

Project
New Regina Indoor Aquatic Feasibility (IAF)

City of Regina

Client
City of Regina

June 23, 2022

7.2 Report

Reference or Number	Components	Description of Systems	Condition on P.F.G.E.	Age in 2021 Estimated (E) Actual (A)	Recommendation	Year 1	Year 2 - 5	Year 6+
Electri	cal							
E1.1	Utility service and Transformer	The transformer feeding the site is located in the parking area to the southeast of the Lawson Aquatic Centre. The overall complex has two services and it is assumed the transformer is double lugged to provide the independent services. From the pad mount transformer the secondary 347/600V feeders run underground to a utility cabinet located on the exterior south face of the Lawson Aquatic Centre. The utility meter is located inside the main electrical room. The transformer appears to be adequately sized for the needs of the facility at this time. It is not known if the secondary conductors have been updated since various upgrades at and around the facility have taken place. Of note, this facility has two separate utility services of the same voltage which is unusual and in most cases not allowable by utilities. Photo reference (<i>Figure 7.3.1</i>)	F - unknown	E - 47 years (1974)	The utility transformer and secondary conductors up to the exterior mounted utility cabinet are owned and maintained by SaskPower and therefore are expected to be under the responsibility of the utility for assessing their condition. No further recommendations are offered.	\$0.00	\$0.00	\$0.00
E1.2	Main Distribution	The main distribution is located on the main level on the south side of the Lawson Aquatic Centre. It is a Westinghouse 400A 347/600V 3 phase 4 wire board with a distribution and metering section. Tied into the main distribution is a 30kVAR capacitor bank for power factor correction. The system does not appear to have surge protection. The capacity of the system appears to be adequate and the distribution section has space for about 25% additional breakers. The capacity of this system was reviewed against utility bills from peak months and it indicates a peak load of 207kVA which indicates adequate capacity. The enclosure is in end of life condition with corrosion over much of the enclosure. Arc flash labels appear to be up to date as of 2019. Photo reference ((Figure 7.3.2)	Р	E - 47 years (1974)	It is recommended that the main distribution is replaced under a maintenance routine based on its reached its end of life. Its likely that breakers and other component replacement parts will be tough to locate. Surge protection should be considered for the main distribution to protect against power surges and bumps that can be damaging to building electronics. Arc flash studies are recommended to be updated every 5 years. In 2024 the study should be updated using the IEEE 1584 2018 standard or whichever standard is current at that time.	\$35,000.00	\$ 10,000.00	\$0.00
E1.3	Sub Distribution	The majority of all sub distribution resides in the main electrical room with 600V panels, splitters and motor control. Multiple small capacity (30-45kVA) 600:120/208V transformers exist which feed branch panels. Most of the sub distribution is badly corroded and appears to original from when the facility was constructed. In 2017 a major modernization took place where some of the distribution was installed as new to accommodate the needs of the modernization. The 120/208V panels are largely full with limited capacity to add additional loads. The majority of the panels do not appear to be labeled with a panel identification, voltage, or 'fed from'. In addition the panel schedules do not appear to be current and in some cases are missing. Photo reference (Figure 7.3.3 Figure 7.3.4)	Р	E - 47 years (1974) A - 2017 (distribution affected by modernization only)	Complete thermal scan analysis, cleaning/maintenance of all sub-distribution components. Replace the original branch circuit panel boards and sub-distribution boards with new. New panels to be sized with ~25% spare capacity and space and to be complete with accurate panel schedules. All new sub distribution to have updated arc flash studies as per IEEE 1584.	\$40,000.00	\$0.00	\$0.00
1.4	Motor Control	The motor control in this building is located primarily in the main electrical room with individual starters and variable frequency drives mounted on the walls. Additional starters are located adjacent to motors distributed throughout the facility. The majority of mechanical equipment is at 600V with some of the smaller motors and specialty pieces of pool equipment at 208V. A partial mechanical upgrade was completed in 2016. This concentrated on the pool mechanical equipment along with the boiler plant and air systems. The fans are primarily controlled by VFDs while the main pool equipment is controlled by single speed starters or integral/unit mounted starters. Photo reference (Figure 7.3.6)	G	E - some is original ranging to updates in 2014, 2015	All starters that are single speed type should be replaced with variable speed drives complete with line reactors or DC choke as recommended by the motor supplier. Consideration should be given to integrating occupancy of various spaces with fan control.	\$15,000.00	\$0.00	\$0.00



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Reference or Number	Components	Description of Systems	Condition on P.F.G.E.	Age in 2021 Estimated (E) Actual (A)	Recommendation	Year 1	Year 2 - 5	Year 6+
Electri	cal Lighting - Interior	The interior lighting has had various upgrades to it over the years as a part of regular maintenance routines. The Lawson facility has a mix of LED and fluorescent lighting types throughout. Most of the lighting utilizes dated T8 fluorescent technology. The lighting is a mix of 120V for the smaller volume spaces and 347V for larger wattage fixtures in the natatorium.	G - Natatorium G - Fitness F - Corridors and back of house	A - Natatorium - 2017 A - Fitness - 2017 E - Corridors, change rooms and back of house - 2000	The natatorium was recently upgraded to LED and meets the needs of the space. The finishes in the space have minimal reflectivity making the space darker and less efficient. It is recommended the finishes are updated with more reflective surfaces and the ceiling is utilized for some indirect lighting to enhance the volume and efficiency of the lighting.	\$35,000.00	\$25,000.00	\$7,500.00
		There was a substantial lighting upgrade in the aquatics space in 2017 which changed over all fixtures in the natatorium to LED. The light levels were measured in excess of the 215 lux minimum code requirement (250-550lux) in every interval that was measured around the perimeter of the pool edge. The starters blocks were measured at ~500lux which does not meet the FINA standard of 600lux. The lighting strategy has multiple layers of light with many types used to achieve the needs of the space. The finishes in the natatorium are dark with minimal reflectivity which requires additional energy to achieve the necessary light levels. Generally the lighting is in good condition, providing uniform light, and glare is minimal.			It is recommended that all remaining fluorescent lighting is upgraded to LED with dimmable drivers. Windows in various spaces would allow for a balance of natural and artificial light which would reduce the overall energy consumption of the lighting system. All new lighting should be designed with colour temperatures that reflect the intended use of each space. Types of fixtures should be minimized to streamline future maintenance routines.			
		The remainder of the facility is primarily fluorescent T8 type in various forms of recessed or suspended linear. Many of these fixtures are approaching end of life throughout the back of house areas. Spot upgrades have taken place over the years where the fixtures have been renewed. The lighting in the fitness room is in good condition with appropriate light levels for the use of the space. Various light temperatures (2700k - 4100k) exist throughout the facility. Photo reference (<i>Figure 7.3.7</i> <i>Figure 7.3.8</i>)						
E1.6	Lighting Control - Interior	The lighting control in the facility is comprised of local line voltage switches and low voltage control in the modernized spaces. The natatorium and fitness centre lighting control is a low voltage dimming system (nLight) with zones for each layer of lighting in each space. Emergency lighting control has also been integrated into the control scheme with loss of power sensing as per code requirements. The control of the natatorium is tied into a networked software for scheduling and scene programming by the owner. This system is in good working condition and provides the necessary control for the spaces. Line voltage manual control is the primary means of lighting control throughout the remainder of the Lawson facility.	E - nLight Low voltage lighting control P - line voltage control	E - 2017 E - 1974	Inoperative fixtures and controls should be replaced/repaired immediately. Consideration should be given to a full exterior lighting retrofit incorporating night sky friendly" LED fixtures and new controls allowing for reduced night time lighting levels after normal operating hours.	\$3,000.00	\$64,000.00	\$0.00



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E1.7	Exterior Lighting	The Aquatic Centre building perimeter is illuminated by High Pressure Sodium (HPS) wall mount fixtures ("wall packs"). These fixtures are mounted at a relatively low height (+/- 2440mm AFG). Similar fixtures are mounted around the perimeter of the Field House to supplement lighting provided by fixtures mounted on the Aquatic Centre for areas like the east entrance. The parking lot that serves the Aquatic Centre and Field House is Illuminated by HPS "cobra head" style light fixtures on double davit arm poles. All exterior lighting is believed to be photocell controlled. Exterior lighting equipment appears to be in fair condition. Three cobra head light fixtures and one wall pack in the parking lot area where non-functional at the time of review. Davit arm poles appear to be in fair condition. One of the ordinal painted steel units has been replaced with a new galvanized unit. The two wall packs illuminating the north west exit from the pool area remained on after sunrise, suggesting a failure of the photocell control. System performance when fully functional is considered adequate for the facility. Lighting levels in the parking lot measured between 1 and 3 footcandles and lighting levels at the east entrance were similar. Lighting levels along the north exposure of the Aquatic Centre were significantly lower, but pedestrian and vehicular traffic on this side of the site is confined to the street and associated city sidewalk. Photo reference (Figure 7.3.9)	F	E - 20 to 47 years	Inoperative fixtures and controls should be replaced/repaired immediately. Consideration should be given to a full exterior lighting retrofit incorporating night sky friendly" LED fixtures and new controls allowing for reduced night time lighting levels after normal operating hours. This is a replacement of heads at the top of poles and not a full parking lot lighting replacement. This would improve the existing condition but would not be uniform in nature. A full replacement with distribution, poles and lights is indicated below as an add to the costs to the right. Added cost for new parking lot lighting.	\$3,000.00	\$64,000.00 \$183,000.00	\$0.00
E1.8	Grounding	The main grounding system is located in the main electrical room. The visual investigation of the grounding system does not give an appropriate analysis of its condition or performance. No visible issues were noted. The pool grounding/bonding is not visible through the tunnel or on the pool deck. It is assumed the methodology is original to 1974 electrical code but cannot be confirmed since the bonding is often poured into the pool basin concrete. There are various instances of lose ground wires distributed amongst the pool tunnel and in many cases is not terminated on one or both ends. Pool basin lighting had been removed over the years so it was possibly a bond for the old lighting. Photo reference (Figure 7.3.10)	F	E - 1974	It is strongly recommended based on the facilities age and magnitude of alterations undertaken that a comprehensive grounding study be undertaken to test ground continuity of all pool area metal components as required by the Canadian Electrical Code Section 68. This should also be implemented as part of bi-annual maintenance shut down.	\$5,000.00	\$0.00	\$0.00
E1.9	Emergency Power	A 30 kW emergency diesel generator is located in the attached fieldhouse building which feeds emergency lighting distribution in the fieldhouse and Lawson Aquatic building. The generator appears to be in acceptable condition and is expected to be maintained and tested as required by code. The size of the generator appears to be adequate for the loads it services. The generator is located in a room that does not appear to meet the requirements of CSA282 to be located in a separate service room. 2 hour emergency lighting does not exist in the generator or transfer switch room as per CSA 282. Photo reference (Figure 7.3.10)	G	E - the same age as the fieldhouse	The existing emergency generator only services emergency lighting in the complex. If desirable, user defined loads such as basic heat or pool circulation could be added to the distribution in the event of a prolonged power outage. If non-code required loads are added to the generator, addition distribution would be required to feed them and the size of the generator would need to be reviewed. Add emergency lighting as per current edition of CSA 282. The upgrade or replacement of the genset to increase capacity to meet additional owner requirements would require installation of a new stand alone genset in a self contained enclosure with associated infrastructure. Size in alignment with code and owner needs. It is assumed some pool systems and HVAC is included.	\$250,00.00		



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Electri	cal							
E1.10	Emergency Lighting System	The Emergency Lighting System for service areas, change rooms and the fitness centre consists of emergency power battery units connected to integral and remote LED lighting heads. Pool Area and Crawlspace emergency lighting equipment consists of general area light fixtures connected to the emergency power distribution. As with Exit Signage, emergency lighting equipment has been equipped with enclosures suitable for harsh environments. The Emergency Lighting System was upgraded in 2017 during mechanical system and pool area lighting upgrades. As such, system equipment is in good condition with no operating deficiencies noted. System coverage is considered adequate for the existing facility. The spacing and locations of the emergency lighting appears to be in line with code requirements however, testing of the units and light readings were not conducted as a part of this review. Photo reference (Figure 7.3.11)	E	A - 4 years	The existing system should be maintained as is. Emergency Lighting should be added to the generator room in the Field House If the existing emergency power system serving the Aquatic Centre/Field House/Link facility is upgraded, consideration should be given to decommission battery operated emergency lighting equipment and modifying existing general area lighting equipment and associated controls in all Aquatic centre areas to provide emergency lighting for the facility. This cost is to provide the emergency lighting pack required by code to the genset room.	\$500.00	\$0.00	
E1.11	Fire Alarm System	The Aquatic Centre fire alarm system is part of the same system serving the Field House and the Link Areas. The main fire alarm system control panel (FACP) for the entire complex is located at the West Main entrance. The system originally installed in the Aquatic Centre was an open circuit 120V fire alarm system (i.e. non-supervised system) consisting of fire alarm pull stations adjacent all building exits and fire alarm horn units located throughout the building. At some point, these original devices were decanted onto the new system installed for the Field House and Link via a relay connection. All initiating devices in the Aquatic Centre, other than some newer devices installed during recent crawlspace upgrades, are conventional devices. There is a remote annunciator located in the Pool Admissions Office, but the unit is non-functional and was likely abandoned during a fire alarm system upgrade. Existing fire alarm equipment exhibits signs of wear related to the harsh environment. More importantly, the existing system does not meet current code requirements with respect to system composition, system installation, system annuitization or device types, locations and quantities. Examples of deficiencies identified on site include: Lack of heat detectors in service and storage spaces Residential style smoke alarm units located at the top of exit stairs in lieu of system smoke alarms A mixture of signalling devices in service (i.e. horns and bells) A lack of visual alarm indicating devices (i.e. strobes) in areas where ambient noise levels might prevent occupants from hearing audible alarm indicating devices. A lack of CAN/ULC S561 compliant remote monitoring.	P	A - 4 years to 47 years	The existing system should be replaced in its entirety with a new two stage addressable system meeting current code requirements.	\$150,000.00		



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Electri	cal							
E1.12	Intrusion Alarm System	The Aquatic Centre is not equipped with and Intrusion Alarm System. A System is in place in the Field House and Link, but it does not extend into the Aquatic Centre. During the site review, C of R staff commented that the Aquatic Centre is manned almost 24/7 by virtue of on-going daily maintenance activity. It is unusual, however, for a facility of this size to not be equipped with an Intrusion Alarm System to at least protect unoccupied spaces.	N/A		Consideration should be given to providing a facility wide, partitioned Intrusion Alarm System to protect unoccupied or intermittently occupied areas after normal operating hours. As with Access Control and Video Surveillance, the Intrusion Alarm System would be managed by a Unified Security Platform (USP) for ease of operation and integration with other security related systems.	\$0.00	\$22,000.00	
E1.13	Video Surveillance System (CCTV)	 The Aquatic Centre is equipped with a video surveillance system consisting of: Dome style mini cameras monitoring the 2nd floor fitness area and stair leading from the fitness area to the main floor (four cameras in total) A "multiplexer" and associated screen for display of the camera images located in the Pool Admissions Office. There does not appear to be any recording capability for the four camera system. There are several older "box" style cameras and a viewing monitor located in the Pool Admissions Area, but these are no longer in service. Newer dome style cameras are also located in the Pool Admissions Area, but these are part of a facility wide system managed remotely by the C of R. The equipment reviewed on site appears to be functional, but the extent and composition of the system falls short of systems that would be installed in newer facilities. Photo reference (Figure 7.3.13 Figure 7.3.14) 	Р	E - 10 to 20 years	Consideration should be given to providing a new Video Surveillance System incorporating POE cameras, local or remote recording capability and local display capability that provides staff with an adequate view of the facility. Camera enclosures would need to take into account the relatively harsh environment of some viewing areas. Camera capabilities and placements would need to provide staff with an adequate view of circulation and activity spaces while ensuring staff and client privacy are not compromised. Viewing for real time or recorded images would need to be controlled to ensure only authorized personnel had access. As with Access Control and Intrusion Alarm Systems, the Video Surveillance System would be managed by a Unified Security Platform (USP) for ease of operation and integration with other security related systems.	\$0.00	\$ 64,000.00	\$0.00
E1.14	Access Control System	The Aquatic Centre is not equipped with and Access Control System. The door between the Pool Admissions Area and Pool Area is equipped with a magnetic lock controlled by a manual operator located in the Pool Admissions Office. A similar locking system is provided for the door leading from the Pool Admissions Area to the fitness centre on the mezzanine. All other facility doors are controlled using manually operated door hardware. Staff report no issues with the system controlling access to the pool. The system controlling access to the fitness centre is non-functional as the magnetic lock has broken free of the door frame.	Р	E - 20 years	Repairs should be carried for the magnetic lock controlling access to the mezzanine area immediately. Consideration should be given to providing a facility wide Access Control system to regulate access to all public and private areas. The Access Control would, in turn, be managed by a Unified Security Platform (USP) for ease of operation and integration with other security related systems. Any Access Control system upgrade would have to carried out in concert with upgrades to existing doors, door frames and door hardware	\$1,000.00	\$48,000.00	
E1.15	Wiring Methods	It is assumed that most of the wiring in the facility is copper and sized appropriately to the code which it was built to. There is a variety of different methods to which the wiring is run throughout the building including EMT conduit and wire, PVC conduit and wire, teck cable, liquid tight flex, and AC90 (BX). The various renovations and maintenance upgrades over the years have resulted in an organized mess of wiring and conduits throughout public spaces and back of house. Where EMT is used in the same environment as the natatorium, varying levels of corrosion is taking place. PVC conduit and teck cable was used as an alternate wiring method during the modernizations and it appears to be in good condition. Teck cable does not allow for future flexibility with the wiring or pathway. Photo reference (Figure 7.3.15)	F	E - 1974-2017	PVC conduit is a useful method to avoid corrosion, however its durability is not as good as EMT. Green guard EMT conduit is commonly used in corrosive environments such as the natatorium. All corroded metlic conduit should be replaced with new EMT with a green guard coating. A minimum required recommendation would be to review all instances of flexible cable installation and ensure CEC is met for installation applications, supports, and connections to equipment.	\$10,000.00		



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Reference or Number	Components	Description of Systems	Condition on P.F.G.E.	Age in 2021 Estimated (E) Actual (A)	Recommendation	Year 1	Year 2 - 5	Year 6+
Electric E1.16	Data and Voice Cabling	The SaskTel demarcation point for the entire complex is located in a second floor electrical room at the south east corner of the Field House. Fibre and copper riser cables extend from this point to an equipment rack located in the Field House and then on to the Aquatic Centre. Copper feeds for telephone run from the Field House equipment rack location to the Aquatic Centre's original SaskTel demarc in the Aquatic Centre Main Electrical Room. Fibre feeds run from the Field House equipment rack location to an equipment plywood in the Aquatic Centre Admissions Office. Administrative network equipment for the Aquatic Centre is also installed at this plywood. Telephone field wiring for the Aquatic centre consists of Cat 3 cable run in conduit and free air from the original SaskTel demarc to telephone outlets located throughout the Aquatic Centre. Data field wiring consists of UTP (Cat 5 and/or Cat6) cable run free air from the equipment plywood in the Pool Admissions Office to data outlets and Wifi Access Point (WAPs) located throughout the facility. In general terms, the data and voice cabling plants for the Aquatic Centre fall short of current standards for a new facility of this type. Cabling and equipment have been installed on an "Ad Hoc" basis as dictated by additions and renovations and by changes in technology and program requirements. Photo reference (Figure 7.3.16)	P	E - 15 years	The existing data and voice cabling plants can be maintained as is. In the event of a major renovation or addition, cabling plants should be replaced to allow for the following: • Secure and climate controlled head end locations for data/voice network equipment and related cable terminations • Structured cabling systems incorporating the latest version UTP cabling for both data and voice fields. • A cabling raceway system consisting of cable tray, conduit and/or cabling hooks to properly support and secure network cabling	\$16,000.00		
E1.17	Miscellaneous	The whirlpool emergency shut off does not appear to have any audio or visual indicator to annunciate actuation. The spa did not appear to have leakage current collectors on all hot tub inlets and outlets as per CEC section 68. There is excessive amount of moisture in the mechanical mezzanine level and in the winter results in significant frost build up on the structure and other systems in the space. The electrical systems are not rated for this level of moisture.			Add audio/visual indicator on the emergency shut off button for the whirlpool. Add leakage current collectors on all water inlets/outlets as per CEC Section 68. Update all electrical systems in the mechanical mezzanine to be NEMA 3R type to account for the moisture in the space.	\$7,500.00		
12 11					Total anticipated costs	\$321,500.00	\$730,000.00	\$7,500.00
					Total			\$1,059,000.00

7.3 Photographs



Figure 7.3.1 Utility Service and Transformer
(assumed to feed both Fieldhouse
and LAC as no other transformer)
exists on site)



Figure 7.3.5 Controls



Figure 7.3.2 Main Distribution



Figure 7.3.6 Motor Control



Figure 7.3.3 Sub Distribution

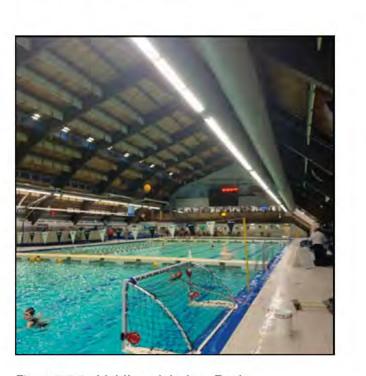


Figure 7.3.7 Lighting - Interior - Pool



Figure 7.3.4 Sub Distribution 2



Figure 7.3.8 Lighting - Interior - Gym



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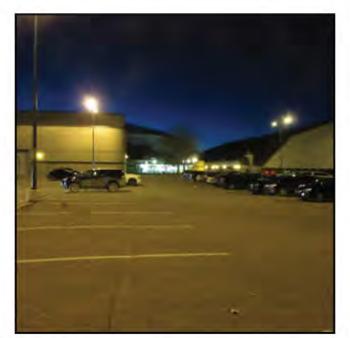


Figure 7.3.9 Lighting - Exterior - Parking Lot



Figure 7.3.13 Video Surveillance System (CCTV)



Figure 7.3.10 Grounding | Emergency Power



Figure 7.3.14 Video Surveillance System (CCTV) 2



Figure 7.3.11 Emergency Lighting System



Figure 7.3.15 Wiring Methods



Figure 7.3.12 Fire Alarm System

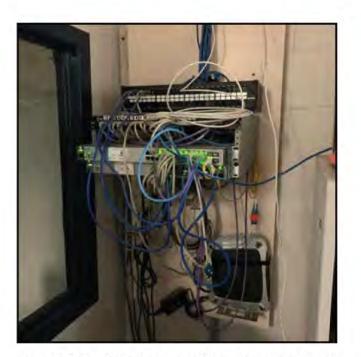


Figure 7.3.16 Data & Voice Cabling. Note: this is not an ideal installation location and a dedicated room should be provided. This is a result of space constraints in the existing building and the ability to add contemporary technology to an old building.

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Section 8.0 Civil Engineering

8.1 Executive Summary

The LAC civil infrastructure is in adequate condition and based on the age of the connections is not in need of any significant upgrades or remedial work. The parking lot is only in fair condition, and site drainage requires review and redesign to ensure proper flow and retention of storm water. For each Civil component this report assesses the status of the services to the existing building (Current Facility Servicing) As the existing servicing to the LAC is not time expired no costs beyond the parking lot remediation is included as part of this condition assessment report. An overview of the findings is as follows:

Current Facility Servicing

The existing Lawson Aquatic Centre presently has adequate water, sanitary and storm sewer servicing.

8.2 Report Context

The following sections describe the existing services network surrounding the Lawson Aquatic Centre site and how the development requirements are likely to be negotiated. A plan showing the existing structure is attached.

Potable Water/Fire Flow

Current Facility Servicing

The current Lawson Aquatic Centre is serviced via two 150 mm services each connected to a 350 mm PVC main in Elphinstone Street. This 350 mm PVC main transitions to a 300 mm Asbestos Cement (AC) main further south of the Field House.

The two 150 mm PVC service connections were installed in 1987. PVC pipe has a conservative lifespan of 100 years and thus there is an estimated 65 years of life remaining.

Costs

Current Facility Servicing

Given the age and material of construction for the existing service connection, limited additional costs are contemplated to service the existing facility.

Sanitary Sewer

Current Facility Servicing

The current facility - and the Field House - appear to be draining towards a sanitary sewer in 10th Avenue / Montague Street. There is no sanitary sewer in Elphinstone Street.

Current Facility Servicing

Given the age and material of construction for the existing service connection, limited additional costs are contemplated to service the existing

Storm Water

Current Facility Servicing

450 mm storm water sewer traversing the site, with connections to it from the existing pool and Field House. Some sections of this pipe are reported to be PVC and other concrete. There is also some abandoned Vitrified Clay Tile (VCT) pipe indicated. Concrete has a lifespan on 100 years under good conditions. Therefore, it is likely that there is approximately 34 years of remaining service.

There is an existing 375 mm and

Costs

Current Facility Servicing

Given the age and material of construction for the existing service connection, limited additional costs are contemplated to service the existing facility unless an expansion of existing stormwater contributions with the facility takes place.

Site Grading and Site Accesses

Site grading and access issues will be dealt with in tandem with the overall facility development and the outcomes of the transportation design.

Parking Lot Assessment

Current Facility Servicing/New Aquatic Centre Servicing

The parking lot was inspected during the winter (90% was covered with snow), what was observed included:

Parking Lot Assessment

Current Facility Servicing/New Aquatic Centre Servicing

The parking lot was inspected during the winter (90% was covered with snow), what was observed included:

- Cracks prevalent approximately every
 - » Cracks not maintained with crack
 - » Melting water getting into cracks increases the risk of freeze/thaw damage occurring.
- Pavement surfaces observed appear non-raveled and in reasonable condition.

The area of parking lot is 26,292 sm.

Current Facility/Parking Lot An opinion of probable costs to

replace the asphalt would be in the order of \$90/m2 (including base. subbase, geogrid, and 65 mm asphalt). Recommendations for next stage of review include:

- Geotechnical investigation (complete with bore holes) to determine potential rehabilitation options (if any),
- Perform a topographic survey to determine appropriate drainage grades
- Perform a visual inspection after all snow is gone, and
- Determine extents/area of pavement affected by new facility.

Summary / General Condition and

Current Facility Servicing

There appears to be adequate existing water and sewer infrastructure to service the existing facility.

Upgrading of the parking lot requires additional investigation to determine the extent of repair versus complete replacement, in consideration of the overall storm water management plan.

Outside of the direct servicing of the facility, strong consideration for bigger picture deep infrastructure improvement planning as part of the overall city strategy should remain a focus of any deep infrastructure improvements in the

Upgrading of the parking lot requires additional investigation to determine the extent of repair versus complete replacement, in consideration of the overall storm water management plan The costing in this report represents a complete replacement, worst-case scenario.

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						Capi	tal Expenditure Fo	orecast
Reference Number	Component	Description of System	Condition P,F,G,E*	Age in 2021 Estimated (E) Actual (A)	Recommendations	Year 1	Years 2 - 5	Years 6+
	DISCIPLINE - Civil							
C1.1	Water/Fire Flow	The current Lawson Aquatic Centre is serviced via two 150 mm services each connected to a 350 mm PVC main in Elphinstone St. This 350 PVC main transitions to a 300 mm AC main further south of the Field House.	Good	The two 150 mm PVC service connections - 35 years (E)	Limited additional servicing is contemplated provided water servicing requirements are not increased. Consideration for bigger picture opportunities to assist the overall city systems should take place during preliminary design.	n/a		
C1.2	Wastewater/Sanitary Sewer	The current facility - and the Field House - drains towards a sanitary sewer in 10th Ave / Montague St. There is no sanitary sewer in Elphinstone St. The existing sanitary pipe near Montague St is a 200 mm PVC pipe.	Good		Limited additional servicing is contemplated provided wastewater servicing requirements are not increased. Consideration for bigger picture opportunities to assist the overall city systems should take place during preliminary design	n/a		
C1.3	Storm	There is an existing 375 mm and 450 mm storm water sewer traversing the site, with connections to it from the existing pool and Field House. Some sections of this pipe are reported to be PVC and other concrete. There is also some abandoned VCT pipe indicated.	Fair/Good	Concrete pipe - 66 years (E)	Limited additional servicing is contemplated provided stormwater servicing requirements are not increased. Consideration for bigger picture opportunities to assist the overall city systems should take place during preliminary	n/a		
C1.4	Pavement/Parking Lot	Cracks prevalent approximately every 10 m. Cracks not maintained with crack filler. Melting water getting into cracks increases the risk of freeze/thaw damage occurring. Pavement surfaces observed appear non-raveled, and in reasonable condition.	Fair		 Geotechnical investigation (complete with bore holes) to determine potential rehabilitation options (if any); Perform a topographic survey to determine appropriate drainage grades; Perform a visual inspection after all snow is gone; and Determine extents/area of pavement affected by new facility. 			26,292 sm x \$90 = \$2,366,00 0
				†	Total anticipated costs			\$2,366,000.00

Date June 23, 2022 client City of Regina Project New Regina Indoor Aquatic Feasibility (IAF)

As a gesture of respect, peace, and friendship, we acknowledge that the Lawson Aquatics Centre is located on Treaty 4 Terr try, the original lands of the Cree, Ojibwe, Sailteaux, Dakota, Nakota, akota and the homeland of the Métis Nation and all their ancestors who have lived on and served as faithful stewards of these lands



_{Date} June 23, 2022

Page A-71



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BUILDING ASSESSMENT - LAWSON POOL MUNICIPAL SERVICES

NAIF Building Assessment - Lawson Pool - Municipal Services

Introduction and Context

The following sections describe the existing services network surrounding the Lawson Aquatic Centre site and how the development requirements are likely to be negotiated. A plan showing the existing structure is attached.

Potable Water

It appears that the current facility is serviced via two 150 mm services each connected to a 350 mm PVC main in Elphinstone Street. This main transitions to a 300 mm Asbestos Cement main further south of the Field House.

Fire Flows

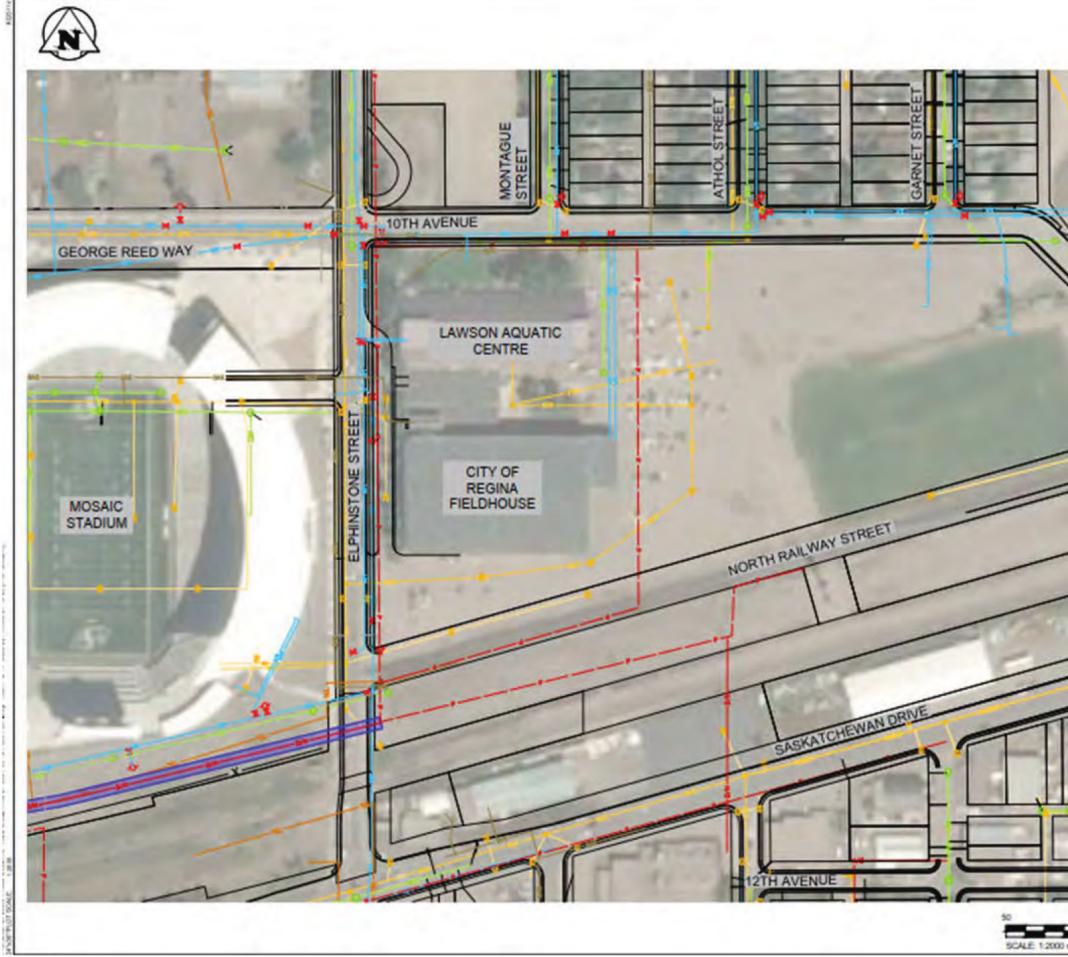
A key consideration for determining the water demand for the site will be the level of fire flows required and the type of fire suppression systems to be installed. The City mains may have the required flows and pressures for a hydrant-based system but not necessarily the required pressures for a sprinkler-based system. Early confirmation of the system requirements is necessary such that the requirements for the site are confirmed and also whether fire pumps will be required for the facility.

Sanitary Sewer.

The current facility drains towards a sanitary sewer in 10th Avenue / Montague Street.

Storm Water

There is an existing 375 mm storm water sewer traversing the site, with connections to it from the existing pool and Field House.





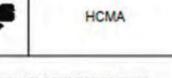
EX STORM SEVER

EX DOMESTIC SEWER EXWATER

EX OVERHEAD POWER

- ALL LINTS ARE IN METHES UNLESS OTHERWISE NOTED.
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 21 PROPERTY LINES ARE OSTAINED FROM THE CITY OF REGINA.
 INFRASTRUCTURE RECORDS MAP AND SHOULD BE VERRIED. PRIOR TO CONSTRUCTION.
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ITY OF REGINA AQUATICS FACILITY

June 23, 2022

XISTING SITE PLAN FIG 1 21-3931-001

Project New Regina Indoor Aquatic Feasibility (IAF)

New Regina Indoor Aquatic Feasibility (IAF) June 23, 2022

Appendix B - Engagement



What We Heard Report

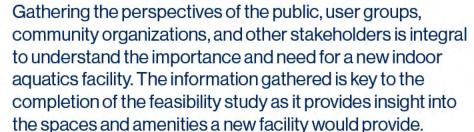
New Indoor Aquatics Facility











A varied program of engagement was implemented to gather the thoughts of the varied constituencies. Combined, these engagement findings present a fulsome perspective on a new indoor aquatics facility in Regina. The tactics utilized included two surveys of residents (coded access and open access); a survey of organized groups in Regina; and a series of meetings and discussion sessions with user groups, potential partners, and other stakeholders in Regina.





Open Access Survey = Participation: 1,400



Stakeholder / Group Survey



Stakeholder Meetings Participation: 14 meetings 39 organizations / perspectives

Conclusions

Several conclusions have been drawn considering each of the different engagement tactics employed: public survey, group and stakeholder survey, and stakeholder meetings.

- There is a strong need for a new indoor aquatics facility. As it relates to the current use of the Lawson, a new facility should not simply replicate the amenities but should address the current deficit of space as well as accommodate future demands.
- The Lawson Aquatic Centre Pool is one of the most used indoor aquatics facility in Regina.
- · A new indoor aquatics facility should accommodate the strong need for recreation and leisure aquatics, swimming lessons, and fitness activities.
- » Specific needs include:
- Warm water pool Beach entry
- Water park amenities: spray / splash park; water slides
- Social gathering / seating areas
- Respite / quiet areas (to escape the highly stimulating environment)

 A new indoor aquatics facility needs · Other amenities to include in a new to accommodate the needs of organizations for their training and » Change rooms: universal change rooms, separate change rooms for competitive needs. The facility should meet the requirements and standards officials and coaches; consider a

as described by national and

international bodies for speed

- 50m 10 lane pool

- Separate 25m pool

- Separate dive tank

and water polo.

include:

swimming, diving, artistic swimming,

» Specific needs in the natatorium

- separate group change room » Café and social gathering space
- » Gymnasium and weight room
- » Public bathrooms with showers for people otherwise not using the
- » Several program rooms that could be used by community
- organizations and agencies Cold and warm tubs / pools » Consider culturally specific rooms
- Spectator seating (off the deck) to accommodate prayer, washing, Separate gym / dryland training smudging
- area (including trampolines) - Sufficient deck space to · The facility should be designed to accommodate officials and recognize the community and the heritage of the residents, particularly the Indigenous community. - Equipment storage for the City
- Multi-purpose rooms for classrooms, officials rooms, hospitality rooms
- The transportation needs of people with mobility challenges needs to be addressed through appropriate parking near the entrances but also with suitable drop off and pick up area (that could be covered or inside.
- · All aspects of the new facility should accommodate people with physical disabilities including pool deck and access, change rooms, entrances, etc.

What We Heard Report

New Indoor Aquatics Facility



June 23, 2022



Project New Regina Indoor Aquatic Feasibility (IAF)

REGINA

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1.0 Introduction

2.0 Community Survey

Gathering the perspectives of the public, user groups, community organizations, and other stakeholders is integral to understand the importance and need for a new indoor aquatics facility. The information gathered is key to the completion of the feasibility study as it provides insight into the spaces and amenities a new facility would provide.

A varied program of engagement was implemented to gather the thoughts of the varied constituencies. Combined, these engagement findings present a fulsome perspective on a new indoor aquatics facility in Regina. The tactics utilized included two surveys of residents (coded access and open access); a survey of organized groups in Regina; and a series of meetings and discussion sessions with user groups, potential partners, and other stakeholders in Regina. More detail about each of these mechanisms is presented below along with their findings.



Coded Access Survey Participation: 2,481 / 40,000





Open Access Survey Participation: 1,400



Stakeholder / Group Survey



Participation: 14 meetings 39 organizations / perspectives

Cilent City of Regina

Two surveys were fielded with residents of Regina to gather their perspectives on aquatics provision in Regina and a new indoor facility. One survey required an access code to be able to submit answers. Forty thousand households were randomly selected according to the distribution of homes in the five different zones in the city. These 40,000 homes each received a postcard promoting the survey, directing them to a website where they would access the survey, and providing a unique access code. This survey gathered responses from October 20, 2021 through to November 7, 2021.

In total 2,481 responses were gathered. Because this survey had a control mechanism (the access code) and was randomly sampled, its findings are considered representative of the entire city's population¹. While data collection primarily took place online, people were able to request a hard copy version of the questionnaire and a postage paid, addressed return envelope. In total six requests were made and two returned. Refer to the Appendix to see the questionnaire.



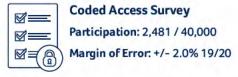




The second survey was an **open access** survey; as such there were no controls on participation. This survey was in the field from October 27, 2021 through to November 8, 2021. In total 1,400 responses were gathered. The primary intent of this open access survey was to provide a means by which people, who did not receive a postcard in the mail, could share their thoughts. The questionnaire used in this survey was similar but slightly shorter than the questionnaire used in the coded access survey.

A variety of promotional tactics were utilized to promote the two surveys. Aside from the postcard, a video was made which was posted on the City's "Be Heard Regina" web page. Notifications about the project and the survey were also mentioned on the City's web page (regina.ca). Visitors to the "Be Heard Regin" a site and the "New Indoor Aquatics Facility" page could be directed to the online questionnaires. Other tactics included the following.

- News release and a Public Service Announcement that spoke about the project itself and opportunities for input.
- Advertisements on websites.
- · Messaging on televisions and elevator screens within the City's facilities and recreation centres.
- Social media posts and reposts / likes / etc on Facebook, Twitter, and YouTube.
- · Paid social media campaign on Facebook and Twitter.
- · Email notification using the BeHeard distribution list.
- · Word of mouth from members of City Council, City administration, and Community Advisory Committee ambassadors.







2.1 Survey Findings

The findings are presented in the order they were posed in the survey. They reflect the proportion of respondents who answered the question; not all respondents answered each question.

Some subsegment analysis was undertaken with the responses to the coded access survey. The answers to the questions were examined according to how some other questions were answered. Subsegment analysis was completed for the following.

- Importance that the City develop a new indoor pool.
- Household member has used a pool in Regina as an active participant.
- · City zone of residence.
- Household composition.

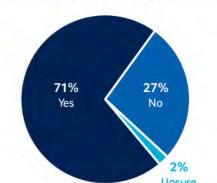
Where sizeable differences in the subsegment analysis exists, it is noted alongside the overall findings. Tables showing all the subsegment findings are presented under a separate cover.

The findings from the open access resident survey are presented alongside the findings of the coded access survey. The open access survey findings are found in text boxes. It is important to note that not all questions asked in the coded access survey were posed in the open survey.

2.1.1 Overall Awareness of Aquatics Planning

To begin the survey, respondents were asked if they are aware that the City has been considering the development of a new indoor pools. As illustrated in the accompanying graph, almost three-quarters (71%) of respondents are aware of this. Approximately one-quarter (27%) are unaware.

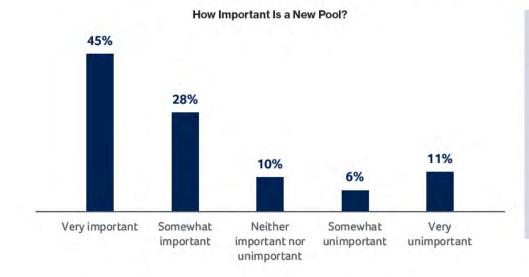
Are You Aware the City is Considering a New Indoor Pool?



Subsegment Analysis

 Households with someone 60 years of age or older were much more aware (80%) than households with children 0-9 years of age (65%), households with children 10-19 years of age (69%), and households without children and seniors (61%).

Almost three-quarters (73%) of respondents think it is important (45% very important and 28% somewhat important) that the City develop a new indoor pool. Seventeen percent (17%) said the development of a new pool by the City is unimportant. Refer to the graph.



How important is it that the City develop a new indoor pool? Very important – 58%

Open Access Survey Findings

Somewhat important – 24%

Neither - 8%

Somewhat unimportant - 3%

Very unimportant – 7%

Subsegment Analysis

- · Households that have actively used a pool in the previous three years are more likely to think it is very important (60%) that the City develop a new indoor pool than others (21%).
- Households with children 0-9 years (62%) and 10-19 years (65%) are much more likely to say it is very important that the City develop a new indoor pool than households with people 60 years and older (35%) and those without children and seniors (37%).







New Regina Indoor Aquatic Feasibility (IAF) June 23, 2022

Open Access Survey Findings

Are you aware the City is considering a new indoor pool?

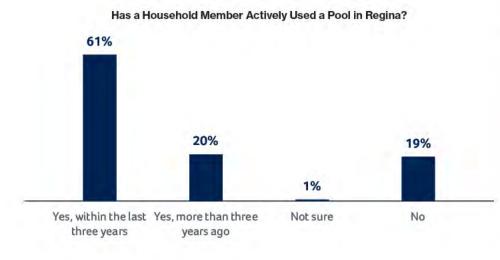
Yes - 80%

No - 19%

Unsure - 1%

2.1.2 Aquatics Utilization

Approximately two-thirds (61%) of respondents said that a household member used a pool (outdoor or indoor) in Regina an active participant in the last three years. A further twenty percent (20%) of respondents had an active pool participant in their households but more than three years ago. A similar proportion (19%) had not used an indoor or outdoor pool as illustrated in the graph.



Subsegment Analysis

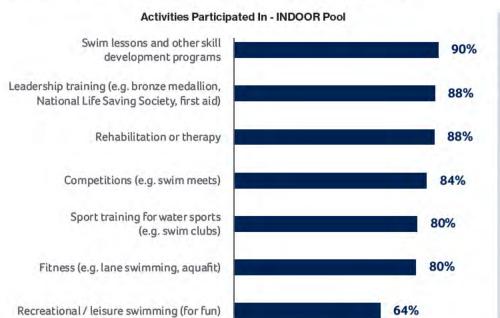
- Households who think it is important to get a new indoor pool are more likely to have used a pool with the last three years (73%) than those who do not think it is important² (30%).
- Households with children 0-9 years (89%) and 10-19 years (83%) are much more likely to have actively used a pool in the past three years than households with someone 60 year or older (45%) and households without children and seniors (48%).



participated in at indoor pools and outdoor pools. (Note: respondents who answered the previous question that no one in their households used an indoor or outdoor pool as an active participant were not asked this question.)

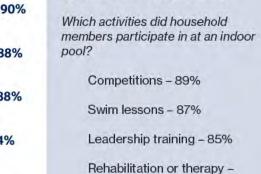
Next, respondents were asked to identify the activities in which household members

As illustrated in the accompanying graph, ninety percent (90%) of households participated in swim lessons and other skill development programs. Similar proportions took leadership training (88%) and completed rehabilitation or therapy (88%) at indoor pools. The lowest proportion (66%) used indoor pools for recreational / leisure swimming. Refer to the graph for other responses.



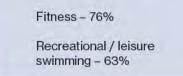
Regarding outdoor pools, the largest proportion (36%), used outdoor pools for recreational / leisure swimming. Only 11% took swim lessons and other skill development at outdoor pools. See the graph for other responses.





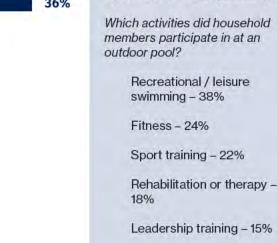
82%

Open Access Survey Findings



Sport training - 78%

Open Access Survey Findings



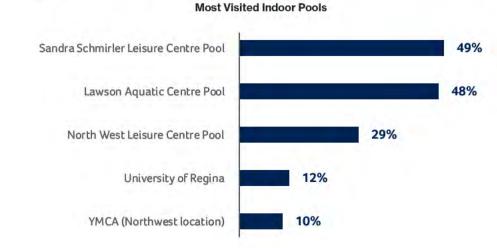
members participate in at an outdoor pool? Recreational / leisure swimming - 38% Fitness - 24% Sport training - 22% Rehabilitation or therapy -

Swim lessons - 13%

Competitions - 11%

June 23, 2022

Approximately half of respondents³ visit the Sandra Schmirler Leisure Centre Pool (49%) and the Lawson Aquatic Centre Pool (48%) the most. The YMCA (Northwest location) was identified by ten percent (10%) of respondents as one of the pools they visit the most.

