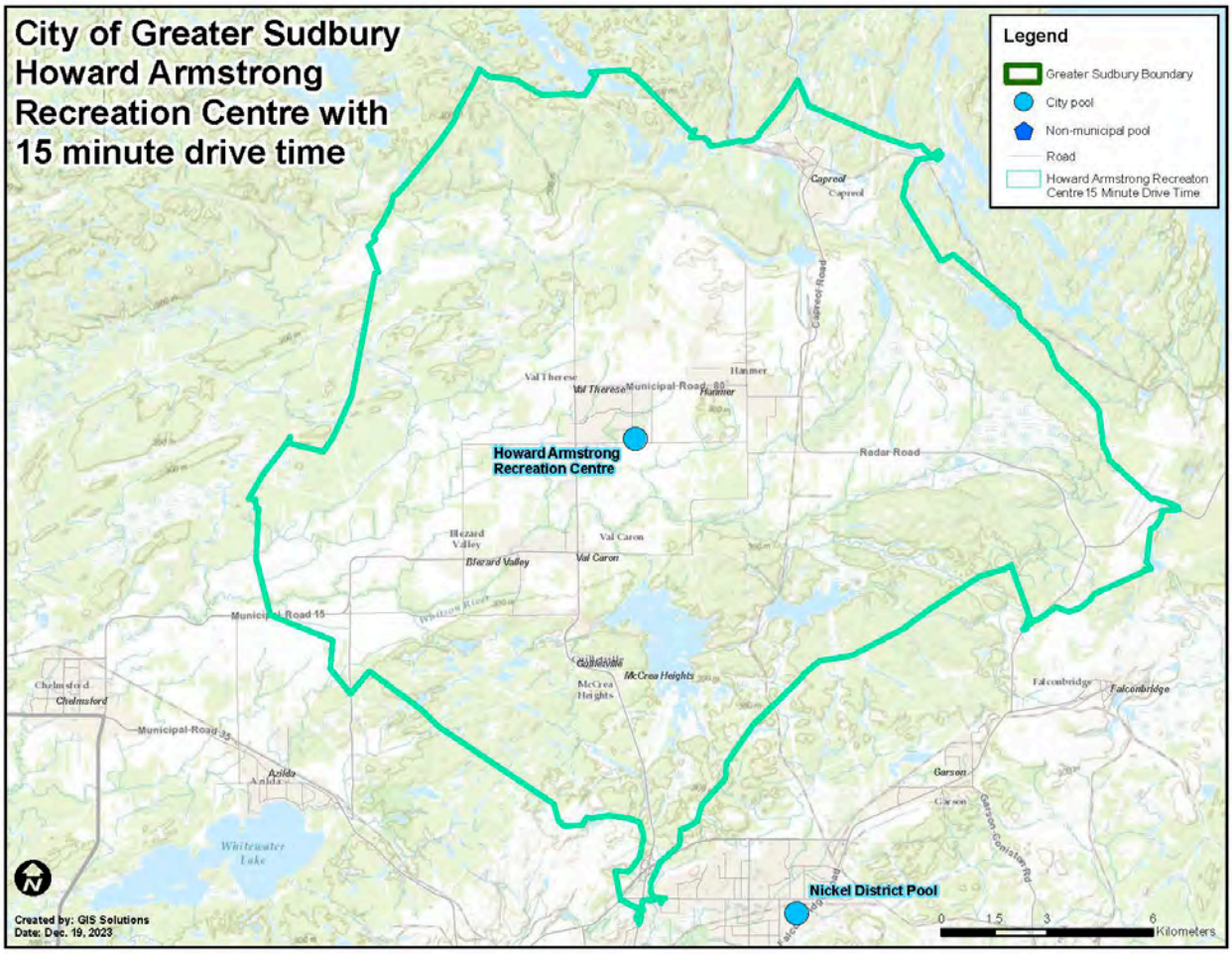

Sudbury Aquatics Programs
R.G. Dow Pool
Location, Category
R.G. Dow Pool, Advanced Swimming Lessons
R.G. Dow Pool, Parents and Tots
R.G. Dow Pool, Preschool Level Courses
R.G. Dow Pool, Private and Semi-Private Lessons
R.G. Dow Pool, Swimmer Level Courses
Howard Armstrong
Onaping Pool
Gatchell Pool
R.G. Dow Pool
Nickel District Pool
Capreol
Val Therese
Levack
Onaping
Dowling
Chelmsford
Azilda
Val Caron
Hanmer
Falconbridge
Garson
Copper Cliff
Sudbury
Wanahpitae
Lively
Whitefish
Wanup
0
5
10
20 Km

Appendix D: Drive Time Analysis

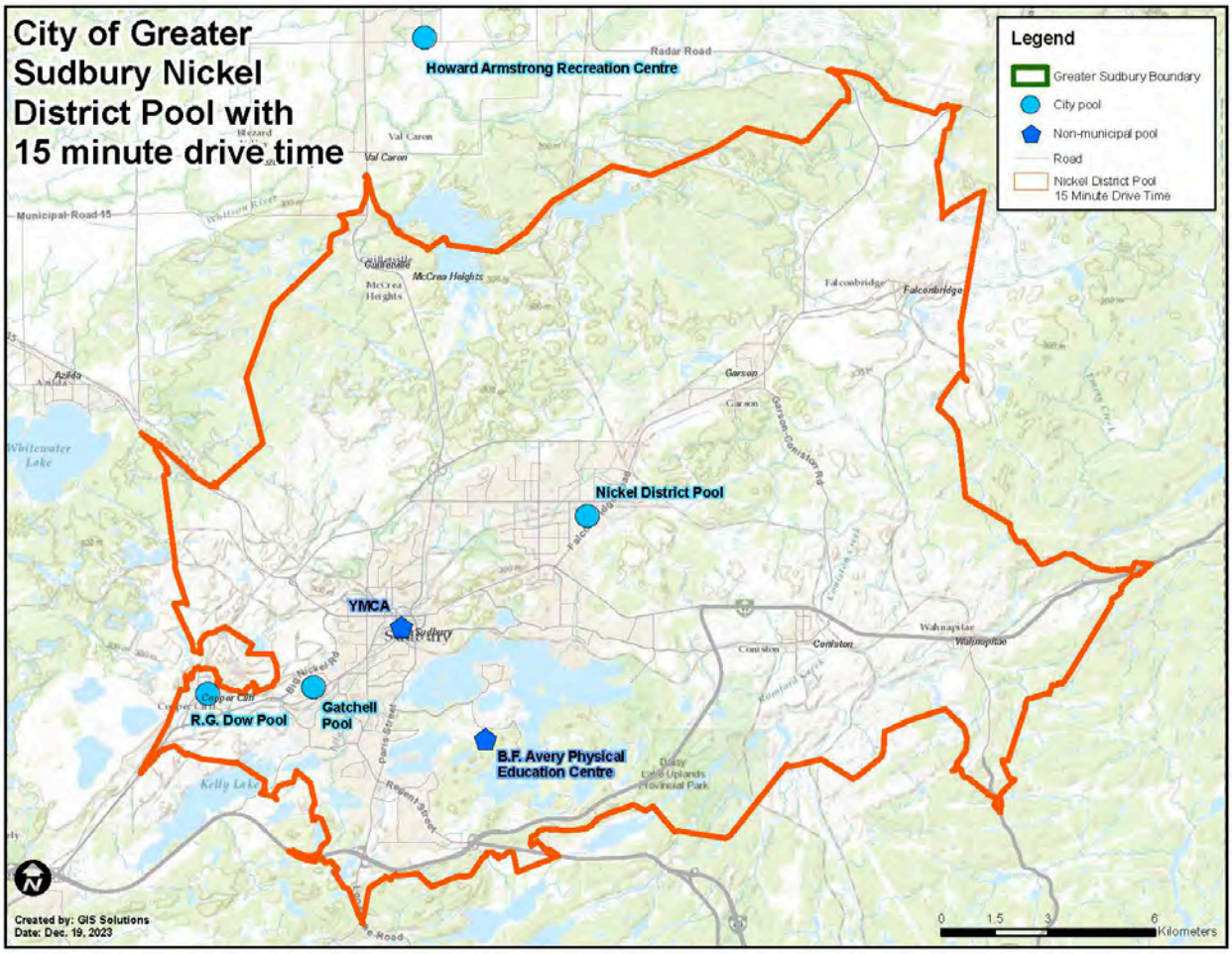
Gatchell Pool



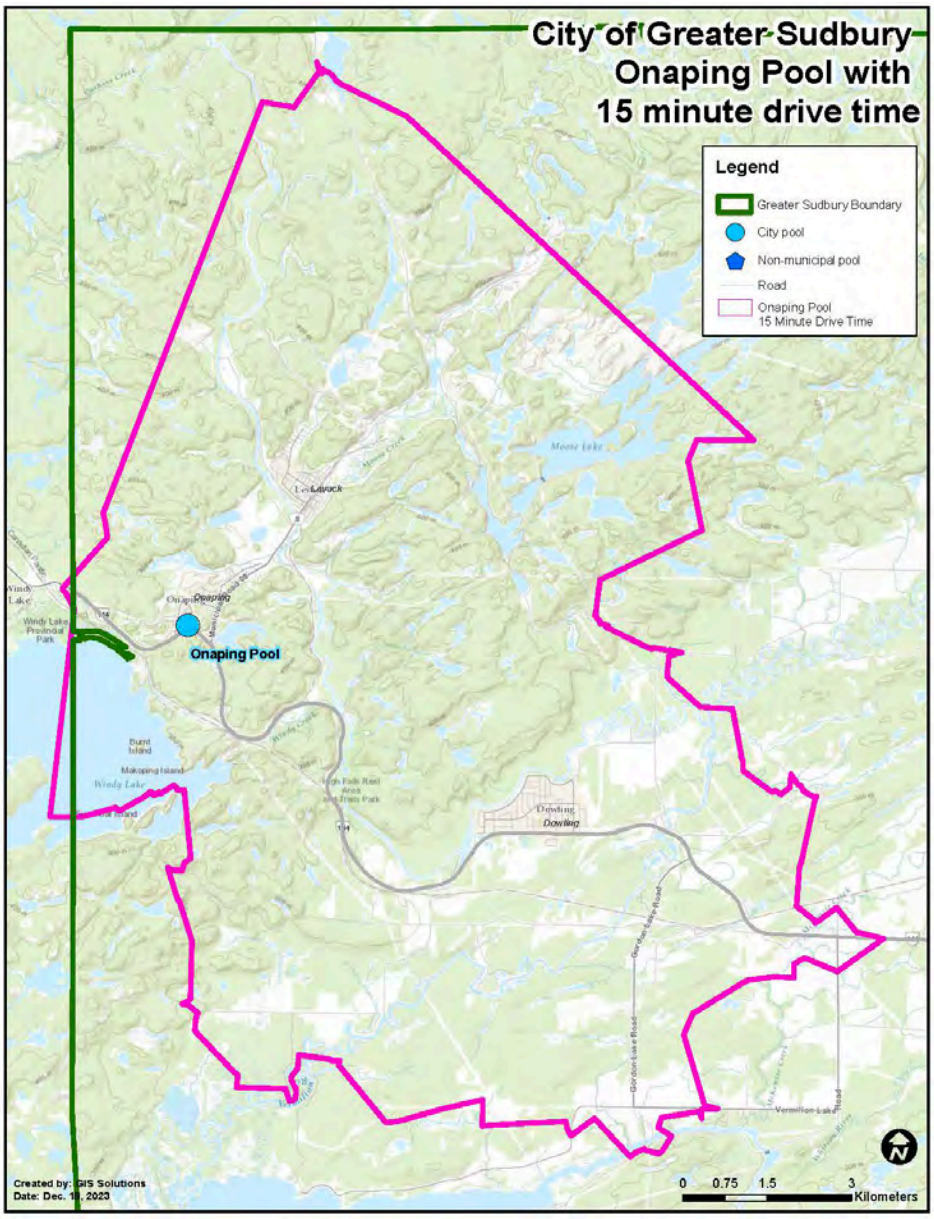
Howard Armstrong Recreation Centre Pool