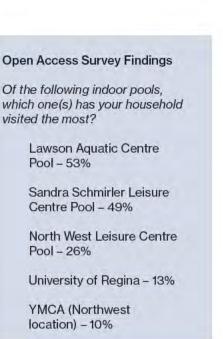


Subsegment Analysis

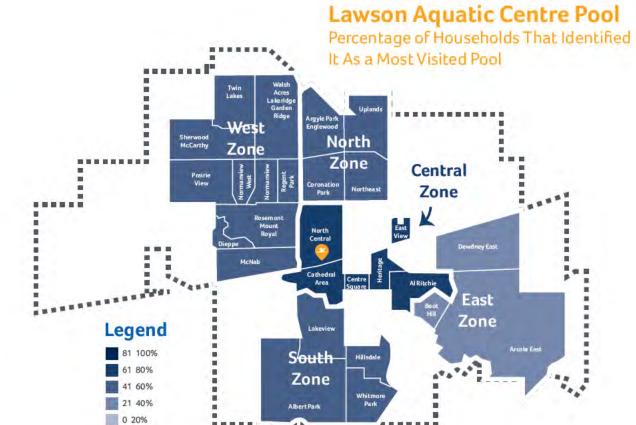
- Households who think it is important that the City develop a new indoor pool are more likely to say the Lawson Pool is one they visit most often (50%) compared to those who think it is unimportant (or who said it is neither important nor unimportant) (40%).
- · There is sizeable differences of most visited indoor pools according to the zone of residency as presented in the following table.

	City Zo	ne of Res	idence		
Indoor Pool	West	North	Central	South	East
North West Leisure Centre Pool	66%	59%	11%	10%	5%
Sandra Schmirler Leisure Centre Pool	28%	33%	35%	49%	84%
Lawson Aquatic Centre Pool	44%	45%	75%	59%	31%
YMCA (Northwest location)	17%	19%	8%	5%	4%
University of Regina	6%	3%	14%	21%	12%

The following maps illustrate - for each indoor pool - the percentage of respondents from each zone that said that pool is one of their most visited pools.



Note: the percentages shown here are based on households who had used an indoor or outdoor pool as an active participant (81% of the respondents to the Coded Access









New Regina Indoor Aquatic Feasibility (IAF)

Open Access Survey Findings

Yes, within the last 3

Yes, more than 3 years

as an active participant?

years - 83%

Not sure - <1%

ago - 9%

No - 8%

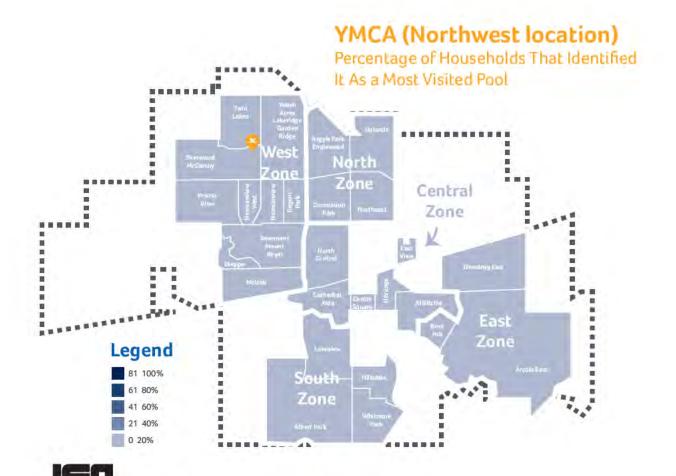
Has anyone in your household used

an indoor or outdoor pool in Regina

New Regina Indoor Aquatic Feasibility (IAF)

City of Regina

Percentage of Households That Identified It As a Most Visited Pool West Lake July Pool It And It As a Most Visited Pool West Zone Prairie View Mount Mount Royal Pool Royal Disple Molad Recently Royal Royal Pool Royal Royal



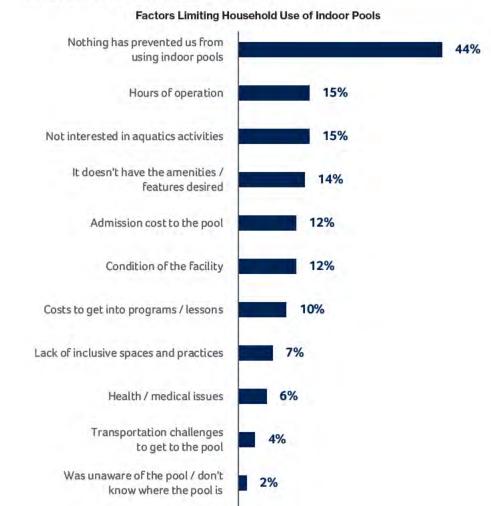
New Regina Indoor Aquatic Feasibility (IAF)

University of Regina Percentage of Households That Identified It As a Most Visited Pool The Water Labridge Committee Completed Committee Completed Complete

 There are some sizeable differences of the most visited indoor pools according to household composition as illustrated in the following table.

	Household Co	10-19 yrs and older nor Seniors						
Indoor Pool	Children 0-9 yrs			THE SEASON SERVICE AND ADDRESS OF THE PARTY				
North West Leisure Centre Pool	39%	33%	24%	16%				
Sandra Schmirler Leisure Centre Pool	62%	56%	39%	44%				
Lawson Aquatic Centre Pool	32%	45%	53%	60%				
YMCA (Northwest ocation)	13%	15%	8%	2%				
University of Regina	9%	12%	12%	18%				

Almost half (44%) of respondents said that nothing has limited the use of indoor pools by household members. The most cited limiting factors are hours of operation (15%), lack of interest in aquatic activities (15%), and a lack of desired amenities (14%). Refer to the graph to see other reasons.



Subsegment Analysis

Physical barriers to access

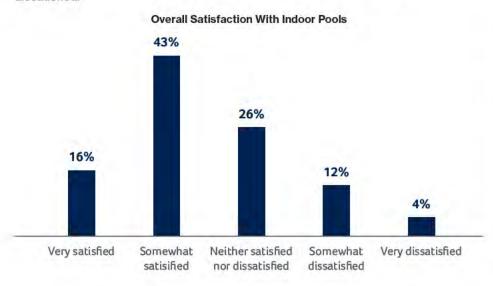
or get into the pool

- Households who said it is important that the City develop a new indoor pool are
 more likely to say a lack of amenities (17%) and the condition of the facility (14%)
 limit their use of indoor pools than other households (5% and 4% respectively).
- Households that have actively used a pool in the last three years are more likely to say a lack of amenities (18%) and the condition of the facility (15%) limit their use of the indoor pools than other households (8% and 7% respectively).
- Hours of operation (28%) is a limiting factor for a greater proportion of households without children or seniors, compared households with children 0-9 years (23%), households with children 10-19 years (17%), than for households with people 60 years and older (8%).

When asked what factors (other than COVID-19) limited the use of indoor pools, respondents described a multitude of items (this included 472 individual responses). The main limitations that respondents described includes:

- Availability of swimming lesson (111 unique comments). Respondents said the demand for swimming lessons far exceeds the supply. The process used to enroll can be frustrating and limiting. In addition, other programs such as fitness classes also had demand that exceeds supply (28 unique comments).
- 2. Facilities being too busy or crowded (87 unique comments).
- Limited hours of operation or program timing does not match user needs (56 unique comments).
- The location of pools restricts use. Some respondents noted the need for a pool in the south end of Regina (47 unique comments).
- The need for more leisure swimming time and additional leisure amenities were also mentioned frequently (46 unique comments).

When asked to rate their overall satisfaction with indoor pools, over half (59%) said they are satisfied (16% very satisfied). Sixteen percent (16%) said they are dissatisfied.



Overall, how satisfied are you with indoor pools in Regina? Very satisfied – 10% Somewhat satisfied – 43%

Neither - 18%

Open Access Survey Findings

Somewhat dissatisfied - 21%

Very dissatisfied – 7%

Subsegment Analysis

- Households who said it is important that the City develop a new indoor pool are more likely to be dissatisfied (19%) with indoor pools in Regina than the other households (8%).
- Households who actively used the pools in the last three years are more likely to be dissatisfied (20%) with indoor pools than other households (10%).
- Households with children 10-19 years of age were more likely to be dissatisfied (27%) than households with children 0-9 years (19%), households with people 60 years and older (11%), and households without children and seniors (14%).



Project

New Regina Indoor Aquatic Feasibility (IAF)

City of Regina

Date

University of Regina

Date

University of Regina

More than 1,800 individuals provided rationale for their level of satisfaction with indoor pools. While satisfaction is generally high, it is clear that respondents would like to see improvements, upgrades, and new additions to aquatic offerings in Regina. The main themes within respondents' satisfaction of indoor pools included:

- 1. The need for a new (additional) aquatic facility (233 unique comments) A new facility would include amenities such as waterslides, a wave pool, lazy river. saunas, and other leisure features. In addition, respondents described the need for a balance between recreation and competition within this new facility. Connected to this theme was the overwhelming response (231 unique comments) that the current pools are lacking desired amenities and leisure features as described above. Finally, when considering a new facility there was a high demand for the location to be in the south End of Regina (83 unique comments).
- 2. Current facilities need upgrades (177 unique comments). Respondents also noted the need for upgrades to be made to current pools (some in addition to a new facility and some who felt that upgrades to current facilities would suffice).
- 3. Indoor pools within Regina are overcrowded and appear over capacity (161 unique comments). Responses suggests that users are experiences crowding and this is taking away from their overall satisfaction with their experience. Some respondents also mentioned that the over crowding made them feel unsafe, made the facility appear unclean, and deterred them from future visits.
- 4. Related to high demand for indoor pools in Regina, respondents noted the need for more swimming lessons and programs as these appear to fill up very quickly and do not currently provide enough opportunities for the level of demand (159 unique comments).
- 5. Change rooms need to be upgraded and the focus should be on increasing the amount of family changes rooms, universal and gender neutral changerooms, and accessible facilities (98 unique comments).
- 6. Cleanliness was reported as main problem for user who are dissatisfied with their experiences of indoor pools (71 unique comments).
- 7. Improvements can be made on the availability of lane swimming such as more designated times, increase the number of lanes, etc. (58 unique comments) Many respondents felt that a new facility would help improve the perceived lack of lane swimming opportunities.

New Regina Indoor Aquatic Feasibility (IAF)

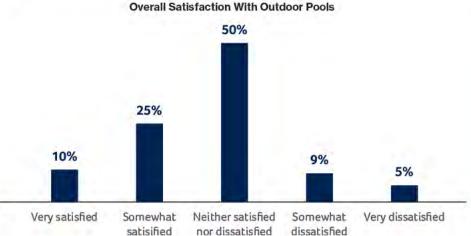
8. Increasing the operation hours would provide for opportunities for users to enjoy the existing indoor pools in Regina (40 unique comments).

Open Access Survey Findings

(954 individual responses)

- 1. The need for a new aquatic facility with leisure amenities (164 unique comments);
- 2. Lack of lane swimming opportunities (111 unique comments):
- 3. Too crowded/busy (106 unique comments):
- 4. More swimming lessons are needed (101 unique comments)
- Current facilities need upgrades, specifically new change rooms including family and universal change room options (73 unique comments).

Considering outdoor pools in Regina, half (50%) are neither satisfied nor dissatisfied. Approximately one-third (35%) however did express satisfaction as shown in the graph.



Outdoor pools are highly valued by respondents, a total of 1,715 individuals provided context to their satisfaction response. Within the responses 96 unique comments made regarding how short the season is and the variability of the weather, some felt that outdoor pools should open earlier in the season and that there should be options for colder weather (hot tubs, warmer water etc.) The following describes the main themes respondents reported:

- 1. The reopening of Wascana pool (284 unique comments). Many respondents noted that their main satisfaction is tied to this facility and expressed excitement about the renovation and reopening. People are highly satisfied with the amenities proposed and they overall facility design. In addition, many respondents are currently using and felt very satisfied with Maple Leaf outdoor pol (66 unique comments).
- 2. There is a very high demand for outdoor pools and respondents reported feeling overwhelmed by the number of users at a given time, indicating they think the facilities are crowded or too busy (111 unique comments).
- 3. **Upgrades needed** to existing facilities including the change rooms and adding family and universal change rooms (99 unique comments).
- 4. Current outdoor pool offerings lack the amenities (79 unique comments) that respondents are looking for such as waterslides, hot tubs, spray parks, and more however many of these comments also included a recognition that the new facility being built at Wascana Park will satisfy those needs.
- 5. Lane swimming is a priority for some (75 unique comments) and many respondents felt that current outdoor pool lane swimming options are crowded or too busy.
- 6. The cleanliness of the facilities was noted as something to be improved (54) unique comments).
- 7. Respondents would like to see hours of operation increased (53 unique comments), many people are highly satisfied with the outdoor pools but would like an increase in time they are open (and an increase in seasonality).
- 8. Accessibility is a major focus for some (43 unique comments), this includes physical accessibility but also costs, location, and safety.

Open Access Survey Findings



Somewhat satisfied - 32%

Neither - 41%

Somewhat dissatisfied - 13%

Very dissatisfied - 6%

Open Access Survey Findings

(826 individual responses)

- 1. The reopening of Wascana pool (156 unique comments):
- 2. Maple Leaf pool is a great resource (47 unique comments) but current facilities need upgrades, specifically new change rooms including family and universal change room options (74 unique comments);
- 3. Too crowded/busy (59 unique comments):
- 4. Lack of lane swimming opportunities (57 unique comments):
- 5. The need for leisure amenities (36 comments)

Open Access Survey Findings

What is the priority of functions that should be accommodated in a new indoor pool?

- 1. Recreational and leisure swimming
- 2. Swim lessons
- 3. Swimming for fitness
- 4. Sport training
- 5. Rehabilitation or therapy
- 6. Leadership training
- 7. Competitions

Fitness gym / studio Seating & social gathering area Physiotherapy services

Pool facilities often have non-aquatic services. As illustrated in the graph, three-

quarters (75%) of respondents think a fitness gym / studio should be included when

Non-Aquatics Services to Include

developing a new indoor pool. Approximately two-thirds (65%) said a seating and



Physiotherapy services - 41%

Subsegment Analysis

social gathering area should be included.

Child minding services

Retail services (e.g. pro shop)

- · Households who said it is important that the City develop a new indoor pool are more likely to identify fitness gym / studio (80% vs 61%), seating & social gathering area (71% vs 46%), child minding services (51% vs 37%), and retail services (33% vs 15%) than others.
- Households with children 0-9 years (74%) and 10-19 years (75%) are more likely to identify seating & social gathering areas as something that should be included than households with someone 60 years and older (60%) and households with no children or seniors (67%).

Respondents had many unique and interesting ideas for what additional facilities and services should be included when developing a new aquatic facility, this included 462 individual responses. The most common additions include the following.

- 1. Food services (135 unique comments). This includes ideas such as a café, bar, restaurants, concession stand, and catering services. Many respondents felt strongly that food service options be healthy, local, and fresh.
- 2. Aquatic amenities such hot tubs, saunas, steam room, waterslide, wave pool etc. were highly desired (70 unique comments).
- 3. Community hub with resources and meeting spaces. This includes a library (26 unique comments), indoor playground (20 unique comments), multipurpose rooms (22 unique comments), childcare (8 unique comments), health services (8 unique comments).
- 4. Other fitness and physical activity facilities such as a fitness centre (26 unique comments), walking or running track (19 unique comments), climbing wall (10 unique comments).
- 5. Viewing or spectator area (25 unique comments).

Seating & social gathering area - 70% Child minding services - 46%

Open Access Survey Findings

What services should be included

when developing a new indoor pool?

Fitness gym / studio - 76%

Retail services - 32%

Open Access Survey Findings

(191 individual responses) 1. Food services (69 unique

- comments);
- 2. Aquatic amenities such hot tubs, saunas, steam room. waterslide, wave pool etc. (35 unique comments).
- 3. Community space and meeting rooms (25 unique comments).





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4 Functions that were ranked as the top choice were given 6 points with 5 points given to the next highest ranked function down to 1 point. The points were then totalled to determine overall ranking.

2.1.3 Future Considerations – Indoor Pool Facility

· Leadership training (e.g. bronze medallion, National Life Saving Society, first, aid,

Respondents were asked to rank these functions as to what should be

accommodated in a new indoor pool. The rankings4 are as follows:

2. Swim lessons and other skill development programs

Indoor pool facilities can serve many functions including the following seven.

Recreational and leisure swimming (for fun)

Rehabilitation or therapy

Competitions (e.g. swim meetings)

1. Recreational and leisure swimming

Swimming for fitness

Competitions

7. Leadership training

4. Rehabilitation or therapy

Sport training for water sports

Swimming for fitness (e.g. lane swimming, aquafit)

Sport training for water sports (e.g. swim clubs)

Swim lessons and other skill development programs

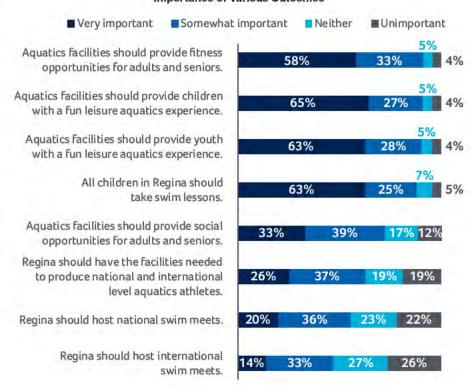
2.1.4 Other Considerations - Aquatics

A series of outcomes for an indoor pool were presented to respondents. For each outcome, respondents were asked to rate its level of importance. Approximately two-thirds of respondents said it is very important that:

- Aquatics facilities should provide children with a fun leisure aquatics experience (65% very important)
- All children in Regina should take swim lessons (63% very important)
- Aquatics facilities should provide youth with a fun leisure aquatics experience (63% very important)

The lowest levels of importance were provided for the hosting of national and international swim meets. Refer to the graph to see the levels of importance attributed to each outcome.

Importance of Various Outcomes



Open Access Survey Findings

How important are each of the outcomes?

- Aguatic facilities should provide children with a fun leisure aquatics experience - 69% very important; 24% somewhat important
- Aguatics facilities should provide fitness opportunities for adults and seniors - 62% very important; 31% somewhat important
- Aquatic facilities should provide youth with a fun leisure aquatics experience - 67% very important; 25% somewhat important
- All children in Regina should take swim lessons - 71% verv important; 21% somewhat important
- Aquatics facilities should provide social opportunities for adults and seniors - 37% very important; 40% somewhat important
- Regina should have the facilities needed to produce national and international level aquatics athletes - 31% very important, 35% somewhat important
- Regina should host national swim meets - 25% very important, 30% somewhat important
- Regina should host international swim meets - 16% very important, 30% somewhat important

Subsegment Analysis

- . Households who said it is important that the City develop a new indoor pool were much more likely to say the following outcomes are important than did other
- » Regina should host national swim meets (66% vs 27%)
- » Regina should host international swim meets (56% vs 21%)
- » Regina should have the facilities needed to produce national and international level aquatic athletes (74% vs 31%)
- » Aquatics facilities should provide social opportunities for adults and seniors (79% vs 51%)
- Households that have actively used pools in the last three years were much more likely to say the following outcomes are very important than other households:
- » All children in Regina should take swim lessons (71% vs 49%)
- » Aquatics facilities should provide children with a fun leisure aquatics experience (75% vs 48%)
- » Aquatics facilities should provide youth with a fun leisure aquatics experience (73% vs 46%)
- There were **differences in the proportion of households** who rated the outcomes very important when examined by household composition.
- » Households with children 10-19 years were more likely to think Regina hosting national swim meets is very important (28%) than households with children 0-9 years (20%), households with people 60 years and older (20%), and households without children and seniors (12%).
- » Household with children 0-9 years were more likely to say "all children should take swim lessons" is very important (75%) than households with children 10-19 years (69%), households with people 60 years and older (56%), and households without children or seniors (49%).
- » Households with children 0-9 years were more likely to say "aquatics facilities should provide children with a fun leisure aquatics experience" is very important (87%) than households with children 10-19 years (77%), households with people 60 years and older (53%), and households without children and
- » Households with children 0-9 years were more likely to say "aquatics facilities should provide youth with a fun leisure aquatics experience" is very important (84%) than households with children 10-19 years (77%), households with people 60 years and older (51%), and households without children and seniors (59%).

Finally, 1,041 individual respondents shared overall thoughts on the process of responding to this survey as well as ideas and considerations for a new aquatic facility, their ideas are represented by the following themes:

- 1. Support for and description of the need for a new aquatic facility (380 unique comments). Within this theme, respondents noted the need for new aquatic amenities such as waterslides, wave pools, and hot tubs (188 unique comments). they also felt that any new facilities should ensure accessibility for all, which includes physical accessibility as well as cost and transportation (111 unique comments). Consideration for the location of a new facility was mentioned through 63 unique comments and many respondents felt that a facility was needed in the south end of Regia.
- 2. Concern regarding cost, debt, and increases in taxes as a result of a new aguatic facility (177 unique comments) was expressed. Specifically, respondents are concerned about the need to solve social issues such as homelessness, mental health, and addictions support before spending money on new recreational facilities. Some respondents felt that a new aquatic facility is not needed and would rather see money spent on upgrading current facilities or on other much needed social services (114 unique comments).
- 3. Ensure facility can support competition and events, this includes more than just competitive swim races but ensure diving, synchronized swimming, water polo, and other groups are also accommodated for (67 unique comments).
- 4. Make swimming lessons a priority, as mentioned throughout the survey the demand far exceeds the need for swimming lesson (66 unique comments).
- 5. Ensure that the Lawson facility does not close but is kept open and updated to meet the needs of users (53 unique comments).

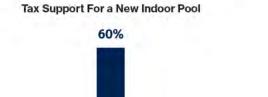
Open Access Survey Findings

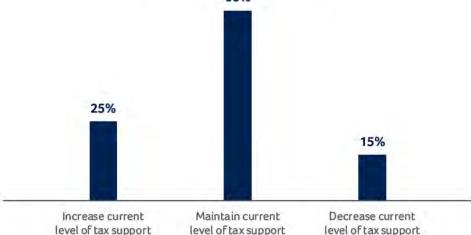
(523 individual responses)

- I. New aquatic facility needed (251 unique comments); Ensure inclusion and access for all, do not focus solely on competition pool (52 unique comments):
- 2. Increase supply of swimming lessons (56 unique comments).
- Competition and event space for water sports (45 unique comments).

2.1.5 Willingness to Pay

City of Regina recreation facilities are paid for by a combination of tax support (including property taxes) and fees paid by users. As it relates to tax support for a new pool, one-quarter (25%) support an increase in current tax levels while the majority (60%) want to maintain current levels.

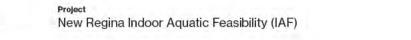




Subsegment Analysis

- Households who said it is important that the City develop a new indoor pool were more likely to support an increase in the current level of tax support (33%) compared to others (4%).
- Households who actively used a pool in the last three years were more likely to support an increase in the level of tax support (31%) than other households (16%).
- Some differences exist within respondents when examined by zone. As it relates to support for increasing the current level of tax support, 35% of Central Zone respondents were in favour compared with 32% from South Zone, 21% from West Zone, and 20% from East Zone and North Zone.

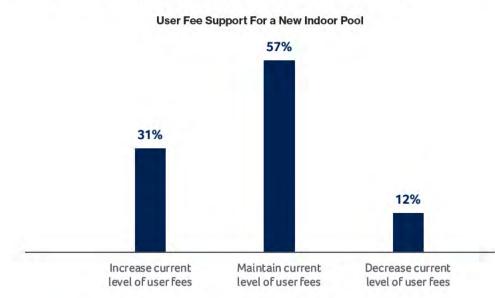




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As it relates to user fees, approximately one-third (31%) support an increase in user fees while over half (57%) would like to see user fee levels maintained.



Subsegment Analysis

- Households who said it is important that the City develop a new indoor pool were more likely to support the maintenance of the current level of user fees (61%) compared to others (46%). Twenty-eight percent of households who said it is important to develop a new indoor pool support an increase in user fees compared to 40% of others.
- Some differences exist within respondents when examined by zone. As it relates to support for increasing the current level of user fees, 36% of East Zone respondents were in favour compared with 32% from West Zone, 30% from South Zone, 28% from North Zone, and 25% from Central Zone.





2.1.6 About Your Household

Respondents were asked several questions about their household. The responses are presented in the following table.

City Zone of Residence			
West Zone	22%		
North Zone	15%		
Central Zone	13%		
South Zone	24%		
East Zone	26%		

Household Includes a Member Who Immigrat Past 3 Years	ed or Resettled in Canada Within
Yes	3%
No	97%

Household Composition				
49.0				
6.4%				
8.3%				
8.3%				
5.5%				
7.9%				
14.2%				
15.1%				
11.9%				
14.2%				
6.4%				
1.8%				

Findings	3	
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Open Access Survey

West - 23%

North - 10%

Central - 12%

South - 28%

East - 27%

Immigrated or Resettl

Yes - 1%

No - 98%

Unsure - <1%

City Zone

Total Household Income Before Taxes (2020) Don't know / don't want to answer 25% Less than \$30,000 \$30,000 to just under \$45,000 \$45,000 to just under \$60,000 \$60,000 to just under \$75,000 \$75,000 to just under \$90,000 \$90,000 to just under \$105,000 \$105,000 to just under \$120,000 \$120,000 to just under \$135,000 \$135,000 to just under \$150,000

Subsegment Analysis

\$150,000 and over

· Households that actively used a pool in the last years have a greater proportion of higher income households (43% have an income of \$105,000 and higher) than other those who have not actively used a pool in the last three years (25% have an income of \$105,000 and higher).



3.0 Stakeholder & Group Survey

A survey was fielded with a variety of organizations in Regina including aquatics groups but also a series of others. In total, thirty-one organizations were invited by the City to participate in the survey. An email introducing the project and the group survey was sent to a representative from each organization. Attached to the email was a hard copy version of the questionnaire; the email also included a hyperlink to an online version of the same questionnaire. Each group was asked to provide a single response.

Invitations were sent on November 3, 2021 and the survey closed on November 18,2021. In total 15 responses were received; findings are presented in raw numbers rather than in percentages. It should be noted that not each respondent answered each question. Refer to the Appendix to see which organizations provided a response. These findings are not considered representative of all groups in Regina. Rather the findings provide insight into the perspectives of organizations as it relates to a new indoor aquatics facility. The findings are presented below in the order that the questions were posed.



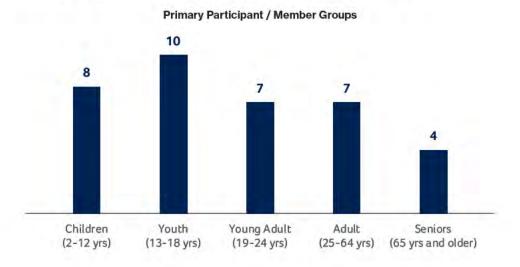
New Regina Indoor Aquatic Feasibility (IAF)

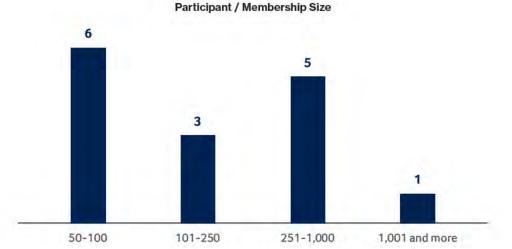
3.1 Survey Findings

3.1.1 About Your Organization

The questionnaire began by gathering some information about the respondent organizations. As illustrated in the list of organizations participating in the survey (refer to the Appendix), approximately half the respondents (7 groups) are those who require aquatic facilities to deliver their programs. The other respondents include agencies with more of a therapeutic and social purpose; some of these groups would make us of aquatic facilities for some programming.

As illustrated in the accompanying graphs, the respondents provide services to a wide array of ages although there is an emphasis on children and youth. They also represent an array of organizational size considering their participant / membership size.





3.1.2 Aquatics Utilization

Respondents identified the proportion of their programming that takes place at various aquatics facilities in Regina. The **Lawson pool is used by the largest number of respondents** – 12 groups use it for their programming. Ten groups use the Schmirler pool, 8 use the North West Leisure Centre, and 7 groups use the YMCA (Northwest location) and 7 the University of Regina pool. The Lawson aquatic centre provides a significant amount of the programming time for the respondents with five of the groups hosting a majority (60-100%) of their programming there.

Respondents were also asked to identify trends in participation and membership over the last three to five years and then identify expectations for the next 3 to 5 years. None of organizations have seen a decline nor are expecting to experience it. Nine of the fourteen respondents have grown over the past few years; the remaining five organizations have remained stable. In terms of expectations, **eleven of the fourteen respondents expect to see an increase** in participation / membership. Only three respondents expect to remain stable.

When then asked to comment on their expectations for access to pool time, the large majority (12 out of 14) indicated an increase in pool time will be needed. The remaining two respondents commented that they expect no change in their need for pool time. The main issues impacting the respondents' need for pool time can be explained in a few statements:

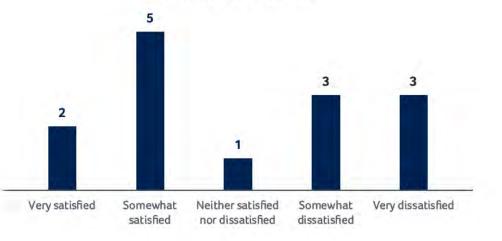
- There are so many groups vying for limited pool time so access is limited.
- The facility and its amenities do not fully meet the needs of the groups. This
 includes things such as the area required for an activity; the depth of the pool; and
 the absence of dive blocks.
- Available pool times are not at ideal or preferred times.
- An interest in the activity and enjoyment from the participants has resulted in increased demand.



Half (7 out of 14) of the respondents expressed satisfaction with indoor pools; a similar number (6) are dissatisfied (see graph). When asked to explain their satisfaction, several comments were offered multiple times.

- Access is limited impacting programming. Many groups are vying for the same time. As well a large booking can restrict a group's access.
- Physical accessibility into the pools needs improvement (e.g. lifts, gradual entry)
- Leisure amenities are lacking for children and youth.
- Spectator seating is limited; only the Lawson can offer the appropriate space.

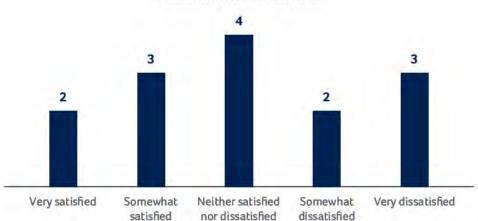
Satisfaction With Indoor Pools



Regarding outdoor pools, while the number of respondents satisfied is less than for indoor pools (5 satisfied), the level of dissatisfaction is also slightly less (5 dissatisfied compared to 6 for indoor pools). Refer to the graph. Comments related to satisfaction with outdoor pools includes the following.

- Needed amenities are not available in outdoor pools and the facilities are dated.
 (Appropriate change facilities are lacking i.e. universal or family)
- They cater more to recreational use or have been unavailable for club use.

Satisfaction With Outdoor Pools

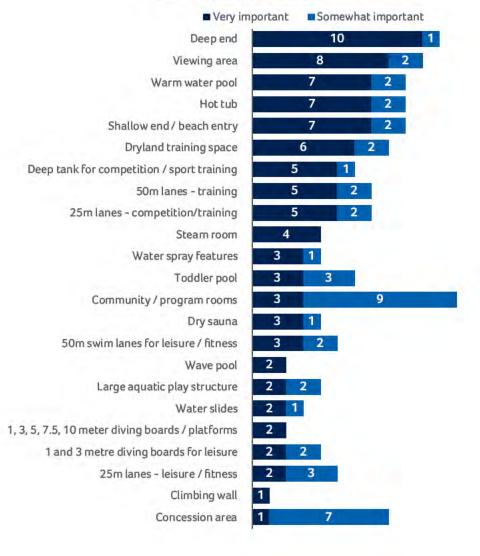


3.1.3 Future Considerations – Indoor Aquatics

Respondents were presented with a list of aquatics amenities and asked to indicate the importance of each for their own programming. While community / program rooms were considered important (very and somewhat) by the largest number of respondents, at least half of respondents identified the following amenities as very important: deep end, viewing area, warm water pool, hot tub, and shallow end / beach entry. See the accompanying graph. In the comment section there was a call to ensure the aquatic facility aligns with the requirements of governing bodies for

Those amenities for which at least five respondents identified them as unimportant included: climbing wall, wave pool, large aquatic play structure, water slides and water spray features.

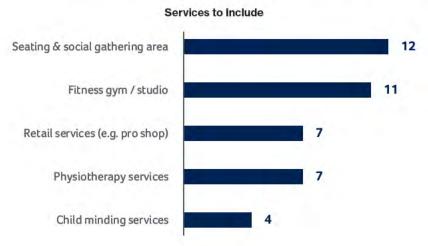
Importance for Programming







There are often non-aquatic services at aquatic centres. From the list provided, seating and social gathering areas was something that should be included according to a large majority of respondents as is a fitness gym / studio. See the graph for other responses.



Respondents were able to suggest other amenities they would like to see in a new aquatics facility. These included the following.

- Separate dryland area for trampolines.
- Cold tubs for high performance athletes.
- Café
- Wellness centre with physiotherapy, massage, sports therapy
- Family changerooms / large change rooms. Include a plinth table.
- Sports / gymnasium type space; ninja warrior training area
- Children's play structure
- · Mechanical lifts in all areas
- Kitchen area / hospitality room to accommodate events and competitions.
- Club storage space.

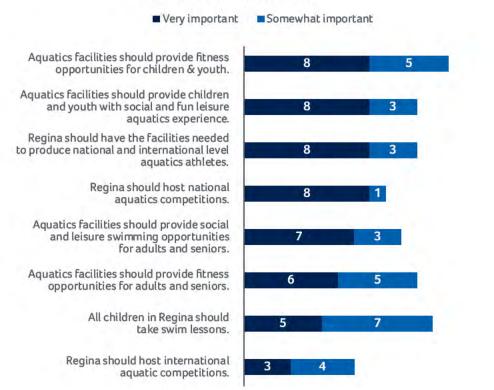
There was also a call for a large recreational component to a new aquatics facility that would include elements such as water slides, spray / splash area, sauna / steam rooms. A zero entry warm pool was also identified as a needed in a new facility.

3.1.4 Other Considerations - Aquatics

A variety of outcomes for an aquatics facility was presented to respondents. For each outcome the respondents were to rate its importance. As illustrated in the accompanying graph, at least half of all respondents said all outcomes are important. Over half, however, said the following outcomes are very important.

- Aquatics facilities should provide fitness opportunities for children & youth.
- Aquatics facilities should provide children and youth with social and fun leisure aquatics experience.
- Regina should have the facilities needed to produce national and international level athletes.
- Regina should host national aquatics competitions.

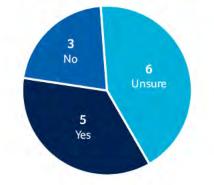




3.1.5 Willingness to Pay

Approximately one-third (5 out of 14) of respondents said they would support an increase in facility user fees or rental fees for a new indoor aquatics facility. The largest segment is unsure. None of the aquatics sport respondents said they would oppose an increase.

Would You Support an Increase in User Fees?



3.1.6 Partnerships

Respondents were asked to describe any partnership arrangements they have with the City of Regina as it relates to the provision of aquatics facilities. They could also describe any partnership opportunities they would entertain. Existing partnerships cited the Affordable Fun program, the leisure passes discounted, and the rental agreement for space. A couple of respondents said they are open to suggestions from the City. There were several potential partnership opportunities suggested.

- The organization would provide coaching to people from disadvantaged or barriered populations due to socio-economic circumstances while the City would provide the space without cost.
- The organization would provide training for City staff who, in turn, would work with children with disabilities.
- The organization would delivery a program for adults with physical disabilities on a regular basis. The City would provide facility access as well as additional lifts to get people into the pool.
- One organization suggested that it would rent storage space from the City. The group would have the storage space labelled so that it promoted the organization to the public.

3.1.7 Final Thoughts

The survey ended with the opportunity for respondents to share any additional or final comments regarding a new indoor aquatics facility in Regina.

- A new facility should ensure that addresses the unmet needs of groups. Additional capacity is needed and the facility should align with the requirements for competitions (standards).
- Other facilities in other cities should be examined, including the Shaw Centre in Saskatoon.
- Other comments.
- » Provide opportunities in the new facility for economically disadvantaged people.
- » Ensure the facility continues the City's efforts to enhance accessibility.
- » Provide more leisure opportunities in aquatics in Regina.
- » Ensure that amenities, including seating, considers the needs for people of all physical needs.









Project
New Regina Indoor Aguatic Feasibility (IAF)

4.0 Stakeholder Meetings

A series of meetings were convened representing a range of interests. Some meetings were one on one interviews via telephone while others were group discussions convened virtually. The meetings were hosted from November 17, 2021 through to November 25, 2021. In total fourteen (14) meetings were hosted with thirty-nine (39) organizations / perspectives. The organizations included "traditional" aquatics clubs, school jurisdictions, social agencies, individual advocates, newcomer associations, advocates for marginalized people, housing organizations, and others. Please refer to the Appendix to see the organizations and perspectives who participated in the meetings.

The intent of the meetings was to explore the possibility of a new indoor aquatics facility with different interests to better understand the perspectives of those who participated in the group survey. Other stakeholders presented a different perspective than can be gained through a survey.

A synopsis of the meetings is presented below across several themes. The themes include: overall need for a new facility; aquatic amenities needed; complementary elements to the aquatic components; other amenities to include in the facility; and other comments. The inclusion of points does not imply unanimity existed throughout the discussions; items are included herein because there were multiple mentions of them. Some specific examples however, may have only been stated in a single session. All efforts have been made to ensure that comments are not attributable to anyone participant. It is important to note that all of the findings presented below emanated from the meetings; these notes are a reflection of the conversations that occurred.

4.1 Meetings Synopsis

4.1.1 Overall Facility Need

There is a significant need for a new aquatics facility in Regina. There is insufficient access to pool time. This, in turn, is having an impact on the amount and quality of training and is impacting participant numbers. The Lawson Pool is the primary centre in Regina for competitive aquatics programming. Although there are other facilities that are used for some activities, the Lawson is the primary centre. A need for additional leisure aquatics was also identified.

There is significant demand for time and space in the facility which pits the different organizations against each other. Additionally because there is only a single tank, the activities of organizations gets limited as the space is divvied-up between them. As well, with a single tank, if the facility gets booked for an event, then all users are impacted.

4.1.2 Aquatic Amenities

The need for amenities to satisfy the training & competitive needs of organizations as well as the leisure and recreational users was clearly supported.

Training & Competitive Amenities

- Multiple tanks are needed. While there were some calls for two 50m tanks, the primary comments simply referenced the need for multiple tanks to be able to accommodate demand.
- » The 50m pool should have 10 lanes.
- A moveable bulkhead would enable two 25m tanks to
 he used.
- » There needs to be a 25m warm up tank.
- » A separate dive tank is needed.
- The new facility needs to meet the requirements of the governing bodies for all competitive aquatics activities including: swimming, diving, water polo, and artistic swimming. The ability of the new facility to host national events was supported.
- A moveable floor in the pool tank was identified as a feature that would help ensure a broad array of activities could be accommodated.

Recreation & Leisure Amenities

- Water park amenities should be included so that this component of the new build would be a significant destination for those seeking leisure aquatics in Regina.
- » This area should be separate from the training & competitive area (partly for noise considerations)
- » This should include:
- Warm water pool with beach entry
- Lazy river
- Water slides (including those to accommodate users with physical disabilities)
- Water spray and splash features
- Wave pool

4.1.3 Support Amenities

The support amenities refers to those components that are needed by users of the aquatic amenities to maximize their activities.

- Spectator seating is needed but not on the deck level. The seating needs to be raised and separate from the athletes and participants.
- To accommodate dryland training (including trampoline work), a separate gymnasium area accessible from the deck and able to be monitored by someone on the deck is desired. This will help ensure that deck space is not consumed by training and warm up activities and equipment. As well this space could accommodate some weight work and warm up for athletes that requires some equipment.
- Deck space is needed to accommodate some dryland components but also to provide sufficient space for officials, athletes, and warm up activities.
- Storage which can help free up deck space but also enables the groups to have ready access to their necessary equipment at the facility without having to take it when they leave the facility. Storage for facility uses including for timing pads, accessibility equipment is needed.
- Group and family change rooms. There were many calls for sufficient change rooms for facility users. Change facilities for coaches and meet officials needs to be separate from those used by athletes. Change facilities need to allow room so someone with disabilities can be assisted by a support person or care giver. A call for a separate change facility with individual and separate bathroom and shower facilities for groups be included. In this manner a group could all stay together and change using a room that could be secured with their belongings.
- Timing / scoring room would be ideal. Related built in timing and scoring system along with other technology elements like underwater viewing and televisions. A built-in sound system and timing clocks were included in technological requirements.
- Classroom space immediately off the deck would be used by organizations and other uses. A separate space as well that could be used as an official's room and a "hospitality" room.
- Therapy pools including cold pools and hot pools were identified.





4.1.4 Other Amenities

A broad array of suggestions were identified throughout the sessions as elements to add when a new facility is developed. The most common include the following:

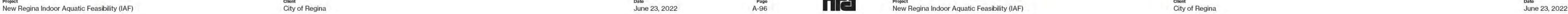
- Gymnasium space. The fieldhouse can be very busy and having gymnasium space provides another location for activities that can be used by visitors to the aquatics facility but also others.
- Weight room / fitness studio.
- · Indoor walking track.
- Several multi-purpose meeting rooms / classroom space were identified. While there are some rooms that exist in the Sportplex, there were calls to include additional space that can be used by the local community, by organized groups, and by other facility users.
- Social gathering space was identified as a need. The facility is seen as a destination that should provide space for people to gather that is not necessarily directly accessible from the aquatics space. Session participants spoke about a place for families to meet, have a meal, or even wait. Others mentioned a place where people could meet, like at a café. Others suggested that a gathering space onsite would eliminate the need for some patrons to have to go somewhere else after using the facility before heading home.
- » Café and food service area where healthy food choices can be offered.

Other spaces and amenities that were identified during the discussion are noted below.

- Cultural spaces. These may be different than the multipurpose space and could include space for wudu (ceremonial washing); prayer rooms; smudge room.
- Wellness center that could include: physiotherapy, massage, sports medicine, nutritionist, counselling. These services would be available to both facility patrons and community members.
- » This could accommodate a pop-up grocery store

- Child minding so parents can use the facility and have their children supervised.
- Child play area / indoor child play ground.
- Bathrooms, showers, and change rooms for use by people who are not using the sports and recreation areas of the facility. Some people in the community need an area to access these services. Secure lock boxes for people to house important personal documents was also mentioned as a service to this population.
- Water stations for people not in the recreation and sport spaces.
- Community bulletin boards promoting services to people.
 The services included on these boards would communicate a welcoming message to all patrons as well.
- Places to store or house strollers, wheelchairs, walkers ble while using the facility.
 - In terms of outdoor spaces:
- Accessible parking spaces should be near the door. They should be large enough and signed so people have sufficient space to use the accessible vehicles.
- Indoor and covered drop off and pick up spaces would make it easier for people, particularly those with transportation issues, to use the facility.
- The facility design should consider a recognition and respect for the history of the city, the community in which the facility resides, and the Indigenous peoples.



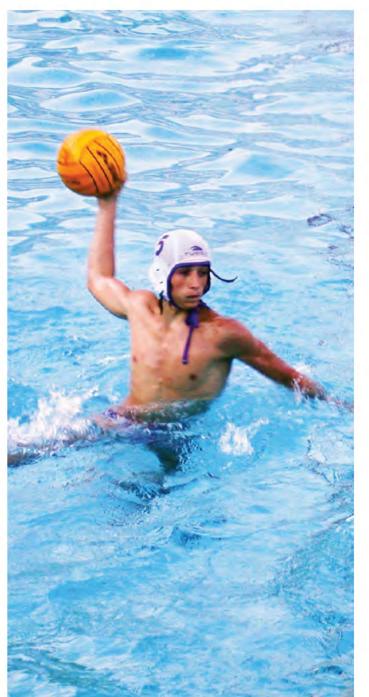


4.1.5 Other Comments

The comments included in this section are varied and relate to operational considerations as well as future involvement of the meeting participants.

- Allocation of space and time in the aquatics facility should be reviewed, particularly with a new facility to ensure equitable access. This references adequate pool time for aquatics groups.
- Ideally, the staffing complement would reflect the diversity found in the community. In several sessions, participants spoke about an enhanced welcoming atmosphere for community members when seeing people "similar to them" working in the facility. Related, staff working at the facility need to know how to work effectively with different segments of the community including people from different cultural groups, socio-economic circumstances, gender identity, and others.
- The need to consider how people get to the facility is important. This can be reflected in parking, drop-off points, and public transportation services.
- Signage in the facility needs to accommodate people with limited ability reading English and those with limited literacy skills. This may result in fewer written word signs and more graphic / icon type signs.
- The safety of people using and visiting the facility needs to be considered. Everyone needs to feel safe in the facility and in accessing the facility. Consideration related to the design should reflect this.
- This potential facility is considered as a means to address the needs of competitive aquatics organizations, the needs of city residents for enhanced leisure and recreation aquatic elements, and fulfill some social needs for people in Regina broadly but also in the surrounding community. Participants spoke about the facility's ability to address training, competition, recreation and leisure, therapeutic, and social needs
- Regardless of the functions of the facility, it needs to be barrier free. Design and operational elements need to consider the ability of people with physical disabilities and challenges to utilize all aspects of the facility from entry to change rooms and washrooms to all amenities in the aquatics facility.
- Some concern was expressed that a new aquatics facility, without maintaining the Lawson pool, would not provide much of an increase in capacity. Building a new facility and shuttering the Lawson was considered by some participants as simply transferring the same challenges securing space to a new pool There were some calls to keeping the Lawson operational in addition to a new facility.
- Should planning progress with this facility, session
 participants expressed a desire to be kept abreast of what
 is occurring or to be involved in further engagement. Beyond
 a need for the new facility, participants expressed an
 interest in helping the City with the planning needed.





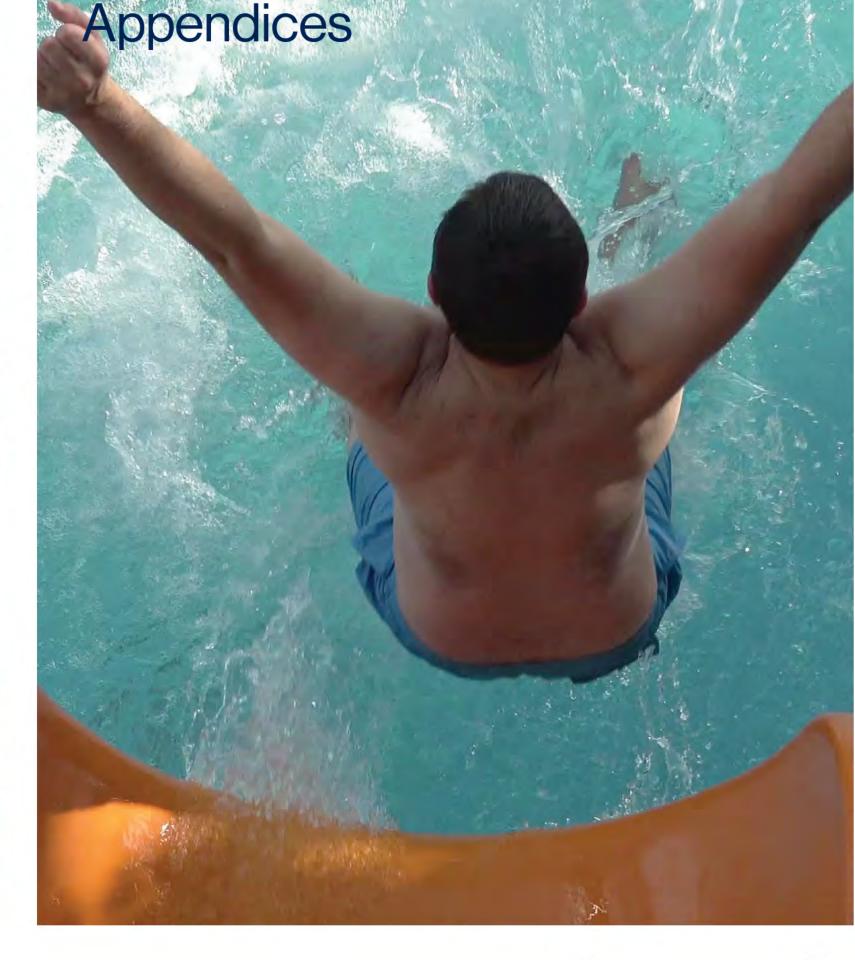
5.0 Conclusions

Several conclusions have been drawn considering each of the different engagement tactics employed: public survey, group and stakeholder survey, and stakeholder meetings.

- There is a strong need for a new indoor aquatics facility. As
 it relates to the current use of the Lawson, a new facility
 should not simply replicate the amenities but should address
 the current deficit of space as well as accommodate future
 demands.
- The Lawson Aquatic Centre Pool is one of the most used indoor aquatics facility in Regina.
- A new indoor aquatics facility should accommodate the strong need for recreation and leisure aquatics, swimming lessons, and fitness activities.
- » Specific needs include:– Warm water pool
- Beach entry
- Water park amenities: spray / splash park; water slides
- Social gathering / seating areas
- Respite / quiet areas (to escape the highly stimulating environment)
- A new indoor aquatics facility needs to accommodate the needs of organizations for their training and competitive needs. The facility should meet the requirements and standards as described by national and international bodies for speed swimming, diving, artistic swimming, and water polo.
- » Specific needs in the natatorium include:
- 50m 10 lane pool
- Separate 25m pool
- Separate 25m dive tank
- Cold and warm tubs / pools
- Spectator seating (off the deck)
- Separate gym / dryland training area (including trampolines)
- Sufficient deck space to accommodate officials and athletes
- Equipment storage for the City and clubs
- Multi-purpose rooms for classrooms, officials rooms, hospitality rooms
- · Other amenities to include in a new facility:
- » Change rooms: universal change rooms, separate change rooms for officials and coaches; consider a separate group change room
- » Café and social gathering space
- » Gymnasium and weight room
- » Public bathrooms with showers for people otherwise not using the facility
- » Several program rooms that could be used by community organizations and agencies
- » Consider culturally specific rooms to accommodate prayer, washing, smudging
- The facility should be designed to recognize the community and the heritage of the residents, particularly the Indigenous community.
- The transportation needs of people with mobility challenges needs to be addressed through appropriate parking near the entrances but also with suitable drop off and pick up area (that could be covered or inside.
- All aspects of the new facility should accommodate people with physical disabilities including pool deck and access, change rooms, entrances, etc.







Project New

Project Client Date Project Client Date
New Regina Indoor Aguatic Feasibility (IAF) City of Regina Date Suppose Suppos

Appendix A: Coded Access Questionnaire

New Indoor Pool

Household Questionnaire

Access Code:

The City of Regina is exploring the feasibility of a new indoor pool. This exploration includes community research with Regina residents and community groups.

The City's Recreational Master Plan prioritizes a new indoor pool to respond to population growth, aging infrastructure, and the increasing need for year-round aquatics programming to better serve the competitive and recreation needs of our community.

The feasibility study will explore how a potential new pool fits into our overall aquatics programming around the city. We will also look at project timelines and costs, sustainability aspects, desired uses, and other considerations.

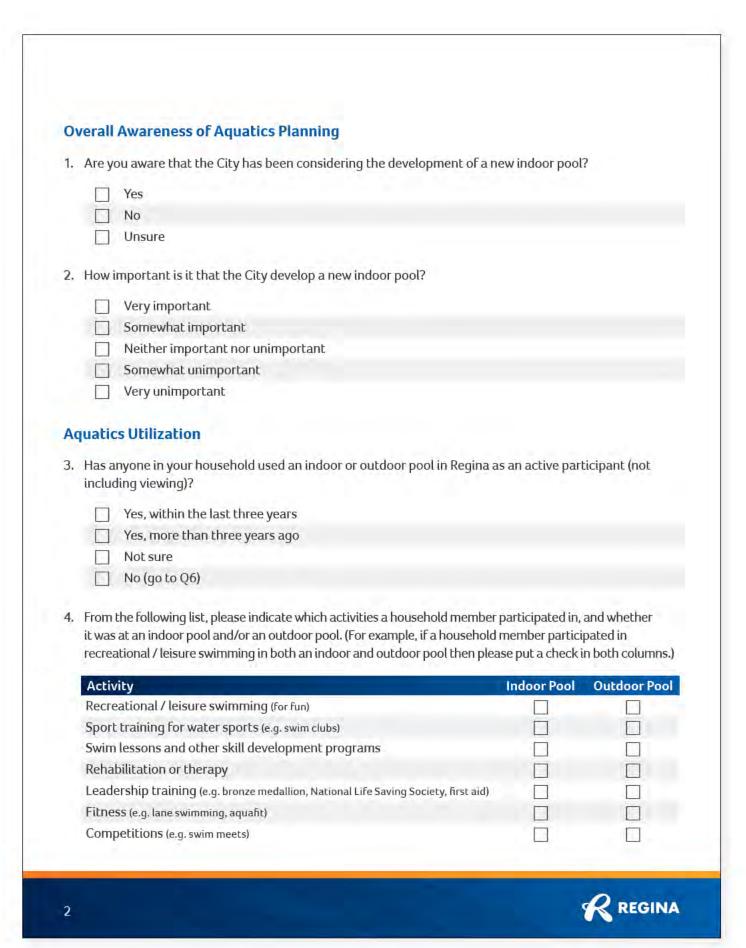
This survey has been randomly sent to 40,000 households as a first step in researching public use of pools (aquatics facilities) in Regina. You've been selected to share your thoughts!

What Do You Think?

Please answer the following questions considering all members of your household. Survey responses need to be submitted by November 5, 2021. Thank you!



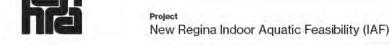




	Of the following indoor pools, which one(s) has your household visited the most?
	North West Leisure Centre Pool
	Sandra Schmirler Leisure Centre Pool
	Lawson Aquatic Centre Pool
	YMCA (Northwest location)
	☐ University of Regina
	Aside from factors related to COVID-19, what has limited the use of indoor pools in Regina by household members? (Select all that apply.)
	Nothing has prevented us from using indoor pools
	Not interested in aquatics activities
	Physical barriers to access or get into the pool
	Health / medical issues
	Lack of inclusive spaces and practices
	Costs to get into programs / lessons
	Admission cost to the pool
	☐ Hours of operation
	☐ It doesn't have the amenities / features desired
	Condition of the facility
	Was unaware of the pool / don't know where the pool is
	Transportation challenges to get to the pool
	Other (please specify)
7. (Overall, how satisfied are you with the indoor pools in Regina?
	☐ Very satisfied
	Somewhat satisfied
	Neither satisfied nor dissatisfied
	Somewhat dissatisfied
	☐ Very dissatisfied
	a. Please explain your answer.

Somewhat satisfied Neither satisfied nor dissatisfied Somewhat dissatisfied Very dissatisfied a. Please explain your answer. Future Considerations – Indoor Pool Facility 9. Indoor pool facilities serve many functions. Consider all of the functions below and rank them to indicate what functions should be accommodated in a new indoor pool. A ranking of 1 means that it is your top priority, a ranking of 2 is your second most important priority, a so on. Please rank order all of them. Recreational and leisure swimming (for fun) Swimming for fitness (e.g. lane swimming, aquafit) Swim lessons and other skill development programs Rehabilitation or therapy Sport training for water sports (e.g. swim clubs) Competitions (e.g. swim meetings) Leadership training (e.g. bronze medallion, National Life Saving Society, first aid, lifeguard)		Ц	Very satisfied
Somewhat dissatisfied Very dissatisfied a. Please explain your answer. Future Considerations – Indoor Pool Facility 9. Indoor pool facilities serve many functions. Consider all of the functions below and rank them to indicate what functions should be accommodated in a new indoor pool. A ranking of 1 means that it is your top priority, a ranking of 2 is your second most important priority, a so on. Please rank order all of them. Recreational and leisure swimming (for fun) Swimming for fitness (e.g. lane swimming, aquafit) Swim lessons and other skill development programs Rehabilitation or therapy Sport training for water sports (e.g. swim clubs) Competitions (e.g. swim meetings)			Somewhat satisfied
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 9. Indoor pool facilities serve many functions. Consider all of the functions below and rank them to indicate what functions should be accommodated in a new indoor pool. A ranking of 1 means that it is your top priority, a ranking of 2 is your second most important priority, a so on. Please rank order all of them. Recreational and leisure swimming (for fun) Swimming for fitness (e.g. lane swimming, aquafit) Swim lessons and other skill development programs Rehabilitation or therapy Sport training for water sports (e.g. swim clubs) Competitions (e.g. swim meetings) 			
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Swim lessons and other skill development programs Rehabilitation or therapy Sport training for water sports (e.g. swim clubs) Competitions (e.g. swim meetings)			
Rehabilitation or therapy Sport training for water sports (e.g. swim clubs) Competitions (e.g. swim meetings)			Please rank order all of them.
Sport training for water sports (e.g. swim clubs) Competitions (e.g. swim meetings)			Please rank order all of them. Recreational and leisure swimming (for fun)
Competitions (e.g. swim meetings)			Please rank order all of them. Recreational and leisure swimming (for fun) Swimming for fitness (e.g. lane swimming, aquafit)
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Leadership training (e.g. bronze medallion, National Life Saving Society, first aid, lifeguard)			Please rank order all of them. Recreational and leisure swimming (for fun) Swimming for fitness (e.g. lane swimming, aquafit) Swim lessons and other skill development programs Rehabilitation or therapy
			Please rank order all of them. Recreational and leisure swimming (for fun) Swimming for fitness (e.g. lane swimming, aquafit) Swim lessons and other skill development programs Rehabilitation or therapy Sport training for water sports (e.g. swim clubs)
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		pool.			
Fitness gym / studio					
Child minding services					
Physiotherapy services					
Retail services (e.g. pro shop)					
Seating & social gathering are Other (please specify)	a				
Other (picase specify)					
er Considerations - Aquatics					
	da a cultacana				
ow important are each of the follow					
	Very important	Somewhat important	Neither	Somewhat unimportant	Very unimportant
Regina should host national swim neets.					
Regina should host international					
Regina should have the facilities					
needed to produce national and	П				
nternational level aquatics athletes.		-	-		_
All children in Regina should take swim lessons.					
Aquatics facilities should provide					
itness opportunities for <u>adults and</u> seniors.					
Aquatics facilities should provide					
social opportunities for adults and seniors.					
Aquatics facilities should provide		-			
<u>children</u> with a fun leisure aquatics experience.					
Aquatics facilities should provide					
<u>youth</u> with a fun leisure aquatics experience.					

-							
_							
_							
Willing	ness	to Pay					
13. City o	of Regi	na recreation fac	cilities are paid	for by a com	oination of ta	x support (inc	cluding property tax
		id by users.					31 10 3
a.	Whic	n of the following	g options do yo	u support in I	elation to ta	support for	a new indoor pool?
		Increase currer	nt level of tax su	upport			
		Maintain curre	nt level of tax s	upport			
		Decrease curre	nt level of tax s	support			
b.	Which	n of the following	g options do yo	u support in I	elation to us	er fees for a	new indoor pool?
		Increase currer	nt level of user I	fees			
		Maintain curre	nt level of user	fees			
		Decrease curre	nt level of user	fees			
About \	our l	Household					
				ent views and	needs of resi	dents, the ne	xt few questions allo
us to ana	lyze th	ne data into sub-	groups.			1	
14. Do yo	u live	within Regina cit	y limits?				
	Yes					Work No.	
IfY	ES, in	which part of the	e City?			West Zone	
		West Zone			200		
		North Zone				Cent	ral Zone
		Central Zone					East Zone
	П	South Zone				South Zone	
		East Zone		-			

June 23, 2022

15. What is your postal code? _____ 16. Have you or members of your household immigrated or resettled in Canada within the past three (3) years? Yes ☐ No Unsure 17. Please describe your household by identifying the number of members in each of the following age groups, including yourself. 0 - 4 yrs 5 - 9 yrs 10 - 14 yrs 15 - 19 yrs _____ 20 - 29 yrs _____ 30 - 39 yrs _____ 40 - 49 yrs _____ 50 - 59 yrs 70 - 79 yrs 80+ yrs 18. Which of the following categories best describes your total household annual income, before taxes, in Don't know/Don't want to answer Less than \$30,000 \$30,000 to just under \$45,000 \$45,000 to just under \$60,000 \$60,000 to just under \$75,000 \$75,000 to just under \$90,000 \$90,000 to just under \$105,000 \$105,000 to just under \$120,000 \$120,000 to just under \$135,000 \$135,000 to just under \$150,000 \$150,000 and over Thank you very much for taking the time to participate in the survey! Your input is very important as the planning continues for a new indoor pool. REGINA



- 1. Autism Resource Centre Inc
- 2. Chip and Dale Homes Inc.
- 3. Muscular Dystrophy Regina
- 4. Regina Marlins Swim Club
- 5. Regina Multisport Club
- 6. Regina Piranhas Summer Swim

- 7. Regina Residential Resource Centre
- Regina Synchro
- 9. Regina Water Polo Association
- 10. Saskatchewan Artistic Swimming
- 11. Spinal Cord Injury Saskatchewan
- 13. TriP (The Regina intersectoral Partnership)

12. The Big Sky Centre for Learning and Being Astonished! Inc.

- 14. Wascana Rehabilitation Centre
- 15. Water Polo Saskatchewan

Project New Regina Indoor Aquatic Feasibility (IAF)

City of Regina

June 23, 2022

City of Regina

Appendix C: Stakeholder Meeting Participants

Adapted Recreation

2. Age Friendly Regina

3. Canadian Mental Health Association

4. Cosmo Learning Centre & Muscular Dystrophy Regina Chapter

5. Dive Sask

6. Diving Plongeon Canada

7. Family Services Regina

8. Flatland Sports

9. Hopes Home

10. Individual Accessibility advocate

11. Individual swimmer with physical disability

12. Namerind Housing Corporation

13. Regina Catholic Schools

14. Regina Diving Club

15. Regina Housing Authority

16. Regina Immigrant Advisory Table

17. Regina Masters

18. Regina Mens Marlins

19. Regina Multi-Sport

20. Regina Open Door Society

21. Regina Optimist Dolphins

22. Regina Piranha Summer Swim

23. Regina Public Schools

24. Regina Synchronettes

Regina Transition House

26. Regina Treaty Status Indian Services

27. Regina Water Polo Association

28. RRLIP (The Regina Region Local Immigration Partnership Project)

29. Saskatchewan Artistic Swimming

30. Saskatchewan Health Authority

31. Silver Sage Housing Corporation

32. Spinal Cord Injury Saskatchewan

33. Swim Saskatchewan

34. The Big Sky Centre for Learning and Being Astonished

35. TransSask Support Services

36. TRiP (The Regina Intersectoral Partnership)

37. UR Pride

38. Water Polo Sask

39. YWCA Regina



Terms of Reference – Indoor Aquatics Facility Community Advisory Committee (IAFCAC)

1. Overview

The 2019 Recreation Master Plan supports Regina's Official Community Plan, Design Regina, and its priorities by quiding the future of publicly supported recreation opportunities and services. The Recreation Master Plan determined that the top priority is to increase the provision, both in quantity and quality, of indoor aquatics facilities and the most important indoor recreation need and priority in the short term is enhancement of indoor pool competition and leisure capacity at the City-wide level.

A new Indoor Aquatic Facility (Facility) is needed to respond to City population growth, aging infrastructure, the increasing need for community access to indoor aquatic programming and support indoor aquatic needs into the future. The project involves the design and construction of a new Facility that is centrally located, potentially leveraging existing facility adjacencies. A new Facility will enable the City to meet the service level needs of the community into the future with the delivery of sport, recreation and cultural programming to existing and new neighborhoods to support complete communities. A well designed and constructed Facility is important to building a contemporary city that attracts people and businesses and supports economic growth.

The Facility will provide aquatic service in a number of broader categories such as recreation swimming, skill development, fitness swimming (both lane and agua fit classes), sport training, special events, therapy and rehabilitation, leadership training, respite from summer heat and water orientation for toddlers. The Facility will be inclusive and accessible to all and consider opportunities to further the efforts around Reconciliation. The Facility will be progressive in environmental and sustainable design and will consider post pandemic resilience. The sizes and specifics of each of the Facility elements will be determined through consultation with the community, stakeholders, user groups and competition requirements. In addition to these spaces, multi-purpose spaces to support aquatics and provide additional programming and bookable spaces for the community will be developed to provide revenue opportunities to offset the cost of operations. Partnership and retail opportunities will also be explored and incorporated to also generate revenue and reduce the impact on taxpayers.

The Indoor Aquatic Facility Community Advisory Committee (IAFCAC) shall function to provide critical inputs to help guide the development of the IAF within the City of Regina. The IAFCAC shall act in an advisory capacity, providing input and feedback as well as support to the project team. It is anticipated one of the IAFCAC's most significant roles will be reviewing options on project phasing and site development, as well as providing comment to the IAF project team on the future of the existing Lawson Aquatic Centre. This feedback will be used as an input to inform the consultant's recommendations.

The IAFCAC will help the project team deliver information that is built upon best practices, program needs and community benefits. This information will be intended to help City Council decide on next steps for the new indoor aquatics facility development project. The IAFCAC is an advisory committee that will be primarily active up to the construction

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Regina.ca

procurement phase. The IAFCAC's role as the project moves into construction will be revisited at that time.

2. Purpose

The purpose of the IAFCAC is to advise the Facility project team of information on items such as aquatic programming, competition requirements, community requirements, accessibility and inclusion requirements, operational considerations and general project input. The IAFCAC has no decision-making authority, but will provide important evaluation, input and influence to the project team to help guide decision making.

IAFCAC members will include individuals with broad knowledge and experience within their respective programs and interests as well as experience of living in Regina and knowledge of the local recreation market. Advisory committee members will represent the perspectives of key project stakeholders and will be empowered to provide direction to the project team on behalf of key project stakeholders.

Background

- The City's Recreation Master Plan identifies indoor aquatics as a high priority.
- The City's existing indoor aquatic facilities are aging and lacking in meeting the aquatic needs of the community (both leisure and competition aquatics amenities)
- Aquatics services are critical to the community and could be combined with secondary amenities providing additional community benefits (i.e. multi-purpose
- The Facility project team requires critical information from stakeholders to ensure the project aligns with stakeholders needs.

3. IAFCAC Roles and Membership

The IAFCAC will:

- 1. Be a diverse group that represents the community for current and future potential user needs;
- 2. Support the broader consultation process. The IAFCAC will be leveraged as advocates for the project and to be involved in the broader community engagement strategy throughout the course of the project. IAFCAC members will be looked at to support the project and therefore be project champions; and
- 3. Provide perspective and input on key project decisions such as:
 - a. Community needs
 - b. Financial impacts
 - c. Project timing (phasing, project delivery model, etc.)
 - d. Siting options
 - e. Other project considerations





The IAFCAC members are expected to participate within the following guidance and rules to maintain a transparent and effective IAFCAC:

- a. All members of the IAFCAC shall be 'independent' with no material relationship to the project. Members must be free from conflicts of interest and exercise independent judgement in carrying out their responsibilities.
- b. Where a vacancy occurs at any time in the membership of the IAFCAC, it may be filled at the sole discretion and authority of the co-chairs
- c. Any changes to committee membership are at the discretion of the co-chairs. If partnerships are explored and a potential partner of the IAF needs to be added to the IAFCAC, this is to be done at the discretion of the co-chairs.
- d. Advice and recommendations provided to the project team and consultant will be made on a consensus basis with the goal of achieving full consensus. It is anticipated IAFCAC members work cooperatively and professionally with other IAFCAC members for the betterment of the IAF project.
- e. The IAFCAC is anticipated to be active from August 2021 through Q3 2022. The IAFCAC's role as the project moves into construction will be revisited at that time.

The intended use of the data, information and suggestions is to form inputs to the project team that can utilize the data to form the best overall project direction.

The CAC will be co-chaired by the following:

- Director, Parks, Recreation and Cultural Services
- Director, Land, Real Estate and Facilities

The co-chairs and committee will be supported by the consultant and any other resource support deemed necessary by the co-chairs.

IAFCAC Committee Membership:

- City of Regina
 - Executive Director, Financial Strategy and Sustainability
 - o Director, Parks, Recreation and Cultural Services
 - Director, Land, Real Estate and Facilities
- 2. Speed Swimming representative
- 3. Artistic Swimming representative4. Diving representative
- 5. Water Polo representative
- 6. Multi-Sport representative
- 7. Five (5) Community members reflecting the diversity of our community
- 8. Economic Development Regina
- 9. University of Regina (Aquatics Program representative)
- 10. Regina Exhibition Association Ltd. (Program Representative)

Other stakeholder engagement outside of the committee

- The IAFCAC will provide input into and be informed of these other engagement activities and have an opportunity to review the outcomes as an input into the advisory group review and provide feedback. The engagement with key stakeholders is anticipated to be limited to smaller, personal discussions with a focus on understanding the information and gathering details. Surveys may also be utilized. The external consultant (with support from a City subject matter expert) will guide the discussions and engagement. Examples of other engagement opportunities include but are not limited to:
- CORE Partnership Framework Representatives
- Accessibility Advisory Committee
- Age Friendly Committee
- New Canadians (Open Door Society), 2SLGBTQ organizations
- YMC.A
- Regional representatives

4. IAFCAC Responsibilities

- Assemble Current Information Gather current and relevant information from
 respective stakeholder group perspectives related to a new indoor aquatic facility
 and the program requirements. Be knowledgeable of any relevant long-term
 plans of the stakeholder groups and bring forward those that may impact the IAF.
 Provide information on items such as special event attendance, membership, etc.
- Siting and Facility Analysis Identify opportunities, gaps in performance, and
 any maintenance and operational needs in an indoor aquatic facility from the
 stakeholder groups' perspective. Provide feedback and rationale on how various
 siting options may impact respective stakeholder groups. Provide feedback on
 various operational models considered, and the impact on the stakeholder
 groups.
- Financial Analysis Provide perspective on data brought forward such as additional facility amenities and the financial impact it may have on that stakeholder group (i.e. user fees/capital contributions). Understand the financial impact on the stakeholder group and support the project decisions and lead change within their stakeholder group. Be knowledgeable and leverage other similar stakeholder groups to comment on items such as user fees, sponsorships, revenues, operational costs, etc. Provide feedback and rationale for key project decisions (i.e. prioritizing which amenities are most important and their impact on the stakeholder groups). Provide feedback on various operational models considered, and the impact on the stakeholder groups.
- Best Industry Practices Provide experiences and observations from other indoor aquatic facilities that inform the project team from member group perspectives. Provide perspective on how other amenities within other aquatic facilities would benefit and impact the community from the member group perspective, and how certain program amenities in the industry are being used.

Be knowledgeable and gather current general information on other similar aquatic stakeholders for comparison in different locations (i.e. similar aquatics group in Saskatoon).

- Development Plan and Timelines Identify general program and potential
 facility impacts based on project timelines, phasing and project delivery methods.
 Provide feedback on proposed project schedule and construction approach
 specifically on any impacts to existing facility access, impacts to user group
 programming and financial impact to the project. Support the final project
 schedule and lead the change within the community groups.
- Change Management Be enthusiastic leaders within the community and stakeholder groups about the project. Support the project and be active advocates for the project along with the changes it will bring.

5. Meetings and Engagement

- Meeting agendas and minutes will be prepared and distributed for all IAFCAC meetings.
- Reasonable time and place of meetings will be provided in writing or by electronic communication preferably a minimum of 7 days before the meeting.'
- Meeting frequency will occur as circumstances dictate. The committee is expected to be active between August 2021 to Q3 2022.



Project Client Date
New Regina Indoor Aguatic Feasibility (IAF) City of Regina June 23



Appendix C - Regina Aquatics Review, Supply & Demand









Regina Aquatics

Supply And Demand Analysis & New Indoor Aquatics Facility Program Study

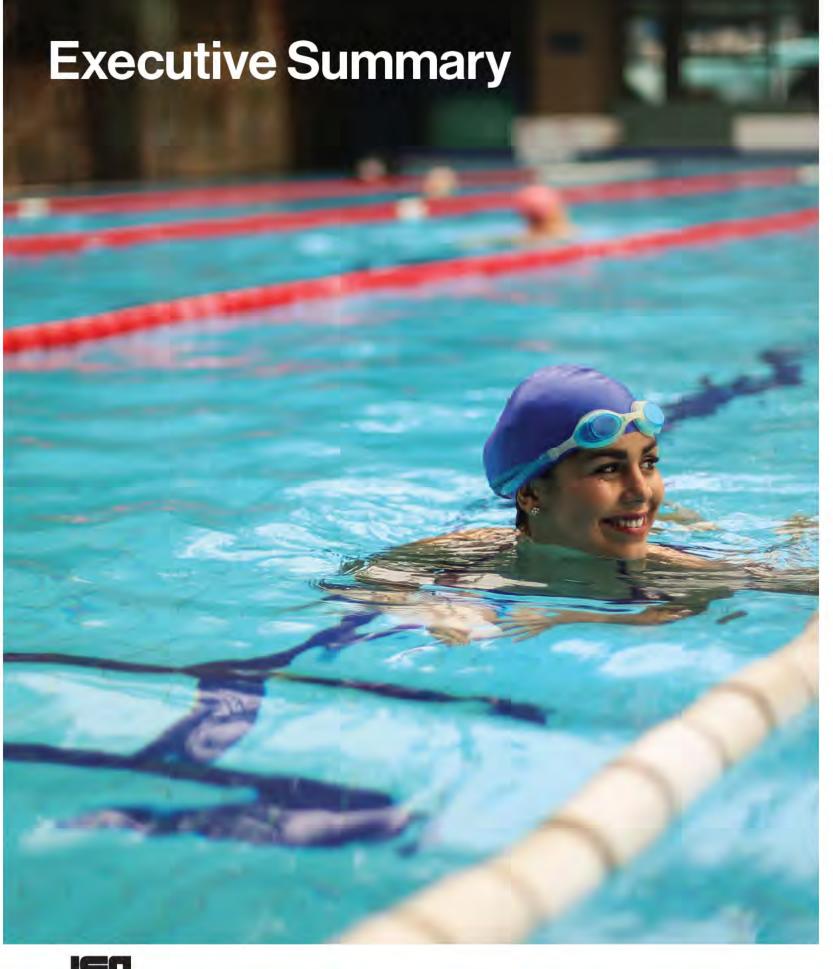


Supply And Demand Analysis & New Indoor Aquatics Facility Program Study









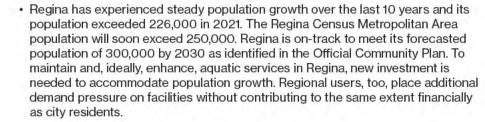
This study supports the City of Regina (the City) to make decisions now and in the future about providing aquatic facilities and services, sustainably and equitably, to deliver the most benefit to the most people in Regina. It was initiated based on the findings and recommendations of the city's Recreation Master Plan (2019) that identified improving the provision of indoor aquatics facilities (in terms of both quantity and quality) in the short term is a top priority, particularly to enhance indoor pool competition and leisure capacity at a citywide level.

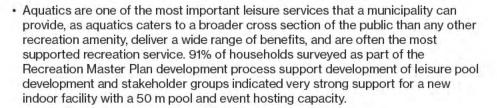
This study - and its companion Aquatic Policy - establishes the current state of pools in Regina and identifies a functional space program for a new indoor aquatics

- Establishing a solid planning framework for why the City provides aquatic
- Examining the various aquatic activity types and the need/rationale for taking a balanced approach to aquatics provision and service delivery to achieve maximum benefit of investment:
- Reviewing pertinent plans, policies, legislation, and trends to identify key considerations to be brought forward through a new indoor aquatics facility
- Comparing aquatics facility provision in Regina to other communities in Canada to identify areas where the city is competitive and may be deficient;
- Analyzing current supply and demand rates for indoor aquatic facilities based on current and future demographics to identify system-wide capacity for aquatic activities by reviewing utilization data and conducting geospatial analyses;
- · Considering public engagement findings and user group insights as foundational and integrated throughout this study; and,
- Presenting a new facility program for an indoor aquatics facility that reflects findings of all the above content.

Effective planning for pools should start by looking at the big picture of where the City currently is and where it wants to be in providing aquatic services for its residents and visitors. Regina has had excellent aquatic services in the past and delivers a wide range of facilities and sites. However, there is need for more capacity to accommodate current demand for indoor aquatics in Regina and this need is only expected to grow as the city's population grows.

Key Study Findings





- Pool users seek out enticing, engaging facilities that offer a variety of amenities. Modern indoor aquatics facilities adopt a balanced approach to program design to ensure a facility is accessible and appealing to a wide range of users. This means that pools should be designed to accommodate all aquatic activity types, ranging from recreational and leisure swimming all the way through to sport training and
- · Indoor aquatic facilities are increasingly functioning as community social hubs and centres for activity, as well as viewed as drivers of economic development through attracting special events and competitions. Social spaces for formal and informal gathering are standard in modern facilities, as is a greater interface between indoor and outdoor environments and campus-style developments that provide several municipal services in one convenient location. Inclusivity and universal access are also critical design elements users expect of modern facilities.
- · Sustainable building design techniques and technologies are now often standard features in municipally-operated indoor aquatics facilities. Facility designs are also evolving in the context of public health considerations, incorporating automated cleaning technologies, and equipping facilities to be able to deliver some programming remotely, particularly group exercise.
- · Regina's inventory of aquatics facilities is aging and recent investment into outdoor facilities - Maple Leaf Pool and Wascana Pool - illustrates how utilization can be greatly enhanced by providing new, in-demand amenities. Indoor aquatics facilities in the city are now at a point in their expected lifespans where maintenance is becoming more costly and the durations of pool shutdowns to complete this maintenance are growing much longer.



- · Regina's indoor aquatics facilities are well-utilized and are nearing, at, or even over capacity based on 2019 swim counts. The City is under tremendous pressure to accommodate existing demand for swim lessons, with a regular wait list of between 3,000 and 4,500 per year and exceeding more than 10,000 in 2021 during COVID. User groups engaged through this study indicated the need for pool time, particularly for sport training and competitions.
- Existing facilities are challenged to meet demand and user expectations for amenities and greater system-wide capacity is needed. Of note is that the overall supply of indoor aquatics in the City has decreased with the closure of the downtown YMCA indoor pool. In addition, a longer-than-usual maintenance closure period for the Northwest YMCA shifted additional demand to City facilities. Finally, the future of the University of Regina indoor pool is also uncertain. Regina's overall supply of indoor aquatics facilities is tenuous at the time of writing.
- Indoor pool user groups and sport teams at times struggle to secure needed training time due to requests for space exceeding what can be accommodated within City facilities.
- · This City is facing greater levels of competition within the private sector recreation marketplace in the form of private gyms, hotel pools, and other activities in recent vears. To continue to compete within an evolving landscape of activity options and providers, the city will need to continue to invest in its facilities to maintain service level standards and attract greater visitation. New amenities and investment also signal to users and residents the city's commitment to providing a high quality of
- A new indoor aquatics facility should be developed based on a balanced approach to providing amenities, with consideration given to all user group needs and activity types to add needed capacity to Regina's overall aquatics capacity.

This study responds to emergent needs, opportunities, and challenges in the years that have followed the adoption of Regina's Recreation Master Plan and affirms the recommendation that the city add to its indoor aquatics capacity and presents an updated space program that reflects trends and other key considerations that have emerged in the

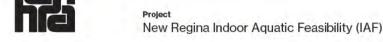










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Project
New Regina Indoor Aquatic Feasibility (IAF)

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1.0 Introduction

1.1 Study Purpose

The purpose of this study is to support the City of Regina (the City) to make decisions now and in the future about providing aquatic facilities and services. sustainably and equitably, to deliver the most benefit to the most people in Regina.

This study was initiated based on the findings and recommendations of Regina's Recreation Master Plan (2019) that identified increasing the provision of indoor aquatics facilities in the short term as a top priority, particularly to enhance indoor pool competition and leisure capacity at a city-wide level.

To determine the best course of action for the City as it relates to the provision of aquatics facilities, this study – and its companion Aquatic Policy – establishes the current state of pools in Regina and identifies a functional space program for a new indoor aquatics facility by:

- Establishing a solid planning framework for why the City provides aquatic
- Examining the various aquatic activity types and the need/rationale for taking a balanced approach to aquatics provision and service delivery to achieve maximum benefit of investment:
- Reviewing pertinent plans, policies, legislation, and trends to identify key considerations to be brought forward through a new indoor aquatics facility
- Comparing aquatics facility provision in Regina to other communities in Canada to identify areas where the City is competitive and may be deficient;
- Analyzing current supply and demand rates for indoor aquatic facilities based on current and future demographics to identify system-wide capacity for aquatic activities by reviewing utilization data and conducting geospatial analyses;
- · Considering public engagement findings and user group insights as foundational and integrated throughout this study; and,
- Presenting a new facility program for an indoor aquatics facility that reflects findings of all the above content.

It should be noted that this study occurred within the context of the COVID-19 pandemic, which severely disrupted operations of recreation facilities in Regina. As such, supply and demand analysis and utilization review is based primarily on 2019 swim counts provided by the City.

1.2 Regina Context

1.2.1 Community Profile

To ensure that this study is best positioned to meet the needs of the community, it is important that the unique composition of Regina's population is understood and reflected in decision-making. The city's current and future demographics, local context, ethnicities and cultures, and other factors will all affect demand, user preferences, and will help illuminate the priorities to be advanced through design and development of a new aquatic facility.

1.2.2 History

The land on which modern Regina is situated is Treaty 4 territory and the traditional home of the Anihšinābēk, Nêhiyawak, Dakota, Lakota, and Nakota peoples, and the original home of the Métis/Michif Nation. In the spirit of reconciliation, the City of Regina acknowledges that both Indigenous and Métis people are the spiritual and cultural keepers of their traditional lands and to this day practice their values. languages, beliefs, and knowledge.

Indigenous people have lived in the Regina region for thousands of years, with the area being an important site where Indigenous people would gather and hunt roaming bison herds. Honouring the spirit of the bison, the area was named oskana ka-asastēki by Indigenous peoples - meaning "bone piles". European settlers began to arrive in the region in the 1880s, enticed by the high-quality agricultural land available on the Saskatchewan Prairies. Named Regina ('queen' in latin) after Queen Victoria, Regina became a city in 1903 and was named the capital of Saskatchewan in 1905.

Throughout its history. Regina has been an important centre for trade, distribution. and logistics, specifically in relation to agricultural production, but also in more diverse sectors including, events and tourism, finance and insurance, manufacturing, mining, and oil and gas. The city and region's population has grown steadily over its history, but more rapid growth is forecast for the next 10 years: Economic Development Regina forecasts that Regina's population (Census Metro Area) may reach or exceed 300,000 by around 2030.

1.2.3 Demographics¹

Key Statistics (2021)

- City population of 226,404 (5.3% growth from 2016 pop. of 215,106)
- Census Metropolitan area population of 249.217
- Percentage of population over the age of 65 14.4%
- Percentage of population under the age of 15 18.5%

Reconciliation Regina identified that city residents feel that public spaces should be designed so that people can learn about contributions made by Indigenous peoples in the community, integrate art and other visual displays, and utilize Indigenous names and languages as strategies for acknowledging the past and promoting discussion on how to carry forward lessons learned from historical

Economic Development Regina forecasts that the Regina regional population may reach 300,000 by 2030. Newcomers to Canada and the region's Indigenous communities will be major drivers of population growth in the coming years.

Public surveying conducted by

the city is most populated in the West and East Zones, followed by the Central, South, and North Zones, Between 2011 and 2016. Regina's population grew by an average annual rate of 2.3% - greatly exceeding the provincial average annual rate of 1.3%. Between 2016 and 2021 the city's population grew by 1.1% on average per year, in line with overall population growth observed across Canada. As of 2021, Regina's population was 226,404. International, inter-provincial, and intraprovincial migration will likely see the city's population return to similar growth rates experienced between 2011 and 2016, particularly as the severity of the COVID-19 pandemic continues to decrease over time. Another important population trend to note is continued rural to urban migration occurring both across Canada and in Saskatchewan specifically. Together, a return to historical growth rates, rural to urban population migration, immigration, and rapid growth of Canada's

Indigenous population will all have significant implications on both the

and infrastructure needed to support such growth – including indoor

aguatics and recreation more broadly.

number of residents that call Regina home, and on the types of services

Regina is divided into five separate recreation zones to manage

recreation service provision. In terms of recreation zone populations,

.............. Zone Central Zone East Zone

> to grow at a rate of around 2% per year, Regina's population will surpass 250,000 by 2026. By 2031, Regina's population is likely to be around 300,000. The City of Regina acknowledges the important role it can play in advancing reconciliation through its operations and decision-making. It is important that Indigenous histories, viewpoints, and traditions be reflected in city facilities and programming to foster reconciliation and

create safe spaces for all.

Regina's Recreation Master Plan projects

Assuming the city's population continues

that the city's population may surpass

300,000 residents by around 2030.

The mâmawêyatitân centre is an excellent example of how partnerships and embracing collaboration can lead to innovative outcomes in facility design and service delivery transformation. This North Central amenity will help to improve outcomes in determinants of health and social well being by focusing on providing a range of services at a shared, safe

¹ Statistics, unless otherwise noted, are gathered from Economic Development Regina's economic indicator portal and Statistics Canada 2021 Census data for the Regina CMA.



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With sustained population growth, demand for recreation services will continue to grow. Additional investment is needed to maintain and, ideally, enhance recreation services in the city.

Other notable demographic statistics of relevance to this study include:

- Around 10% of Regina's population identifies as Indigenous. The percentage of Regina's population identifying as Indigenous has remained stable since 2016.
- » Canada's Indigenous population is among its fastest growing, increasing by more than 40% since 2006 and a significant percentage (60%) of Indigenous people now live within metropolitan areas. Although Statistics Canada notes that Indigenous population growth in Regina was slowest among CMAs between 2006 and 2016, the city's Indigenous population grew at a much faster rate than the city's non-Indigenous population.2
- More than 16,000 immigrants arrived in Regina between 2011 and 2016, more than the combined total of all immigrants arriving in the city between 1981 and 2010. As of 2021, 18% of the city's population was comprised of immigrants.
- » Many newcomers to Regina are attracted by the city's high quality of life and its welcoming nature. The city's recreation facilities, including aquatic centres, provide year-round opportunities to be active, gather, and participate in community life. Continuing to invest in these amenities will be important to continue attracting immigrants at such a strong rate.
- · Regina is a city of Community Associations: the city is divided into five recreation zones with more than 25 Community Associations that provide zone-wide programming to residents.
- » As Statistics Canada data becomes available at a more granular scale, it will be important to monitor population growth and dynamics at a Community Association scale to ensure that needed amenities are accessible to as many residents as possible.
- The **median age** of Regina residents was 36.7 in 2021, up slightly from 36.5 in 2016. Regina is younger than the Saskatchewan median age of 37.8 and national median age of 41.2 (2016). Approximately 19% of the city's population was under the age of 15 in 2021 and just under 14% were over the age of 65.
- » Saskatchewan's population is aging overall, and Regina should anticipate the proportion of its population above the age of 65 to increase over time as well despite having a median age younger than average.
- The median household income in Regina was \$89,622 (2020), around \$20,000 more per year than in 2011 and higher than Saskatchewan's median household income measure. However, the prevalence of low-income households in the city is also important to consider, with approximately 6.5% of adults ages 18 to 64 and 1.7% of those age 65 and over falling into the low-income cut-off category (LICO-AT) (2015, 2020 data not available as of the time of writing)
- » Affordability of access to recreation services is a significant barrier to participation, particularly for low-income households. Regina's Affordable Access program provides discounted access to recreation facilities and programs, as well as discounts on transit passes. Accessibility should also be examined based on proximity of amenities to low-income households, as well as access to such facilities via public transit.

· Visible minorities comprised around 27% of Regina's population in 2021 compared to approximately 17% in 2016. Around 15% of Saskatchewan's population was comprised of visible minorities in 2021, suggesting that Regina is significantly more visually diverse than the province overall.

» Regina's growing diversity is a strength of the community, with City plans and strategies reflecting the enormous contribution and potential that Regina's cultural heritage has for building deeper community connections and pride. With immigration also a major factor driving population growth, the city's diversity will only grow in the years to come.

1.2.4 Population Projections

As presented in the Recreation Master Plan. Regina's population is projected to reach nearly or exceed 300,000 residents by 2031, a figure also identified in Design Regina: Official Community Plan. Over the last 10 years, Regina's population has grown on average by between 1.1% and 2.3% per year, with COVID hampering population growth across Canada. Assuming a return to more normal growth rates, Regina's population will likely exceed 280,000 by 2030 and 300,000 by around 2034. To continue to provide access to quality recreation opportunities and to accommodate this projected population growth, additional investment is required to maintain and, ideally, enhance provision of aquatic amenities for as many residents as possible.

Consideration of Regional Communities

There are several regional – or bedroom - communities within driving distance of Regina with populations that regularly travel to Regina to shop and access services, including recreation programs and facilities. These bedroom communities within the Census Metropolitan Area (CMA), including Edenwold, White City, Pilot Butte. Lumsden, and Balgonie, are home to around 26,000 residents (2021). A growing regional population will generate additional demand on City of Regina amenities, including aquatic facilities. The City of Regina has strong working relationships with its regional counterpart municipalities and does not charge differential fees at its recreation facilities for users residing outside of the City of Regina; however, the City does stagger program registration by allowing residents first access, then opening up registration more broadly after two days. Continued regional population growth is likely to create additional demand pressure on the City's recreation amenities without generating additional property and other tax revenues.



² https://www150.statcan.gc.ca/n1/daily-quotidien/171025/dq171025a-eng.htm



New Regina Indoor Aquatic Feasibility (IAF)

Inclusion and diversity are key tenets of

Regina's economic development strategy which establishes a goal of Regina being

Canada's most inclusive city by 2030. To

achieve this goal, the city should strive to

increase/enhance the number and quality

of community gathering spaces that are

inclusive, as well as should activate the

newcomers to engage and be engaged

While Regina's median age was younger

than provincial and national measures in

2016, the city's population overall is aging

proportion of seniors (65+) will call the

supports required to ensure successful

particularly those therapeutically focused,

over time. This means that a larger

city home, with diverse needs and

aging-in-place. Aquatic programs,

are excellent low-impact options to

maintain healthy, active lifestyles into

Like other major centres on the Prairies,

downtown core and attract more

city makes progress on the Regina

Revitalization Initiative, more residents

should be expected to live in core areas

moving forward and public spaces and facilities are important amenities to

Regina has been working to revitalize its

residents to live in the city centre. As the

accessible, age-friendly, safe, and

city's Cultural Plan to create new

opportunities for residents and

holistically.

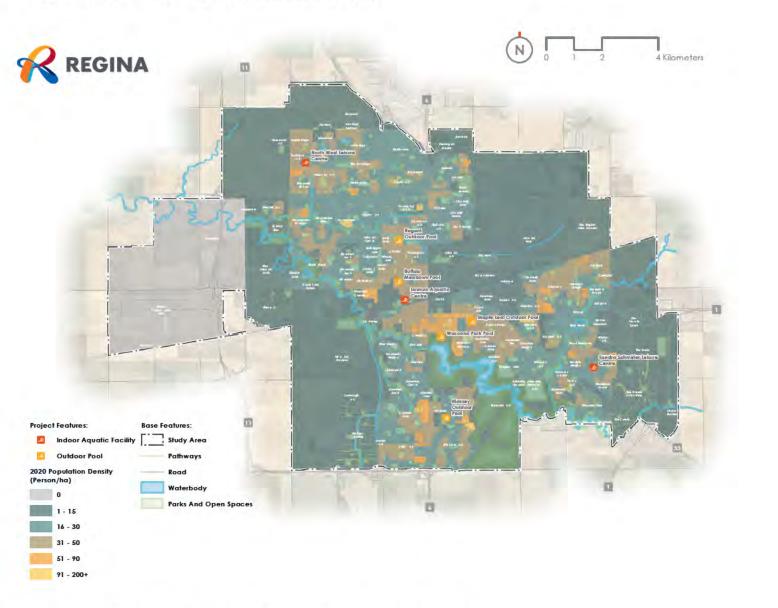
older age.

June 23, 2022

1.2.5 Geospatial Analyses

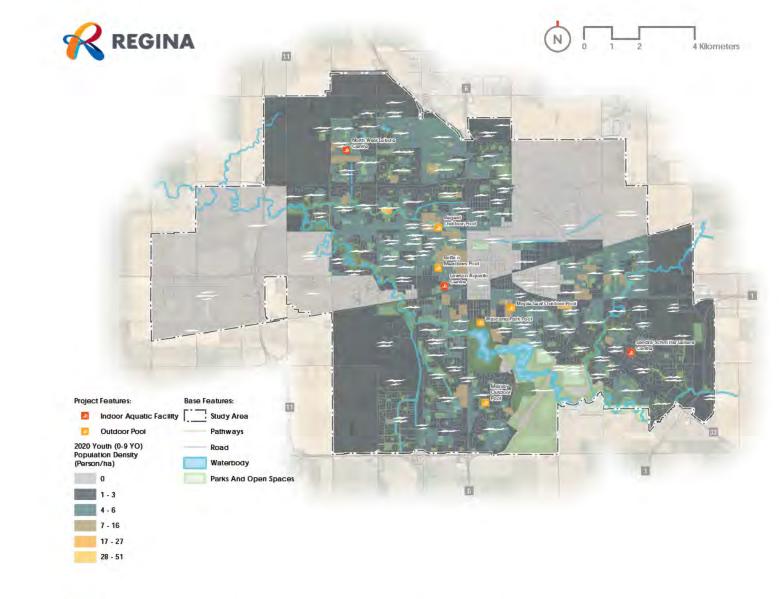
A series of geospatial analyses were performed to better understand a range of population data for Regina as related to the provision of indoor aquatics facilities in the city. Outdoor aquatic facilities are also analyzed to provide additional context.