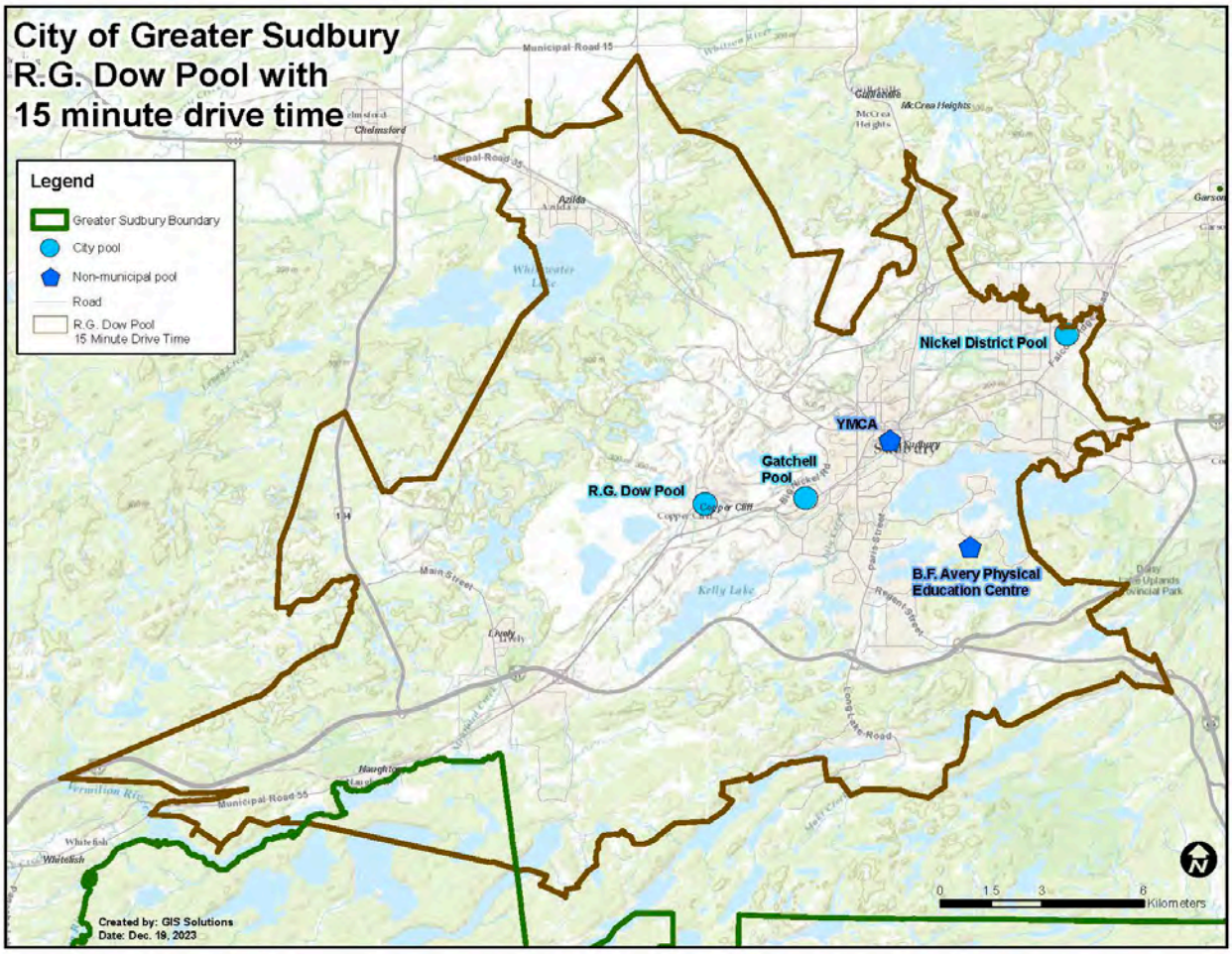
Nickel District Pool



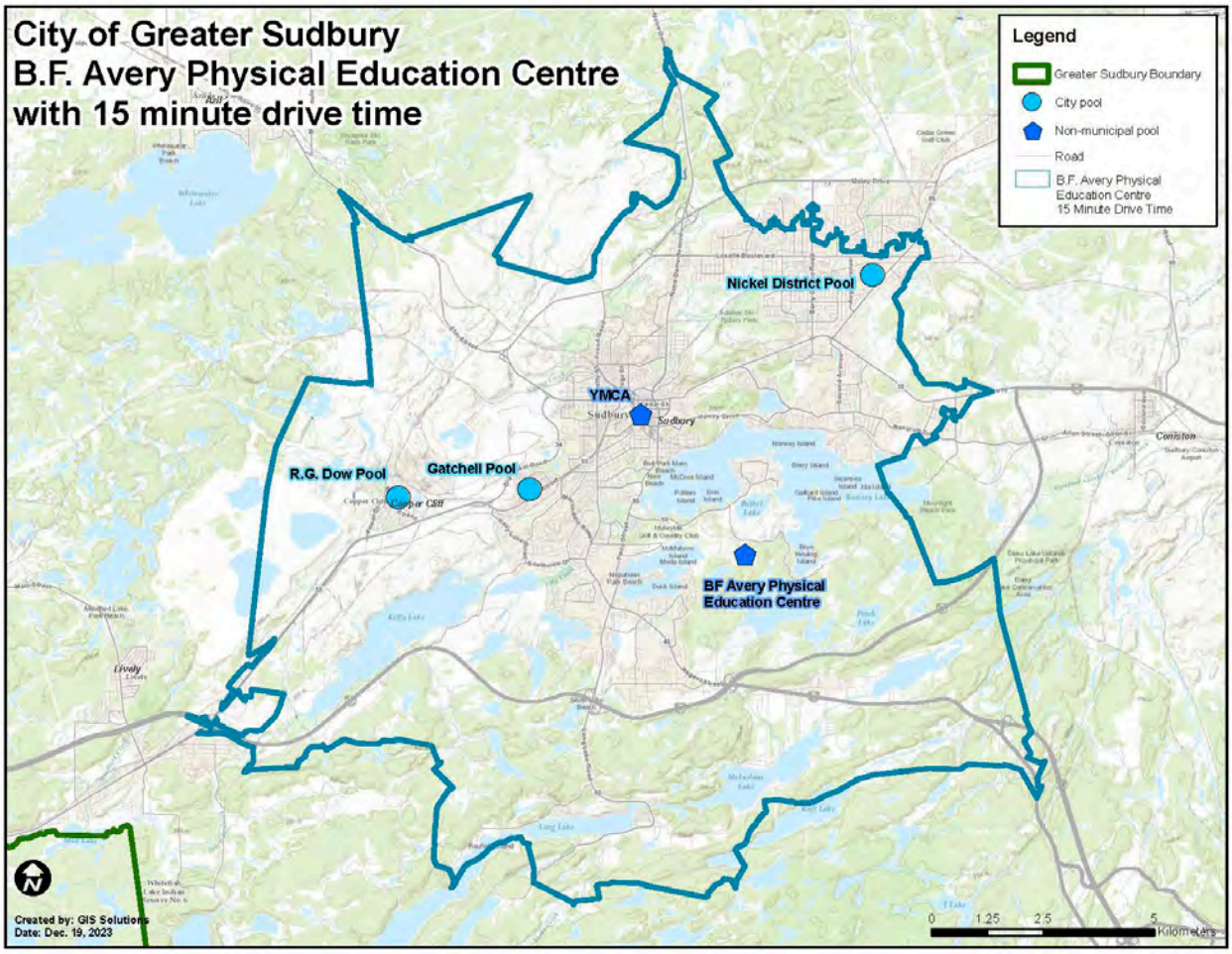
Onaping Pool



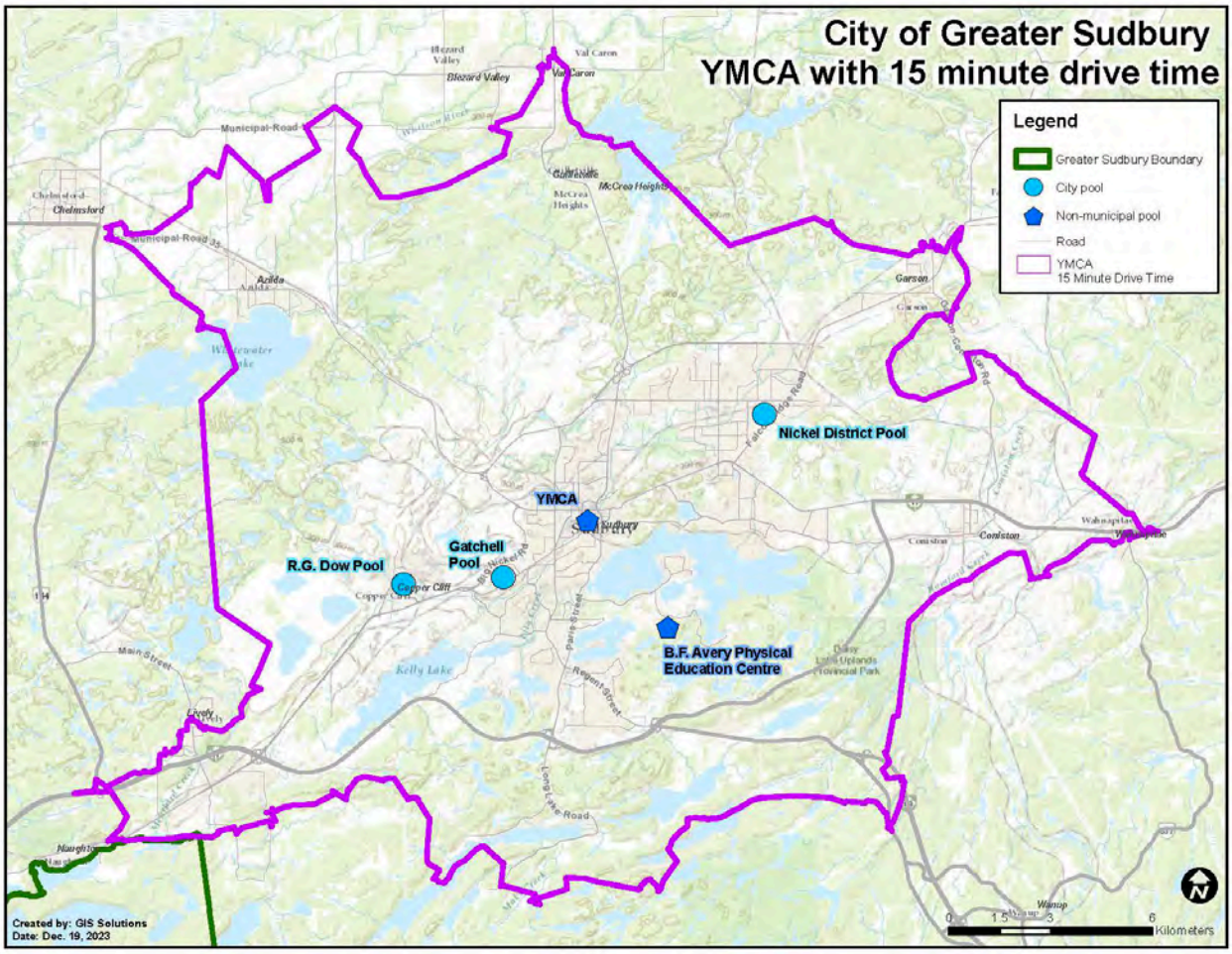
R.G. Dow Pool


City of Greater Sudbury
R.G. Dow Pool with
15 minute drive time
Legend
Greater Sudbury Boundary
City pool
Non-municipal pool
Road
R.G. Dow Pool
15 Minute Drive Time
Nickel District Pool
YMCA
Gatchell Pool
R.G. Dow Pool
B.F. Avery Physical Education Centre
Municipal Road 15
Municipal Road 55
Main Street
Long Lake Road
Paris Street
Regent Street
Kelly Lake
Whitefish
Created by: GIS Solutions
Date: Dec. 19, 2023
0 1.5 3 6
Kilometers

Laurentian University – Jeno Tihanyi Pool (non-municipal)



Sudbury YMCA Pool (non-municipal)