Map 1: 2020 Population Density (2021 Environics PRIZM Data)



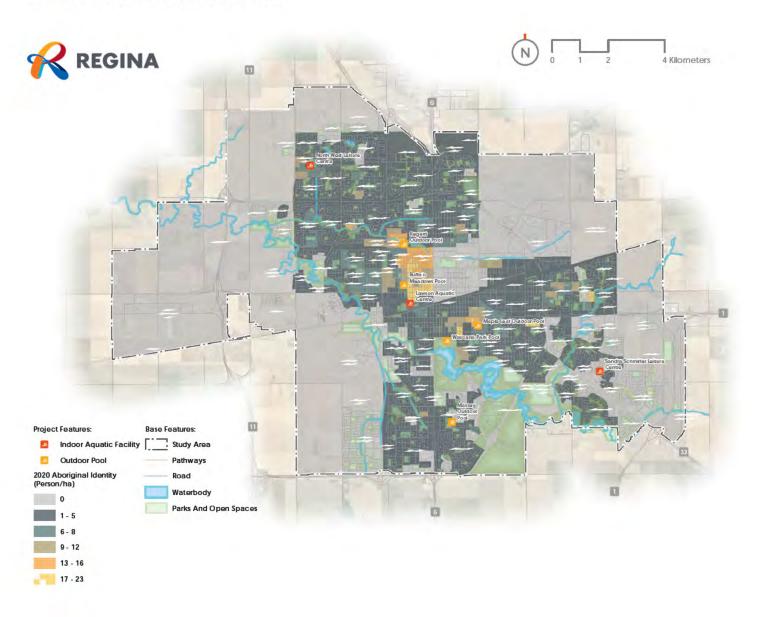
Map 1 presents Regina's 2020 population, illustrating that the city is most densely populated in the core/downtown areas to the immediate south of the Lawson Aquatic Centre. There is also significant density within the city's south and east

Map 2: Youth Population Density 2020

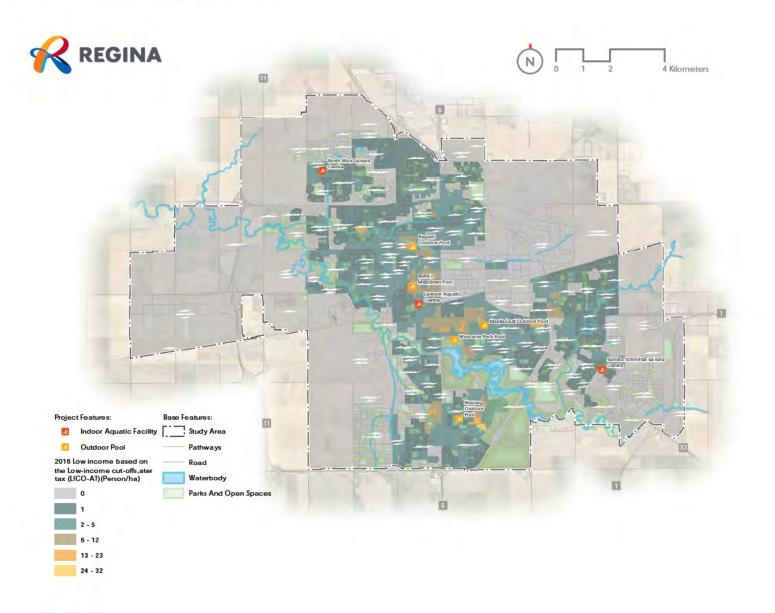


Map 2 presents the population density of youth ages 0 – 9 in 2020, which illustrates that there is some youth density in the neighbourhoods surrounding the Lawson Aquatic Centre and to the north of the pool, as well as a few other pockets of greater youth density across the city.

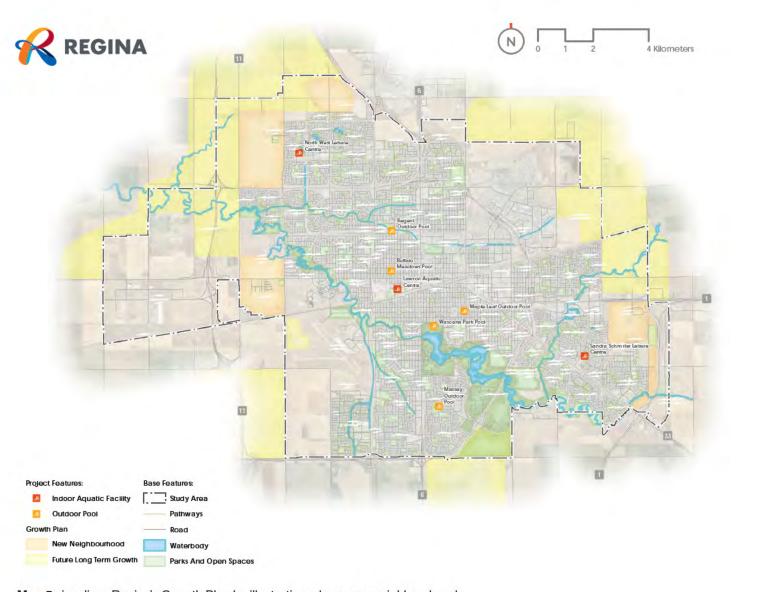




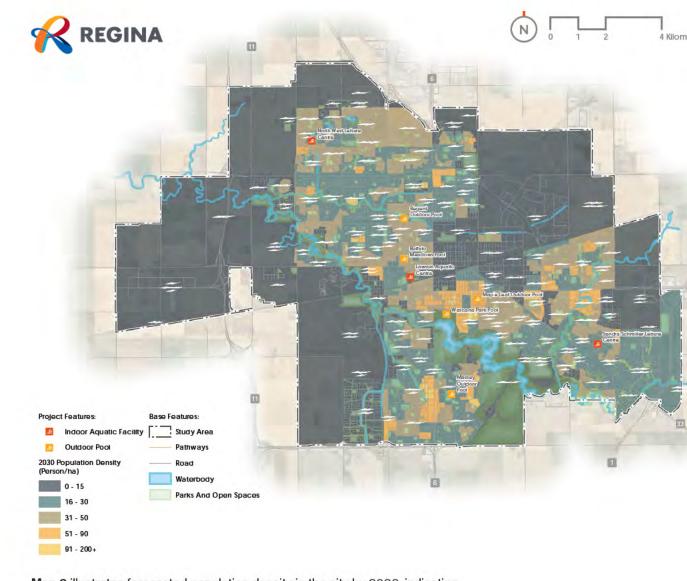
Map 3 illustrates population density of those identifying as Indigenous in Regina as of 2020, showing significant population density to the immediate north of the Lawson Aquatic Centre, particularly when contrasted with other neighbourhoods in the city.



Map 4 illustrates the density of residents classified as low-income using Statistics Canada's 2016 LICO-AT measure. Compared to other areas in Regina, there is greater density of low-income residents residing in central neighbourhoods in the city, particularly those in the vicinity of the Lawson Aquatic Centre.



Map 5 visualizes Regina's Growth Plan by illustrating where new neighbourhoods and future long-term growth is likely to be accommodated as its population increases to 300,000+ in the coming decades. Much of the forecasted growth is anticipated to occur in the city's northwest and northeast areas.



Map 6 illustrates forecasted population density in the city by 2030, indicating significant increases in density in the city's central neighbourhoods near the Lawson Aquatic Centre and in the south.

City of Regina

1.3 Chapter Considerations for Facility **Design and Operations**

Equity and Inclusion

- Accessible, affordable access is key given the density of low-income residents in Regina's central and downtown neighbourhoods, particularly in the area proximate to the Lawson Aquatic Centre
- Regina's Indigenous and multicultural communities are growing and facilities like mâmawêyatitân centre illustrate the importance of providing spaces and places for socialization and cultural learning
- · Regina's senior population is growing in proportion over time and demand for low-impact water-based rehabilitation and therapies will likely increase as well

Sustainability

- As Regina's population increases, so too will demand for aquatic services. Additional population growth requires more system-wide capacity and additional investment in infrastructure
- There is already a significant wait list for swimming lessons and as Regina's population continues to grow, this demand will increase as well. There is insufficient capacity within the City's aquatic facilities to accommodate demand both now and into the future



2.0 Analysis Framework

To best understand and analyze pools in Regina, this report section presents a clear framework that identifies benefits provided by aquatic facilities, establishes aquatic activity types to understand facility design requirements and program elements, and presents a logical methodology for determining supply and demand of aquatic facilities to understand overall need and establish service levels for each activity type within the city.

2.1 Benefits of Aquatics

Aquatics are one of the most important leisure services that a municipality can provide, as aquatics caters to a broader cross section of the public than any other recreation amenity, delivers a wide range of benefits, and are often the most supported recreation service by residents. In Regina, the city is the primary provider of pools and aquatic programming. The University of Regina also operates a 25m indoor pool that provides some programming and swim lessons to the public, but the primary purpose of the facility is to meet the educational and recreational needs of the U of R campus community; based on age and design limitations, the U of R facility is also constrained in its ability to meet the needs of its intended user groups, but it does provide program capacity that were it to close would primarily be accommodated at the Lawson. As a vibrant and growing Prairie city, the City of Regina provides aquatic facilities and programs as part of its broader recreation system that provides residents and visitors with access to opportunities that contribute to a high quality of life. At a municipal level, provision of recreation services generally relates to level of demand and public benefits derived from investments in these services.

Public investment in recreation services, including aquatics, is justified due to benefits provided in the form of the collective good - that is, the indirect and direct benefits provided to all, rather than simply looking at revenues generated or providing niche or trendy services (i.e. what the private sector typically focuses on). A fundamental question to ask when considering public investment in recreation services is "does this service make our community a better place for people to live for all residents regardless of whether they use this service or not?"

Public pools are unique places in that they provide opportunities for recreation and leisure, sport participation and training, rehabilitation and wellness, relaxation, socialization, and event hosting. The spaces and activities provided by pools can enhance physical and social health and well-being, contribute to community and economic development, and address challenges related to physical inactivity, mental health, chronic conditions, providing safe spaces for reconciliation and inclusion initiatives, and facilitating community cohesion.

While pools tend to be some of the costliest facilities to provide, such investments are highly valued by residents due to the wide range of direct and indirect benefits that are provided, including:

· Swimming and aquatic based exercise provides significant health benefits to those who are healthy and to those in rehabilitation or managing chronic conditions. The low-impact, full body nature of swimming and aquatic activities

Public demand for service is a common justification for provision of recreation amenities and programs. However, demand can be difficult to estimate and often requires looking at factors such as attendance/registrations, waitlists, trends and user preferences, public and stakeholder engagement, and price - with recreation often being publicly subsidized.

As a province home to more than 100,000 lakes, the benefits of aquatics become more pronounced when considering the positive effect that swim instruction can have in reducing risk of drowning. The Lifesaving Society of Saskatchewan is an advocate for the Swim for Life Program focused on acquisition and development of fundamental swim skills. Municipal aquatic facilities are critical sites for individuals to develop skills in safe, controlled environments. So too are these facilities important in providing training venues for lifeguards and other leaders.

can reduce falls in elderly adults, reduce age-related frailty, and more recently explored, can have positive impacts on physical and cognitive functioning for individuals with dementia.1,2

- · As attractive facilities for a wide range of the population, pools can help reduce physical inactivity - leading to significant health care cost savings. A 2015 study found that physical inactivity amongst British Columbians led to \$350 million in direct health care costs and \$673 million in disability and premature mortality costs. Cumulatively, reducing physical inactivity by 1% annually could avoid more than \$3 billion in cost by 2036.3
- Swimming and aquatic activity have been shown to help individuals maintain and improve wellbeing, regardless of gender, age, ability, and socioeconomic status. Beyond just physical health, there is growing recognition within the recreation and public health sectors of the importance of maintaining and promoting wellness as it relates to mental health issues.4
- Pools have traditionally provided an important public space for community members to come together for recreation, socialization, and participation in public life. Pools provide spaces and programs for those of all ages and backgrounds, supporting multigenerational socialization and cross-cultural interactions.
- Aquatic literacy gained through experience in safe aquatic environments can significantly reduce risk of drowning. The Lifesaving Society estimates that the associated cost of drowning injury and death in Canada was \$173 million in 2019. For many, visits to the pool are the first experience they may have with water and key to building life long aquatic literacy.5
- Pools also contribute to a community's economy through employment, visitor attraction, and event hosting. A study out of Australia estimates that the average pool facility contributes around \$2.7 million (AUS\$) per year to the local economy. Furthermore, hosting major aquatic events like swim meets or competitions can not only generate facility revenues, but can have economic spillovers through accommodations and food services expenditures.6

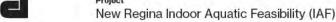
There are myriad benefits that may be realized though public investment in pools, some of which are more quantifiable than others. Health, social, cultural, and economic benefits associated with pools are wide-ranging and, despite investment costs typically being significant, residents overwhelmingly value these services as important within the community.



- 2 Physical and functional implications of aquatic exercise for nursing home residents with dementia (2015) https://pubmed.ncbi.nlm.nih.gov/25453191/
- 3 The economic benefits of risk factor reduction in British Columbia: Excess weight, physical inactivity, and tobacco smoking (2015) http://www.bccdc.ca/pop-public-health/Documents/ EconomicBenefitsofRiskFactorReductioninBC full%20report.pdf
- 4 Effects of participation in swimming lessons on health perception and belief. Journal of exercise rehabilitation (2015) https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4378349/
- 5 Canadian Drowning Prevention Plan, 8th Edition (2021). https://www.lifesavingsociety.com/ media/343290/cdn-drowningpreventionplan-8thedition.pdf
- 6 Royal Life Saving Society Australia (2017). https://www.swimaustralia.org.au/docs/rlss-economicbenefits-report-2017.pdf









2.2 Aquatic Activity Type Classification

With the benefits of investing in pools established, it is equally important to understand the range of activities that can take place at indoor and outdoor pools, as these activities each have specific program requirements to ensure user comfort and strong utilization. For planning purposes, it is beneficial to categorize aquatic activities based on what motivates use of available pools (i.e. what benefits users hope to reap through participating). Water temperatures, depths, and tank configurations must be precisely tuned to each activity type, along with specialized amenities or other features.

Aquatic activities generally fall into one of seven types, which can be further differentiated by whether the level of service provided is 'fundamental' or 'specialized'. For example, most pools can accommodate fundamental recreation and leisure swimming experiences; however, only facilities with specialized amenities such as water slides, dive tanks, and wave pools should be characterized as specialized. Please see the chart on the following page for an overview of these activity types. More detailed descriptions of each activity type are presented on the pages that follow.

Table 1: Aquatic Activity Types

Activity Type		Description	Level of Service
		Swimming for fun	Fundamental
	Recreational and Leisure	Swimming for fun with specialized amenities like waterslides, wave pools, lazy rivers, play equipment, etc.	Specialized
	Skill Development	Primarily swim lessons, but also other skills taught in lesson format	Fundamental
WY)	Fitness	Lane swimming and structured aquacise / fitness classes	Fundamental
8		Aquatic sport club training programs	Fundamental
	Sport Training	Training requiring specialized amenities such as diving tanks, underwater sound systems, timing systems etc.	Specialized
(2)		Pool rentals, birthday parties	Fundamental
	Special Events	Swim meets, competitions, major tournaments, etc.	Specialized
	Therapy and Rehabilitation	Therapy and rehab for those with varying abilities and those recovering from surgery or injury, zero entry access and some assisted support for access	Fundamental
		Specialized access systems and therapy/ rehabilitation elements, separate tanks with various water temperatures	Specialized
682	Leadership Training	Lifeguard, aquatic instructor training, leadership and development programs	Fundamental

^{*} A note on catchment areas: typically, fundamental facilities have smaller, more localized catchment areas (e.g. 5 KM) and specialized have larger catchment areas (e.g. 10-40 KM). For this study, the assumed catchment area for both fundamental and specialized facilities in Regina is city-wide and likely region-wide with users traveling from communities such as White City and Lumsden to access these services and spaces. Generally, users are willing to travel longer distances for more specialized amenities.

2.2.1 Indoor Activity Types



Recreational and Leisure Swimming

Individuals and groups going to the pool to swim and have fun is one of the most popular activity types, both indoor and outdoors. Motivation for participating in recreational and leisure swimming is often mixed with wanting to be active and healthy, providing some elementary levels of fitness or skill development. For most municipalities, this activity type comprises more than half of all pool visits. Little skill is required to have fun at the pool and this activity type has the fewest barriers to participation and appeals to the broadest cross-section of the public. This activity type is often a user's introduction to aquatic services and should be considered as essential. This category often accommodates drop-in participants, but also rentals (e.g. birthday parties). Due to high participation rates in this activity type, municipal cost per swim is typically the lowest of all activity types. Generally, if specialized amenities or features are provided, users are more inclined to travel greater distances – such as water slides, lazy rivers, wave pools, and aquatic play equipment. While capital costs of these amenities can be significant, enhanced attractiveness for users often offsets these costs over time.

Service Provision and Facility Specification Considerations

- Is one of the most basic aquatic activity types and should be accommodated at all City of Regina pools; all pools should facilitate at least a fundamental level of recreational and leisure swimming.
- Many modern indoor pools incorporate some specialized amenities to enhance facility attractiveness and attract users from a broader catchment area. Amenities may include waterslides, wave pools, surf machines, lazy rivers, and themed aquatic play equipment.
- Recreational and leisure swimming has the fewest barriers to participation and has the widest appeal to users.
- Almost any warm water shallow tank can accommodate recreational and leisure swimming at a fundamental level. Water temperatures of between 28 – 30 degrees Celsius and water less than 1.5 m deep are most appropriate; there are no specific tank size or configuration requirements.
- Specialized amenities often involve moving water (e.g. waves or currents, waterfalls), water based fixed toys or play features, slides or swings, and floatable toys. These features require careful consideration at the program and facility design phase.



Skill Development

Learning how to swim and water safety skills are fundamental life skills / important to physical literacy. All residents should have at least basic water skills to survive in emergency situations. Swimming skills are typically taught via lessons where students register for a series of swims with an instructor. Often highly regimented with prescribed levels of progression, skill development (i.e. swim lessons) typically begin with water safety basics and expand into higher levels of techniques and skills. The primary market for skill development is children between the ages of 4 to 12, but there are also adults that are interested in honing skills. Most of those registered in swim lessons come to the pool with an adult caregiver that may or may not also be active at the pool. This activity type does not require any specialized support amenities and therefore has a relatively low capital cost and can be accommodated at most facilities.

Service Provision and Facility Specification Considerations

- Skill development, like recreation and leisure swimming, should be considered a fundamental activity type and accommodated at all City of Regina pools.
- Skill development requires a variety of water depths, ranging from a minimum of approximately 0.3 m to around 1.5 m to accommodate beginner-level instruction, to water more than 1.5 m for more advanced levels of swim instruction and other types of specialized skills (e.g. scuba diving).
- Water temperatures should be in the range of 28 30 degrees Celsius, with warmer temperatures better for children learning to swim. Temperatures should be around 32 – 34 degrees Celsius for children under 4.
- There are no specific sizes or configurations required for swim tanks, with a 25 m tank ideal for most programming, but on-deck storage is often required for some swim aids and there should be enough space to accommodate adult spectators during swim lessons, particularly in areas with line of sight on tanks and in dressing areas to assist their children.







Fitness Swimming

Fitness swimming typically accounts for the third highest volume of swims at municipal pools, behind recreational and leisure and skill development swims. Water based fitness activities are also growing in popularity due to the low-impact nature of participation. Fitness swimming can occur via drop-in through lane swimming or delivered through program as shallow or deep-water fitness classes, with socialization often an added benefit of these types of classes (e.g. aquacise). The primary market for this activity type tends to be adults and seniors, either participating individually or in groups.

Service Provision and Facility Specification Considerations

- Fitness swimming should be as easily accessible to residents as possible, with at least three swim lanes provided per facility if possible.
- Swim lanes should be between 2 to 2.5 m wide and ideally 25 m long to maintain
 consistency with swimming standards. Traditionally, the desire to incorporate lanes
 is what leads to the predominance of rectangular swim tanks; however, lanes are
 being more creatively integrated into pool designs in wave and leisure pools to not
 require wholly rectangular tanks.
- Water should be at least 1.2 m deep and deeper, as necessary, to accommodate other activities such as deep water running.
- · Vertical walls are required at the end of each lane to support turns.
- Water temperatures should be between 28 30 degrees Celsius, but lower temperatures may be more appropriate for higher intensity activities and specific populations.



Sport Training

Training or league play to enhance competitive skills and abilities is typically provided by non-profit sport organizations (i.e. clubs) that rent pool space. While most participants in sport training are children or youth, higher level competition can extend up to young adults; adult and senior swim and competition clubs are also common. Aquatic sports include speed swimming, water polo, diving, underwater hockey, and synchronized swimming. Most sports require scheduled training times, often multiple times per week, and characterized by relatively few participants. Some sports operate in a team setting and feature league play (e.g. water polo). Most participants have good knowledge of how to swim prior to registering in an aquatic sport club.

Service Provision and Facility Specification Considerations

- There are typically not enough users at local levels to support sport training at
 every municipal pool, but at a broader catchment area (i.e. city-wide) there are
 often multiple clubs that require access to sport training amenities; therefore, not
 every municipal facility needs to accommodate sport training, but such service
 should be available at the city-wide level.
- Higher level sport training requires specialized amenities such as timing systems, scoreboards, underwater acoustic systems, dive tanks, and even large spectator viewing areas if hosting competitions or special events.
- Depending on the sport, sport training can be accommodated in short course (25 m with 6 to 8 lanes, minimum water depth of 1.2 m for speed swimming and deeper for other sports) or long course tanks (50 m with six to 10 lanes). Long course tanks are often required for higher levels of competition.
- Cooler water temperatures in the range of 25 to 28 degrees Celsius are preferred for sport training activities.
- Some sport programs require some dry floor space near or on the pool deck for activities.



Special Events

Special events mostly relate to aquatic events that occur outside the normal activity of a facility or sports organization / club. These events require planning, involve several users and volunteers, and often attract spectators. Special events occur infrequently and often through rentals. They can be multi-day events and often pre-empt other scheduled users of the pool (e.g. swim lessons, public swim). Special events can involve participants of all ages. Swimmers participating in special events typically have advanced skill levels and event type examples include water polo team tournaments, competitions, swim meets, and seasonal championships.

Service Provision and Facility Specification Considerations

- Smaller special events are generally local or regional in nature and include events such as tournaments organized by a single club or a few clubs and range from one to three days in duration, involving a few dozen to a few hundred participants, and attracting a few dozen to a few hundred spectators. Seating and viewing areas are important for events of all scales.
- Larger special events require more detailed planning and specialized amenities
 and are more likely to be hosted at a city or region-wide scale. Large events
 involve more participants, require support personnel (paid or unpaid), and may
 attract media and significant spectator numbers. These events are often multi-day
 and can be part of multi-sport events, as well as can be national or international in
 scope.
- To host larger events or national/international events, facilities must adhere to standards set by governing bodies (e.g. Swimming Canada, FINA).
- Larger special events require particular attention to be paid to things such as tank size and depth, water temperatures, timing systems, diving tanks and platforms, spectator viewing requirements, warm up areas, participant marshalling areas, and other amenities.
- Deeper water in the temperature range of 25 to 28 degrees Celsius are often appropriate for most special events.
- Swimming Canada's Facility Rules & Guidelines (2019) provides technical guidance
 on indoor aquatics facility design requirements to host national and internationallevel swim competitions and other special events. Generally, the higher the level of
 competition, the more rigorous the design requirements are for an indoor aquatic
 facility. The table below presents minimum facility standards organized by level of
 competition, with standards set by either Swimming Canada or FINA, the
 international governing body for swim competitions.

Table 2: Facility Standard Comparison Chart for Sanctioned Aquatics Competitions

Component	International	National	Provincial	Club Invitational
Water depth for start (diving) from starting platform (0.75m max height from water)	1.35m (extending from 1.0m to at least 6.0m from end wall)	Same as International	Same as International	Same as Internationa
Water depth for start (diving) from permanent deck or bulkhead (0.35m max height from water)	Not appropriate for this level of competition	Not appropriate for this level of competition	Not appropriate for this level of competition	1.2-1.35m (extending from 1.0m to at least 5m from the end wall
Water depth elsewhere	1.0m	1.0m or a reasonable variance	1.0m or a reasonable variance	1.0m or a reasonable variance
Starting platforms	Per FINA FR 2.7 (International standard)	Per FINA FR 2.7	Starting platforms are available	Starting platforms or end-wall starts
Backstroke ledges	Per FINA FR 2.10	Per FINA FR 2.10	When available	When available
Length of course	Per FINA 2.1	Per FINA 2.1	Per FINA 2.1	Per FINA 2.1 or CFR 2.1.1
Warm-up / Warm down pool	Additional 50m pool required	Additional 25m or 50m pool required	Per provincial requirements	As required
Lane width	2.5m	1.8m or a reasonable variance	1.8m or a reasonable variance	1.8m or a reasonable variance
Lane width per 2 lane (distance events)	Not applicable	Minimum 2.0m or a reasonable variance	Minimum 2.0m or a reasonable variance	Minimum 2.0m or a reasonable variance
Lane rope colours	Per FINA FR 2.6	No requirements	No requirements	No requirements
Pool temperature	25-28 degrees Celsius	25-28 degrees Celsius	25-28 degrees Celsius or a reasonable variance	25-28 degrees Celsius or a reasonable variance







Therapy and Rehabilitation

Water buoyancy provides an excellent medium for activity and exercise for people with varying abilities and those recovering from illness, injury, or surgery. Water activities are low-impact and do not place undue stress on the body's joints, making aquatics an excellent therapeutic and rehabilitation exercise. As users age, water tends to become more of an attractive medium for exercise. Specific skills or abilities are not required to participate in therapy and rehabilitation activities and such activities can be organized (e.g. programmed classes), occur one-on-one with an instructor, occur via drop in, or through rentals where a third party provides instruction.

Service Provision and Facility Specification Considerations

- Most fundamental therapy and rehabilitation swims can be accommodated in pools that cater to other activity types.
- More specialized access systems and amenities that provide enhanced therapy and rehabilitation services should be accessible at a city-wide level, rather than at
- Facility requirements for fundamental service levels are minimal, with warm water in the range of 32 to 35 degrees Celsius and shallow water (less than 1.5 m). Water temperatures requirements do vary by condition, with those with Multiple Sclerosis requiring a lower water temperature in the range of 27 to 29 degrees Celsius.
- Facility requirements for specialized service levels are more complex, with special attention required for dressing rooms (e.g. mechanical lifts to beds or chairs). wheelchair water entry access (i.e. ramps or lifts), more circulation space on decks, warmer water temperature, and specialized water depths (e.g. movable depths). Other support amenities such as physical therapy and massage services operating in the same facility are common.



Leadership Training

Aquatic services rely on trained leaders (e.g. instructors, lifeguards). The market for leadership training tends to be teens and young adults, but those of all ages can participate in this activity type. Leadership training is almost always delivered via organized programs such as Bronze Medallion or Bronze Cross. Most municipalities in Canada are experiencing shortages of qualified leaders to maintain service levels and safe facility operation requires that individuals with these skillsets be available. While leader training is typically a small component of facility utilization, it is a vital activity type for aquatic system operation and should be accommodated to the greatest extent possible at each facility. Leadership training courses can be held at any time throughout the year and, during warmer months, can take place in outdoor environments.

Service Provision and Facility Specification Considerations

- This activity type does not need to be accommodated within every facility in the City of Regina but should be more readily available overall at a city-wide level to encourage more participants.
- A variety of water depths, temperatures, and tank configurations are often required to support leadership training depending on specialization level.
- Some specialized support spaces, such as larger pool decks and off-deck classrooms, are often required to support this activity type.





2.2.2 Outdoor Aquatic Activity Types

While this report focuses on indoor aquatic facilities and activity types, Regina has several outdoor pools that serve two important activity type roles that are unique from indoor facilities: water orientation opportunities for toddlers and providing a respite against summer heat.

Water Orientation for Toddlers

Prior to learning to swim in structured, organized programs, toddlers should be exposed to water in comfortable, safe environments. Toddler introduction to water can happen both outdoors and indoors and requires no prerequisite skills. Primary orientation usually occurs in warm, shallow water areas with gradual depth increases, either through drop-in activity or through introductory programs. Outdoor pools, wading pools, and spray parks often provide these opportunities. As developing comfort with water is considered a fundamentally basic service, these outdoor amenities should be located as close to residences as possible. Facility specifications to accommodate this activity type include significant areas with warm, shallow water, graduated depth accesses from zero to 0.4 metres, but with no dimensions or configurations of tank or splash pad area required.

Respite from Summer Heat

Unlike water orientation for toddlers that can occur either indoors or outdoors, this activity type is typically accommodated through outdoor facilities during the summertime. Indoor facilities with easy access to secured outdoor environments are also an option for meeting this activity type. Water can be used to cool off on warm summer days and this activity type requires no prerequisite skills. This activity type is provided primarily through drop in opportunities and can be delivered to all age groups. This activity type category is typically delivered at a community level, located as close to potential users and possible, with the only specification for use being warm outdoor temperatures.

2.2.3 Radar Analysis

The purpose of this report is to establish a new facility program for an indoor aquatics facility that reflects research, policy, and engagement findings. To provide a clear overview of how each chapter relates to this objective, a radar analysis has been completed for each chapter that evaluates the relative importance of chapter content to each of the 7 indoor activity types described above. Each report chapter is scored out of 5 as to how strongly each program area should be considered in detailed facility design and operating considerations, with an aim to achieving a balanced facility program that enables all activity types.

At the end of the report, a final radar diagram is presented that averages the scoring for each activity type across all chapters to provide a visual support for detailed facility design and operating considerations.



Chapter findings are then rated from 1 to 5 based on how strongly content aligns with these program areas, providing direction to the overall indoor facility program.

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2.3 Supply / Demand **Analysis Methodologies**

There are several methodologies for determining what an appropriate supply of aquatic facilities is at a municipal level based on activity type and demand.

Demand, at a basic level, is indicated by the number of swims that occur over time in an area. Assuming that there is excess capacity to accommodate more swims and that there are no participation barriers, then demand should equal the actual number of swims. However, capacity often varies, and participation barriers cannot be eliminated for all users; therefore, demand is a much more complex metric to calculate than supply.

Supply is, also at a basic level, the total amount of swims that a pool or system of pools can accommodate over a specified duration. There are measures to calculate absolute maximum capacities using regulations such as building codes, but this does not provide much detail on how often visitors turn over at any given time. It is not realistic to expect a facility to reach its maximum potential visitations specified under legislation, especially considering that most activities require each user have adequate space to participate in.

There are three primary methodologies to determine the capacity of pools, illustrated in the figure below. One of the most effective approaches to determine overall supply is to calculate the **practical capacity** of each facility by examining the total surface area for each facility and water depth. Water depth is a more important factor than tank size in terms of the number of users that can be safely accommodated in a tank. Pools accommodate a wide variety of activity types, each of which requires adequate space between participants.

Based on decades of observation and operational experience in communities across Canada, multipliers for the total number of annual swims per square foot of pool surface area have been developed for water depth shallower than 5 feet and deeper than 5 feet based on the activity type. The following information describes a highlevel methodology for calculating practical capacity:

STEP 1 Gather Data

- Gather operational hours per week for the facility and identify any extended disruptions that may have occurred in the past year that may impact hour
- Collect tank amenities, characteristics, and dimensions
- Organize total annual swims by activity categories and control for single versus multi purpose facilities (lifeguard logs and pool check in logs are most accurate).

A useful me hod for estimating the total supply capacity of aquatic facilities (i.e. how many swims can be accommodated per year) is to use multipliers per square footage of tank area that is sha lower han 5 feet and deeper han 5 feet.

Supply and demand analyses are not straightforward when it comes to aquatic fac lities. Demand is rarely just a measure of total swims accommodated, but rather is affected by capacity and whether users experience barriers to access.

STEP 2 Analyze and Filter Data

- If any facility disruptions occurred over the year, subtract these from the
- Divide the total swim counts recorded by the total number of operational weeks to get the average number of swims accommodated per week
- Determine if swim data is accurate enough to support the practical capacity calculation

- STEP 3 Calculate Practical Capacity ----

- Determine proportion of each tank's total surface area deeper than 5 feet and shallower than 5 feet
- Calculate practical capacity by identifying the tank's intended participant load and the total square footage of the tank below and above 5 feet
- » High load: predominantly accommodates specialized recreation and leisure swimming and fitness swimming
- » Balanced load: accommodates all aquatic activity types
- » Low load: predominantly accommodates sport training, special events and leadership training activities

Participant Load	Annual Shallow Water Capacity	Annual Deep Water Capacity
High Load	75	35
Balanced Load	65	25
Low Load	40	15

One major strength of the practical capacity calculation methodology is that it accounts for variability in the type of swim activity types that are accommodated. For example, at a facility where the primary swim activity type is diving and where diving groups rent out significant amounts of a pool's total operating time, this facility's overall practical capacity will be lower than a facility primarily used for leisure swimming. In these cases, supplementing practical capacity analysis with more traditional measures such as percentage of prime time hours utilized per week, bather counts, and so forth can help to enrich the overall utilization analysis.

Table 3: Pool Capacity Methodologies

Legal Capacity	Practical Capacity	
What is it? Maximum pool capacity as determined by the province's Swimming Pool Design and Operational Standards	What is it? Calculation of the practical number of swims that can be accommodated at a facility based on water surface are and depth.	
To determine: one person per 0.9 m ² of pool surface area less than 1.5 m deep; one person per 2.32 m ² for depths greater than 1.5 m	To determine: calculate the surface area of a pool and what percentage is below 5 feet deep and what is over 5 feet deep. Multiply square footage by participant load maximum annual swims per square foot for shallow depths and per square foot for deeper depths. Add the two totals to determine capacity.	
Pros: ensures a facility is operating at a capacity that meets regulatory and public health standards	Pros: based on vast experience at the community level on determining how many swims can be accommodated and the physical characteristics of a pool tank; accounts for various requirements of the seven activity types; refined over the past four decades through observation and review of operational situations.	
Cons: it is unrealistic to expect a facility to reach its maximum potential capacity based on building and/or bather standards; most activity types require more space for participants than would be possible at legal maximum capacities	Cons: does not consider capacity of specialized leisure features such as lazy rivers and wave pools; does not account for potential to accommodate more users at modern facilities with larger deck areas; relies on facility operators to provide accurate measurements and user data, which may not always be available.	



2.4 Chapter Considerations for Facility Design and **Operations**

Equity and Inclusion

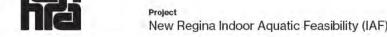
- Recreation and leisure swimming Is the most popular aquatic activity type and appeals to the widest range of population and should be considered one of the primary functions of a pool, with designs providing ample opportunities for fun and
- Pools are important sites for socialization, multicultural and multigenerational
- Spaces should be provided to allow for socialization in the form of viewing areas. abundant seating, and even spaces on pool decks
- There are few specific design requirements for facilities to accommodate personal fitness activities beyond ensuring there is adequate time and space available for lane swimming and group fitness classes
- Swimming is a popular activity and learning to swim is critical to physical literacy
- Opportunities should be provided for both swimming lessons and leadership training / skill development, both of which have minimal design requirements
- With an aging population and the benefits of aquatic activity on recovery, strength development, and other therapeutic treatments, a new pool should include dedicated spaces for these services (e.g. tank temperatures, situated away from higher activity areas)

Sustainability

 Competitive sport, training, and special events are demanding activity types in terms of facility design, with tank size, depth and specialized amenities (e.g. underwater sound systems, timing systems, dive platforms) are often regulated by sport governing bodies. Ensuring amenities can accommodate these demands is key to sustainability of the facility operating as a high performance centre



Content in this chapter speaks to the importance of accommodating skill development, sport training, and recreation and leisure swimming activities within a new indoor aquatics facility program. The radar diagram to the left illustrates the connection between chapter findings and what activity types should be most strongly considered and prioritized during detailed design work.



June 23, 2022

New Regina Indoor Aquatic Feasibility (IAF)

3.0 Planning and Policy Review

- · There is extensive planning and strategic policy in place within the City of Regina related to recreation, community development, inclusiveness and equity, climate change, and many other topics that influence and guide the provision of aquatic amenities. At the same time, there are also plans, policy, and legislation at the provincial and Federal levels related to promoting physical activity, equity, reconciliation, and enhancing the recreation sector more broadly. There are several safety guidelines, regulations, and design considerations that also pertain to aquatic facilities that have a large influence on facility design and programming
- This report section reviews these plans and policies and summarizes them in relation to their influence on future public investment and efforts related to public provision of aquatic facilities in Regina moving forward.

3.1 City of Regina Plans and **Policies**

The table below presents a high-level summary of pertinent plans and policies in Regina that should be considered as foundational for aquatic amenity decision making in the city. A few points of relevance and influence for each policy are presented as they relate to this study and the overall provision of aquatic amenities

Table 4: City of Regina Plan and Policy Review Table

Plan or Policy	Relevance and / or Influence on Aquatics	
Design Regina: Official Community Plan (2013)	 Highest level planning document in the City of Regina that will manage growth to 300,000 people and establish the foundation for future growth Broad vision of Regina as Canada's most vibrant, inclusive, attractive, and sustainable community where people live in harmony and thrive in opportunity Investing in recreation is a community priority and indoor facilities are identified as important sites for activity Spaces should be multifunctional, minimize barriers, consider the needs of vulnerable populations, and be designed for year-round use where possible 	
Regina OCP – Part B.7 – North Central Neighbourhood Plan (1981)	 Neighbourhood sub-plan for the North Central Neighbourhood (Lawson) Identifies resident concern with personal security and safety in the area and importance of having access to high quality community amenities 	
Recreation Master Plan (2019)	 A centrally located aquatic facility is the top indoor amenity identified for investment in the Master Plan, with the Lawson Aquatic Centre identified for additional capacity to be added to both competitive and leisure amenities Identifies the need for more aquatic capacity to accommodate growth and to meet public expectation for investment in these important amenities, particularly at a city-wide amenity level/quality 	
Adapted Recreation Plan (2022)	 The City of Regina is preparing an Adapted Recreation Plan to improve accessibility within City recreation facilities, informed by public surveying Pools were identified often through surveying as needing additional consideration for accessible design, with Maple Leaf Pool identified as an exemplar. However, features such as winding pathways and having to queue in lines can be difficult for those with disabilities 	



City plans and policies are most relevant

'why' and 'where' public investments

within city documents for investing in

recreation services, including aquatics, given identified benefits and opportunities

related to community liveability, safety,

reconciliation, culture, and the economy.

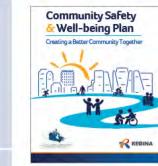
should be made. There is broad support

to the local Regina context in terms of the



Community Safety & Well- Being Plan (2021)	 City strategy for enhancing community safety and well-being based on extensive engagement and consultation work
	Relevant priority areas include racism and discrimination, safety, and improving the service system
	Recommendations include increasing accessibility, inclusion, and centralization of services and creating safer spaces and services for all
	Consultation work identified affordable options for seniors and youth and more centrally located facilities for recreation programs, specifically
Energy and Emissions	Regina has committed to being a 100% renewable city by 2050
Inventory (2019)	 Recreation centres consume approximately 28% of the city's overall energy demand
	Energy reduction, generation, consumption monitoring, and conserving resources and minimizing environmental impacts are key priorities
Sustainability Framework	Regina is in the process of finalizing its Sustainability Framework to help the City achieve its goals of being net zero by 2050, reducing energy
(2022)	consumption, improving energy efficiency, and switching to renewable or lo carbon energy sources
	Facility design should explore feasibility of net zero performance
Transportation Master Plan (2017)	25-year transportation plan that aims to expand multi-modal transportation networks to accommodate population growth and reduce emissions
(2011)	Transportation networks and land uses should be closely related to ensure complete community development and robust accessibility
	 The Lawson Aquatic Centre benefits from adjacencies to the Fieldhouse, Mosaic Stadium, and other recreation amenities that are well serviced by public transit, supporting the city's approach of integrated transit and land use planning
Reconciliation Regina Community Action Plan	Reconciliation Regina was established to develop a broader community response to the Truth and Reconciliation Commission's (TRC) Calls to Action
(2020/2021)	 The Community Action Plan outlines actions and deliverables to advance reconciliation in Regina, including incorporating Indigenous knowledge into municipal operations and identifying opportunities to incorporate Calls to Action into workplans, initiatives, events, and services
	Examples of actions taken to advance reconciliation include commissioning murals, installation of the Reconciliation Wall, and hosting ceremonies
Cultural Plan (2016)	Lays the strategic direction for the city's arts and culture community for the next 10 years
	Embracing cultural diversity, strengthening the arts and culture community and celebrating the city's cultural heritage are focus areas
	 Opportunities for advancing this Plan through aquatic amenities include creating high quality places, integrating language and culture into facility design, and providing support amenities that enable cultural and artistic expression
Economic Development Regina Strategic Plan (2020)	Establishes the vision and goals for Economic Development Regina, as well as identifies key sectors for economic growth
negina strategic Plan (2020	 Events and tourism are important economic sectors in Regina and this strategy identifies the importance of quality infrastructure to attract and retain major events such as sporting competitions

Relevance and / or Influence on Aquatics









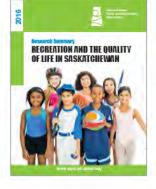
3.2 Provincial and National **Plans and Policies**

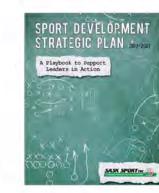
Provincial and national plans and policies provide broader strategic direction, guidance, and support for investment in public services like aquatics. Some documents pertain more specifically to aquatics and identify important facility elements for competition and leadership development, while others speak to the role that recreation and aquatics can play in supporting active lifestyles and healthy communities.

Plans and policies presented below have been gathered from provincial and national sources, with a focus on broad theme or topic areas of relevance to this project. Together, these plans and policies provide high level direction and guidance for decision-making and support for strategic investments in the city's recreation system, specifically aquatic amenities.

Table 5: Provincial and National Plans and Policy Review Table

Plan or Policy	Relevance and / or Influence on Aquatics
Recreation and Quality of Life in Saskatchewan (2016)	 Identifies a holistic range of benefits that recreation provides to residents of Saskatchewan, including bringing diverse groups of people together, strengthening communities, and encouraging healthy lifestyles.
	 Provides broad statistical evidence for the positive impacts of recreation in the province and data to support investing in recreation facilities.
Sask Sport	Guiding document for sport organizations in the province that identifies strategies to enhance collaboration and increase sport opportunities.
Sport Development Strategic Plan (2017-2021)	Accessibility and equity are fundamental principals for ensuring broad based participation and high performance within sport.
	 An objective to increase the number of high performance athletes competing at national levels requires investment in training and competition facilities.
Sask Sport Annual Report (2020-2021)	 Outlines funding and initiatives for the organization for the 2020-21 period. Highlights the achievements of three swimmers over the course of the year.
	Coaching education, Indigenous engagement, and virtual participation highlighted as opportunities.
Swim Saskatchewan Policies	Swim Saskatchewan regularly updates its policies related to winter and summer swimming, athlete support, registration fees, and so forth.
	 Identifies competition parameters, scoring, and activity types by age group, and publishes technical packages and protocols to guide events.
	 Outlines minimum water depths (1.2-1.35m) for dive entries at various heights for indoor facilities.
Swimming Canada 2021 – 2028 Strategic Plan	Focus areas include world class performance, sport development (incl. event hosting), and facility development.
	Identifies High Performance Centres as key to providing training environments needed for high performance athlete development.





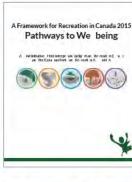








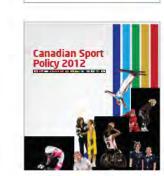
Plan or Policy	Relevance and / or Influence on Aquatics
Swimming Canada Facility Development Webinars	 Series of webinars exploring components of shovel-ready aquatic facility projects, importance of partnerships, and safe operations during COVID-19. Major challenges identified include lack of year-round access to 50m facilities, suitable event venues for mid-size and provincial level meets. It is critical to include community aquatic components along with competitive components for inclusiveness, recreation/fitness, leisure, and to ensure adequate availability of pool time for all users and that pool amenities are appropriate (e.g. tank size, temperature, water depth, water types). Broad-based facility programs deemed most successful – competition, community, fitness, and fun elements are all important components.
Framework for Recreation in Canada (2015)	 Overviews a renewed vision of recreation in Canada, with common values and principles for service delivery. Provides an outcome based and evidence driven framework for creating healthy, active communities and supporting wellbeing of citizens.
A Common Vision for Increasing Physical Activity and Decreasing Sedentary Behaviours in Canada (2016)	 Outlines a collective way forward to guide the country towards ways of increasing physical activity and reducing sedentary living. The Common Vision is guided by five interdependent principles that are foundational to increasing physical activity and reducing sedentary living. They include Physical Literacy, Life Course, Population Approach, Evidence-based and Emergent-focused and Motivations.
Truth and Reconciliation: Calls to Action (2016)	 Provides guidance on the importance of creating mechanisms in the delivery of recreation which are supportive and encouraging of relationship building with Indigenous peoples and support inclusive participation.
Canadian High- Performance Sport Strategy (2019)	Outlines the importance of creating a high-performance sport program that is value based and responsive to shifting environmental context.
Canadian Sport Policy (2002; 2012)	 Explains the importance of a sport system that is accessible, inclusive, and responsive to shifting societal demands. Describes a framework to provide guidance to all levels of government, the private and non-profit sectors in Canada in the delivery of sport Outlines a vision for sport delivery and development in Canada.









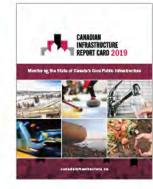


Plan or Policy	Relevance and / or Influence on Aquatics
Canadian Infrastructure Report Card (2019)	 Regularly produced report on the condition of Canada's infrastructure. Around 30% of arenas and pools in Canada are rated as being in very poor to fair condition, one of the worse rated categories of infrastructure. Recommends annual reinvestment of 1.7% to 2.5% of a facility's value to ensure maximum lifespans and prevent deterioration.
Physical Literacy in Aquatic Environments (2019)	 Physical literacy in water is unique in that drowning is a major societal concern and improving physical literacy in water can prevent drowning. Indoor aquatic environments should provide exposure to a diversity of conditions and activities to maximize learning and development.
Sport for Life for All Newcomers to Canada (2018)	 Published by Sport for Life, this document identifies some of the unique barriers, challenges, and opportunities faced by newcomers to Canada when it comes to participating in recreation and sport. Opportunities identified include expanding community-based programming offering discounted rates for newcomers, offering drop-in programs at more diverse times, creating multi-sport opportunities, offering 'learn to' or 'try it' nights, developing informational material in diverse languages, and working with newcomer associations to promote facility use and creating a welcoming environment.
ParticipACTION Report Card on Physical Activity (2021)	 ParticipACTION regularly publishes report cards for both children and youth and adults that assess overall physical fitness and movement rates. The 2021 report card for adults was released in November 2021 and COVID-19 has impacted measures across the board. Facilities and infrastructure are given a grade of "B", with municipalities generally providing good access to spaces and places needed for people to be active. Maintaining and improving facilities is recommended to increase the attractiveness of infrastructure to users and further support activity.
She Belongs: Building Social Connection for Lasting Participation in Sport (2020)	 Canadian Women & Sport is dedicated to creating an equitable and inclusive sport and physical activity system that empowers girls and women to be active participants and leaders within and through sport. She Belongs is a recently published report that outlines strategies for keeping girls in sport through social connection, which requires programs.

keeping girls in sport through social connection, which requires programs

and facilities to provided opportunities for unstructured social time and

using sport as a safe space from external issues.









3.3 Safety Guidelines, **Regulations and Design** Considerations

There are several guidelines, regulations, and design guides that should be considered during aquatic facility design, programming, and operations. Pertinent documents are reviewed below that should be considered during detailed design and next steps of this project.

Safety guidelines, regulations, and design consideration documents reviewed for this report provide technical guidance as to how to design an aquatic facility to be safe, inclusive, accessible, and conducive to skill development.

Table 6: Safety Guidelines, Regulations,	nd Design Considerations Review Table
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Plan or Policy	Relevance and / or Influence on Aquatics
Saskatchewan Swimming Pool Design and Operational Standards (2012)	 Standards outlining required pool design elements to ensure physically and bacteriologically safe swimming pools in Saskatchewan. Covers construction, recirculation, operational standards, and safety. Should be considered a fundamental document during the facility program and architectural design stages.
Saskatchewan Swimming Pool Regulations (1999)	Regulatory document outlining licensing, operational obligations and requirements, and supervisory standards for swimming pools.
Lifesaving Society Canada's National Safety Standards (2013)	Explains the safe design and operation of an aquatic facility in Canada, including the importance of safety measures.
Lifesaving Society Policy and Procedures (2020)	 Outlines the proper procedure for the administration and delivery of Society's programs and services Will inform the delivery of swim instruction and leadership training in Regina facilities. Recently updated in 2020 to reflect current research and protocols.
Lifesaving Society Safety Standards (various dates)	 Robust guidelines and standards covering general and swimming pool safety standards, including rope swings, safety equipment, lighting levels, basin colours, diving depths, and water clarity. Should be regularly referred to during detailed facility design stages.
National Parks and Recreation Association – Multi Purpose Pools (2017)	 Identifies that modern aquatic facilities are now being designed to be multi-purpose, blending competition, training, recreation, and leisure amenities into one facility, typically with multiple tanks. Common program features include competition-length pools, diving wells, wading pools, water slides, climbing walls, lazy rivers, and aquatic playgrounds Designing multi-purpose facilities requires special attention be paid to things like water and air quality, spectator and seating areas for competitions and leisure components, staffing and supervision, travel paths when in the facility, and accessibility elements.

New Regina Indoor Aquatic Feasibility (IAF)



Plan or Policy	Relevance and / or influence on Aquatics
National Parks and Recreation Association – Essential Framework for Adaptive Aquatics (2016)	 Identifies key considerations for aquatic facility design to allow for adaptive aquatics programming. Pool temperatures should be maintained at 89 degrees Fahrenheit. Other programming decisions that can support accessibility include allowing free admission, providing staff with specialized training to support those with disabilities, and offering special recreation programming.
Rick Hansen Foundation – Accessibility Certification Professional Handbook (2018)	 Summarizes the RHFAC rating system as related to accessibility of public spaces, including pools, fitness centres, playgrounds, and so forth. Outlines ten categories that affect accessibility, ranging from vehicle access through to trails and pathways. For example, it is recommended that pool deck surfaces should be non-slip and provide direct routes to lifts, ramps, change facilities, and showers.

· Should be consulted during the detailed facility design phase.

examples, and several best practices are presented.

including the importance of safety measures.

Society's programs and services

Regina facilities

children and site design work / development of adjacencies.

to ensure inclusive, accessible design.

· Practical toolkit that touches upon all elements of play spaces for children

 Recommendations are provided for how to design spaces to be inclusive and accessible, including finishing materials, play experiences, equipment

Should be reviewed when considering indoor and outdoor play areas for

· Explains the safe design and operation of an aquatic facility in Canada,

Outlines the proper procedure for the administration and delivery of

Will inform the delivery of swim instruction and leadership training in

· Recently updated in 2020 to reflect current research and protocols.

· Provides a framework for establishing a risk management plan for an

· Spaces should be designed for as wide a range of abilities as possible, including mobility, vision, hearing, and sensory disabilities.













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Rick Hansen Foundation - A

Play Spaces (2020)

Guide to Creating Accessible

Lifesaving Society Canada's

Lifesaving Society Policy and

Red Cross Aquatic Safety Plan: Guide for Aquatic

Procedures (2020)

National Safety Standards

3.4 Chapter Considerations for Facility Design and **Operations**

Equity and Inclusion

- Pools should be designed to be multipurpose and include components that support leisure and recreation regardless of if primarily intended for training and competition, and be designed to minimize physical and other barriers
- · Spaces for cultural engagement and reconciliation should be provided through
- · Both the pool facility and various tanks should be designed to be barrier-free and accessible to those of all physical and mental abilities
- Swimming Canada identifies the importance of community leisure and recreation components in pool design to maximize inclusiveness and utilization of pool

Sustainability

- Event hosting is identified as an important growth sector in the city's economy and the pool should be designed to host major competitions
- · Swimming Canada identifies the importance of quality infrastructure to enable high performance training
- Regina is committed to being a 100% renewable City by 2050 and facility design should work to achieve this objective

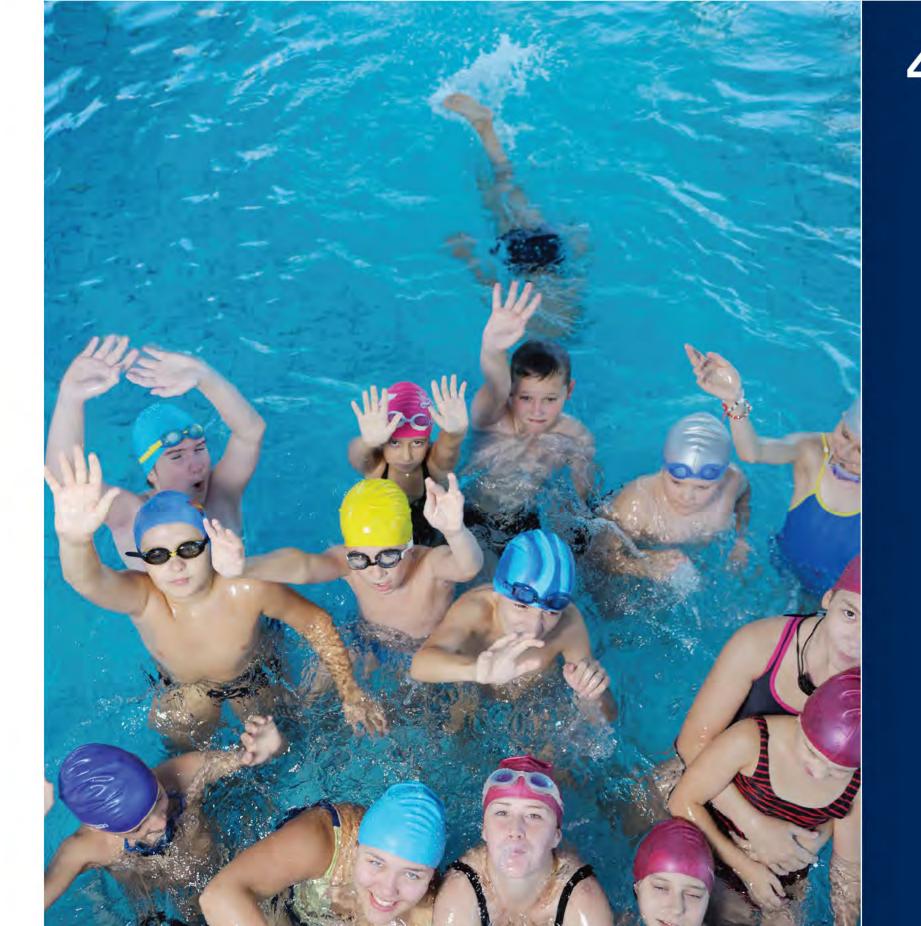
Public Health and Safety

- There are some concerns about personal safety in the neighbourhood and a new pool should be designed with safety in mind. Free of charge amenities are needed to support vulnerable populations in the area
- Are key to physical literacy and preventing injury/drowning and there is abundant plan and policy support for expanding access to swimming lessons for those of all
- There are many rules and regulations that govern the design and operations of indoor pools that must be adhered to, further enhancing public safety



New Regina Indoor Aquatic Feasibility (IAF)

4.0 Community Engagement



As complimentary to this report, the findings of a varied program of engagement related to aquatic services in Regina is presented under a separate cover (What We Heard). For a full overview of the engagement process and detailed findings, it is recommended that this What We Heard report be reviewed as a companion document to this

Key findings of the community engagement work conducted as part of this project include:

Community engagement for this project included fielding community surveys, surveying organized groups in the city, and hosting a series of discussion sessions with user groups, potential partners, and other stakeholders in

4.1 Community Survey

information collected and the opinions of participants. For complete engagement findings, please refer to the What We Heard report under a separate cover.

- Almost three-quarters of households surveyed (73%) think it is either very or somewhat important that the City of Regina develop a new indoor pool.
 - » Households with children were more likely to say it is very important that the city develop a new indoor pool and these households are also far more likely to have used an indoor pool in the last 3 years compared to other segments.
- The top indoor aquatic activities that households participate in are swim lessons and skill development programs (90%), leadership training (88%), rehabilitation or therapy (88%), competitions (84%), sport training (80%), fitness swimming (80%) and recreational and leisure swimming (64%).
- » The most popular outdoor aquatic activity is recreational and leisure swimming (36%), followed by fitness (21%) and sport training (20%).
- · When asked about factors that limit their use of indoor pools, lack of availability of swimming lessons, facilities being too busy or crowded, limited operating hours, pool location, and need for more leisure and recreational amenities were
- When asked about their overall satisfaction with indoor pools in Regina, over half said they are very or somewhat satisfied (59%). When asked about factors affecting their satisfaction, respondents indicated:
- » There is need for a new aquatic facility, with features such as waterslides, a
- » Existing facilities lack desired amenities, need upgrades, and are overcrowded.
- » Need for more capacity for swimming lessons.
- » Improving cleanliness of facilities should be a priority.

Summary points below are findings from engagement conducted, reflecting

A total of 3,881 household responses were gathered through the community survey, of which 2,481 / 40,000 coded access surveys were completed. This represents a statistical margin of error of +/- 2.0% 19/20. Results from the statistically reliable coded survey are presented in-text.

- · Around half of households report having visited the Sandra Schmirler Leisure Centre Pool (49%) and the Lawson Aquatic Centre Pool (48%).
- mentioned frequently.
- lazy river, wave pool, saunas and other features identified. Respondents expressed that there needs to be a balance between recreation and competitive components.
- » High demand for a new pool to be in Regina's south end.
- » Change rooms need upgrading and focus should be on family change rooms. universal / gender neutral changerooms, and accessible facilities.

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- Outdoor pools are generally highly valued by households, with many indicating excitement about the future reopening of Wascana Pool and satisfaction with the newly reopened Maple Leaf Pool.
- Respondents were asked to rank the aquatic activity types in order of importance that they be accommodated in a new facility, with the rankings as follows:

Community survey findings further

and valuation of swimming lessons

provided at City facilities. There is

insufficient capacity to accommodate

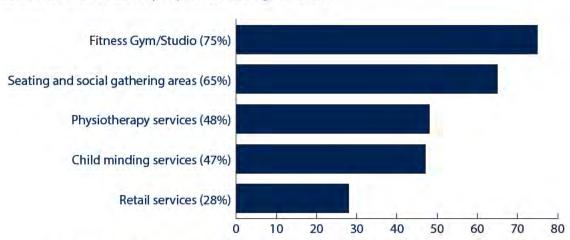
existing or future demand for swim

lessons, particularly when factoring

population growth.

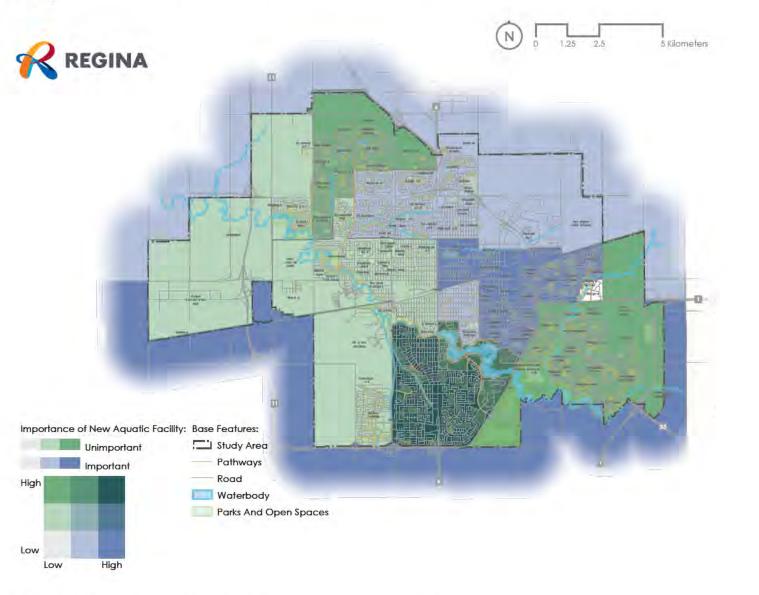
substantiate the high level of demand for

- » 1. Recreational and leisure swimming
- » 2. Swim lessons and skill development programs
- » 3. Fitness swimming
- » 4. Therapeutic and rehabilitation
- » 5. Sport training
- » 6. Competitions
- » 7. Leadership training.
- Respondents were also asked to rank potential non-aquatic amenities that should be included in a new indoor pool, with the rankings as follows:



- Respondents also had the opportunity to offer their own ideas for what amenities should be included in a new indoor pool, with the most identified amenities being:
- » Food services (135 comments), particularly healthy, local, and fresh food
- » Aquatic amenities like hot tubs, saunas, steam rooms, waterslides, wave pools
- » Community hub space with resources and meeting rooms, indoor play areas
- When asked about their ideas generally about developing a new indoor pool,
- » Recognize the need for and support the development of a new facility (380 comments out of 1.041)
- » Would like to see new aquatic amenities like waterslides, wave pools, and hot
- » Want the new facility to be accessible for all, including physical accessibility and transportation and cost (111).

Map 7: Community Survey Identified Levels of Importance for a New Aquatic Facility



Map 7 illustrates how, geographically, level of importance for a new aquatic facility varies across Regina. Deeper green tones illustrate areas where a new facility was identified as less important by survey respondents and those darker blue are areas where a new facility was identified as very important. Areas that are a blend of the two tones illustrate where there is a sizable percentage of respondents that feel that a new facility is both important and unimportant. A new facility is deemed most important by residents living in the city's Northeast and least important by those in the Southeast.

4.2 Stakeholder and Group Survey

Summary points below are findings from engagement conducted, reflecting information collected and the opinions of participants. For complete engagement findings, please refer to the What We Heard report under a separate cover.

- Most groups (12 / 15) utilize the Lawson pool for their programming, with 10 using the Schmirler pool, 8 using the North West pool, and 7 each using the YMCA and University of Regina pools.
- » 5 groups host most (60-100%) of their programming entirely at the Lawson
- Eleven of fourteen groups expect to see increased participation and membership; the other three expect participation to remain stable. No groups forecast any decline in participation over the next 3 to 5 years.
- Twelve out of fourteen indicate expecting to need more pool time to accommodate programming growth. Challenges identified by groups that may interfere with their ability to meet growing demand include:
- » Many groups competing for limited pool time limits access.
- » Facilities do not meet programming needs, for example dry space areas needed for activity, pool depths, lack of dive blocks, etc.
- The top programming elements that groups indicated are most important to include in an indoor pool are:
- » Deep end
- » Viewing areas
- » Warm water pool
- » Hot tub
- » Shallow / beach entry
- Non-aquatic elements identified as most important by groups include:
- » Seating and gathering areas
- » Fitness gym / studio
- » Retail services
- » Physiotherapy services
- » Child minding services

A total of 15 responses were received out of 31 organizations invited by the City of Regina to participate. Please see the Appendix for a list of participants.

When asked to suggest other non-aquatic program areas, groups identified separated dryland areas, cold tubs for high performance athletes, a café, a wellness centre, family changerooms / large change rooms with plinth table, sports/gymnasium space, mechanical lifts in all areas, club storage space, and children's play structures.

4.3 Stakeholder and Group Meetings

Summary points below are findings from engagement conducted, reflecting information collected and the opinions of participants. For complete engagement findings, please refer to the What We Heard report under a separate cover.

- There is a significant overall need for a new indoor pool in Regina due to insufficient access to pool time, which impacts the amount and quality of training
- The Lawson is Regina's primary facility for indoor competitive aquatics training. High demand for time and space in the facility has created a situation in which some groups feel they are competing with one another.
- · A single tank is identified as a program weakness as it often must be divided up between groups; facility rentals impact all users as the tank is not available for group use.
- Multiple swim tanks are needed, including two 50 m tanks, a 25 m warm up tank, and separate dive tank; a movable floor would benefit many user groups.
- · The new facility should meet the requirements of governing bodies for competitive activities including swimming, diving, water polo, and artistic swimming, creating the potential for hosting national and international events.
- Recreation and leisure amenities such as a water park should be included in the new facility program to create a significant city-wide and regional destination; these amenities should be separate from training and competition areas and include a warm water pool with beach entry, lazy river, water slides (including accessible waterslides), spray and splash features, and wave pool.
- · Spectator seating is needed, but this should not be at deck level it should be separate from users and athletes.
- · An on-deck or deck-accessible gymnasium area is desired for dryland training, including trampoline and weight work. This area will help to reduce conflict between users warming up and actively training.
- More abundant change facilities are needed for groups, families, those with disabilities, and separate areas for coaches and meet officials to be separate from
- Consideration should be given to various specialized amenities needed for training and competition, including scoring systems, underwater viewing and televisions, sound systems, and timing clocks.
- Classroom space immediately off the deck could be used by organizations, officials, and as 'hospitality' space for events.
- Hot and cold therapy pools were identified.
- Gymnasium / fitness area to help relieve pressure on the fieldhouse featuring a weight room, cardio equipment, etc.
- Multi-purpose meeting rooms were identified that could be used by the local community, organized groups, and others.
- · Social gathering spaces are needed to support the facility being used and seen as

39 different organizations to explore the possibility of a new indoor pool and better understand group perspectives. Organizations included "traditional" aquatics clubs, school jurisdictions, social agencies, individual advocates, newcomer associations, advocates for marginalized people, housing organizations, and others. Please see the Appendix for a list of participants.

A total of 14 meetings were hosted with

indicates that nearly all groups have experienced significant growth across all activity types, including learn-to-swim, and competitive and non-competitive activities. In terms of percentage of growth by activity type, learn-to-swim numbers have grown by between 10% and 175% per year between 2017 and 2019; non-competitive swimming has experienced growth of between 0% and 60%; and competitive swimming has grown by between 11% and 159% over these years. It is currently a challenge to accommodate existing users within the City's inventory of aquatic facilities, let alone accommodating such rapid participant expansion.

Data provided to the City of Regina by

user groups and other stakeholders



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a destination, particularly spaces that are not necessarily directly accessible from the aquatics program, including places for people to meet, have a meal, or even

- Other spaces identified include cultural spaces for ceremonies, prayer, and
- Wellness and community support spaces were discussed such as nutrition services, counselling, pop up grocery stores, bathroom and shower facilities that can be used by non-facility users, secure storage areas to store belongings for vulnerable populations, and water stations.
- · Accessible parking is needed as close to entrances as possible, with covered parking and drop off areas available as well.
- · Facility design and program should consider Regina's history, the community in which the facility is situated, and Indigenous peoples and histories.
- Participants spoke of the importance of the new facility to address training. competition, recreation and leisure, therapeutic, and social needs of the community.

4.4 Chapter Considerations for Facility Design and **Operations**

Equity and Inclusion

- · Universal accessibility and inclusiveness (e.g. universal change rooms, ensuring spaces are accessible and affordable) are important values to residents and
- Groups also identified the benefit of community gathering spaces, as well as socialization spaces to create an attractive destination. Spaces and designs that accommodate the different cultures in Regina were promoted.
- · Support services such as nutrition guidance, counselling, and bathroom and shower facilities accessible by non-users were identified by households and

Sustainability

- · Regina households would like to see more leisure and recreation amenities in a new pool, including a lazy river, wave pool, waterslides, and saunas
- Households would like to see food services, seating/gathering areas, and community hub spaces with resources and meeting rooms
- · Most groups expect demand for programs to increase over time
- · More pool time and space are needed to accommodate existing demand multiple tanks are needed. It is difficult to foresee how continued growth can be accommodated.

- New facility should be designed to meet competition regulations and standards. While both national and international competitions were mentioned, national level competitions were discussed more frequently
- Non-aquatic spaces such as dryland training areas, fitness rooms, and spectator viewing areas are desired
- Swimming lessons and leadership training are the most participated in activity types by Regina households
- More pool time is needed to accommodate existing and future demand for swim lessons and leadership training

Public Health and Safety

- · Fitness swimming is a popular activity type, with 80% of households indicating participation
- · Households and groups would like to see a gym/fitness centre incorporated into
- 88% of households indicate participating in rehabilitation and therapeutic activities
- · Hot and cold therapy pools were identified as a desired amenity by groups



5.0 Trends and Other **Municipal Practices**

This section provides an overview of some important trends and leading practices identified for consideration as they relate to the development of a new indoor aquatics facility in Regina. Current and emerging trends for both aquatic services and recreation more broadly are discussed below. Trends and practices are not presented in order of importance and are intended to provide points of consideration, rather than firm recommendations.

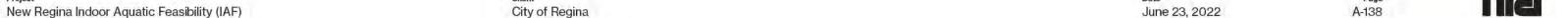
5.1 Inclusion and Accessibility

Inclusion and accessibility are critical priorities for the City of Regina and many policies and plans reflect the importance of providing programs, spaces, and opportunities that are accessible for everyone.

- Accessibility means looking at a facility holistically from the moment a potential user considers going to a facility to their experience arriving at and entering the facility, to how change rooms are configured, and finally, getting into the pool itself. There are numerous guidelines available that provide direction on how to design spaces to be universally accessible and municipalities are increasingly requiring universal accessibility as standard practice.
- · Ensuring inclusion and accessibility means considering the physical, financial, and social needs of all individuals, including those with physical and cognitive disabilities, those experiencing social and/or cultural barriers, and those from all socioeconomic backgrounds.
- Strategies for reducing barriers to participating in aquatic programs include allowing caregivers or support workers free access to facilities, providing 'quiet' times in the pool for those with sensory sensitivities, providing training to staff on how to assist swimmers with special needs, offering 'free' days, and so forth.
- Inclusion is the conscious practice of actively engaging people of different backgrounds in a way that everyone feels respected, heard, encouraged, and valued. Inclusion involves bringing people together to share experiences and to build a shared understanding of different perspectives. Strategies for promoting inclusion include incorporating multiple languages into facility signage and written materials, providing culturally sensitive programming such as women only times for women practicing Islam or LGBTQ+ dedicated swim times, and even designing admission counters to be offset from main entries to create a more open and inviting first impression.
- Where possible, efforts should be made to address social isolation and challenges faced by vulnerable populations such as seniors, those with disabilities, those experiencing homelessness, newcomers, and Indigenous communities.

In terms of designing facilities to be safe and inclusive, CPTED principles provide a strong foundation when evaluating design choices. Ensuring that spaces are well lit, supervised, open, and inviting can help all users feel safe. Other strategies for advancing equity, diversity, inclusion, and reconciliation include utilizing different languages on signage, soliciting design feedback from community groups, and through programming (i.e. newcomer ambassador program, Indigenous sport try it events).





Reconciliation

Reconciliation challenges the recreation sector to more than just acknowledge territorial lands or the Truth and Reconciliation Commission's Calls to Action. Reconciliation provides an opportunity to learn more about the land and traditions of Indigenous peoples and cultures, as well as to foster new relationships that will lead to healthier individuals, communities, and partnerships. A renewed cultural awareness of the systemic nature of racism, inequity, and exclusion has emerged in recent years, revealing that municipalities have a key role to play in working to combat racism and foster inclusion/reconciliation in their operations. Advocacy groups have brought attention to the persistence of racism within Canadian communities and the need to create safe, inclusive spaces for all.

- · The City of Regina has demonstrated its leadership and commitment to reconciliation in the design of mâmawêyatitân centre that brings together many public and community services aimed at building trust and strengthening relationships with Indigenous communities.
- · Providing dedicated spaces and amenities for Indigenous placemaking, ceremonies, and community gatherings is becoming more common within municipal facilities across Canada. Opportunities to advance reconciliation should be explored through facility design and programming.
- Incorporating Indigenous language and names, artwork, and storytelling can both broaden understanding and appreciation of Indigenous cultures, as well as demonstrate respect for the long histories and traditions of Regina's Indigenous

5.2 Climate Change and Sustainability

Sustainability is top of mind for many municipalities in Canada, encompassing not only the environmental impacts of decisions, but also the social and economic impacts, too. Leveraging technology and smart design can significantly reduce a facility's energy use and environmental impacts.

- Climate change has and will continue to impact the provision of recreation services in Canada, with increased energy and material costs forcing many municipalities to reconsider building design and operations to minimize environmental impacts and increase resiliency to disruption.
- Pools are unique given the high levels of energy and water needed to operate in northern climates. Utilizing green building design standards (e.g. LEED) and incorporating leading edge technologies to reduce energy consumption, prevent heat loss, and lower water consumption can help to offset a pool's overall environmental impact. Renewable energy generation technologies can also be incorporated to generate electricity and to warm water.
- Municipalities are also grappling with shifting economic landscapes and ongoing impacts of the COVID-19 pandemic that have challenged revenues and placed expenditures under greater scrutiny. Integrating sustainable building technologies can help to reduce the ongoing operating costs of pools. Regularly reviewing user fees can also help to balance the importance of affordable, accessible services with revenues needed to maintain high service standards.
- More extreme weather means that people will seek out climate-controlled environments more often. Pools can provide not only a respite from summer heat. but also from frigid winter temperatures. Incorporating social gathering spaces that can be accessed without paying for admission can provide safe, comfortable environments for all.

It is widely accepted that indoor recreation facilities can foster a sense of community identity, pride and spirit, bring people together, create destinationoriented spaces (i.e. hubs), and connect people to each other and nature. Inclusion and reconciliation are ongoing processes that should occur in a respectful manner.

Green building rating systems like LEED and BREEAM can provide guidance on how facilities can be designed to use less energy and water and to provide healthier, more comfortable indoor spaces. There are myriad rating systems available to measure a building's performance and to identify areas for improvement.

Pandemic / Public Health Considerations

The COVID-19 pandemic has created many challenges for indoor recreation facility operators, both in terms of operational impacts as well as greater focus on how to keep people safe within facilities. The need to regularly clean and sanitize surfaces, implement temporary or permanent measures to ensure physical separation between users, and a growth in popularity of unstructured, informal recreation activities have all challenged facility operators' budgets and staffing needs. Facility operators must also instill confidence in users that facilities are going to be clean and safe for activity. Several design choices can be made to ensure that indoor recreation facilities can better operate within the context of the current and future public health crises. These choices include:

- Designing facility spaces to allow for hybrid delivery of programs and services, allowing users to participate remotely if necessary or desired. Spaces can be designed to integrate cameras and other audio-visual technologies to allow for live streaming of programs, as well as accommodate in-person activities.
- Air handling systems, corridor widths, room capacities, and surface material choices can all be designed to maximize occupant health and safety by considering how often air is circulated in a space, filtering systems, whether individuals can maintain physical distance if necessary, and whether surfaces are easy to clean and/or naturally anti-bacterial.
- Traffic flow within facilities should be considered to reduce potential disease or illness transmission risk, focusing specific attention on entry/exit pinch points, change room and bathroom design to maximize space between occupants.
- Facilities should be designed to minimize the number of high-touch surfaces by integrating touch-free technologies like sensors on doorways, hand motion soap and paper towel dispensers, and so forth. Design should strive to reduce user need to touch surfaces as they move throughout a facility.
- Surface materials should also be selected for long-term durability and wear-andtear due to needing to more frequently sanitize surfaces.



Economic Development

Sport is a significant segment in the tourism world and has become a highly competitive industry. As such, sport tourism and sport event hosting are often drivers of partnerships aimed at the development of new infrastructure in Canadian cities. Given this important contribution sport, and specifically sport tourism, makes to local and national economies, many communities are reacting to the growth and opportunities associated with sport tourism and event hosting by dedicating resources to the attraction and retention of events, including the development of competition-level facilities.

While sport tourism and event hosting can be highly beneficial to a community, it is important to consider several factors when allocating resources to facility development and event attraction to ensure that investment provides positive and long-lasting impacts. Best practices that should be followed include:

- Infrastructure investment (enhancement or new development) needs to be sustainable and beneficial to a wide array of residents.
- · Benefits from each event are communicated to the public.
- Community volunteer capacity needs to be accurately assessed and deemed
- The pursuit of events needs to be strategically aligned with community values and
- How such investments support resident attraction and retention should also factor into decision-making, as excellent and accessible public amenities are key to quality of life for many.

By viewing indoor recreation facilities as community hubs, the facility audience shifts away from just primary users, but towards residents overall. Social gathering spaces can encourage residents to visit facilities during non-event or program hours to meet friends or family, or as simply part of their daily routines.

Multi-purpose, community-focused aquatic facilities tend to be highly utilized, valued by residents, and can act as 'draws' to areas, particularly those going through redevelopment.

User expectations for indoor recreation facilities are increasing over time, with greater demand for convenience amenities such as public WiFi, comfortable seating areas, child play areas, and other amenities.

5.4 Blending Indoor and **Outdoor Environments** A growing trend in recreation infrastructure planning is to ensure that there is a seamless interface between indoor and outdoor environments.

child play areas, and indoor/outdoor public art.

 While there are many operational considerations that should be examined when planning indoor/outdoor spaces (e.g. cleaning, access control), the concept of planning an indoor facility to complement its outdoor site it is located on (as well as associated outdoor amenities) is important to maximize utilization of both facilities, but as well as broader networks such as the parks and trails system.

Facility designs can incorporate things like public event spaces being located both

indoors and outdoors, indoor/outdoor walking trails or corridors, indoor/outdoor

- Integrating indoor and outdoor environments can be as simple as ensuring that interior spaces have good opportunities to view the outdoors.
- Common outdoor amenities provided at indoor aquatic facilities include spray pads, playground features, 4-season activities such as toboggan hills and other winter play activities to expand the overall range and seasonality of recreational opportunities typically available within indoor facilities.

When considering a location for a new indoor aquatic facility, adjacencies to other city-wide attractions or compatible land uses should be considered, including whether there is an effective interface between the facility and outdoor environments / natural areas.



5.3 Pools as Community Hubs

Pools are increasingly being viewed and designed as social gathering places – they are not just places to swim, but also places to gather and socialize. In many communities, indoor recreation facilities like pools also function as community hubs - both formally and informally - in addition to their primary function.

Pools are being designed to accommodate spontaneous or drop-in users, as well as to provide critical social gathering spaces such as attractive lobbies or atrium areas, spectator viewing areas, meeting facilities, outdoor parks and green spaces, and indoor play equipment / child minding areas.

Combination, or campus-type facilities, are also becoming more common. Such developments include not only core recreational amenities like gymnasiums, fitness centres, and aquatics facilities, but also public libraries, municipal service counters. creative or cultural venues, and so forth. By deliberately designing facilities to include social amenities, indoor recreation facilities can function as 'community living rooms' that enable greater levels of community cohesion and connectedness.

Some pool amenities that may support the facility operating as community hub include providing fun features like aquatic playgrounds, wave pools, lazy rivers, saunas, lounge areas on pool decks, and food and beverage services.

New Regina Indoor Aquatic Feasibility (IAF)

It is important that any investment in

community needs and demand.

range of residents.

infrastructure be framed around meeting

investment in sport and competition-level

amenities should be prioritized based on

benefits being provided to the widest

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5.5 Aquatic Service Delivery and Programming Trends

As user expectations for indoor recreation facilities have increased over time, some trends have also emerged specific to aquatics in the areas of service delivery and programming that should be considered through design work for the new Lawson:

- Recreational swimmers are increasingly looking for exciting aquatic experiences such as aquatic playgrounds for those of all ages and abilities, lazy rivers, wave pools, surf machines, waterslides, etc.
- · Swimming and all activity types are regaining popularity as people are looking for more spontaneous physical activities that fit into busy work/life schedules; working from home and gig work has also shifted when people look for recreational opportunities rather than there being a pre- or post-work rush.
- Swimming lessons are also growing in popularity, resulting in greater demand for lessons for those of all ages, particularly as such lessons are viewed as integral to physical literacy, skill development, and preventing injury/drowning. Some municipalities are experimenting with offering swimming lessons for children jointly with adult programming such as aquacise.
- Providing opportunities for all family members to take part in different activities simultaneously at the same location can increase participation levels, as well as a sense of convenience and satisfaction for residents. For example, while children participate in swim lessons, guardians may wish to grab a coffee and visit in social areas in sight of pool tanks.
- Wellness and therapy pool users are one of the fastest growing user segments for aquatic services, particularly in communities with aging populations. These users tend to require warmer water (e.g. 32 degrees Celsius), but can also benefit from access to cold water plunge tanks as well.
- Competitive swimmers have high expectations for facility design and governing bodies, too, have certain standards for tank configurations, spectator seating areas, timing systems, and so forth. Modern training facilities should include amenities such as dive tanks, warm up pools, starting blocks, advanced timing systems, and scoreboards.
- Aquatic exercise, including swimming, water-based resistance training, or water aerobics, are increasingly popular activities among those looking for a low impact workout in a fun environment. Accessible community pools and therapeutic tanks are necessary amenities to support these types of activities.
- Pools are being designed to have multiple tanks and 'zones', such as quite areas for rehabilitation and therapy, as well as for users with sensitivities to sound and/or light, training areas with one or more 50 m tanks, separate 25 m warm up tanks, 25 m leisure and recreation pools, hot tubs, and saunas. Increasingly, users expect multiuse spaces as the norm and service providers need to quickly adapt to meet community needs.
- Many aquatic facilities in Canadian municipalities are nearing end-of-life and significant reinvestment is required to meet changing user expectations and provide quality environments for aquatic activities, preferring to go to newer or more feature-equipped facilities. Municipalities must compete with the private sector in the form of hotels or resorts that may have newer or more attractive amenities.



5.6 Chapter Considerations for Facility Design and **Operations**

Equity and Inclusion

- · Inclusion and accessibility are top of mind for most municipalities and should be holistically engaged with throughout design and programming
- Pools often function as community hubs and important gathering places for those of all ages, cultures, and backgrounds
- · Pools should incorporate abundant socialization areas, including specialized areas for Indigenous placemaking and ceremonies, community events and meetings, and unprogrammed open spaces for spontaneous socialization



- Users now expect fun leisure and recreation amenities like aquatic playgrounds, waterslides, lazy rivers, wave pools, hot tubs, and saunas
- Modern facilities are being designed to be multiuse, blend indoor and outdoor environments, and capitalize on adjacencies to enhance utilization
- Competitive swimmers and training clubs have high expectations for pool amenities and governing bodies have significant requirements for competition and event hosting (e.g. FINA)
- Amenities such as multiple 50 m tanks, warm up tanks, dive tanks, starting blocks, scoreboards, underwater sound systems, advanced timing systems, and off-deck dryland training spaces are commonly found at high quality training pools

Public Health and Safety

- Aquatic exercise is growing in popularity due to its low impact nature and health
- Swimming lessons are and will continue to be popular, particularly for children. However, aquatic literacy is increasingly being viewed as key to physical literacy overall and more users – including adults – are interested in skill development
- · Wellness and therapy users are one of the fastest growing user groups for pools
- COVID-19 has and will continue to impact facility operations and, increasingly, public health is a fundamental consideration for facility design – as well as operations. Air handling systems, automated cleaning amenities, surface finishes, corridor widths, and a much broader range of design considerations are now key to safe facility operation





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New Regina Indoor Aquatic Feasibility (IAF) New Regina Indoor Aquatic Feasibility (IAF) June 23, 2022

6.0 Indoor Pools in Regina

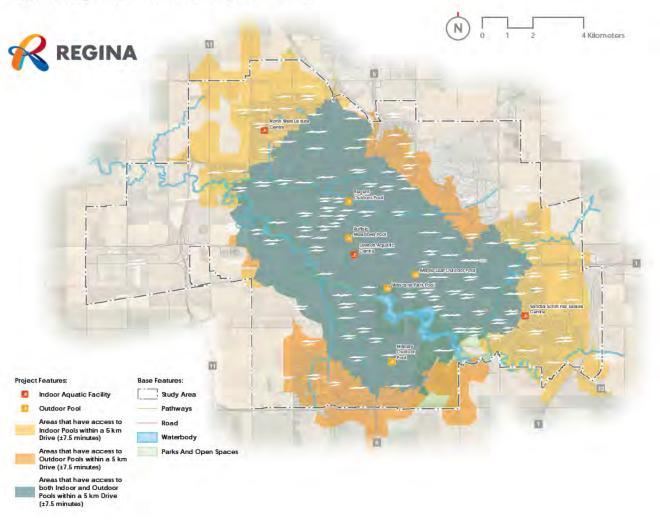
This section reviews the current provision of indoor pools in Regina, inventories amenities and major features, and presents an analysis on supply / demand within the city both now and into the future.

6.1 Indoor Pool Inventory

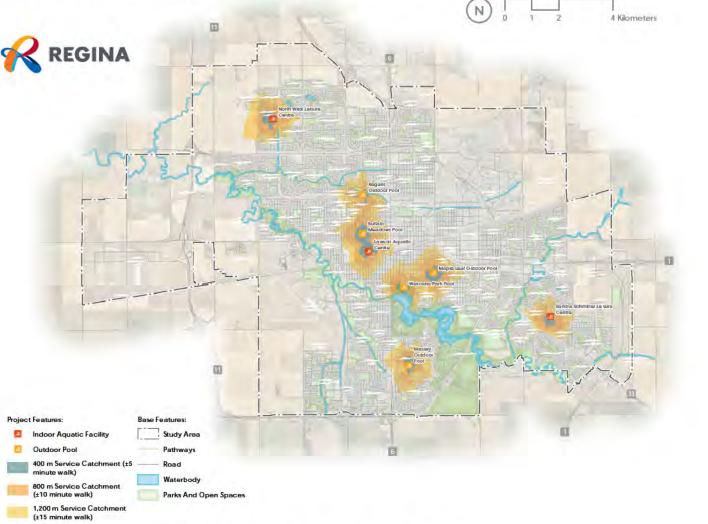
The City of Regina operates three indoor pools: Lawson Aquatic Centre, Sandra Schmirler Leisure Centre, and North West Leisure Centre. An overview of each of these facilities will now be presented. The University of Regina also operates a 25m indoor pool and 12-foot-deep tank. While the University of Regina pool is an important facility for the overall provision of aquatics in the city, it is primarily intended to meet the educational and recreational use of the University of Regina community despite also providing time for other user groups. Swim programs are open to the public and lessons are available at the U of R facility, but for the purpose of this study, this analysis will focus only on City of Regina facilities. Based on data provided by the City of Regina, both the University of Regina and YMCA facilities absorb some demand for aquatic facilities and when these facilities are shuttered for maintenance, City facilities experience greater demand. While these facilities currently provide system-wide capacity, the University of Regina facility is likely nearing its end-of-life. In terms of system-wide demand, the City of Regina should anticipate having to absorb more users should either the University of Regina or YMCA pools close.

Most neighbourhoods in Regina can access an indoor o facility within a 5-kilometre catchment area. Map 8 below illustrates areas in the city that can access an indoor pool within a 5-kilometre drive, with more central neighbourhoods generally having

Map 8: Driving Catchment Areas for Aquatic Facilities



Map 9: Walking Catchment Areas for Aquatic Facilities



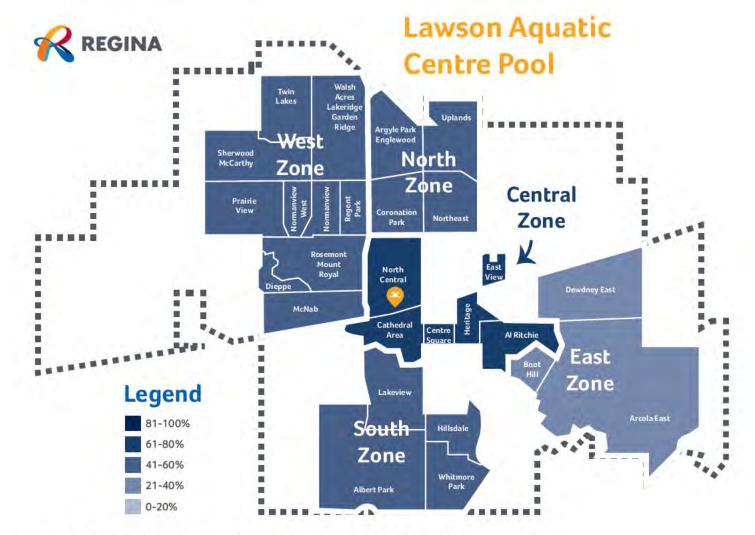
Map 9 illustrates areas of the city that can access an indoor aquatic facility within a 5-, 10-, and 15-minute walk (between 400 and 1,200 metres, roughly). Generally, more central neighbourhoods have better walking access to facilities.

6.1.1 Lawson Aquatic Centre

The Lawson Aquatic Centre (LAC) was constructed in 1975 and is the only city-wide competition-level aquatic facility. The LAC is located in Regina's North Central neighbourhood and is the city's most centrally located indoor aquatic facility. The LAC contains a 65m pool with deep tank, middle tank, and shallow tank, a dive tower (1m, 3m, 5m, 7.5m, 10m), teach pool, whirlpool, and sauna in each gendered change room. The LAC also has an aquatic timing system and synchronized swimming sound system. Non-aquatic components include a weight/fitness training room, accessible change rooms, trampolines and dryland mounted diving boards/mats, retractable bleachers, a scoreboard system, and a classroom located off-deck. The LAC functions both as a recreational and competition level facility. The LAC is co-located on the same site as the City of Regina Fieldhouse and is directly adjacent to Mosaic Stadium and close to old Taylor Field neighbourhood. In addition, a future east-west pedestrian corridor is being considered to connect to the Stadium. The LAC shares a lobby, cashier, food vendor, eating area, retail space, and community washrooms with the Regina Fieldhouse. Other notable adjacencies include the Regina Armoury and the REAL District, the largest interconnected event complex in Canada. The LAC is also highly accessible via public transportation (Route 12) and major roadways, including the Trans-Canada Highway (Victoria Avenue) and

REGINA Indoor Aquatic Facility

Where are visitors coming from?



The map above illustrates the percentage of survey respondents that report having visited the LAC in the last 12 months, generally with higher percentages indicating having visited the closer they are to the facility.

Due to its age and evolving user needs and demands, the LAC has been identified by the City as no longer meeting the functional requirements necessary to provide the appropriate levels of indoor aquatic programming to the community and competitive users. Many significant facility components and elements are nearing the end of their functional lifespans and the facility has accrued a significant amount of deferred maintenance. The LAC is functionally limited to meet evolving community needs such as population growth, changing demographics, as well as accessibility and inclusion requirements. It is also deficient in being able to provide contemporary competition or leisure aquatics opportunities, meet user group training demands, host larger competitions and it generally does not meet current swim competition standards.

In 2019, the LAC saw 170,150 swims total across all activity types; the top three were recreation and leisure (73,507 or 43% of all swims), sport training (34,605 or 20%), and skill development (35,697 or 21%). The largest user group segments for the LAC are children and youth (49% of swims), adults (28%), seniors (13%), and families (8%). Looking at visitation type, scanned membership visits were the largest segment in 2019 at 38% of all visitations (64,798), followed by rentals (32%, 55,244), programming (17%, 28,631), and single admissions (13%, 21,485). The LAC accommodated over 80% of all indoor aquatic rentals in the city in 2019, accommodated most sport training users, and was the only facility to host any special events.

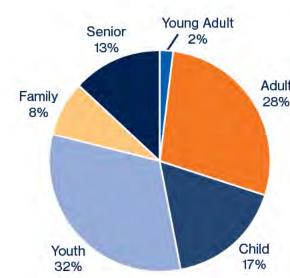


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2019 Swims by Activity Type and User Groups



While the LAC is not-well suited to accommodate therapy and rehabilitation swim activities, this activity type is not currently tracked and it is possible that these this swim activity is indeed accommodated.



Utilization of Prime Time Hours at LAC

LAC is the primary sport training aquatics facility in Regina and a significant portion of its utilization comes from user group programming, lane swimming, and rentals. Aquatics facilities, like indoor ice, tend to have 'prime time' hours that are in high demand for user groups. These prime time hours, particularly in the evenings and on the weekends, are also highly desirable times for the public to access these facilities as well. Understanding utilization of and demand for prime time hours can illustrate to what extent a facility is 'available' for use for various groups, including the public, and provides needed contextualization for practical capacity calculations that may not account for this type of complexity.

Lawson Aquatic Centre 2019 Prime Time Lane Hour Allocations

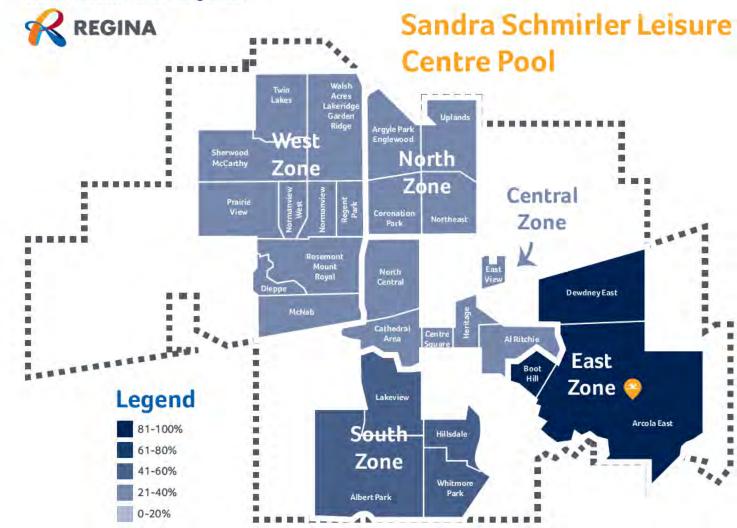
User/ Activity	Mon/Fri 5:30- 8:30 a.m.	Mon/Fri 11:30 a.m 1:30 p.m.	Mon/Fri 4:00- 9:30 p.m.	Sat 6:00 a.m 2:00 p.m.	Sun 7:00 a.m 12:00 p.m.	Sun 5:00- 8:00 p.m.	Total
Lane Swim	151,94	79.08	88.9	25.35	35.3	19	399.57
Rods	72		125.6	21			218.6
Lessons			53.22	61.15	36.9		151.27
RWPA			65.33			24	89.33
Leisure Swim			73.24				73.24
Flatlands	17.2		35.55	8	10		70.75
Diving	4.8		38.4	9.6			52.8
Rentals		44					44
Aqua Fitness		34	6.7				40.7
Multisport			17		11.25		28.25
Cougars	27,5						27.5
Synchro			14	7.22			21.22
Masters	12			7.5			19.5
WPS		18.9					18.9
Marlins	6				6		12
Total	291.44	175.98	517.94	139.82	99.45	43	1267.63
Available Hours	295.50	197.00	541.75	157.60	99.50	59.10	1350.45
Remaining	4.06	21.02	23.81	17.78	0.05	16.10	82.82
% of Prime	99%	89%	96%	89%	100%	73%	94%

Approximately 94% of all available prime time hours at the LAC were utilized in 2019, meaning that just 82 hours went unused out of a total availability of more than 1,350 hours. Utilization rates of prime hours during the week range from 89% to 99% and weekend utilization is between 73% and 100%. There is minimal capacity available to accommodate either additional hours for existing users or to expand opportunities for public swimming at the LAC based on 2019 utilization rates. While some opportunities may exist to shift some utilization to non-prime hours, this is likely not feasible for most user groups' program offerings. Non-prime hours are generally during the daytime during the week and thus often conflict with people's work and school schedules.