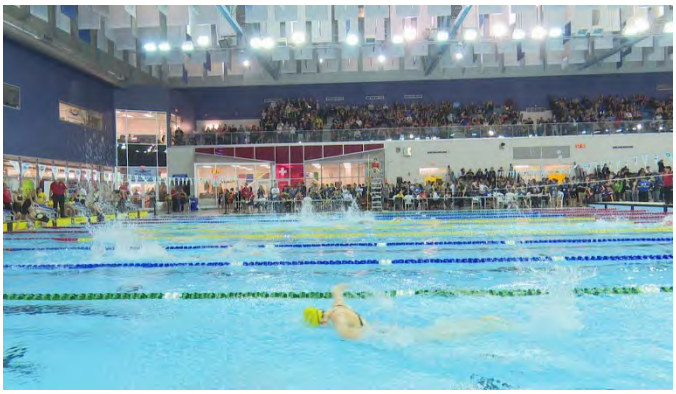


Appendix E: Examples of Comparator Pools in Other Jurisdictions

A high-level scan of recently built or renovated indoor pools in Ontario was undertaken to better understand provision models, designs, partnerships, and construction costs. Information was sourced from websites, published reports, and direct involvement by our team members. It is noted that recent cost escalations have been significant and today's construction costs will be greater than those reported below.

Windsor International Aquatic and Training Centre (new competition pool and water park)

Pool Type	Competition
Owner / Partnership Details (if any)	City of Windsor
Year Built / Renovated	2013 (opened)
Pool Size	71m x 25m, 10-lane pool (with two movable bulkheads and a movable floor); 10m dive tower; seating is provided for over 900 spectators and 600 competitors
Other Facility Components	Adventure Bay Water Park (adventure river, double flow rider, wave pool, tot and kids' areas, activity pool and a dozen slides); meeting and program rooms; fitness space; large dry-play structure; Sports Hall of Fame
Construction Cost	$78 million
Capital Funding Sources	Municipal (primary) and provincial funding
2021 Census Population	229,660
Other Notes	Constructed to support the 2013 International Children's Games

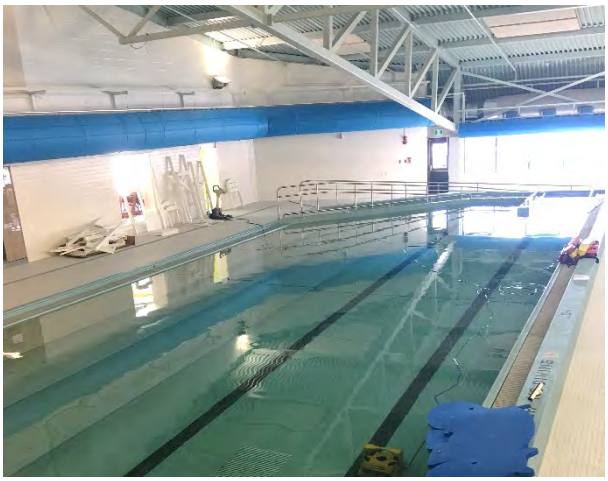


Markham Pan Am Centre (new competition pool)

Pool Type	Competition
Owner / Partnership Details (if any)	City of Markam
Year Built / Renovated	2014 (opened)
Pool Size	50m
Other Facility Components	Gymnasium (15 badminton, 7 volleyball, and 3 basketball courts). Warm-up hall (with additional 3 badminton, 1 volleyball, and 1 basketball courts). Audio visual rooms. Fitness centre (Happy Life Fitness Centre).
Construction Cost	$78.5 million
Capital Funding Sources	Provincial and municipal funding, Pan Am Games Organizing Committee
2021 Census Population	338,503
Other Notes	Constructed to support the 2015 Pan Am Games

Zatzman Sportsplex (Dartmouth, NS) (renovation)

Pool Type	Community Pool
Owner / Partnership Details (if any)	Halifax Regional Municipality
Year Built / Renovated	Original 1981 / Major Renovation in 2020
Pool Size	25M 8 lane lap with separate leisure pool tank
Other Facility Components	Splash pad, change rooms, washroom, weight room, fitness centre, gymnasium, track and skating, personal training, child development, day camps, dance academy.
Construction Cost	$28 million
Capital Funding Sources	Municipality, Zatzman family donation
2021 Census Population	439,131 (For the Municipality of Halifax)
Other Notes	$750,000 donation from the Zatzman Family