6.1.2 Sandra Schmirler Leisure Centre

The Sandra Schmirler Leisure Centre (SSLC) is a multi-purpose recreation centre that includes an indoor pool. The SSLC is located in Regina's Arcola East neighbourhood and is located in the city's southeast area. Constructed in 1990, the SSLC features a 25m leisure pool with diving board (1m) and shallow swim areas, play amenities such as a tree spray toy and medium slide into the deep end, a tot pool with movable slide and play features, steam room, and hot tub. The SSLC is Regina's second largest indoor aquatic centre and operates primarily as a family swimming facility for lessons and learn-to-swim programs. Non-aquatic elements of the SSLC include a public library branch, weight room, accessible change rooms, a bookable classroom, and a birthday room. The SSLC is adjacent to Windsor Park and an outdoor spray pad, as well as backs onto a small pond. The facility is accessible via Prince of Wales Drive and is approximately 400m from Arcola Ave / Highway 33. The SSLC can also be accessed via public transportation (Routes 12, 22, and 60).

Where are visitors coming from?

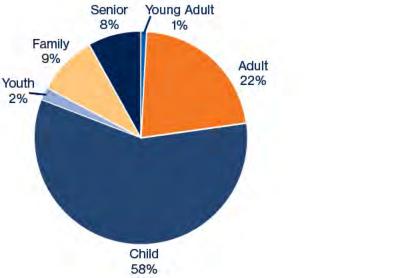


The map above, like the LAC map presented earlier, illustrates the percentage of respondents that report having visited the SSLC within the last 12 months, with a greater percentage indicating they had visited the SSLC from respondents living in Regina's East and South Zones. The SSLC has not undergone significant renovations since opening in 1990 but is generally in good condition and serves the community well. However, minimal capacity exists for the facility to accommodate growing and shifting needs of the community due to depth and size limitations of its aquatic tank.

The SSLC accommodated 183,493 swims in 2019, making it the city's busiest indoor facility by visitation. The top three activity types were recreation and leisure (94,674 or 52% of all swims), skill development (72,341 or 39%), and fitness swimming (14,268 or 8%). The largest user group segments for the SSLC are children and youth (60% of swims), followed by adults (22%), families (9%), and seniors (8%). Programming visits were the largest segment in 2019 at 42% (77,395), followed by single admissions at 35% (63,344), and scanned admissions at 18% (32,853). The SSLC is the only indoor facility in Regina offering therapy and rehabilitation programming and a total of 843 visits for this activity type were recorded in 2019.

2019 Swims by Activity Type and User Groups





June 23, 2022

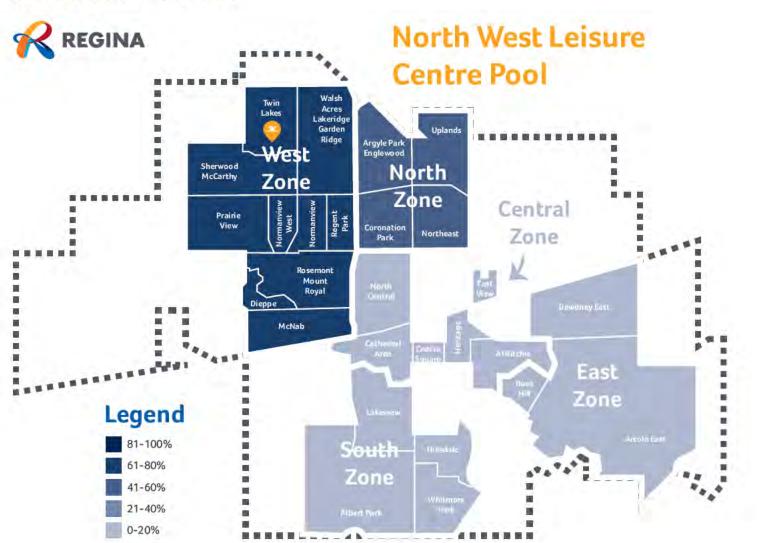


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6.1.3 North West Leisure Centre

Constructed in 1983, the North West Leisure Centre (NWLC) is a multi-purpose recreation centre that features an indoor pool. The NWLC is located in Regina's Twin Lakes neighbourhood. The NWLC has a small leisure pool with a 4 to 5 foot deep end with zero depth entry, a sauna, whirlpool, and play features (large flower spray toy). The NWLC functions solely as a family swimming facility for lessons and learn-to-swim programs. Non-aquatic elements include a multi-purpose room / gymnasium, two classrooms, an accessible change room, and a weight/fitness room. The NWLC is adjacent to Doug Wickenheiser Arena and there is an indoor connection between the two facilities. The NWLC is also adjacent to an outdoor splash park and Rochdale Park, which features a small lake and walking path. The facility is accessible via Rochdale Boulevard and can be reached by public transportation (Route 17).

Where are visitors coming from?

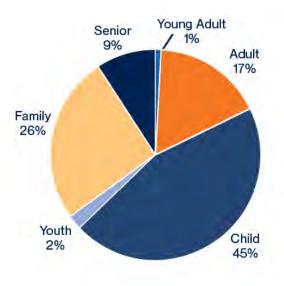


The map above illustrates the percentage of respondents that report having visited the NWLC in the last 12 months, with a notable concentration of visitors from the West and North Zones.

As is the case with the SSLC, the NWLC has not undergone any significant renovations since its opening. The facility is in good condition, but programming opportunities are limited based on tank size and depth limitations and high level of demand for existing amenities. There is little additional capacity for the facility to accommodate additional demand or to address accessibility and inclusion requirements.

The NWLC accommodated 94,859 swims in 2019. The top three activity types were recreation and leisure (48,032 or 51% of all swims), skill development (33,259 or 36%), and fitness swimming (10,473 or 11%). The largest user group segments for the SSLC are children and youth (47% of swims), families (26%), adults (17%), and seniors (9%). Programming visits were the largest segment in 2019 at 39% (36,551), followed by single admissions at 34% (31,899), and scanned admissions at 22% (21,077). Just over 3,000 sport training and leadership training activity swims took place at the NWLC in 2019.





6.1.4 University of Regina Swimming Pool

The University of Regina's Centre for Kinesiology, Health, and Sport houses an indoor aquatic centre with a 25 metre pool ranging in depth from 4 feet to 4 feet 6 inches, along with a separate 12 foot deep tank. The pool is primarily intended for the educational and recreational use of the University of Regina community. However, when not in use for academic, athletic, and recreational sports programs or other university-related events, the pool can be booked by the public for events. Common bookings include local swim clubs, student associations, birthday parties, private functions, and public school bookings. An extensive swim program is also available at the pool that are open to the public. The University of Regina pool regularly hosts swim clubs, synchronized swimmers, and masters swims. The long-term future of the U of R swimming pool is uncertain as of 2022.

The City of Regina experiences significantly increased demand on its indoor pools during periods when the University of Regina pool is closed for maintenance or other reasons. As the U of R facility is likely nearing its end of life, there is potential for service demand to shift more permanently to City of Regina facilities.

6.1.5 YMCA of Regina

The YMCA of Regina operates a four-lane, 20 metre pool with an adjustablebuoyancy moving floor, as well as a 10-metre family pool with adjustable-buoyancy moving floor, a 16-foot water slide and on-deck hot tub. The facility is accessible to members of the YMCA for drop in and swimming lessons but is also utilized by some swim clubs for training and other activities.

Utilization data provided by the YMCA indicates that sport groups, on average, rent around 15 hours of pool time per week between September and March of each year (420 hours). Swimming lessons offered through the YMCA have also had a consistent wait list ranging from 19 in summer 2019 to 69 in fall 2019. Between fall 2018 and Winter 2020, more than 3,500 participants were registered in swim lessons at the YMCA, with additional demand of around 280 participants that could not be accommodated.

6.2 City of Regina Indoor **Pool Utilization and Supply** and Demand Analysis

Table 7: Annual Swims Per Facility

Facility	2015	2016	2017	2018	2019
LAC	151,008	159,186	165,417	171,064	170,158
SSLC	204,351	199,323	189,198	180,404	183,493
NWLC	82,673	93,189	91,232	98,363	94,858*

^{*} temporary pool closures were experienced at the LAC in 2015/16 due to air quality issues and at the NWLC in 2019 due to hot tub issues

Considering population growth, population swim counts per capita appear to be steady over time. However, this stasis may largely be a result of existing aquatic facilities being at capacity and unable to accommodate more swims. Another important factor to consider is that the City's indoor aquatics facilities are aging, requiring longer periods of shut down for regular maintenance and becoming less attractive to current and future users

Table 7 presents annual swim visits per facility between 2015 and 2019, as well as what the average attendance across these facilities was over this temporal period. In general, swim counts have remained stable in the city since around 2011. The graph on the previous page presents a break down of activity type accommodated at each indoor aquatic facility in 2019, illustrating that recreation and leisure is the top activity type in Regina, followed by skill development, sport training, and fitness swimming. As discussed above, demand for aquatic services is also being met at other indoor facilities in Regina, primarily the University of Regina pool, but also the YMCA to some degree, which may affect demand on City of Regina indoor pools.

NWLC SSLC LAC

2019 Swims per Indoor Facility by Activity Type

Recreation & Leisure

Skill Development

Fitness Swimming

Leadership Training

Therapy & Rehabilitation

Table 8: Percentage of All 2019 Activity Type Swims Accommodated at Each

Activity Type	LAC	SSLC	NWLC
Recreation and Leisure	34%	44%	22%
Skill Development	25%	51%	24%
Sport Training	94%	0%	6%
Fitness Swimming	38%	36%	26%
Special Event	100%	0%	0%
Leadership Training	52%	27%	21%
Therapy and Rehabilitation	0%	100%	0%

Table 8 breaks down the percentage of swims per activity type that are accommodated at each indoor aquatic facility in Regina. The table illustrates that the LAC is the only location in Regina accommodating sport training and special events (around 6% of sport training swims occurred at the NWLC) and that over half of leadership training swims occurred at the LAC as well. In contrast, the SSLC accommodated more than half of skill development swims and is the only indoor facility offering therapy and rehabilitation opportunities.

Nearly all sport training swims were accommodated at the Lawson Aquatic Centre in 2019 (94%) and more than half of leadership training swims took place at the LAC as well (52%)



City of Regina

Visitor Attendance by Type for Indoor Pools 2019



The chart above illustrates the number of visits per facility by visitation type. Compared to the NWLC and SSLC, visitations to the LAC are driven by scanned pass users (i.e. memberships) or rental users. Together, these two visitation types account for nearly three-quarters (72%) of all visits to the LAC. That the LAC accommodates most rental users of aquatic facilities has a secondary impact of also limiting the number of hours of publicly accessible program and swim times. effectively creating a situation where utilization may not be accurately represented by number of swims accommodated alone. In contrast, visitations to the SSLC are driven by program users (i.e. swimming lessons) and single admissions (42% and 35%, respectively). Visitations to the NWLC are similarly driven by program users (39%) and single admissions (34%).

In terms of program users, the City estimates that the wait list for swimming lessons increased by 1,200 people between 2010 and 2019, reaching nearly 3,000; as of August 2021, the wait list for swim lessons was estimated at nearly 12,000. These figures suggest that the city is beyond capacity for swim lessons, which primarily occur at the SSLC and NWLC.

As of 2021, the City of Regina has 3 indoor aquatic facilities (supply) to serve its 2021 population of 226.404 (CMA population of 241.465) (demand). At a basic ratio. this means that the city provides 1 indoor aquatic facility per 75,468 residents (up from the 2016 ratio of 1 per 71,702 residents). However, this ratio does not account for the unique characteristics of each facility and their varying abilities to accommodate existing and future demand, as well as the types of activities accommodated.

Visitation to the LAC is far more likely to be driven by membership admissions and rental use than either the SSLC or NWLC. A high percentage of visitation driven by rental users ultimately limits the number of hours available for drop-in and program-related uses. For these two facilities, program users and single admission / drop-in users account for most visitation. Around 80% of the city's program user swims occur at either the SSLC (54%) or NWLC (26%).

The City is beyond capacity in its ability to offer swim lessons. Investing new resources into indoor aquatics to accommodate both program and drop-in users will help to alleviate system-wide

Table 9: Number of Swims Accommodated Per Facility Per Year and Day (2019)

Facility	2019 Annual Swims	Average Weekly Swims	Adjusted Swims Per Week	Adjusted Swims Per Year
LAC	170,158	3,272	3,620	188,259
SSLC	183,493	3,528	3,904	203,013
NWLC	94,858	1,824	2,018	104,949

Table 9, above, presents the number of swims accommodated at each facility in 2019 divided over 52 weeks per year (as practical capacity is calculated based on the assumption of an aquatics facility operating for 100 hours per week, 52 weeks per year), as well as an adjusted 'swims per week' calculation based on facility closure data for 2019. For example, the LAC pool was shut down for maintenance from mid-August to mid-September, reducing the total annual availability of the facility to 47 weeks. For both the SSLC and NWLC, it is assumed that both pools are unavailable for 4 weeks per year as well. Therefore, the adjusted swims per week presented in the table above projects total swims over a 52 week period based on 2019 totals divided by 48 weeks. The adjusted swims per week is then multiplied by 52 weeks to give a more accurate projection of how many swims would have been accommodated at the facilities were they not closed for several weeks per year.

Table 10: Practical Capacity Calculations for Indoor Aquatic Facilities1

Facility	Sq. ft < 5 ft.	Sq. ft > 5 ft.	Annual shallow capacity	Annual deep capacity	Total capacity (max practical swims / yr)
LAC (Low Load, 40-15)	6,991	6,403	279,646	96,052	375,698
SSLC (Balanced, 65-25)	1,615	1,615	104,948	40,365	145,313
NWLC (Balanced, 65-25)	2,287	0	148,676	0	148,676

With practical capacities calculated for each of the city's three indoor aquatic facilities, utilization rates can now be calculated. Please see **Table 11** for this practical capacity utilization analysis. In general, a facility is considered underused if between 0 and 49% of its practical capacity is utilized per year, moderately used if 50-69% is utilized, well used if between 70-79% is utilized, and very well used if 90% or higher is utilized. These utilization rates are generalized and do not account for contextual differences that may explain why some facilities appear underutilized when the on-the-ground reality indicates they are at or near capacity. For example, practical capacity calculations assume that facilities are available for use for a particular number of hours over a particular number of weeks. Disruptions caused by facility maintenance or required repairs or hours a facility is unavailable for use due to being rented by a single user group are not factored in to these calculations. Practical capacity does, however, quickly illustrate to what extent a pool can accommodate additional swims in theory.

Table 11: Utilization of Indoor Aquatic Facilities based on Practical Capacity

Facility	Total Adjusted Annual Swims	Practical Capacity	Utilization of Practical Capacity	Additional Swims that Could be Accommodated
LAC	188,259	375,698	50%	187,439
SSLC	203,013	145,313	140%	-65,854
NWLC	104,949	148,676	71%	12,074

Looking at total utilization of practical capacity (i.e. total adjusted swims in 2019 divided by practical capacity), the SSLC is overutilized by a significant margin and the NWLC is nearing capacity. However, as mentioned above, there were hot tub issues that affected swim counts at this facility in 2019. Looking at adjusted swim counts for the NWLC, the facility accommodated 104,949 swims in 2019, which represents a practical capacity utilization rate of 71%. In contrast, around half of the LAC's practical capacity was utilized in 2019. While this figure suggests that nearly twice the number of swims could be theoretically accommodated at the LAC, when factoring in prime time hour utilization and activity type most often accommodated. capacity to accommodate additional swims is highly constrained. Furthermore, considering activity types most often accommodated at the SSLC and NWLC (i.e. single admission, drop-ins, programs), there is likely no additional capacity within the City of Regina's indoor aquatics facilities to accommodate additional increases in demand. Finally, accounting for the age of these three facilities, the likelihood of maintenance disruptions growing in duration and magnitude overtime to ensure continued facility operations is significant. This means that existing demand for indoor aquatics will need to be accommodated within an increasingly constrained supply, only becoming more severe over time.

Although the LAC appears to be underutilized at 50% of practical capacity, again, it is important to consider the activity types that are being accommodated at the facility and other important factors such as facility accessibility and age/condition. Of Regina's three indoor aquatic facilities, the LAC is the city's oldest at 46 years (2021) and the only to incorporate competition level amenities such as a dive tower, aguatic timing system, and synchronized swimming sound system. Nearly all of Regina's sport training and special event swims occur at the LAC and most leadership training swims (52%) do as well. Rentals also comprise approximately 35% of all swim visits (just over 62,000 swims). Together, these types of activities and user visit types likely distort the total utilization of practical capacity percentage calculated for the LAC.

Based on this practical capacity analysis. the SSLC is overutilized and the NWLC is closely nearing capacity. In contrast, the LAC appears to be underutilized. However, this calculation does not consider how different activity types such as sport training and special events, and rentals can significantly limit supply.

Regina's indoor aquatic facilities are at

capacity considering activity types accommodated. Factoring in additional demand generated through population growth, simply rebuilding the Lawson with similar amenities will not alleviate current and future demand pressures. The 2019 Recreation Master Plan recommended that both the supply and quality of amenities provided be increased. An expanded Lawson should be considered a key starting point for improving the provision of aquatics in the city. Without investment in Lawson, as well as likely future investment in other facilities or development of a new facility entirely, demand will continue to create systemwide pressure.

6.3 Indoor Aquatic Facility **Financials**

The City of Regina spent approximately \$2.65 million in 2019 to operate its three indoor aquatic facilities (excluding maintenance, operations, and utilities costs), while bringing in around \$2.9 million in revenues. System-wide, this represents a costrecovery percentage of nearly 110% - meaning that the City's indoor aguatic facilities were revenue positive in 2019 in terms of program delivery. **Table 12** below breaks down financials for each facility for 2019, as well as associated cost per swim calculations.

Table 12: Program Expenses and Revenues for Indoor Aquatic Facilities, 2019

Facility	Program Expenses	Revenues	Tax Support	Cost Per Swim	Tax Suppor Per Swim
LAC	\$1,016,016	\$1,247,012	\$0	\$5.40	\$0.00
SSLC	\$912,484	\$1,048,654	\$0	\$4.53	\$0.00
NWLC	\$717,244	\$596,478	\$120,765	\$6.83	\$1.15

Looking at the table above, cost per swim is calculated based on total expenses for each facility divided by the number of adjusted swims accommodated annually (2019), with tax support per swim the total tax revenue required (expenses minus revenues) divided by number of swims.

Revenues presented above include admission fees, pass sales, programs, lockers, room rentals, and pool rentals. Expenses include staff salaries and benefits, office and administration expenses, and material goods and supplies purchasing.

Financial figures presented above are from 2019 due to being the last full operating year not impacted by COVID. In addition, facility operating costs (e.g., maintenance, operations, utilities) are not factored into the cost per swim calculation presented

Facility operating costs were available for review for the LAC, indicating a total cost of \$978,024 in 2019, of which \$135,561 went towards facility maintenance, \$513,087 towards operations, and \$329,375 towards utilities including water, gas, electricity. and sewer. With operating costs factored in to calculations, the LAC operated at a 46% cost recovery rate in 2019.

Aguatics facilities are among the most expensive recreation facilities for communities to operate and maintain. Research examining cost-recovery across indoor facilities within British Columbia's Peace Region suggests that cost recovery for indoor pools tends to range between 30% and 60%. With a cost recovery rate of 46% at the LAC in 2019, the City's indoor aquatics facilities generate well-above average revenues and cost recovery rates!









6.4 Chapter Considerations for Facility Design and Operations

Equity and Inclusion

 Recent investments into outdoor pools have focused on providing socialization areas and other amenities and have had great results – swim counts have increased significantly at Maple Leaf Pool, for example. Similar investment is needed for indoor facilities

Sustainability

- Considering population growth, more capacity is needed to accommodate future demand for leisure and recreation services. Some of this capacity may be added by developing a new indoor aquatics facility and/or enhancing or redeveloping existing facilities
- While socialization is not captured in user data, it is a fundamental element for most user groups and for understanding why users choose to participate in aquatic activities
- Fitness swimming is currently accommodated at all 3 Regina indoor pools and demand is likely being met; however demand may increase if enhanced nonaquatic elements (e.g. socialization space, food services, meeting rooms) are available
- Swim Saskatchewan has reported 250% registration growth between 2010 and 2019 and this trend is expected to continue; local user groups have reported significant growth in participant numbers between 2017 and 2019 that, should this trend continue, will be difficult to accommodate in City of Regina facilities
- Lawson accommodates nearly all sport training and special events and additional capacity is needed to accommodate existing and future demand for training infrastructure
- The wait list for swim lessons averages between 3,000 and 4,500 each year, peaking with more than 10,000 waitlisted in 2021 due to COVID. Additional pool space is required to accommodate both swimming lessons and leadership development (i.e. swim instructors, lifeguards).
- Developing a new indoor aquatic facility with a dedicated teaching pool could relieve pressure on other pools that are at or over capacity, particularly to address lengthy wait lists for swimming lessons. This will require deep water in a leisure pool tank to be provided

New Regina Indoor Aquatic Feasibility (IAF)

 Regina's indoor facilities are aging and more extensive and time-consuming maintenance should be expected in the future to maintain their serviceable lifespans. This will further constrain the existing supply, which is already challenged to meet demand based on regular maintenance

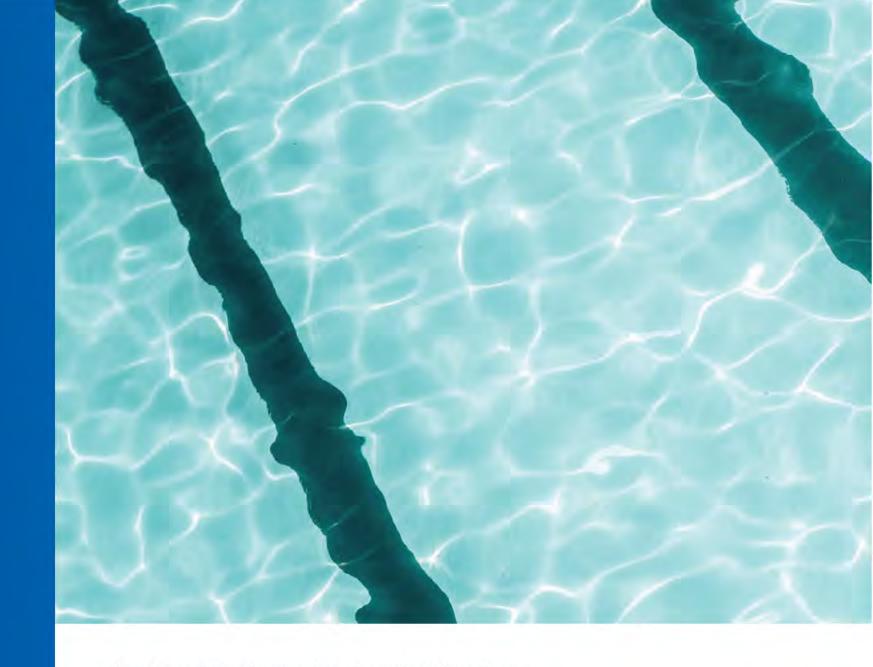
Public Health and Safety

- The LAC is not currently suited to accommodate therapy and rehabilitation swims.
 Without investment, this activity type and additional demand should it arise in the future will have to be accommodated elsewhere
- As Regina's population continues to age, demand for rehab, therapy, and wellness amenities – particularly in core, mature neighbourhoods – is likely to increase over time





7.0 Recommended Indoor Facility Program



The city recognizes the important role aquatic facilities play by providing sport and recreation programs and community development opportunities, resulting in personal, social, economic, and environmental benefits to both individuals and the community at large. Additional investment is needed to enhance community access to indoor aquatic programming, to accommodate population growth, and to address challenges related to aging infrastructure. This report section summarizes recommendations made for a new indoor aquatic facility program within the City of Regina's Recreation Master Plan (2019) and presents an updated facility program that reflects the findings of this report.

City of Regina







7.1 Preliminary Amenities Identified

The City of Regina's Recreation Master Plan (2019) recommends that a new indoor aquatic facility be built in the city, that more and better indoor aquatic amenities are required. Following approval of the Recreation Master Plan, City staff and community groups continued to discuss and identify what kinds of indoor aquatic amenities need to be enhanced in the community to accommodate existing and future demand. The list on the following page presents the program elements and amenities that have been identified to date.

Table 17: Indoor Aquatic Program Elements Identified in Recreation Master Plan (2019)

Program Area	Amenities					
Fitness / Training / Competition	Swimming lanes for competitions and warmups					
	Bulkheads and timing equipment, starting blocks					
	Scoreboards / videoboards					
	Diving boards, platforms, and dive tower					
	 Pool area for water polo, artistic swimming, speed swimming, diving, swimming lessons / programs 					
	Spectator seating for large aquatic events and general program uses					
	Dryland training and multipurpose program areas					
	Event change rooms and support rooms					
eisure and Recreation	Contemporary leisure pool water park with spray toys and play structures, wave pool, water slides, lazy river, and zero depth edge and pool entry					
	Teach pool					
Therapy	Therapy pool					
Other Aquatic Elements	Hot tub(s)					
Ion-Aquatic Elements	Classrooms / meeting rooms / event rooms					
	Concession / food and beverage area					
	Retail / business area(s)					
	Kids area with indoor playground					
	Public lockers					
	All gender / universal showers, washrooms and change rooms					
	First aid space					
	Multi-purpose spaces					
	 Design elements in support of social and cultural programs, supporting truth and reconciliation and inclusion 					
Support Spaces	Admission counter					
	Staff work area and locker room with showers					
	Staff lunchroom, washrooms, maintenance room					
Outdoor Elements	Accessible spray pad					
	Accessible playground / play area					
	Outdoor seating area with concessions connected to facility					
Site Design / Adjacencies	Accessible parking areas for staff, bus access, users					
	Fencing, landscaping, and traffic control measures					

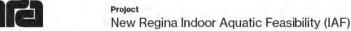
7.2 Report Findings Key Considerations

Equity and Inclusion

- Accessible, affordable access is key given the density of low-income residents in Regina's central and downtown neighbourhoods, particularly in the area proximate to the Lawson Aquatic Centre
- Regina's Indigenous and multicultural communities are growing and facilities like mâmawêyatitân centre illustrate the importance of providing spaces and places for socialization and cultural learning
- Recreation and leisure swimming is the most popular aquatic activity type and appeals to the widest range of population and should be considered one of the primary functions of a pool, with designs providing ample opportunities for fun and leisure
- Pools are important sites for socialization, multicultural and multigenerational interaction
- Spaces should be provided to allow for socialization in the form of viewing areas, abundant seating, and even spaces on pool decks
- There are few specific design requirements for facilities to accommodate personal fitness activities beyond ensuring there is adequate time and space available for lane swimming and group fitness classes
- Swimming is a popular activity and learning to swim is critical to physical literacy
- Opportunities should be provided for both swimming lessons and leadership training / skill development, both of which have minimal design requirements
- With an aging population and the benefits of aquatic activity on recovery, strength development, and other therapeutic treatments, a new pool should include dedicated spaces for these services (e.g. tank temperatures, situated away from higher activity areas). Demand for low-impact water-based rehabilitation and therapies will likely increase as well.
- Spaces should be designed to be multifunctional and minimize physical and other barriers
- Spaces for cultural engagement and reconciliation should be provided through non-aquatic amenities
- Both the pool facility and various tanks should be designed to be barrier-free and accessible to those of all physical and mental abilities
- Swim Canada identifies the importance of community leisure and recreation components in pool design to maximize inclusiveness and utilization of pool facilities
- Pools should be designed to be multipurpose and include components that support leisure and recreation regardless of if primarily intended for training and competition
- Universal accessibility and inclusiveness (e.g. universal change rooms, ensuring spaces are accessible and affordable) are important values to residents and groups

- Groups also identified the benefit of community gathering spaces, as well as socialization spaces to create an attractive destination
- Support services such as nutrition guidance, counselling, and bathroom and shower facilities accessible by non-users were identified by households and groups
- Inclusion and accessibility are top of mind for most municipalities and should be holistically engaged with throughout design and programming
- Pools often function as community hubs and important gathering places for those of all ages, cultures, and backgrounds
- Pools should incorporate abundant socialization areas, including specialized areas for Indigenous placemaking and ceremonies, community events and meetings, and unprogrammed open spaces for spontaneous socialization
- Recent investments into outdoor pools have focused on providing socialization areas and other amenities and have had great results – swim counts have increased significantly at Maple Leaf Pool, for example





City of Regina

June 23, 2022

Project
New Regina Indoor Aquatic Feasibility (IAF)

City of Regina

Date June 23, 2022

- As Regina's population increases, so too will demand for aquatic services. Additional population growth requires more system-wide capacity
- There is already a significant wait list for swimming lessons and as Regina's population continues to grow, this demand will increase as well. There is insufficient capacity within the City's aquatic facilities to accommodate demand both now and into the future
- Competitive sport, training, and special events are demanding activity types in terms of facility design, with tank size, depth and specialized amenities (e.g. underwater sound systems, timing systems, dive platforms) which are often regulated by sport governing bodies. Ensuring amenities can accommodate these demands is key to sustainability of the facility operating as a high performance
- · Event hosting is identified as an important growth sector in the city's economy and the pool should be designed to host major competitions
- Swimming Canada identifies the importance of quality infrastructure to enable high performance training
- Regina is committed to being a 100% renewable City by 2050 and facility design should work to achieve this objective
- Regina households would like to see more leisure and recreation amenities in a new pool, including a lazy river, wave pool, waterslides, and saunas
- · Households would like to see food services, seating/gathering areas, and community hub spaces with resources and meeting rooms
- Most groups expect demand for programs to increase over time
- More pool time and space are needed to accommodate existing demand multiple tanks are needed. It is difficult to foresee how continued growth can be accommodated.
- New facility should be designed to meet competition regulations and standards
- Non-aquatic spaces such as dryland training areas, fitness rooms, and spectator viewing areas are desired
- Swimming lessons and leadership training are the most participated in activity types by Regina households
- More pool time is needed to accommodate demand for swim lessons and leadership training
- Users now expect fun leisure and recreation amenities like aquatic playgrounds, waterslides, lazy rivers, wave pools, hot tubs, and saunas
- Modern facilities are being designed to be multiuse, blend indoor and outdoor environments, and capitalize on adjacencies to enhance utilization
- Competitive swimmers and training clubs have high expectations for pool amenities and governing bodies have significant requirements for competition and event hosting that should be consulted

- Amenities such as multiple 50 m tanks, separate warm up tanks, dive tanks, starting blocks, scoreboards, underwater sound systems, advanced timing systems, and off-deck dryland training spaces are commonly found at high quality
- Considering population growth, more capacity is needed to accommodate future demand for leisure and recreation services. Some of this capacity may be added by developing a new indoor aquatics facility and/or enhancing or redeveloping existing facilities
- While socialization is not captured in user data, it is a fundamental element for most user groups and for understanding why users choose to participate in aquatic activities
- · Fitness swimming is currently accommodated at all 3 Regina pools and demand is likely being met; however demand may increase if enhanced non-aquatic elements (e.g. socialization space, food services, meeting rooms) are available
- Swim Saskatchewan has reported 250% registration growth between 2010 and 2019 and this trend is expected to continue; local user groups have reported significant growth in participant numbers between 2017 and 2019 that, should this trend continue, will be difficult to accommodate in City of Regina facilities
- Lawson accommodates nearly all sport training and special events and additional capacity is needed to accommodate existing and future demand for training infrastructure
- The wait list for swim lessons reached nearly 12,000 in 2021 and additional pool space is required to accommodate both swimming lessons and leadership development (i.e. swim instructors, lifeguards).
- Developing a new indoor aquatic facility with a dedicated teaching pool could relieve pressure on other pools that are at or over capacity, particularly to address lengthy wait lists for swimming lessons
- Regina's indoor facilities are aging and more extensive and time-consuming maintenance should be expected in the future to maintain their serviceable lifespans. This will further constrain the existing supply, which is already challenged to meet demand based on regular maintenance

Public Health and Safety

- . There are some concerns about personal safety in the neighbourhood and a new pool should be designed with safety in mind. Free of charge amenities are needed to support vulnerable populations in the area
- · Are key to physical literacy and preventing injury/drowning and there is abundant plan and policy support for expanding access to swimming lessons for those of all
- Fitness swimming is a popular activity type, with 80% of households indicating participation
- · Households and groups would like to see a gym/fitness centre incorporated into the new pool
- 88% of households indicate participating in rehabilitation and therapeutic activities
- Hot and cold therapy pools were identified as a desired amenity by groups
- Aquatic exercise is growing in popularity due to its low impact nature and health
- Swimming lessons are and will continue to be popular, particularly for children. However, aquatic literacy is increasingly being viewed as key to physical literacy overall and more users - including adults - are interested in skill development
- Wellness and therapy users are one of the fastest growing user groups for pools
- COVID-19 has and will continue to impact facility operations and, increasingly. public health is a fundamental consideration for facility design – as well as operations. Air handling systems, automated cleaning amenities, surface finishes, corridor widths, and a much broader range of design considerations are now key to safe facility operation
- No rehabilitation and therapy activities took place at the Lawson in 2019. suggesting that the facility is currently not suited for this activity type and additional demand should it arise will have to be accommodated elsewhere
- As Regina's population continues to age, demand for rehab, therapy, and we lness amenities - particularly in core, mature neighbourhoods - is likely to increase over



The radar diagram above presents the combined scoring averages for each of the six chapters presented in this report, illustrating that all activity types are important to consider in the design and operation of the updated Lawson Aquatic Centre; however, some activity types - particularly those most closely tied to inclusion and equity and physical literacy – are slightly more prominent than others.

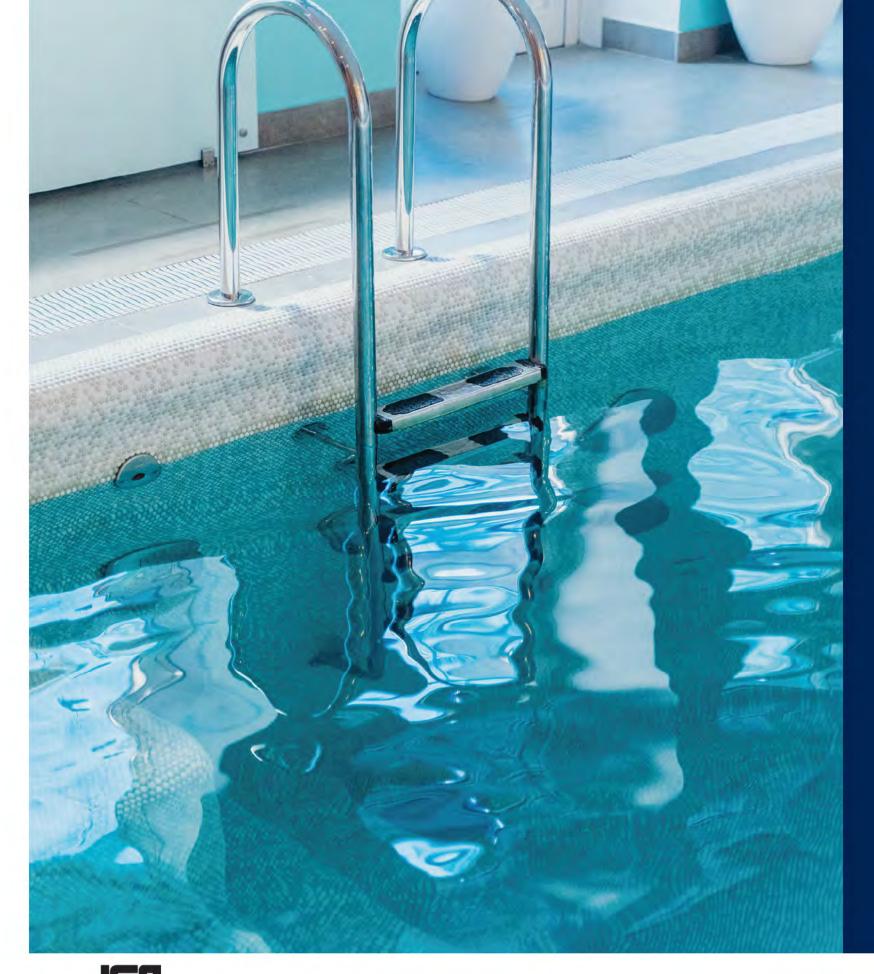




June 23, 2022

7.3 Updated Indoor **Aquatics Facility Program**





Project New Regina Indoor Aquatic Feasibility (IAF)







Effective planning for pools – both indoors and out – should start by looking at the big picture of where the City of Regina currently is and where it wants to be in providing aquatic services for its residents and visitors. Regina has had excellent aguatic services in the past and delivers a wide range of facilities and sites – both indoor and outdoor. There is need for more capacity to accommodate current demand for indoor aquatics in Regina and this need is only expected to grow as the city's population grows.

The 2019 Recreation Master Plan identified the need for the City to add more indoor capacity at the city-wide level for leisure, fitness, therapy, and special events. This report affirms this recommendation and presents an updated functional space program for a new indoor aquatics facility that seeks to address current challenges identified and accommodate future growth and demand, as well as capitalizes on opportunities to advance inclusion, equity, reconciliation, and community development in Regina more broadly.

Since the adoption of the 2019 Recreation Master Plan, the City of Regina has faced increased competition within the private sector recreation marketplace that requires continued investment in City facilities to maintain service level standards. The increasing number of user groups utilizing the LAC for competitive training has at times required the city to solicit a consultant to assist in the creation of an allocation policy for training time, as requests for space have exceeded what can be accommodated within Regina's current indoor aquatics facility supply. Several new gyms and fitness facilities have opened since 2019 and as the City emerges from the COVID-19 pandemic new investments are needed to both differentiate public recreation services from those available within the private sector, but also to modernize and renew infrastructure so as to continue attracting recreation users and bolster the City's position as a site for major sporting events and tournaments. In addition to these changes in provision of facilities and opportunities, the closure of a publicly available indoor pool at the Downtown YMCA and uncertainty around the future of the indoor pool at the University of Regina intensifies demand now and in the future for indoor aquatics experiences of all types.

This study responds to these emergent needs, opportunities, and challenges by affirming the 2019 Master Plan's recommendation that the City add to its indoor aquatics capacity and presenting an updated space program that reflects trends and other key considerations that have emerged in the interim.



Appendix I: Engagement Participants

Group Survey Respondents

- 1. Autism Resource Centre Inc
- 2. Chip and Dale Homes Inc.
- 3. Muscular Dystrophy Regina Chapter
- 4. Regina Marlins Swim Club
- 5. Regina Multisport Club
- 6. Regina Piranhas Summer Swim Club
- 7. Regina Residential Resource Centre
- 8. Regina Synchro
- 9. Regina Water Polo Association
- 10. Saskatchewan Artistic Swimming
- 11. Spinal Cord Injury Saskatchewan
- 12. The Big Sky Centre for Learning and Being Astonished! Inc.
- 13. TriP (The Regina intersectoral Partnership)
- 14. Wascana Rehabilitation Centre
- 15. Water Polo Saskatchewan

Appendix II: Indoor Aquatic Facility Annual Attendance, 2015 - 2019

Skateholder Meeting Participants

1. Adapted Recreation 21. Regina Optimist Dolphins

22. Regina Piranha Summer Swim Club 2. Age Friendly Regina

3. Canadian Mental Health Association 23. Regina Public Schools

4. Cosmo Learning Centre & Muscular Dystrophy Regina Chapter

24. Regina Synchronettes 25. Regina Transition House

5. Dive Sask

26. Regina Treaty Status Indian Services

6. Diving Plongeon Canada

27. Regina Water Polo Association

7. Family Services Regina

28. RRLIP (The Regina Region Local Immigration Partnership Project)

8. Flatland Sports 9. Hopes Home

29. Saskatchewan Artistic Swimming

10.Individual Accessibility advocate

30. Saskatchewan Health Authority

32. Spinal Cord Injury Saskatchewan

11. Individual swimmer with physical disability

31. Silver Sage Housing Corporation

12. Namerind Housing Corporation

33. Swim Saskatchewan

13. Regina Catholic Schools

34. The Big Sky Centre for Learning and Being Astonished

35. TransSask Support Services

15.Regina Housing Authority

16.Regina Immigrant Advisory Table

17. Regina Masters

14.Regina Diving Club

36. TRiP (The Regina Intersectoral Partnership)

37. UR Pride

18.Regina Mens Marlins 19.Regina Multi-Sport

City of Regina

38. Water Polo Sask

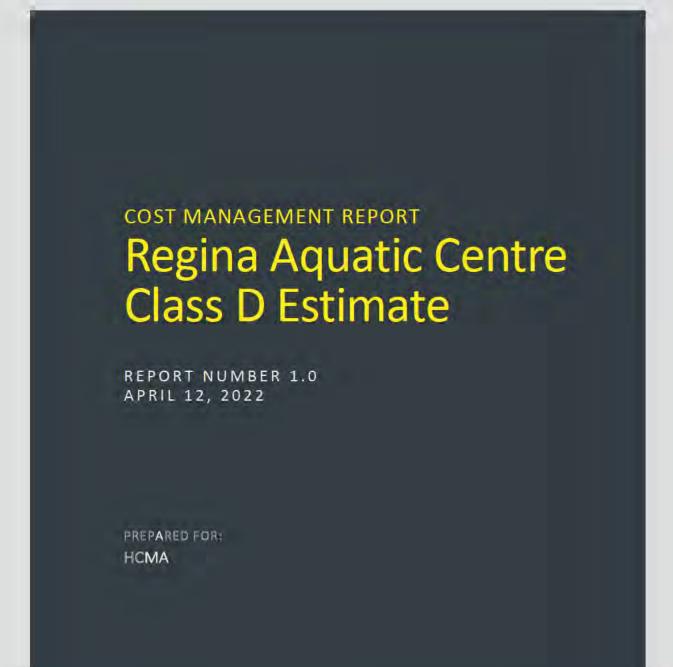
39. YWCA Regina 20. Regina Open Door Society

New Regina Indoor Aquatic Feasibility (IAF)



Appendix D - Costing





135 21st Street East, Saskatoon, S7K 0B4 T 306 242 9210











HCMA | Regina Aquatic Centre - Class D Estimate



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APPENDICES:

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APPENDIX III	Cost Plan	45 pages

Manager and Manage	Reviewed By	Date	
teve Botsio	Allen Reid	4/12/2022	

135 21st Street East, Saskatoon, S7K 0B4 | 306 242 9210

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Report Number 1.0 | April 12, 2022



1.0 Introduction

1.1 Instructions Received

This report has been prepared by BTY Group ("BTY") at the request of HCMA (the "Client").

HCMA has appointed BTY to provide an Order of Magnitude estimate developed for the Regina Aquatic Centre (the "Project"). It is assumed that the Project will be delivered using a Stipulated Price Contract construction model and, therefore, BTY strongly recommends that estimates are prepared at each of the key design milestones. This report has been prepared in accordance with the scope of our Fee Proposal, dated April 19, 2021, and is subject to the terms of that appointment.

Information related to the Project for the purposes of this report was received by BTY on March 7, 2022. Please refer to Section 13.0 for a list of information received in producing this report.

1.2 Report Reliance

This Report is owned by BTY Group, and it is provided for the benefit and sole reliance of the Client. BTY Group, its directors, staff, or agents do not make any express or implied representation or warranty whatsoever as to the factual accuracy of the information provided to us on behalf the Client, its subcontractors or agents, upon which this Report is based. This Report contains confidential, proprietary information and related intellectual property rights of BTY Group which is licensed on a non-exclusive and limited basis to the Client and the Report may not be reproduced, transferred, copied, shared, or distributed, in whole or in part, to any party other than the Client, without the express prior written permission of BTY Group.

1.3 Reporting Qualifications

This Report has been prepared based on information provided to us by the Client up to the date of issue of this Report. BTY Group does not accept any liability or accountability for information that has not been provided, or made available to us, at the time of preparing this Report. Any advice, opinions, or recommendations within this Report should be read and relied upon only in the context of the report as a whole. The contents do not provide legal, insurance or tax advice or opinion. Opinions in this report do not an advocate for any party and if called upon to give oral or written testimony it will be given on the same assumption.

1.4 Contacts

Should you have any queries regarding the content of this report, please do not hesitate to contact either of the following:

Steve Botsio Allen Reid Associate Director Director Tel: 306 242 9210 Tel: 306 242 9210 Email: stevebotsio@bty.com Email: allenreid@bty.com

135 21st Street East, Saskatoon, S7K 0B4 | 306 242 9210



The purpose of this report is to provide a realistic estimate of the Project cost based on the information

The opinion expressed in this report has been prepared without the benefit of detailed architectural,

In order to provide an accurate cost estimate for the Project, BTY Group strongly recommends that a

any design information produced on behalf of the Client during the remaining stages of design.

structural, mechanical, electrical or processing system drawings and should, therefore, be considered a Order

of Magnitude (Class D) estimate. Based on the documents reviewed, our estimate should be correct within a

professional Quantity Surveying organization, such as BTY Group, be retained to provide a detailed analysis of

The proposed development is the construction of an aquatic centre in Regina. This estimate consists of 2

options, the renovation and addition to the existing building built in 1975 and the construction of an entirely

new facility. The facility will include offices, meeting rooms, 50m and 25m 10-lane pools, leisure & recreation,

The existing structure is timber framed with glulam arches, wood purlins and wood tongue and groove deck.

The glulam arch frames are supported by concrete buttresses on pile caps and battered piles. The mezzanine

Mechanical scope of work includes plumbing & drainage, fire protection, HVAC, and related pool mechanical

services. Electrical works includes Service and distribution, Lighting, devices and controls, System & ancillaries.

floor comprises precast concrete hollow core planks supported by a combination of steel beams and load

bearing masonry block walls. The exterior cladding consists of metal panels, brick veneer and aluminum storefront. The interior construction is masonry unit and wood frame partitions aw well as ceramic tile

flooring, drywall ceiling, acoustic ceiling tile with cedar slat and painted wall finish.

The siteworks will include soft and hard landscaping as well as site services.

2.0 Executive Summary

available at the time of writing.

range of approximately +/- 20% to 25%.

2.2 Project Background and Description

change rooms, fitness as well as outdoor spaces.

2.1 Report Purpose



2.3 Project Overview

A STATE OF THE PARTY OF THE PAR	D	etails
Construction Budget Status	Option1 - Reno & Additional Bldg	Option 2 - New Building
Budget	Not Specified	Not Specified
Current Estimate	\$144,745,500	\$146,161,800
Current Cost / m²	\$5,530 /m²	\$5,584 /m²
Project Specifics		
GFA	26,173 m²	26,173 m ²
Construction Start	January-2024	January-2024
Construction Completion	June-2027	August-2027
Duration	42 months	44 months
Escalation	14.41%	15.49%
Design Contingency	15.00%	15.00%
Construction Contingency	15.0% and 5.0%	5.00%

3.0 Development Cost Summary

135 21st Street East, Saskatoon, S7K 0B4 | 306 242 9210

HCMA | Regina Aquatic Centre - Class D Estimate

Report Number 1.0 | April 12, 2022

The current estimated cost of the project may be summarized as follows:

	TOTAL .	Estimated Co	sts (\$)
ē	Item	Option 1 (A+B)	Option 2
1	Land Cost (Excluded)	0	
	Construction	102,225,500	103,198,0
	Contingencies	22,296,900	21,196,9
)	Professional Fees	0	
	Municipal & Connection Fees	0	
	Management & Overhead	0	
ì	Project Contingency	0	
1	Furnishing, Fittings & Equipment	1,000,000	1,000,0
	Financing Costs	0	
	Provincial Sales Tax	7,531,344	7,523,6
	Goods & Services Tax	6,276,120	6,269,7
	Total Project Cost (Apr 2022 Dollars)	\$139,329,864	\$139,188,3
	Escalation	17,936,900	19,267,5
	Escalated Project Cost (Jun & Aug 2027 Dollars)	\$157,266,764	\$158,455,8

Please note that, where zero-dollar values are stated, BTY has excluded these costs and the values should be carried in a separate budget (if

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4.0 Basis & Assumptions

The construction estimate is based on the following list of assumptions:

- 1. Foundations will consist of perimeter grade beams on cast-in-place concrete piles.
- 2. Structural slab on grade under pool and main level are assumed to be 200mm thick
- 3. Interior Stairs assumed to be steel with concrete filled pans and steel railings
- 4. Steel structure assumed to be 40kg/m2 for upper floor
- 5. Roofing system utilized will be 2 ply- SBS Membrane roofing for new construction and replacement of metal roof for the existing renovation
- 6. Allowance of \$50,000 has been included to improve accessibility in the existing building
- 7. Existing metal cladding and brick veneer to be replaced with new for Option 1
- 8. Assume new doors and finishes for existing reno space for Option 1

New Regina Indoor Aquatic Feasibility (IAF)

- 9. We assume that the pool tanks in the existing facility would be replace entirely for Option 1
- 10. Allowance of \$1,200,000 for demolition of existing Lawson Aquatic Centre for Option 2
- 11. Allowance included for commercial kitchen equipment
- 12. Allowance for two passenger elevator
- 13. Minimal heating and ventilation considered in crawlspace
- 14. LEED Gold requirement considered when required
- 15. The extra over cost for Net Zero is 2% to be applied to Escalated Construction Cost
- 16. We have included an allowance of \$100,000 for hazardous material abatement as advised by client
- 17. Exterior changeroom/washroom is assumed to be within the footprint of the building
- 18. Assumptions have been made regarding the interior partitions, doors, and fittings. Please refer to Appendix III for details
- 19. Allowance has been included in the General Requirement for permits and winter conditions (assumed 2% of the net construction cost)
- 20. We have assumed a flat escalation rate of 3.5% after 2024 as we typically do not project escalation beyond 2 years of the date of the report
- 21. We have included allowances for FF&E, PST and GST in Section 3.0 Development Cost Summary of our report. These amounts are not included in the Escalated Construction Budget in the appendix

Please note that BTY is not qualified to act as design consultant. The assumptions in our estimate should be reviewed and corrected by the design team.



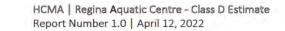
5.0 Exclusions

The construction estimate includes all direct and indirect construction costs derived from the drawings and other information provided by the Consultants, with the exception of the following:

- Land costs
- 2. Professional fees and disbursements
- 3. Planning, administrative and financing costs
- 4. Legal fees and agreement costs / conditions
- Development cost charges
- 6. Temporary facilities for user groups during construction
- 7. Loose furnishings and equipment
- 8. Unforeseen ground conditions and associated extras
- 9. Environmental remediation outside building footprint
- 10. Servicing outside the project site boundary (Main hydro service)
- 11. Decanting & moving
- 12. Project commissioning (Third Party)
- 13. Erratic market conditions, such as lack of bidders, proprietary specifications
- 14. Cost related to existing field house
- 15. Cost escalation past June and August 2027 for Option 1 and Option 2 respectively









6.0 Construction Cost Summary

The estimated construction cost of the project may be summarized as follows:

Estimated Cost (\$)			
Option 1 (A+B)	Option 2		
15,006,200	18,838,600		
35,315,400	32,444,500		
23,257,700	23,009,800		
10,932,800	12,366,700		
13,792,900	13,432,300		
\$98,305,000	\$100,091,900		
2,388,400	2,642,400		
2,317,100	1,601,400		
861,200	657,800		
\$103,871,700	\$104,993,500		
15,580,800	15,539,000		
7,073,000	6,026,600		
\$126,525,500	\$126,559,100		
18,220,000	19,602,700		
\$144,745,500	\$146,161,800		
26,176 m²	26,176 m ²		
\$3,756 /m²	\$3,824 /m ²		
\$3,968 /m²	\$4,011 /m ²		
\$4,834 /m ²	\$4,835 /m ²		
\$5,530 /m²	\$5,584 /m²		
	0ption 1 (A+B) 15,006,200 35,315,400 23,257,700 10,932,800 13,792,900 \$98,305,000 2,388,400 2,317,100 861,200 \$103,871,700 15,580,800 7,073,000 \$126,525,500 18,220,000 \$144,745,500 26,176 m² \$3,756 /m² \$3,968 /m² \$4,834 /m²		

7.0 Taxes

The estimate excludes the Provincial Sales Tax (P.S.T). (see Section 3.0 Development Cost Summary)

The estimate excludes the Goods and Services Tax (G.S.T.). (see Section 3.0 Development Cost Summary)

8.0 Project Schedule & Escalation

For the purpose of identifying and quantifying the escalation allowance for this project, BTY has assumed the following schedule:

Activity	Start	Finish	Duration
Option 1A	Dec-01-2025	Jun-30-2027	19 months
Option 1B	Jan-01-2024	Nov-30-2025	23 months
Option 2	Jan-01-2024	207-08-30	44 months

Based on the above schedules, the mid-point of construction for Option 1A is projected to be September 15, 2026, which is 54 months from the date of this estimate. On this basis, BTY has calculated the escalation for this project to be 19.19%.

Based on the above schedules, the mid-point of construction for Option 1B is projected to be December 15, 2024, which is 33 months from the date of this estimate. On this basis, BTY has calculated the escalation for this project to be 12.22%.

Based on the above schedules, the mid-point of construction for Option 2 is projected to be October 31, 2025, which is 43 months from the date of this estimate. On this basis, BTY has calculated the escalation for this project to be 15.49%.

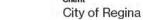
Our current projected escalation rates are shown below. In the event that there is slippage in the schedule, further escalation based on the projected escalation rate per annum should be included in the estimate.

Current BTY	2022	2023	2024
Group Forecast	4% - 6%	~4%	~4%

As this is not reasonable to predict past three years due to the uncertainty of the construction market. Based on the average escalation over 10 years, 3.5% is considered reasonable for 2025 onwards

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New Regina Indoor Aquatic Feasibility (IAF)

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City of Regina

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9.0 Pricing

The estimate has been priced at current rates considering the size, location, and nature of the project. The unit rates utilized are considered competitive for a project of this type, bid under a stipulated lump-sum form of tender in an open market, with a minimum of five (5) bids, supported by the requisite number of subcontractors.

The estimate allows for labour, material, equipment and other input costs at current rates and levels of productivity. It does not consider extraordinary market conditions, where bidders may be few and may include in their tenders' disproportionate contingencies and profit margins.

10.0 Risk Mitigation

BTY Group recommends that the Owner, Project Manager and Design Team carefully review this document, including exclusions, inclusions and assumptions, contingencies, escalation and mark-ups. If the project is over budget, or if there are unresolved budgeting issues, alternative systems/schemes should be evaluated before proceeding into the next design phase.

Requests for modifications of any apparent errors or omissions to this document must be made to BTY Group within ten (10) days of receipt of this estimate. Otherwise, it will be understood that the contents have been concurred with and accepted.

It is recommended that BTY Group design and propose a cost management framework for implementation. This framework would require that a series of further estimates be undertaken at key design stage milestones and a final update estimate be produced which is representative of the completed tender documents, project delivery model and schedule. The final updated estimate will address changes and additions to the documents, as well as addenda issued during the bidding process. BTY Group is unable to reconcile bid results to any estimate not produced from bid documents including all addenda.

11.0 Contingencies

11.1 Design Contingency

A design contingency of Fifteen Percent (15%) has been included in the estimate to cover modifications to the program, drawings and specifications during the design.

11.2 Construction Contingency

An allowance of Fifteen Percent (15%) has been included in the estimate for the Renovation portion and Five Percent (5%) for the new construction, for changes occurring during the construction period of the project. This amount may be expended due to site conditions or if there are modifications to the drawings and specifications.

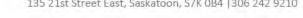
12.0 Documents Reviewed

The list below confirms the information that we have reviewed in order to prepare our opinion contained within this report:

Description	Revised Date
Drawings & Specifications	
2021-11-23 NIAF_Existing Building-BW	Not Specified
2022-01-31 NIAF_Existing Building	Not Specified
2022-02-04 NIAF - New Build 3	Not Specified
2022-02-04 NIAF - Reno 2	Not Specified
Report	
2021-12-02_Draft_LawsonAquatics	December 2, 2021

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APPENDIX I

Elemental Summaries

6 PAGES

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COST CONSULTANTS

8.422 m²

Option 1A - Renovation to Existing Building



	THE RESERVE OF THE PERSON NAMED IN	Ratio	Eleme	nt	Average	Amount	Total Cost	Cost/Flo	oor Area	
Element		The second second	Quantity		Unit Cost	\$	\$	5/	The second secon	%
SUBSTRU	CTURE						270,000		32.06	0.9%
	tandard Foundations	0.48	4,015	m ²	37.36	150,000		17.81	32,00	0.550
	pecial Foundations	0.00	0		0.00	120,000		14.25		
	asement Excavation	0.00	0		0.00	0		0.00		
STRUCTU	The state of the s	0.00			0.00		1,252,700	0.00	148.74	4.3%
The second second	owest Floor Construction	0.00	0	m ²	0.00	785,000		93.21		
	Ipper Floor Construction	0.07	560		580.36	325,000		38.59		
	tair Construction	0.00	0	risr	0.00	22,700		2.70		
	oof Construction	0.00	0		0.00	120,000		14.25		
V. 524.2	RENCLOSURE						4,118,400		489.00	14.1%
The second second	tructural Walls Below Grade	0.00	0	m ²	0.00	55,000		6.53	7,000	
	Valls Above Grade	0.35	2,910		452.06	1,315,500		156.20		
	tructural Walls Above Grade	0.00	0	m ²	0.00	0		0.00		
	urtain Walls	0.03	291	177.	1,400.00	407,400		48.37		
	Vindows & Louvres	0.00	0	m ²	0.00	0		0.00		
	ilazed Screens	0.00	0	m ²	0.00	0		0.00		
	loors	0.00	0	lvs.	0.00	54,100		6.42		
	oof Covering	0.00	0	m ²	0.00	2,256,400		267.92		
	kylights	0.00	0	m².	0.00	0		0.00		
	rojections	0.00	0	100	0.00	30,000		3.56		
	NS & DOORS	0,00					359,200	0.50	42.65	1.2%
	ixed Partitions	0.15	1,263	m ²	194.97	246,300		29.24		10,000
B11.2 N	Noveable Partitions	0.00	0	m ²	0.00	0		0.00		
B11.3 St	tructural Partitions	0.00	0	m ²	0.00	0		0.00		
B12 D	loors	0.00	36	lvs.	3,136.11	112,900		13.41		
FINISHES						2001	5,283,200		627.31	18.0%
B21 F	loor Finishes	1.00	8,422	m ²	113.74	957,900		113.74		
B22 C	eiling Finishes	0.81	6,855	m ²	416.89	2,857,800		339.33		
B23 W	Vall Finishes	1.71	14,404	m ²	101.88	1,467,500		174.25		
FITTINGS	& EQUIPMENT					200	3,500,300		415.61	11.9%
B31.1 N	Metals	1.00	8,422	m ²	9.33	78,600		9.33		
B31.2 N	Aillwork	1.00	8,422	m ²	20.00	168,400		20.00		
B31.3 S	pecialties	1.00	8,422	m ²	21.95	184,900		21.95		
B32 E	quipment	1.00	8,422	m ²	348.30	2,933,400		348.30		
B33.1 E	levators	1.00	8,422	stop	16.03	135,000		16.03		
B33.2 E	scalators & Moving Walkways	0.00	0	no.	0.00	0		0.00		
B33.3 N	Naterial Handling Systems	0.00	0	no.	0.00	0		0.00		
MECHANI							7,067,000		839,11	24.1%
	lumbing and Drainage	1.00	8,422		172.50	1,452,800		172.50		
	ool Mechanical	1.00	8,422		82.28	693,000		82.28		
	ire Protection	1.00	8,422		55.13	464,300		55.13		
	IVAC	1.00	8,422		472,50	3,979,400		472.50		
- Company of the last of the l	ontrols	1.00	8,422	m ²	56.70	477,500		56.70		
ELECTRICA	STATE OF THE STATE					1000	2,918,200	1, 100	346.50	10.0%
	ervice & Distribution	1.00	8,422		105.00	884,300		105.00		
	ighting, Devices & Heating	1.00	8,422		178.50	1,503,300		178.50		
-	ystems & Ancillaries	1.00	8,422	m ²	63.00	530,600		63.00		
GENERAL	REQUIREMENTS & FEES		U. I				4,532,700		538.20	15.5%
	ieneral Requirements	14.8%				3,665,800		435.26		
Z12 F	ee	3.5%				866,900		102.93		
	S COST						29,301,700		3,479.19	100%

New Regina Indoor Aquatic Feasibility (IAF)

Regina Aquatic Centre Class D Estimate April 12, 2022

8,422 m²



Elemer	at .	Ratio G.F.A.	Eleme Quantity		Average Unit Cost	Amount \$	Total Cost	Cost/Floor Area \$/ m²	%
Elejilei		0.7 .A.	edulitiety	Cities .	OTHE COSE	~	<u> </u>	\$7.111	70
NET BUILD	ING COST		0				29,301,700	3,479.19	
1 SITE W	ORK						140,000	16.62	
D11.1	Site Preparation	0.00	0	m ²	0.00	0	-	0.00	
D11.2	Hard Surfaces	0.00	0	m ²	0.00	0		0.00	
D11.3	Site Improvements	0.00	0	m ²	0.00	0		0.00	
D11.4	Landscaping	1.00	8,422	m ²	5.94	50,000		5.94	
D12	Mechanical Site Services	1.00	8,422	m ²	5.94	50,000		5.94	
D13	Electrical Site Services	1,00	8,422	m ²	4.75	40,000		4.75	
Control of the Contro	ARY WORK						2,052,900	243.75	
D21.1	Demolition	1,00	0.5		231.88	1,952,900		231.88	
D21.2	Hazardous Materials	1.00	12527		11.87	100,000		11.87	
D22	Alteration	0.00	0	m ²	0.00	0		0.00	
No. of Concession,	AL REQUIREMENTS & FEES		-				401,400	47.66	
Z11	General Requirements	14.8%				324,600		38.54	
Z12	Fee	3.5%				76,800		9.12	
IET CONST	RUCTION COST						31,896,000	3,787.22	
2 ALLOW	ANCES	N Comb					7,718,800	916.50	
Z21	Design Allowance	15.0%				4,784,400		568.08	
Z23	Construction Allowance	8.0%				2,934,400		348.42	
UBTOTAL	CONSTRUCTION COST						39,614,800	4,703.73	
Provin	cial Sales Tax	0.0%					0	0.00	
Goods	& Services Tax	0.0%					0	0.00	
OTAL CON	ISTRUCTION COST						39,614,800	4,703.73	
Z31	Escalation Allowance	19.2%					7,603,000	902.75	
SCALATED	CONSTRUCTION COST						47,217,800	5,606.48	

COST CONSULTANTS

A1-1

June 23, 2022

Regina Aquatic Centre Class D Estimate April 12, 2022



17,751 m² Option 1B - Addition to Existing Building A1 SUBSTRUCTURE A11.1 Standard Foundations 0.73 12,873 m² 50.00 36.26 0.73 12,873 m² 150.00 1,931,000 A11.2 Special Foundations 108.78 A12 Basement Excavation 0.06 1,000 m³ 252.10 252,100 14.20 A2 STRUCTURE 574.32 14.8% A21 Lowest Floor Construction 0.73 12,873 m² 265,43 3,416,900 A22.1 Upper Floor Construction 0.27 4,878 m² 418.70 115.05 2,042,300 0.00 24 risr 566.67 0.77 A22.2 Stair Construction 0.73 12,873 m² 366.81 A23 Roof Construction 4,722,000 266.01 22.92 A31 Structural Walls Below Grade 0.04 754 m² 539.83 0.20 3,610 m² 450.00 A32.1 Walls Above Grade 1,624,500 91.52 0.00 0 m² A32.2 Structural Walls Above Grade 0.00 0.00 A32.3 Curtain Walls 0.04 722 m² 1,400.00 1.010.800 56.94 A33.1 Windows & Louvres 0.00 0 m² 0.00 0.00 A33.2 Glazed Screens 0.00 0 m² 0.00 0.00 A33.3 Doors 0.00 12 lvs. 4,783.33 3.23 A34.1 Roof Covering 0.73 12,873 m² 344.46 249.81 A34.2 Skylights 0.00 0 m² 0.00 0.00 0.00 0 m² 0.00 3.38 A35 Projections B1 PARTITIONS & DOORS 106,59 2.7% B11.1 Fixed Partitions 0.50 8,876 m² 195.00 1,730,700 97.50 0.00 0 m² 0.00 B11.2 Moveable Partitions 0.00 0.00 0 m² 0.00 B11.3 Structural Partitions 0.00 B12 Doors 0.00 61 lvs. 2,645.90 161,400 9.09 B2 FINISHES 252.58 6.5% B21 Floor Finishes 1.00 17,751 m² 118.73 2,107,600 118.73 B22 Ceiling Finishes 1.00 17,751 m² 99.17 1,760,300 99.17 B23 Wall Finishes 1.41 25.005 m² 24.62 615,600 34.68 **B3 FITTINGS & EQUIPMENT** B31.1 Metals 1.00 17,751 m² 9.55 169,600 9.55 1.00 17,751 m² B31.2 Millwork 22.50 22.50 B31.3 Specialties 1.00 17,751 m² 88.09 1,563,700 88.09 1.00 17,751 m² 351.19 B32 Equipment 351.19 0.00 4 stop 45,000.00 B33.1 Elevators 10.14 B33.2 Escalators & Moving Walkways 0.00 0 no. 0.00 0.00 B33.3 Material Handling Systems 0.00 0 no. 0.00 C1 MECHANICAL C11 Plumbing and Drainage 1.00 17,751 m² 230.00 230.00 C11.5 Pool Mechanical 1.00 17,751 m² 46.85 831,600 46.85 C12 Fire Protection 1.00 17,751 m² 44.10 44.10 782,800 C13 HVAC 1.00 17,751 m² 540.75 9,598,900 540.75 C14 Controls 1.00 17,751 m² 50.40 894,700 50.40 C2 ELECTRICAL 1.00 17,751 m² 157.50 2,795,800 C21 Service & Distribution 157.50 1.00 17,751 m² 210.00 3,727,700 C22 Lighting, Devices & Heating 210.00 1.00 17,751 m² 84.00 1,491,100 C23 Systems & Ancillaries 84.00 Z1 GENERAL REQUIREMENTS & FEES

7,169,200

2,091,000

69,003,300

Regina Aquatic Centre Class D Estimate April 12, 2022 GFA:

Option 1B - Addition to Existing Building

17,751 m²

D11.1 Site Preparation D11.2 Hard Surfaces D11.3 Site Improvements D11.4 Landscaping D12 Mechanical Site Services D13 Electrical Site Services	1.00 1.00 1.00 1.00	17,751 17,751				69,003,300		
D11.1 Site Preparation D11.2 Hard Surfaces D11.3 Site Improvements D11.4 Landscaping D12 Mechanical Site Services	1.00 1.00	17,751					3,887.29	<u> </u>
D11.2 Hard Surfaces D11.3 Site Improvements D11.4 Landscaping D12 Mechanical Site Services	1.00 1.00	17,751				2,248,400	126.66	
D11.3 Site Improvements D11.4 Landscaping D12 Mechanical Site Services	1.00			6.95	123,300		6.95	
D11.4 Landscaping D12 Mechanical Site Services				67.89	1,205,100		67.89	
D12 Mechanical Site Services	1.00	17,751		25.35	450,000		25.35	
		17,751		11.27	200,000		11.27	
D13 Electrical Site Services	1.00	17,751		8.45	150,000		8.45	
A A CONTRACT A DESCRIPTION OF THE PARTY.	1.00	17,751	m²	6.76	120,000		6.76	_
ANCILLARY WORK	4.00	47.754	2	44.00	264 200	264,200	14.88	
D21.1 Demolition D21.2 Hazardous Materials	1.00	17,751 0		14.88	264,200 0		14.88 0.00	
	0.00			0.00			0.00	
D22 Alteration GENERAL REQUIREMENTS & FEES	0.00	0	m ²	0.00	0	459,800	25.90	
Z11 General Requirements	14.8%				371,900	459,800	20.95	_
Z12 Fee	3.5%				87,900		4.95	
	3,370				67,500	74 075 700		
T CONSTRUCTION COST						71,975,700	4,054.74	
ALLOWANCES						14,935,000	841.36	
Z21 Design Allowance	15.0%				10,796,400		608.21	
Z23 Construction Allowance	5.0%				4,138,600		233.15	
BTOTAL CONSTRUCTION COST						86,910,700	4,896.10	
Provincial Sales Tax	0.0%					0	0.00	
Goods & Services Tax	0.0%					0	0.00	
OTAL CONSTRUCTION COST						86,910,700	4,896.10	
Z31 Escalation Allowance	12.2%					10,617,000	598.11	
SCALATED CONSTRUCTION COST	ZEILE					97,527,700	5,494.21	
AND DESCRIPTION OF THE PARTY OF						THE REAL PROPERTY.	and the same	
lotes:								

A1-2

Z12 Fee

NET BUILDING COST

COST CONSULTANTS

Z11 General Requirements

New Regina Indoor Aquatic Feasibility (IAF)

12.0%

3,5%

403.88

117.80

521.67 13.4%

3,887.29 100%

June 23, 2022

A-171

0.00

207.00

46.60

38.59

75.60

178.50

397.33

115.89

100,091,900

210.00 84.00

511.35

879.14 23.0%

472.50 12.4%

3,824.24

Option 2 New Construction 36.18 A11.1 Standard Foundations 0.72 18,938 m² 50.00 946,900 108.54 A11.2 Special Foundations 0.72 18,938 m² 150.00 2,840,800 0.08 2,000 m³ 205.10 15.67 410,200 A12 Basement Excavation 14,141,300 0.00 540.30 14.1% A2 STRUCTURE A21 Lowest Floor Construction 0.72 18,938 m² 98.25 2,571,500 A22.1 Upper Floor Construction 0.28 7,235 m² 355.44 A22.2 Stair Construction 88 risr 568.18 1.91 265.42 A23 Roof Construction 0.72 18,938 m² 366.81 6,946,800 456.73 11.9% 0.04 929 m² 0.25 6,500 m² 19.08 A32.1 Walls Above Grade 450.00 2,925,000 111.76 A32.2 Structural Walls Above Grade 0.00 0.00 A32.3 Curtain Walls 0.05 1,300 m² 1,820,000 69.54 0.00 A33.1 Windows & Louvres A33.2 Glazed Screens 0.00 3.29 A33.3 Doors 16 lvs. 5,381.25 A34.1 Roof Covering 0.72 18,938 m² 344.46 249.25 A34.2 Skylights 0.00 A35 Projections 2,000.00 100,000 3.82 B1 PARTITIONS & DOORS B11.1 Fixed Partitions 97.50 B11.2 Moveable Partitions 0.00 0 m² 0.00 B11.3 Structural Partitions 0.00 0 m² 0.00 0.00 2,155.32 303,900 11.61 B12 Doors 0.01 141 lvs. 276.46 7.2% B21 Floor Finishes 117.16 1.00 26,173 m² 117.16 3,066,400 B22 Ceiling Finishes 1.00 26,173 m² 78.64 2,058,300 78.64 B23 Wall Finishes 1.28 33,602 m² 2,111,000 80.66 B31.1 Metals 1.00 26,173 m² 8.88 8.88 B31.2 Millwork 1.00 26,173 m² 22.50 588,900 22.50 B31,3 Specialties 1.00 26,173 m² 70.81 B32 Equipment 1.00 26,173 m² 302.18 B33.1 Elevators 3 stop 105,000.00 12.04

207.00

46.60

511,35

75.60

178.50

210.00

84.00

1,219,700

1,978,700

2,198,500

10,399,200

3,033,100

Regina Aquatic Centre Class D Estimate April 12, 2022

26,173 m²



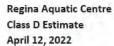
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APPENDIX II

Summary of Locations

2 PAGES





Summary By Location

150		Option 1A - Renovation to Existing Building	Option 1B - Addition to Existing Building	Option 2 New Construction
Elemen	t	\$	\$	\$
A1 SUBSTR	OLICTURE .			
A11.1	Standard Foundations	150,000	643,700	946,9
A11.1	Special Foundations	120,000	1,931,000	2,840,8
A11,2	Basement Excavation	0	252,100	G. 4
A2 STRUCT	SCHOOL SECTION AND ADMINISTRATION OF STREET A	0	232,100	410,2
AZ STRUCT	Lowest Floor Construction	785,000	3,416,900	4,573,0
A22.1	Upper Floor Construction	325,000	2,042,300	2,571,5
A22.1 A22.2	Stair Construction	22,700	13,600	50,0
A22.2	Roof Construction	120,000	4,722,000	6,946,8
THE RESERVE AND PARTY AND PARTY.	OR ENCLOSURE	120,000	4,722,000	0,540,8
A3 EXTERIO	Structural Walls Below Grade	55,000	406,900	499,4
A32.1	Walls Above Grade	1,315,500	1,624,500	2,925,0
A32.1	Structural Walls Above Grade	1,313,300	1,024,300	2,523,0
A32.2	Curtain Walls	407,400	1,010,800	1 020 0
A32.3 A33.1	Windows & Louvres	407,400	1,010,600	1,820,0
A33.2	Glazed Screens	0	0	
		4		00.1
A33.3	Doors	54,100	57,400	86,10
A34.1	Roof Covering	2,256,400	4,434,300	6,523,5
A34.2 A35	Skylights	20,000	0	100.0
The second second second	Projections	30,000	60,000	100,0
The second second	IONS & DOORS	245 200	1 720 700	2.554.0
B11.1	Fixed Partitions	246,300	1,730,700	2,551,9
B11.2	Moveable Partitions	0	0	
B11.3	Structural Partitions	113 000	151 400	202.0
B12	Doors	112,900	161,400	303,9
B2 FINISH		057.000	2 107 000	2.000.4
B21	Floor Finishes	957,900	2,107,600	3,066,40
B22	Ceiling Finishes	2,857,800	1,760,300	
B23	Wall Finishes	1,467,500	615,600	2,111,0
	SS & EQUIPMENT	70.000	450 500	222.2
B31.1	Metals	78,600	169,600	232,3
B31.2	Millwork	168,400	399,400	588,9
B31.3	Specialties	184,900	1,563,700	
B32	Equipment Elevators	2,933,400	6,234,000	
B33.1		135,000	180,000	315,0
B33.2	Escalators & Moving Walkways	0	0	
B33.3	Material Handling Systems	0	0	
C1 MECHA		1 452 000	4.003.700	E 447.0
C11	Plumbing and Drainage	1,452,800	4,082,700	5,417,8
C11.5	Pool Mechanical	693,000	831,600	1,219,7
C11.6	Rink Refrigeration	0	702.200	4 040 0
C12	Fire Protection	464,300	782,800	
C13	HVAC	3,979,400	9,598,900	13,383,6
C14	Controls	477,500	894,700	1,978,7
C2 ELECTR		201.111	0.705.444	
C21	Service & Distribution	884,300	2,795,800	4,671,9
C22	Lighting, Devices & Heating	1,503,300	3,727,700	
C23	Systems & Ancillaries	530,600	1,491,100	2,198,5
	AL REQUIREMENTS & FEES			
711	General Requirements	3 665 800	7 169 200	10 399 2



A1-6

Project
New Regina Indoor Aquatic Feasibility (IAF)

12.0%

3.5%

0.00

0 no.

1.00 26,173 m²

B33.2 Escalators & Moving Walkways

B33.3 Material Handling Systems

C11 Plumbing and Drainage

C21 Service & Distribution

C23 Systems & Ancillaries

C22 Lighting, Devices & Heating

C11.5 Pool Mechanical

C12 Fire Protection

C13 HVAC

NET BUILDING COST

COST CONSULTANTS

C14 Controls

COST CONSULTANTS



Summary By Location

	Option 1A - Renovation to Existing Building	Option 1B - Addition to Existing Building	Option 2 New Construction
Element	\$	\$	s.

ET BUILDING COST	29,301,700	69,003,300	100,091,900
1 SITE WORK	100000000000000000000000000000000000000		
D11.1 Site Preparation	0	123,300	177,300
D11.2 Hard Surfaces	0	1,205,100	1,205,100
D11.3 Site Improvements	0	450,000	450,000
D11.4 Landscaping	50,000	200,000	250,000
D12 Mechanical Site Services	50,000	150,000	400,000
D13 Electrical Site Services	40,000	120,000	160,000
2 ANCILLARY WORK			-
D21.1 Demolition	1,952,900	264,200	1,501,400
D21.2 Hazardous Materials	100,000	0	100,000
D22 Alteration	0	0	(
GENERAL REQUIREMENTS & FEES			-
Z11 General Requirements	324,600	371,900	509,300
Z12 Fee	76,800	87,900	148,500
ET CONSTRUCTION COST	31,896,000	71,975,700	104,993,500
ALLOWANCES			
Z21 Design Allowance	4,784,400	10,796,400	15,539,000
Z22 Construction Allowance	2,934,400	4,138,600	6,026,600
JBTOTAL CONSTRUCTION COST	39,614,800	86,910,700	126,559,100
Provincial Sales Tax	0	0	C
Goods & Services Tax	0	0	(
OTAL CONSTRUCTION COST	39,614,800	86,910,700	126,559,100
Z31 Escalation Allowance	7,603,000	10,617,000	19,602,700
SCALATED CONSTRUCTION COST	47,217,800	97,527,700	146,161,800
GFA (m²)	8,422	17,751	26,173
Cost / m²	\$5,606.48	\$5,494.21	\$5,584.45



APPENDIX III

Cost Plan

45 PAGES



Project New Regina Indoor Aquatic Feasibility (IAF)

June 23, 2022

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Regina Aquatic Centre

Class D Estimate

Description

A1 SUBSTRUCTURE

A11.1 Standard Foundations

April 12, 2022

Amount

Regina Aquatic Centre Class D Estimate

Description Quantity Unit Rate Amount

A1 SUBSTRUCTURE

A11.2 Special Foundations

Pile excavation (auger) Dispose excavated soil offsite Place pile concrete: pump

Concrete supply Reinforcement

ption	14	 Renovation 	to	Existing	Building	

Option 1A - Renovation to Existing Building					Option 1A - Renovation to Existing Building
Allowance to reinforce existing foundation	1	sum	150,000.00	150,000	Additional piles to support new pool deck/slab Mobilize & set up Demobilize
Option 1B - Addition to Existing Building					Formwork
					Pile excavation (auger)
Standard foundation includes grade beams, pile cap, foundation walls. etc.	12,873	m2	50.00	643,700	Dispose excavated soil offsite
Wall excavation					Place pile concrete: pump
Wall backfill: imported					Concrete supply
Dispose excavated soil offsite					Reinforcement
concrete supply					
Formwork					Option 1B - Addition to Existing Building
Concrete placing.: pump					
waterproofing					Allowance for concrete piles
Foundation insulation					Mobilize & set up
					Demobilize
					Formwork
Option 2 New Construction					Pile excavation (auger)
					Dispose excavated soil offsite
Standard foundation includes grade beams, pile cap, foundation walls. etc.	18,938	m2	50.00	946,900	Place pile concrete: pump
Wall excavation					Concrete supply
Wall backfill: imported					Reinforcement
Dispose excavated soil offsite					
concrete supply					Option 2 New Construction
Formwork					
Concrete placing.: pump					Allowance for concrete piles
waterproofing					Mobilize & set up
Foundation insulation					Demobilize
					Formwork

Quantity Unit Rate

Total Standard Foundations	\$1,740,600

Total Special Foundations	\$4,891,800



Project New Regina Indoor Aquatic Feasibility (IAF)

City of Regina

June 23, 2022

1,500 m2

April 12, 2022

80.00 120,000

12,873 m2 150.00 1,931,000

18,938 m2 150.00 2,840,800

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Description	Quantity	Unit Rate		Amount	Description	Quantity	Unit	Rate	Amount
Securitaria	Quantity	Ome Rate		Amount	.				
A1 SUBSTRUCTURE					A2 STRUCTURE				
A12 Basement Excavation					A21 Lowest Floor Construction				
Option 1A - Renovation to Existing Building					Option 1A - Renovation to Existing Building				
Assume no works associated to excavation					Replacement of the main floor pool deck structure including the concrete on metal deck and open web steel joists.	1,500	m2	390.00	585,00
Option 1B - Addition to Existing Building								450,000,00	450.00
Building excavation for 50m and leisure pools new pools	3,490	m3	25.00	87,300	Allowance for structural reinforcing to main floor slab located at change rooms and admin areas, allow 500m2	1	sum	150,000.00	150,00
Excavation depth varies say 1m to 1.5m					Concrete slab on grade - Pool base slab say 200mm thick	1,400	m2	225.00	315,00
Dispose excavated soil offsite					Includes, rough and final grading, granular base, concrete supply, formworks,		1112	223.00	313,00
Building excavation new crawl space, say 1000m2 x 3m deep	3,000	m3	25.00	75,000	reinforcements, water proofing vapor barriers, finishing, cure and protect.				
Building excavation	,			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	e/o structural slab				
Dispose excavated soil offsite									
- " "		_			Allowance to improve accessibility including new ramps	1	sum	50,000.00	50,00
Building backfill	998		90.00	89,800	Timer's/Judge's box Reception area				
Building backfill: granular fill imported (Allowance) to new pools Building backfill: granular fill imported (Allowance)crawl space	698 300				neception area				
bullating bucklin. Grandian in imported (Allowance) craws space	300	ms			Option 1B - Addition to Existing Building				
Option 2 New Construction									
					Concrete slab on grade new spaces/circulation in ground level, crawl space and	10,273	m2	245.00	2,516,90
Building excavation for 50m, 25m and leisure pools	4,797	m3	25.00	119,900	pool deck areas				
Excavation depth varies say 1m to 1.5m					Includes, rough and final grading, granular base, concrete supply, formworks, reinforcements, vapor barriers, finishing, cure and protect.				
Dispose excavated soil offsite					e/o accessible ramps, house keeping pads, slab thinkening, etc.				
Building excavation new crawl space, say 2000m2 x 3m deep	6,000	m3	25.00	150,000	e/o structural slab				
Building excavation	-,			,	•				
Dispose excavated soil offsite					Concrete slab on grade - Pool base slab say 200mm thick	2,600	m2	225.00	585,00
					Includes, rough and final grading, granular base, concrete supply, formworks,				
Building backfill	1,559		90.00	140,300	reinforcements, water proofing vapor barriers, finishing, cure and protect.				
Building backfill: granular fill imported (Allowance) to new pools Building backfill: granular fill imported (Allowance)crawl space		m3			e/o structural slab				
Building backfill: granular fill imported (Allowance)crawl space	600	m3			Option 2 New Construction				
					Concrete slab on grade new spaces/circulation in ground level, crawl space and	d 15,588	m2	245.00	3,819,20
					pool deck areas	,			
					Includes, rough and final grading, granular base, concrete supply, formworks,				
					reinforcements, vapor barriers, finishing, cure and protect.				
					e/o accessible ramps, house keeping pads, slab thinkening, etc. e/o structural slab				
					Concrete slab on grade - Pool base slab say 200mm thick	3,350	m2	225.00	753,80
					Includes, rough and final grading, granular base, concrete supply, formworks,				
					reinforcements, water proofing vapor barriers, finishing, cure and protect.				
					e/o structural slab				

Regina Aquatic Centre

Total Lowest Floor Construction

Class D Estimate

New Regina Indoor Aquatic Feasibility (IAF)

Total Basement Excavation

client City of Regina

\$662,300

June 23, 2022

\$8,774,900

April 12, 2022

Regina Aquatic Centre April 12, 2022 Class D Estimate

Description Quantity Unit Rate Amount

A2 STRUCTURE

A22.1 Upper Floor Construction

columns).

Option 2 New Construction

Suspended Concrete slab on above crawl space

reinforcements, insulation, finishing, cure and protect.

)	ntion	1A -	Renovation	to	Fxistina	Building
7	puon	-	Reliovation	w	LAISTING	Dununng

Structural upgrade and reinforcement - Allowance Allowance for structural reinforcement to allow for new elevator including demolition	1	sum	150,000.00	150,000	
Allowance for suspended concrete slab on steel deck - Diving tower Includes, steel deck on steel frame supports, concrete supply, formworks, reinforcements, insulation, finishing, cure and protect.	1	sum	175,000.00	175,000	
Option 1B - Addition to Existing Building					
Suspended Concrete slab on above crawl space Includes, steel deck on steel frame supports, concrete supply, formworks, reinforcements, insulation, finishing, cure and protect.	2,000	m2	265.00	530,000	
Assume concrete slab on steel deck supported by structural steel frame say				1,512,300	

Suspended concrete slab on steel deck supported by steel framing (beams and columns).

Suspended concrete slab on steel deck supported by steel framing (beams and

Includes, steel deck on steel frame supports, concrete supply, formworks,

Assume concrete slab on steel deck supported by structural steel frame say

Regina Aquatic Centre Class D Estimate

Description Quantity Unit Rate Amount

A2 STRUCTURE

A22.2 Stair Construction

Option	1A -	Renovation	to	Existina	Buildina
Openon.	-, .	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	••		Dananig

40	rsrs	568.00	22,700
24	rsrs	568.00	13,600
88	rsrs	568.00	50,000
	24	24 rsrs	24 rsrs 568.00

Total Upper Floor Construction \$4,938,800

Total Stair Construction \$86,300



New Regina Indoor Aquatic Feasibility (IAF)

City of Regina

2,000 m2

265.00 530,000

390.00 2,041,500

June 23, 2022

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April 12, 2022

Description	Quantity	Unit	Rate	Amount

A2 STRUCTURE

A23 Roof Construction

Option 1A - Renovation	to Existing Building
------------------------	----------------------

Roof deck, say 38dpx0.91 including angle

Steel deck supported by steel roof framing (roof beams, OWSJ and columns).

Allowance to repair any damaged roof structure	1	sum	120,000.00	120,000	
Option 1B - Addition to Existing Building					
Assume Steel deck supported by structural steel roof frame say 40kg/m2 Steel deck supported by steel roof framing (roof beams, OWSJ and columns). Roof deck, say 38dpx0.91 including angle	12,873	m2	366.81	4,722,000	
Option 2 New Construction					
Assume Steel deck supported by structural steel roof frame say 40kg/m2	18,938	m2	366.81	6,946,800	

Regina Aquatic Centre April 12, 2022
Class D Estimate

Description	Quantity	Unit	Rate	Amount
2 do 0 1 p 1 o 1	~~~~			,

A3 EXTERIOR ENCLOSURE

A31 Structural Walls Below Grade

Option 1A - Renovation to Existing Build
--

Option 1A - Renovation to Existing Building				
Allowance for elevator core wall foundation	1	sum	5,000.00	5,000
Allowance for minor repiars to walls below grade at crawlspace: seal water leakade and repairing membrane adhesive (assumed extensive remedial work to crawl space has been completed previously)	1	sum	50,000.00	50,000
Option 1B - Addition to Existing Building				
Allowance for elevator core wall foundation	1	sum	5,000.00	5,000
Concrete Walls to new 50m swimming pool assume average ht of 1.5m to 2m. Excavation and backfill included in building excavation Includes concrete supply, reinforcement formworks, insulation and waterproofing.	254	m2	500.00	126,900
Concrete Walls to new leisure swimming pools assume average ht of 1 m to 1.5m. Excavation and backfill included in building excavation Includes concrete supply, reinforcement formworks, insulation and waterproofing. e/o curved formworks	500	m2	550.00	275,000
Option 2 New Construction				
Allowance for elevator core wall foundation	1	sum	10,000.00	10,000
Concrete Walls to new 50m and 25m swimming pool assume average ht of 1.5m to 2m. Excavation and backfill included in building excavation Includes concrete supply, reinforcement formworks, insulation and waterproofing.	429	m2	500.00	214,400
Concrete Walls to new leisure swimming pools assume average ht of 1 m to 1.5m. Excavation and backfill included in building excavation Includes concrete supply, reinforcement formworks, insulation and waterproofing. e/o curved formworks	500	m2	550.00	275,000

otal Roof Construction	\$11,788,800	Total Structural Walls Below Grade	\$961,300



Project
New Regina Indoor Aquatic Feasibility (IAF)

City of Regina

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Date June 23, 2022

Description	Quantity	Unit	Rate	Amount

A3 EXTERIOR ENCLOSURE

Regina Aquatic Centre

Class D Estimate

A32.1 Walls Above Grade

Ontion	1Δ	- Renovation	to	Evictina	Ruilding

2,910	m2	443.00	1,289,10
1	sum	26,400.00	26,40
3,610	m2	450.00	1,624,5
	1	1 sum	1 sum 26,400.00

Allowance for exterior wall cladding assumed combination of corrugated metals 6,500 m2

Regina Aquatic Centre April 12, 2022
Class D Estimate

ate

Description	Quantity Unit	Rate	Amount

A3 EXTERIOR ENCLOSURE

April 12, 2022

A32.3 Curtain Walls

Caulking

Option 1A - Renovation to Existing Building

Aluminum frame curtain wall system, assume 10% of exterior wall Replace existing aluminum frame curtain wall system, triple glazed Removal of existing included in D21.1 Demolition	291	m2	1,400.00	407,400
Option 1B - Addition to Existing Building				
Aluminum frame curtain wall system, assume 20% of exterior wall Aluminum frame curtain wall system, triple glazed Caulking	722	m2	1,400.00	1,010,800
Option 2 New Construction				
Aluminum frame curtain wall system, assume 20% of exterior wall Aluminum frame curtain wall system, triple glazed	1,300	m2	1,400.00	1,820,000

Total Walls Above Grade \$5,865,000

Total Curtain Walls \$3,238,200



Project New Regina Indoor Aquatic Feasibility (IAF)

and composite metal panels. Assumed exterior wall ht of 10m

Includes insulation and backup walls

client City of Regina

June 23, 2022

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April 12, 2022 Regina Aquatic Centre Class D Estimate

Quantity Unit Rate Amount Quantity Unit Rate Description Description A3 EXTERIOR ENCLOSURE A3 EXTERIOR ENCLOSURE A33.3 Exterior Doors A34.1 Roof Covering Option 1A - Renovation to Existing Building Option 1A - Renovation to Existing Building 13 lvs 2,930.77 38,100 3,165 m2 620.42 1,963,600 Replace existing exterior doors Install new standing seam metal roof Prefinished metal roofing Aluminum swing doors and frames Insulated metal doors and frames, Single Slip sheet Underlayment Overhead door, allow 1no. Exterior grade gwb sheathing, 12.7mm 1 no 16,000.00 16,000 Rigid insulation Poly vapour barrier 6 mil Option 1B - Addition to Existing Building Flashing Misc. fasteners, accessories Aluminum swing doors and frames Doors (2 Pair) 4 pr 8,000.00 32,000 Door caulking Aluminum door: 914 x 2133 2 Ply SBS roof including insulation, adhesive membrane, flashing, etc. 850 m2 344.46 292,800 Aluminum frame: 1828x2133 Rigid insulation R20.0 (100mm) Insulated metal doors and frames (Exterior) Single 2,350.00 4 lvs 9,400 Door caulking Option 1B - Addition to Existing Building Welded frame: 914 x 2133 Hollow metal door: 914 x 2133 2 Ply SBS roof 12,873 m2 344.46 4,434,300 Door poly. rigid insulation Rigid insulation R20.0 (100mm) Filter cloth Vision panel: 250 sq w/gwg Exterior hardware: double doors Peel & stick roof membrane Asphalt impregnated fibreboard: 12mm Paint interior metal doors & frames Exterior gypsum board: 12mm Overhead door, allow 1no. 1 no 16,000.00 16,000 SBS two ply roofing Option 2 New Construction Option 2 New Construction Aluminum swing doors and frames Doors (2 Pair) 2 Ply SBS roof 18,938 m2 344.46 6,523,500 8,000.00 40,000 Door caulking Rigid insulation R20.0 (100mm) Aluminum door: 914 x 2133 Filter cloth Aluminum frame: 1828x2133 Peel & stick roof membrane Asphalt impregnated fibreboard: 12mm Insulated metal doors and frames (Exterior) Single 2,350.00 14,100 Exterior gypsum board: 12mm Door caulking SBS two ply roofing Welded frame: 914 x 2133 Hollow metal door: 914 x 2133 Door poly. rigid insulation Vision panel: 250 sq w/gwg Exterior hardware: double doors Paint interior metal doors & frames Overhead door, allow 1no. 2 no 16,000.00 32,000



Total Exterior Doors

New Regina Indoor Aquatic Feasibility (IAF)

City of Regina

\$197,600

Total Roof Covering

Regina Aquatic Centre April 12, 2022

Class D Estimate

Regina Aquatic Centre Class D Estimate

Quantity Unit Rate Amount Description

A3 EXTERIOR ENCLOSURE

A35 Projections

Option 1A - Renovation to Existing Building

Metal Soffit and projection - Allowance

Soffits & Projections			
Metal Soffit and projection - Allowance	1 sum	30,000.00	30,00
Option 1B - Addition to Existing Building			
Soffits & Projections			
Metal Soffit and projection - Allowance	1 sum	60,000.00	60,0
Option 2 New Construction			
Soffits & Projections			

Regina Aquatic Centre

Class D Estimate

Quantity Unit Rate Description Amount

B1 PARTITIONS & DOORS

B11.1 Fixed Partitions

Fire rated partitions

Option 1A - Renovation to Existing Building

Includes combination of standard metal stud partition, CMU wall partitions,

Allowance for interior partition Includes combination of standard metal stud partition, CMU wall partitions,	1,263	m2	195.00	246,300
Fire rated partitions				
(assume 30% of existing partition to be new)				
Option 1B - Addition to Existing Building				
Allowance for interior partition, assumed partition areas	8,876	m2	195.00	1,730,700
Includes combination of standard metal stud partition, CMU wall partitions,				
Fire rated partitions				
Option 2 New Construction				
Allowance for interior partition, assumed partition areas	13,087	m2	195.00	2,551,900

\$190,000 **Total Projections**

Total Fixed Partitions \$4,528,900



\$13,214,200

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June 23, 2022

New Regina Indoor Aquatic Feasibility (IAF)