Oakville Trafalgar Community Centre (new aquatic centre)

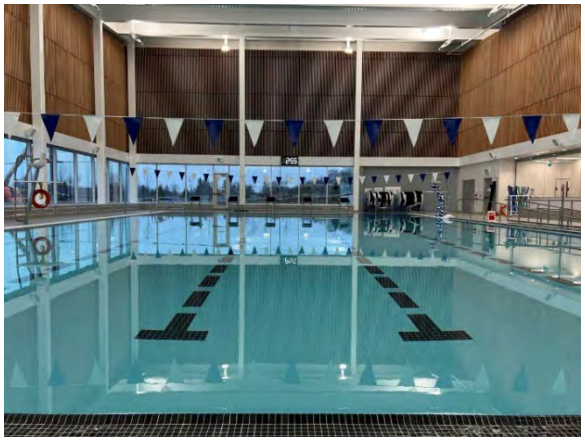
Pool Type	Community/ Warm-water
Owner / Partnership Details (if any)	Town of Oakville
Year Built / Renovated	2020 (opened)
Pool Size	25 metre lap pool (6 lanes) with separate warm-water pool
Other Facility Components	Multi-purpose meeting rooms, café, art exhibits, double gymnasium, fitness centre, universal change rooms
Construction Cost	$35 million + $4 million value add (entire centre)
Capital Funding Sources	Development Charges, plus $1.0 Federal grant
2021 Census Population	213,759
Other Notes	Located on the former Oakville Trafalgar Memorial Hospital site. Both pools are accessible.

Alder Recreation Centre (renovation)

Pool Type	Community
Owner / Partnership Details (if any)	Town of Orangeville
Year Built / Renovated	2024 (renovation)
Pool Size	8 lane 25M and large leisure (teaching) pool and splashpad/slide
Other Facility Components	2 indoor arena ice pads, 5 community rooms, fitness centre, gymnasium, walking track
Construction Cost	$5 million; removed deteriorating Myrtha pool system and replace with stainless steel pool
Capital Funding Sources	Municipal reserves
2021 Census Population	30,167
Other Notes	Pools were enlarged to accommodate increase demand

MURC Aquatic Centre, Town of Georgina (new aquatic centre)

Pool Type	Community / Leisure
Owner / Partnership Details (if any)	Town of Georgina
Year Built / Renovated	2024 (new)
Pool Size	25 metre pool (6 lane) plus 2-depth leisure/therapy pool
Other Facility Components	Double gymnasium, indoor walking track, activity studio, multi-purpose meeting rooms, active living space, discovery branch library
Construction Cost	$50.2 million (entire centre)
Capital Funding Sources	Development Charges
2021 Census Population	47,642
Other Notes	n/a



W.J. Henderson Recreation Centre (renovation/expansion)

Pool Type	Community
Owner / Partnership Details (if any)	Loyalist Township; partnership established with City of Kingston which is contributing $6.55 million towards the capital cost of the aquatic component to allow Kingston residents to have equal access to aquatic programming for a period of 20 years
Year Built / Renovated	scheduled for 2025 (new)
Pool Size	8 lane 25m lap and separate warm-water leisure pool – retrofit of existing facility
Other Facility Components	Single pad arena, library, multi-use rooms
Construction Cost	$49.5M (additional project work includes arena refrigeration upgrade and new ice slab, renovations to lobby and food services, accessibility upgrades, water source heat pumps, and new electrical transformers)
Capital Funding Sources	GICB – $16.5M, Downie / Wenjack fund (pending discussion with Mohawks of the Bay of Quinte First Nation), Green Municipal funding FCM – $1.25M, Employment and social development - $86,000, partnership with City of Kingston for shared usage - $6.5M
2021 Census Population	17,593 (Loyalist), plus 132,485 (Kingston)
Other Notes	Due to its location in a rural/urban community near to City of Kingston, the facility serves a broader region