City of Regina

April 12, 2022

1 sum 100,000.00 100,000

June 23, 2022

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April 12, 2022

April 12, 2022 Regina Aquatic Centre Class D Estimate

Quantity Unit Rate

Class D Estimate	Class D Estimate	

Amount

3,600.00 18,000

client City of Regina

Regina Aquatic Centre

B1 PARTITIONS & DOORS

2 Interior Doors				
Option 1A - Renovation to Existing Building				
Aluminum swing doors and frames (Double) at lobby	9	pr	7,500.00	67,500
Aluminum door: 914 x 2133				
Aluminum frame: 1067 x 2133				
HM doors and Pressed Steel frames (single)	14	lvs	2,100.00	29,400
Welded frame: 914 x 2133				
150x600 door glazing				
Hollow metal door: 914 x 2133				
Interior hardware: single doors				
Paint interior metal doors & frames				
Hollow metal doors and frames (double)	2	pr	2,600.00	5,200
Welded frame : 1067 x 2133				
Hollow metal door: 914 x 2133				
Interior hardware: double doors				
Paint interior metal doors & frames				
Hollow metal doors and frames (double)				
Automatic door operators - Allowance	3	ea	3,600.00	10,800
Option 1B - Addition to Existing Building				
Aluminum swing doors and frames (Double) at lobby	9	pr	7,500.00	67,500
Aluminum door: 914 x 2133				
Aluminum frame: 1067 x 2133				
HM doors and Pressed Steel frames (single)	25	lvs	2,100.00	52,500
Welded frame: 914 x 2133				
150x600 door glazing				
Hollow metal door: 914 x 2133				
Interior hardware: single doors				
Paint interior metal doors & frames				
Hollow metal doors and frames (double)	9	pr	2,600.00	23,400
Welded frame: 1067 x 2133		-	-	-
Hollow metal door: 914 x 2133				
Interior hardware: double doors				
Paint interior metal doors & frames				
Hollow metal doors and frames (double)				

Description	Quantity	Unit	Rate	Amount
				_

April 12, 2022

В1	2 Interior Doors	Cont'd			
	Option 2 New Construction				
	Aluminum swing doors and frames (Double) at lobby Aluminum door: 914 x 2133 Aluminum frame: 1067 x 2133	14	pr	7,500.00	105,000
	HM doors and Pressed Steel frames (single) Welded frame: 914 x 2133 150x600 door glazing Hollow metal door: 914 x 2133 Interior hardware: single doors Paint interior metal doors & frames	29	lvs	2,100.00	60,900
	Hollow metal doors and frames (double) Welded frame: 1067 x 2133 Hollow metal door: 914 x 2133 Interior hardware: double doors Paint interior metal doors & frames Hollow metal doors and frames (double)	42	pr	2,600.00	109,200
	Automatic door operators - Allowance	8	ea	3,600.00	28,800

Total Interior Doors \$578,200

_{Date} June 23, 2022



Quantity Unit Rate

Amount

INISHES				
21 Floor Finishes				
Option 1A - Renovation to Existing Building				
Allowance to remove existing floor finish (included in D21.1 Demolition)				
Ceramic tile - renovated aquatic competition & training pool Ceramic tile e/o rubber base 100mm high	2,061	m2	130.00	267,900
Allowance for floor finishes, combination of resilient floor finish to common areas, ceramic tiles to washrooms carpet tiles to offices. Ceramic tile, allow 50% of floor area Resilient floor, allow 30% of floor area Carpet, allow 10% of floor area Concrete sealer & hardener, allow 10% of floor area Baseboards e/o tactile cues, nosing or slip resistance treatments	6,349	m2	104.94	666,300
Entrance mats - Allowance for Vestibule Pedigrid metal grid entrance mat: 1.2 x 2.4	12	m2	2,056.80	23,700
Option 1B - Addition to Existing Building				
Ceramic tile - to new 50m competition pool Ceramic tile	2,210	m2	130.00	287,300
Ceramic tile - to Aquatic Leisure and recreation Ceramic tile e/o curved layout	2,970	m2	135.00	401,000
Allowance for floor finishes, to sports floor finish to gymnasium and fitness centers	3,099	m2	130.00	402,900
Allowance for floor finishes, combination of resilient floor finish to common areas, ceramic tiles to washrooms carpet tiles to offices. e/o tactile cues, nosing or slip resistance treatments	9,460	m2	104.94	992,700
Entrance mats - Allowance for Vestibule	12	m2	2,056.80	23,700



scription	Quantity Un	it Rate	Amount

Cont'd

В2	FINISHES			
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B21	Floor Finishes	·	com u		
	Option 2 New Construction				
	Ceramic tile - to new 50m competition pool and 25m warm up tank Ceramic tile	3,400	m2	130.00	442,000
	Ceramic tile - to Aquatic Leisure and recreation Ceramic tile e/o curved layout	2,970	m2	135.00	401,000
	Allowance for floor finishes, to sports floor finish to gymnasium and fitness centers	3,927	m2	130.00	510,500
	Allowance for floor finishes, combination of resilient floor finish to common areas, ceramic tiles to washrooms carpet tiles to offices e/o tactile cues, nosing or slip resistance treatments	15,852	m2	104.94	1,663,500
	Entrance mats - Allowance for Vestibule Pedigrid metal grid entrance mat: 1.2 x 2.4	24	m2	2,056.80	49,400

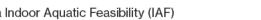
Total Floor Finishes \$6,131,900



Description



Pedigrid metal grid entrance mat: 1.2 x 2.4



Description

B1 PARTITIONS & DOORS

Automatic door operators - Allowance

Quantity Unit Rate Amount Description

B2 FINISHES

B22 Ceiling Finishes

Option 1A - Renovation to Existing Building

Allowance to remove existing selected ceiling finish (included in D21.1 Demolition)					
Repair, make good and re-stain existing wood deck ceiling, allow 4000m2 Light sandblast wood ceiling Prep surface to receive new finish Ceiling finish, stain Repair and refinish glulam beams Misc. accessories Scafolding	4,000	m2	600.00	2,400,000	
Acoustic ceiling Suspended acoustic tile and t-bar - Other Locations, 600 x 1200 S.A.T. Acoustic panels	1,428	m2	115.00	164,200	
Suspended gypsum board ceiling c/w paint Gypsum board ceiling c/w paint Gypsum board ceiling bulk head, c/w paint say 5% of GWB ceiling - Allowance	1,427	m2	148.67	212,200	
Allowance for featured ceiling finish	1	sum	25,000.00	25,000	
Allowance for protective coating to steel structure to underside of pool deck (crawl space)	1,567	m2	36.00	56,400	
Option 1B - Addition to Existing Building					
Allowance paint new exposed ceiling to aquatic and pool areas, e/o high ceiling	5,180	m2	20.00	103,600	
Acoustic ceiling Suspended acoustic tile and t-bar - Other Locations, 600 x 1200 S.A.T. Acoustic panels	7,790	m2	115.00	895,900	
Suspended gypsum board ceiling c/w paint Gypsum board ceiling c/w paint Gypsum board ceiling bulk head, c/w paint say 5% of GWB ceiling - Allowance	4,781	m2	148.67	710,800	
Allowance for featured ceiling finish	1	sum	50,000.00	50,000	

Project New Regina Indoor Aquatic Feasibility (IAF)

Regina Aquatic Centre April 12, 2022 Class D Estimate

Description	Quantity	Unit	Rate	Amount

B2 FINISHES

B22	Ceiling Finishes		Cont'd			
	Option 2 New Construction					
	Allowance paint new exposed ceiling to aquatic and pool areas, e/o high ceiling	6,370	m2	20.00	127,400	
	Suspended acoustic tile and t-bar - Other Locations 600 x 1200 S.A.T.	13,019	m2	63.17	822,400	
	Suspended gypsum board ceiling c/w paint	6,784	m2	141.59	960,500	
	Bulk head allowance c/w paint say 5% of GWB ceiling	1	sum	48,000.00	48,000	
	Allowance for featured ceiling finish	1	sum	100,000.00	100,000	

Total Ceiling Finishes \$6,676,400

June 23, 2022



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Description Quantity Unit Rate Amount

B2 FINISHES

B23 Wall Finishes

Epoxy wall finish

wall finishes

Interior Painting: Latex - walls - other areas

Ceramic tiles to new 50m pool wall

Ceramic tiles to leisure pool walls

Allowance to remove existing wall finishes (included in D21.1 Demolition)				
Epoxy paint - To existing walls to renovated warm-up pool, say 3m high Epoxy wall finish	645	m2	64.83	4
New wood wall panel finish c/w acoustic panel - allow 1200m2 Wood slats Acoustic panels	1,200	m2	879.60	1,05
Interior Painting : Latex - Walls	11,973	m2	14.00	16
Ceramic tiles to walls Existing pool walls Change rooms and washrooms	586	m2	130.00	7
Allowance for Misc. Wall Finishes Tile, Wall Protection etc. say 10% of above wall finishes	1	sum	126,490.00	12

Epoxy paint - To new walls of 50m competition pool and leisure pool, say 3m higl 1,350 m2

Allowance for Misc. Wall Finishes Tile, Wall Protection etc. say 25% of above

Total Wall Finishes \$4,194,100

Regina Aquatic Centre Class D Estimate

Description Quantity Unit Rate Amount

B2 FINISHES

B23 Wall Finishes

Option 2 New Construction

Epoxy paint - To new walls of 50m competition pool and leisure pool, say 3m high	1,800	m2	64.83	116,700
Epoxy wall finish				
Allowance for wood wall panel finish c/w acoustic panel - allow 1200m2 Wood slats	1,200	m2	879.60	1,055,500
Acoustic panels				
Interior Painting: Latex - walls - other areas	29,673	m2	14.00	415,400
Ceramic tiles to 50m and 25m pool wall	429	m2	120.00	51,500
Ceramic tiles to leisure pool walls	500	m2	150.00	75,000
Allowance for Misc. Wall Finishes Tile, Wall Protection etc. say 25% of above wall finishes	1	sum	396,900.00	396,900







client City of Regina

64.83 87,500

14.00 320,600

120.00 30,500

150.00 75,000

1 sum 102,025.00 102,000

22,901 m2

254 m2

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Quantity Unit Rate Amount Description Quantity Unit Rate Description **B3 FITTINGS & EQUIPMENT B3 FITTINGS & EQUIPMENT** B31.1 Metals B31.2 Millwork Option 1A - Renovation to Existing Building Option 1A - Renovation to Existing Building 456.25 36,500 Millwork allowance 8,422 m2 20.00 168,400 Handrails and guardrails Stainless Steel Handrails (Allowance) Washroom vanity Cabinets & countertops 65mm dia. stainless steel pipe guardrail Metal guardrail to stairwell, painted Benches & seating Shelving Misc. Metals Allowance (brackets, bench supports etc.) 8,422 m2 5.00 42,100 Option 1B - Addition to Existing Building Option 1B - Addition to Existing Building Millwork allowance 17,751 m2 22.50 399,400 Handrails and guardrails 456.25 36,500 Washroom vanity Stainless Steel Handrails (Allowance) Cabinets & countertops 65mm dia. stainless steel pipe guardrail Benches & seating Metal guardrail to stairwell, painted Kitchen countertop and base cabinet, say stainless steel top Misc. Metals Allowance (brackets, bench supports etc.) 17,751 m2 7.50 133,100 Option 2 New Construction Option 2 New Construction

Regina Aquatic Centre

Millwork allowance

Washroom vanity

Benches & seating

Shelving

Cabinets & countertops

Class D Estimate

\$480,500 Total Millwork \$1,156,700

26,173 m2

June 23, 2022

22.50 588,900



Total Metals

Handrails and guardrails

Stainless Steel Handrails (Allowance)

Metal guardrail to stairwell, painted

65mm dia. stainless steel pipe guardrail

Misc. Metals Allowance (brackets, bench supports etc.)

New Regina Indoor Aquatic Feasibility (IAF)

City of Regina

450.00

26,173 m2

36,000

7.50 196,300

Kitchen countertop and base cabinet, say stainless steel top

April 12, 2022

Regina Aquatic Centre Class D Estimate

April 12, 2022

Description	Quantity	Unit	Rate	Amount
B3 FITTINGS & EQUIPMENT				
B31.3 Specialties				
Option 1A - Renovation to Existing Building				
Specialties allowance	8,422	m2	21.96	184,900
Washroom accessories				
Washroom partitions				
Lockers, double tier				
Window coverings				
Interior Signages				
Bleachers				
Misc. specialties				
New automated pool bulkhead - Allowance	1	ea	250,000.00	250,000
Option 1B - Addition to Existing Building				
Specialties allowance	17,751	m2	24.71	438,700
Washroom accessories				
Washroom partitions				
Lockers				
Window coverings				
Interior Signages				
Bleachers				
Misc. specialties				
Aquatic Amenities	1	sum	625,000.00	625,000
Spectator seating				
Timing equipment, allow 2no.				

Regina Aquatic Centre

April 12, 2022

Class D Estimate

Description Quantity Unit Rate Amount

B3 FITTINGS & EQUIPMENT

B31.3 Specialties		Cont'd	
Option 2 New Construction			
Specialties allowance	26,173	m2	27.06
Metal dressing compartments			
Washroom accessories			
Washroom partitions			
Lockers			
Window coverings			
Interior Signages			
Bleachers			
Misc. specialties			
Aquatic Amenities	1	sum	645,000.00
Spectator seating			
Timing equipment, allow 4no.			
Media box, allow 4no.			
Diving board, allow 5no.			
Scoreboards/video boards, allow 4no			
New automated pool bulkhead - Allowance	2	ea	250,000.00

Total Specialties \$3,601,800





Diving board, allow 5no.

Scoreboards/video boards, allow 2no

New automated pool bulkhead - Allowance

client City of Regina

1 ea 250,000.00 250,000

June 23, 2022

708,200

645,000

500,000

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Quantity Unit Rate Amount Description

B3 FITTINGS & EQUIPMENT

B32	Equipmen
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Option 1A - Renovation to Existing Building				
Replace existing tanks with new accessible tank - Allowance Pool tanks Teach pool Hot tub	1	sum	2,908,400.00	2,908,400
not tub				
Pool Equipment: Allowance to repair or replace	1	sum	25,000.00	25,000
Option 1B - Addition to Existing Building				
Pool: New 50m-10 lane Pool Equipment c/w walk-in lane and ramps (1,250m2) - Allowance	1	sum	2,750,000.00	2,750,000
Aquatic Leisure & Recreation Leisure Tank High Slide Extreme Rides (tube slide) Outdoor Aquatic Components (hot tub) Lazy river Wave pool/Moving Water Tank	1	sum	3,104,000.00	3,104,000
Pool equipment including steam bath, gutter grating, anchors, rails & grab bars, marking tiles, turn indicators, lift sockets lane rope hatch, misc. pool eqipment, etc. New 50m-10 lane pool Leisure Tank Slide (high, tube) Hot tub (adult, athlete, therapy) Lazy river Wave pool/Moving Water Tank Sauna and Steam Room	1	sum	230,000.00	230,000
Commercial kitchen appliances - Allowance	1	sum	150,000.00	150,000

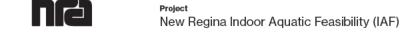
Regina Aquatic Centre April 12, 2022 Class D Estimate

Description Quantity Unit Rate Amount

B3 FITTINGS & EQUIPMENT

В32	Equipment		Cont'd		
	Option 2 New Construction				
	Pool: New 50m-10 lane Pool Equipment c/w walk-in lane and ramps (1,250m2) - Allowance	1	sum	2,750,000.00	2,750,000
	Pool: New 25m-10 lane Pool Equipment c/w walk-in lane and ramps (750m2) - Allowance	1	sum	1,650,000.00	1,650,000
	Aquatic Leisure & Recreation Leisure Tank High Slide Extreme Rides (tube slide) Outdoor Aquatic Components (hot tub) Lazy river Wave pool/Moving Water Tank	1	sum	3,104,000.00	3,104,000
	Pool Equipment New 50m-10 lane pool New 25m-10 lane pool Leisure Tank Slide (high, tube) Hot tub (adult, athlete, therapy) Lazy river Wave pool/Moving Water Tank Sauna and Steam Room	1	sum	255,000.00	255,000
	Commercial kitchen appliances - Allowance	1	sum	150,000.00	150,000

Total Equipment \$17,076,400



client City of Regina

June 23, 2022

Regina Aquatic Centre April 12, 2022 Class D Estimate

Quantity Unit Rate Amount Description

B3 FITTINGS & EQUIPMENT

B33.1 Elevators

Option 1A - Renovation to Existing Building				
Allowance for passenger elevator (1no.)	3	stops	45,000.00	135,000
Option 1B - Addition to Existing Building				
Allowance for passenger elevator (also to accommodate dive platforms) (1no.)	4	stops	45,000.00	180,000
Option 2 New Construction				
Allowance for passenger elevator (2no.)	3	stops	45,000.00	135,000
Allowance for passenger elevator (also to accommodate dive platforms) (1no.)	4	stops	45,000.00	180,000

Regina Aquatic Centre

April 12, 2022 Class D Estimate

Description Quantity Unit Rate

C1 MECHANICAL

C11 Plumbing and Drainage

Complete retrofit

Option 1A - Renovation to Existing Building				
Allowance for passenger elevator (1no.)	3	stops	45,000.00	135,000
Option 1B - Addition to Existing Building				
Allowance for passenger elevator (also to accommodate dive platforms) (1no.)	4	stops	45,000.00	180,000
Option 2 New Construction				
Allowance for passenger elevator (2no.)	3	stops	45,000.00	135,000
ullowance for passenger elevator (also to accommodate dive platforms) (1no.)	4	stops	45,000.00	180,000

Option 1A - Renovation to Existing Building 8,422 m2 172.50 1,452,800

Plumbing fixtures Domestic piping Storm piping Sanitary and sewer piping Testing, balancing and commissioning Hook up Steam and sauna room

Upgrade of Plumbing Equipment

Option 1B - Addition to Existing Building

Plumbing fixtures Domestic piping Storm piping

Sanitary and sewer piping Testing, balancing and commissioning

Hook up Steam and sauna room Plumbing Equipment LEED Gold Best Practice & Commissioning

Option 2 New Construction

Allowance for plumbing & drainage Plumbing fixtures

Domestic piping Storm piping

> Sanitary and sewer piping Testing, balancing and commissioning

Hook up Steam and sauna room Plumbing Equipment

LEED Gold Best Practice & Commissioning

Total Elevators \$630,000 **Total Plumbing and Drainage** \$10,953,300



New Regina Indoor Aquatic Feasibility (IAF)

City of Regina

June 23, 2022

Amount

230.00 4,082,700

26,173 m2 207.00 5,417,800

17,751 m2

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Description	Quantity	Unit	Rate	Amount
C1 MECHANICAL				
C11.5 Pool Mechanical				
Option 1A - Renovation to Existing Building	1	sum	693,000.00	693,000
Retrofit existing 65M pool			,	•
Option 1B - Addition to Existing Building	1	sum	831,600.00	831,600
New 50M lap pool				
Pool Mechanical to leisure pool				
Pool mechanical to hot pool				
New slide pool				

1 sum 1,219,680.00 1,219,700

Regina Aquatic Centre April 12, 2022 Class D Estimate

Description	Quantity	Unit	Rate	Amount
C1 MECHANICAL				
C12 Fire Protection				
Option 1A - Renovation to Existing Building	8,422	m2	55.13	464,300
New fire protection to renovated area				
Option 1B - Addition to Existing Building	17,751	m2	44.10	782,800
Fire protection to additional area				
Option 2 New Construction				
New fire protection	26,173	m2	38.59	1,010,000

Total Fire Protection \$2,257,100 Regina Aquatic Centre April 12, 2022 Class D Estimate

Description	Quantity	Unit	Rate	Amount
C1 MECHANICAL				
C13 HVAC				
Option 1A - Renovation to Existing Building	8,422	m2	472.50	3,979,40
Upgrade existing HVAC equipment				
Hydronic piping reconfiguration				
Air Distribution Equipment Upgrade				
Air Distribution Ductwork reconfiguration				
Testing, balancing and commissioning				
Option 1B - Addition to Existing Building	17,751	m2	540.75	9,598,90
New HVAC system to addition area				
Upgrade existing HVAC equipment				
Hydronic piping reconfiguration				
Air Distribution Equipment				
Air Distribution Ductwork reconfiguration				
Testing, balancing and commissioning				
LEED Gold Best Practice & Commissioning				
Option 2 New Construction	26,173	m2	511.35	13,383,60
New HVAC system to addition area				
Upgrade existing HVAC equipment				
Hydronic piping reconfiguration				
Air Distribution Equipment				
Air Distribution Ductwork reconfiguration				
Testing, balancing and commissioning				
LEED Gold Best Practice & Commissioning				

Regina Aquatic Centre Class D Estimate

New DDC Control

Total Controls

LEED Gold Best Practice & Commissioning

Amount Description Quantity Unit Rate C1 MECHANICAL C14 Controls Option 1A - Renovation to Existing Building 8,422 m2 56.70 477,500 New DDC Control to renovated area LEED Gold Best Practice & Commissioning Option 1B - Addition to Existing Building 17,751 m2 50.40 894,700 New DDC Control to addition area LEED Gold Best Practice & Commissioning Option 2 New Construction 26,173 m2 75.60 1,978,700

Total HVAC \$26,961,900





Total Pool Mechanical

Option 2 New Construction

New 50M lap pool

New 25M lap pool New leisure pool

New hot pool

New Slide pool

\$2,744,300

June 23, 2022

\$3,350,900

April 12, 2022

Quantity Unit Rate

Amount

C2 ELECTRICAL				
C21 Service & Distribution				
Option 1A - Renovation to Existing Building	8,422	m2	105.00	884,300
Allowance for services and distribution to renovated area				
Option 1B - Addition to Existing Building	17,751	m2	157.50	2,795,800
Services and Distribution to renovated area New main services				
Option 2 New Construction	26,173	m2	178.50	4,671,900
Services and Distribution to renovated area				

Regina Aquatic Centre April 12, 2022 Class D Estimate

Quantity Unit Rate

8,422	m2	178.50	1,503,300
17,751	m2	210.00	3,727,700
	·	·	

Total Lighting, Devices & Heating \$10,727,300



Total Service & Distribution

Description

New main services

Project New Regina Indoor Aquatic Feasibility (IAF)

client City of Regina

\$8,352,000

Description

Option 2 New Construction

LED Lighting, devices system

LEED Gold Best Practice & Commissioning

June 23, 2022

26,173 m2 210.00 5,496,300

Regina Aquatic Centre April 12, 2022 Class D Estimate

Description Quantity Unit Rate Amount

C2 ELECTRICAL

C23 Systems & Ancillaries

ption 1A - Renovation to Existing Building	8,422	m2	63.00	530,600
Reconfiguration of existing system and ancillaries to meet current program				
area				
Fire alarm system				
Voice and data				
CCTV				
Card access (New)				
WAP				
AV system (Rough-ins)				
ption 1B - Addition to Existing Building	17,751	m2	84.00	1,491,100
Reconfiguration of existing system and ancillaries to meet current program				
area				
New systems including tie-in to existing				
Fire alarm system				
Voice and data				
CCTV				
Card access				
WAP				
AV system (Rough-ins)				
			04.00	2,198,500
ption 2 New Construction	26,173	m2	84.00	2,190,300

AV system (Rough-ins)

Fire alarm system Voice and data

CCTV Card access WAP

Regina Aquatic Centre April 12, 2022 Class D Estimate

Description Quantity Unit Rate Amount

D1 SITE WORK

D11.1 Site Preparation

Option 1A - Renovation to Existing Building	
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Site preparation included in Option 1B	included
Option 1B - Addition to Existing Building	

Striping of existing football field to accommodate new parking spaces. Includes 13,700 m2

rough and finish grading.

Option 2 New Construction				
Rough and finish grading of demolished Lawson Aquatic Center footprint	6,000	m2	9.00	54,000
Striping of existing football field to accommodate new parking spaces. Includes rough and finish grading.	13,700	m2	9.00	123,300



Total Site Preparation \$300,600



New Regina Indoor Aquatic Feasibility (IAF)

City of Regina

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9.00 123,300

Quantity Unit Rate Amount Description

D1 SITE WORK

D11.2 Hard Surfaces

parking layout

Option 1A - Renovation to Existing Building

New pavement are included in Option 1B

Option 1B - Addition to Existing Building

Allowance to make good existing parking lot pavement to accommodate new

New parking lot over existing football field, say light duty asphalt parking lot	13,700	m2	80.00	1,096,000
Allowance for new walkways and exterior concrete pads	685	m2	130.00	89,100
Allowance to make good existing parking lot pavement to accommodate new parking layout	1	sum	20,000.00	20,000
Option 2 New Construction				
New parking lot over existing football field, say light duty asphalt parking lot	13,700	m2	80.00	1,096,000
Allowance for new walkways and exterior concrete pads	685	m2	130.00	89,100

1 sum 20,000.00

20,000

Regina Aquatic Centre April 12, 2022 Class D Estimate

Description Quantity Unit Rate

D1 SITE WORK

D11.3 Site Improvements

Option 1A - Renovation to Existing Building

Assume site improvement for Option 1A is included in Option 1B

Option 1B - Addition to Existing Building

Allowance for new exterior spray pad	1	sum	100,000.00	100,000
Allowance for new exterior play space	1	sum	50,000.00	50,000
Allowance for exterior signage including digital signs	1	sun	250,000.00	250,000
Allowance exterior site fixtures includes (outdoor benches, picnic tables,	1	sum	50,000.00	50,000
bollards, gates, fences, etc.)				
Option 2 New Construction				
Allowance for new exterior spray pad	1	sum	100,000.00	100,000
Allowance for new exterior play space	1	sum	50,000.00	50,000
Allowance for exterior signage including digital signs	1	sun	250,000.00	250,000
Allowance exterior site fixtures includes (outdoor benches, picnic tables,	1	sum	50,000.00	50,000
bollards, gates, fences, etc.)				

\$2,410,200 Total Hard Surfaces

New Regina Indoor Aquatic Feasibility (IAF)

City of Regina

Total Site Improvements

June 23, 2022

\$900,000

Regina Aquatic Centre Class D Estimate

Description Quantity Unit Rate Amount

D1 SITE WORK

D11.4 Landscaping

Option 1A - Renovation to Existing Building

Allowance for landscaping to exterior spray pad and play area

Landscaping allowance to north and west of existing Lawson aquatic structure	1	sum	50,000.00	50,000
Includes allowance for planting, mulch and new trees				
Option 1B - Addition to Existing Building				
Landscaping allowance to north of new addition structure Includes allowance for planting, mulch and new trees	1	sum	150,000.00	150,000
Allowance for landscaping to exterior spray pad and play area	1	sum	50,000.00	50,000
Option 2 New Construction				
Landscaping allowance to new landscape to northwest of new aquatic center Includes allowance for protection of existing trees/plants, new plants, mulch and new trees	1	sum	200,000.00	200,000

Regina Aquatic Centre

April 12, 2022 Class D Estimate

Quantity Unit Rate Amount Description

D1 SITE WORK

D12 Mechanical Site Services

Option 1A - Renovation to Existing Building

Allowance for new fire main

Option 1B - Addition to Existing Building

Allowance for new fire main

Option 2 New Construction

Allowance for services relocation

Allowance for new site services and tie to existing main 1 sum Allowance for services relocation 100,000.00 100,000 1 sum

\$500,000

New Regina Indoor Aquatic Feasibility (IAF)

1 sum 50,000.00 50,000

City of Regina

April 12, 2022

Total Mechanical Site Services \$600,000

June 23, 2022

1 sum 50,000.00 50,000

1 sum

1 sum

50,000.00 50,000

100,000.00 100,000

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cription	Quantity	Unit	Rate	Amount	Description	Quantity	Unit	Rate	Amoun
SITE WORK					D2 ANCILLARY WORK				
D13 Electrical Site Services					D21.1 Demolition				
Option 1A - Renovation to Existing Building					Option 1A - Renovation to Existing Building				
Site lighting and security refresh	1	sum	40,000.00	40,000	Building Demolition Removal of exiting interior finishes (floor, ceiling & wall finishes)	5,522	m2	189.31	1,045
Option 1B - Addition to Existing Building					Removal of interior walls to accommodate new design layout. Removal of existing exterior cladding (brick and metal)				
Site lighting and security refresh	1	sum	40,000.00	40,000	Cut exterior wall to allow for new curtain wall				
Electrical site services reconfiguration	1	sum	80,000.00	80,000	Demolish existing exterior wall to allow for tie-in to new additional building				
					Remove existing stairs hand and guardrails				
Option 2 New Construction					Carefully remove existing exterior and interior doors				
					Remove existing exterior soffit				
New site lighting and security	1	sum	60,000.00	60,000	Remove existing roof covering, (metal and sbs) including insulation and make				
New incoming power and communication	1	sum	100,000.00	100,000	good to receive new				
					Demolish existing diving tower				
					Demolish existing pool tank and deck	1	sum	907,500.00	90
					Demolish existing main floor slab and steel structure				
					Demolish existing pool tanks including main lap tank, hot tab and teaching				
					pool				
					Removal of misc. tank and deck finishes, accessories				
					Option 1B - Addition to Existing Building				
					Site Demolition				
					Site preparation allowance - Removal of existing asphalt parking pavement to give way for the construction of new aquatic center addition building.	12,873	m2	18.00	23:
					Allowance for removal of existing fences	500	lm	25.00	12
					Allowance to remove misc. site structures (vehicle gates, site fixtures, etc.)	1	sum	20,000.00	20
					Option 2 New Construction				
					Allowance for demolition of existing Lawson Aquatic Center, including backfill o	of 4,400	m2	272.73	1,200
					existing pool				
					Site Demolition				
					Site preparation allowance - Removal of Existing Asphalt parking pavement to		m2	18.00	26
					give way for the construction of new aquatic center building, say approximate	е			
					area				
					Allowance for removal of existing fences	500	lm	25.00	1
					Allowance to remove misc. site structures (vehicle gates, site fixtures, etc.)	1	sum	20,000.00	2

Regina Aquatic Centre

Class D Estimate



Total Electrical Site Services

Project New Regina Indoor Aquatic Feasibility (IAF)

client City of Regina

\$320,000

Total Demolition

April 12, 2022

\$3,718,500

_{Date} June 23, 2022

Regina Aquatic Centre Class D Estimate

Description Amount Quantity Unit Rate

D2 ANCILLARY WORK

D21.2 Hazardous Materials

Ontion	1 A -	Renovation	+-	Evictina	Ruildin

Option 1A - Renovation to Existing Building				
Removal of harzardous material - as advised	1	sum	100,000.00	100,000
Option 1B - Addition to Existing Building				
Removal of harzardous material included above		NIL		
Option 1A - Renovation to Existing Building				
Removal of harzardous material - as advised	1	sum	100,000.00	100.000

Total Hazardous Materials \$200,000



Project New Regina Indoor Aquatic Feasibility (IAF)

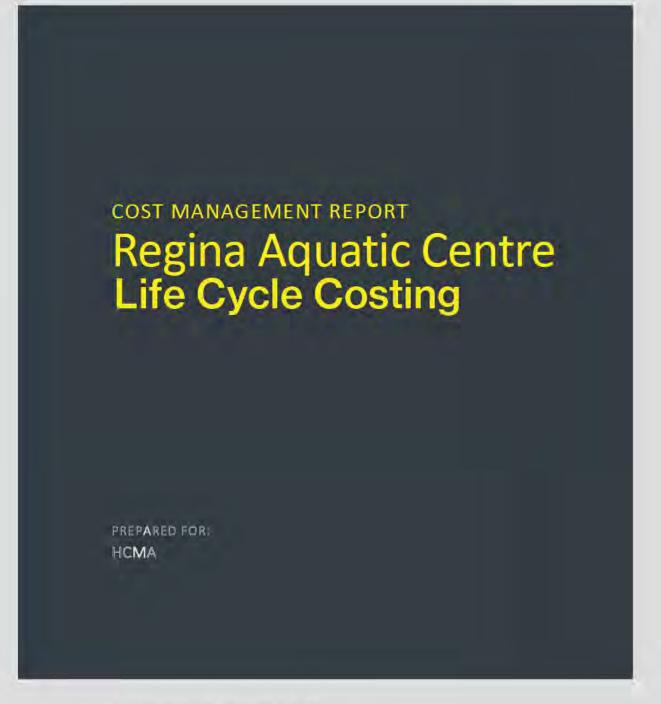
client City of Regina

April 12, 2022

_{Date} June 23, 2022

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135 21st Street East, Saskatoon, S7K 0B4 T306 242 9210

Cilent City of Regina Project
New Regina Indoor Aquatic Feasibility (IAF)

Regina Aquatic Centre Class D Lifecycle Estimate April 13, 2022

GFA:

26,173 m²

Option 1A & B - Renovation to Existing Building



The second second second	Ratio	Elemer	nt	Average Unit	Amount 1a	Amount 1b	Total Cost					The state of the s	*		
al control	G.F.A.		Unit	Cost	\$	\$	\$		Years 1-10	Years 11	-20	Years 21-30	Years 31-40	Years 41-50	Total
lement		Quantity	Unit				2 22 22 2	_	-	_	-			- Aran -	
SUBSTRUCTURE	0.45	1.045		27.26	450,000	512 700	3,096,800		1				4 450,000	25.000 4	475.00
A11.1 Standard Foundations	0.15	4,015		37.36	150,000			\$	- \$		- \$				175,00
A11.2 Special Foundations	0.00		m ²	0.00	120,000	4. 12. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.		\$	- \$		- \$	-	7-17		120,00
A12 Basement Excavation	0.00	0	m³	0.00	0	252,100	The Market No.	\$	- \$		- \$		\$ - 5	- \$	
STRUCTURE		1					11,447,500			_					
A21 Lowest Floor Construction	0.00		m ²	0.00	785,000			\$	- \$		- \$	•			450,00
A22.1 Upper Floor Construction	0.02		m ²	580.36	325,000			\$	- \$		- \$		\$ 300,000		350,00
A22.2 Stair Construction	0.00		risr	0.00	22,700			\$	- \$		- \$	•	\$ - :	-	36,30
A23 Roof Construction	0.00	0	m²	0.00	120,000	4,722,000		\$	- \$	9.	- \$	•	\$ 300,000 \$	- \$	300,00
EXTERIOR ENCLOSURE							11,712,300							11	
A31 Structural Walls Below Grade	0.00	0	m²	0.00	55,000	406,900		\$	- \$		- \$	150,000	\$ - 5	- \$	150,00
A32.1 Walls Above Grade	0.11	2,910	m ²	452.06	1,315,500	1,624,500		\$	- \$		- \$		\$ - 5	- \$	
A32.2 Structural Walls Above Grade	0.00	0	m²	0.00	0	0		\$	- \$		- \$		\$ - 5	- \$	
A32.3 Curtain Walls	0.01	291	m²	1,400.00	407,400	1,010,800		\$	- \$		- \$		\$ - 5	1,135,000 \$	1,135,00
A33.1 Windows & Louvres	0.00	0	m²	0.00	0	0		\$	- \$		- \$	-	\$ - 5	- \$	
A33.2 Glazed Screens	0.00	0	m ²	0.00	0	0		\$	- \$		- \$	•	\$ - ;	- \$	
A33.3 Doors	0.00	0	lvs.	0.00	54,100	57,400		\$	- \$		- \$		\$ - 5	44,600 \$	44,60
A34.1 Roof Covering	0.00	0	m²	0.00	2,256,400	4,434,300		\$	- \$		- \$	4,727,000	\$ 294,600	- \$	5,021,60
A35 Projections	0.00	0	m ²	0.00	30,000	60,000		\$	- \$.c	- \$	•	\$ - 5	- \$	-
PARTITIONS & DOORS			U.				2,251,300								
B11.1 Fixed Partitions	0.05	1,263	m ²	194.97	246,300	1,730,700		\$	- \$		- \$	220,000	\$ 197,700	- \$	417,70
B11.2 Moveable Partitions	0.00	0	m²	0.00	0	0		\$	- \$		- \$		\$ - 5	- \$	1.
B11.3 Structural Partitions	0.00	0	m²	0.00	0	0		\$	- \$		- \$		\$ - \$	- \$. 9
B12 Doors	0.00	36	lvs.	3,136.11	112,900	161,400		\$	28,800 \$		28,800 \$	28,800	\$ 28,800 \$	65,700 \$	180,90
FINISHES							9,766,700								
B21 Floor Finishes	0.32	8,422	m²	113.74	957,900	2,107,600		\$	- \$		1,259,000 \$	485,000	\$ 1,416,400	- \$	3,160,40
B22 Ceiling Finishes	0.26	6,855	m²	416.89	2,857,800	1,760,300		\$	- \$		93,200 \$	93,200	\$ 230,200	93,200 \$	509,80
B23 Wall Finishes	0.55	14,404	m ²	101.88	1,467,500	615,600		\$	623,200 \$		623,200 \$	677,500	\$ 1,420,100	623,200 \$	3,967,20
FITTINGS & EQUIPMENT							12,047,000					-73			
B31.1 Metals	1.00	26,173	m ²	3.00	78,600	169,600		\$	- \$		- \$	-	\$ - 5	- \$	
B31.2 Millwork		26,173		6.43	168,400			\$	- \$		- \$		\$ 596,100 \$		596,10
B31.3 Specialties		26,173		7.06	184,900			\$	62,500 \$		62,500 \$	562,500			924,80
B32 Equipment		26,173		112.08	2,933,400			\$	- \$		150,000 \$	2,129,000			6,884,00
B33.1 Elevators		26,173		5.16	135,000			\$	- \$		31,500 \$				283,50
MECHANICAL							23,257,700								
C11 Plumbing and Drainage	1.00	26,173	m²	55.51	1,452,800	4,082,700		\$	- \$	ć.	- \$	1,935,000	\$ - 5	1,935,000 \$	3,870,00
C11.5 Pool Mechanical		26,173		26.48	693,000			\$	- \$		- \$				1,524,60

Cilent City of Regina



C12	Fire Protection	1.00	26,173	m²	17.74	464,300	782,800		\$ -	\$ - \$	1.3	\$ 310,000	\$	\$ 310,000
C13	HVAC	1.00	26,173	m²	152.04	3,979,400	9,598,900		\$	\$ - \$	10,180,000	\$	\$	\$ 10,180,000
C14	Controls	1.00	26,173	m²	18.24	477,500	894,700		\$ -	\$ 205,000 \$	205,000	\$ D-	\$ 205,000	\$ 615,000
C2 ELECT	RICAL							10,932,800						
C21	Service & Distribution	1.00	26,173	m²	33.79	884,300	2,795,800		\$	\$ - \$	l'Ar 1	\$ 3,128,000	\$ -	\$ 3,128,000
C22	Lighting, Devices & Heating	1.00	26,173	m²	57.44	1,503,300	3,727,700		\$ -	\$ 150,000 \$	4	\$ 1,308,000	\$ 4	\$ 1,458,000
C23	Systems & Ancillaries	1.00	26,173	m²	20.27	530,600	1,491,100		\$ 1.4	\$ 1,620,000 \$		\$ 1,620,000	\$ •	\$ 3,240,000
Z1 GENER	RAL REQUIREMENTS & FEES							13,792,900						
Z11	General Requirements	14.8%				3,665,800	7,169,200		\$ 	\$ - \$	74	\$ 	\$ *	\$ 150
Z12	Fee	3.5%				866,900	2,091,000		\$ 04	\$ - \$	4	\$ (-	\$ 3	\$ - 1
NET BUILD	DING COST							98,305,000						\$ 49,032,500



Project
New Regina Indoor Aquatic Feasibility (IAF)

Date June 23, 2022

Regina Aquatic Centre Class D Lifecycle Estimate April 13, 2022



Element		Ratio G.F.A.	Eleme Quantity		Average Unit Cost	Amount \$	Total Cost \$		Years 1-10		Years 11-20	Years 21-30		Years 31-40	Years 41-50		Total
A1 SUBSTRUCTUR	E						4,197,900	-		Ì							
A11.1 Standa	ard Foundations	0.72	18,938	m²	50.00	946,900		\$	10	\$		\$ 1.0	\$		\$ 	\$	*
A11.2 Specia	l Foundations	0.72	18,938	m²	150.00	2,840,800		\$	4	\$		\$ 4	\$	i i	\$ e de	\$	124
A12 Basem	nent Excavation	0.08	2,000	m³	205.10	410,200		\$	14	\$	g è	\$ 4	\$	14	\$ 4	\$	9
A2 STRUCTURE							14,141,300										
A21 Lowes	t Floor Construction	0.72	18,938	m²	241.47	4,573,000		\$	1.7	\$	+	\$ T-V	\$		\$ 7	\$	-
A22.1 Upper	Floor Construction	0.28	7,235	m²	355.44	2,571,500		\$	-	\$		\$ 1.	\$		\$ 13	\$	-
A22.2 Stair C	Construction	0.00	88	risr	568.18	50,000		\$		\$		\$ 8	\$		\$ 56,000	\$	56,000
A23 Roof C	Construction	0.72	18,938	m²	366.81	6,946,800		\$	-	\$		\$ 	\$		\$ 191	\$	-
A3 EXTERIOR ENC	LOSURE						11,954,000										
A31 Struct	ural Walls Below Grade	0.04	929	m²	537.71	499,400		\$		\$	- (4)	\$ •	\$		\$	\$	-
A32.1 Walls	Above Grade	0.25	6,500	m²	450.00	2,925,000		\$	J	\$		\$ 	\$		\$ 	\$	
A32.2 Struct	ural Walls Above Grade	0.00	0	m²	0.00	0		\$		\$		\$ 4	\$	4	\$ 	\$	i e n.
A32.3 Curtai	n Walls	0.05	1,300	m²	1,400.00	1,820,000		\$	1.4	\$	-	\$ 8	\$		\$ 1,450,000	\$	1,450,000
100 J - 1 1 4 4													14			.0	

- Ś

114.660 S

31 PARTITIO	ONS & DOORS						2,855,800				
A35	Projections	0.00	50	m²	2,000.00	100,000		\$ -	\$ n¥r	\$ 1	\$ 3 - 1
A34.1	Roof Covering	0.72	18,938	m²	344.46	6,523,500		\$ 9	\$ 1 3	\$ 6,850,000	\$ 100
A33.3	Doors	0.00	16	lvs.	5,381.25	86,100		\$ G.	\$ 9	\$ 15/	\$ 9
A33.2	Glazed Screens	0.00	0	m²	0.00	0		\$ -	\$ 1-	\$ 14	\$ (-)
A33.1	Windows & Louvres	0.00	Ō	m²	0.00	0		\$ 10-	\$	\$	\$ 1.8
A32.3	Curtain Walls	0.05	1,300	m²	1,400.00	1,820,000		\$ r e	\$ 50	\$ *	\$ =
A32.2	Structural Walls Above Grade	0.00	0	m²	0.00	0		\$ -	\$ 1	\$ 4	\$ 1-1
A32.1	Walls Above Grade	0.25	6,500	m ²	450.00	2,925,000		\$	\$ -	\$	\$

B21	Floor Finishes	1.00	26,173	m²	117.16	3,066,400		\$ 2.1	\$ 499,050	\$
2 FINISH	ES						7,235,700			
B12	Doors	0.01	141	lvs.	2,155.32	303,900		\$ 28,800	\$ 28,800	\$
B11.3	Structural Partitions	0.00	0	m²	0.00	0		\$ 100	\$ 1-2	\$
B11.2	Moveable Partitions	0.00	0	m²	0.00	0		\$ 2	\$ -	\$
B11.1	Fixed Partitions	0.50	13,087	m²	195.00	2,551,900		\$	\$ 3	\$

78 64 2 058 300



Project New Regina Indoor Aquatic Feasibility (IAF)

June 23, 2022

255,000 \$

1,110,000 \$

- \$

252,900 \$

- \$

- \$

B23	Wall Finishes	1.28	33,602	m²	62.82	2,111,000		\$	537,900	\$ 537,900 \$	575,850	\$ 1,023,700 \$	696,200	\$	3,371,550
B3 FITTIN	GS & EQUIPMENT						10,898,400								
B31.1	Metals	1.00	26,173	m²	8.88	232,300		\$	-	\$ - \$	-	\$ - \$	1151	\$	±1
B31.2	Millwork	1.00	26,173	m²	22.50	588,900		\$	C (*)	\$ - \$	-	\$ 618,000 \$	-	\$	618,000
B31.3	Specialties	1.00	26,173	m²	70.81	1,853,200		\$	86,000	\$ 86,000 \$	586,000	\$ 578,000 \$	86,000	\$	1,422,000
B32	Equipment	1.00	26,173	m²	302.18	7,909,000		\$		\$ 160,000 \$	2,700,000	\$ 2,860,000 \$	(*)	\$	5,720,000
B33.1	Elevators	0.00	3	stop	105,000.00	315,000		\$	1,4	\$ 31,500 \$	220,500	\$ - \$	31,500	\$	283,500
C1 MECH	ANICAL						23,009,800	-			-		-	-	
C11	Plumbing and Drainage	1.00	26,173	m²	207.00	5,417,800		\$	-	\$ - \$	1,895,000	\$ - \$	1,895,000	\$	3,790,000
C11.5	Pool Mechanical	1.00	26,173	m²	46.60	1,219,700		\$	52	\$ - \$		\$ 1,340,000 \$	521	\$	1,340,000
C12	Fire Protection	1.00	26,173	m²	38.59	1,010,000		\$	14	\$ - \$	-	\$ 250,000 \$	-	\$	250,000
C13	HVAC	1.00	26,173	m ²	511.35	13,383,600		\$	- 6	\$ - \$	10,050,000	\$ - \$	- 14c	\$	10,050,000
C14	Controls	1.00	26,173	m²	75.60	1,978,700		\$	1.2	\$ 290,000 \$	290,000	\$ - \$	290,000	\$	870,000
C2 ELECT	RICAL						12,366,700					- things			
C21	Service & Distribution	1.00	26,173	m²	178.50	4,671,900		\$	-	\$ - \$		\$ 3,750,000 \$	-	\$	3,750,000
C22	Lighting, Devices & Heating	1.00	26,173	m²	210.00	5,496,300		\$	12	\$ - \$	-	\$ 1,375,000 \$	4	\$	1,375,000
C23	Systems & Ancillaries	1.00	26,173	m²	84.00	2,198,500		\$	12	\$ 1,650,000 \$	1,2	\$ 1,650,000 \$	7	\$	3,300,000
Z1 GENE	RAL REQUIREMENTS & FEES						13,432,300								
Z11	General Requirements	12.0%				10,399,200		\$	17	\$ - \$	07	\$ - \$	1.2	\$	i - .
Z12	Fee	3.5%				3,033,100		\$	-,-	\$ - \$	-	\$ - \$	-	\$	-
NET BUILI	DING COST						100,091,900							\$	47,360,860



New Indoor Aquatics Facility

Operational Budget Forecasts











New Indoor Aquatics Facility

Operational Budget Forecasts

Date May 18, 2022

Version 03 - DRAFT

City of Regina

Projecting the operational costs for a new indoor aquatics facility at the feasibility stage is a necessary yet difficult task. The process typically entails a review of existing budgets at like facilities, projecting use and user fees, and strategic thinking about new types of staffing functions that will need to be undertaken. Since detailed floor plans for facilities are not readily available at the feasibility stages of a project, these estimates are not usually considered more accurate than +/-20% but do give decision makers order of magnitude as to ongoing operating impacts of development. As the planning process evolves, more information will be developed about facility floor plans and mechanical systems and as the project gets closer to opening, market information will be able to be updated thus more accuracy in operating cost projections can be expected.

For the New Indoor Aquatics Facility in the City of Regina, the feasibility stage operating costs projections have been developed by City staff and the consulting team. They are founded in the City's existing cost structures and utilization statistics from the existing Lawson and Sandra Schmirler aquatics venues and have been informed by a number of workshops with key aquatics stakeholders. The following bullets summarize the key assumptions made at this stage of project planning. An overview of the projection follows.

Key operating budget assumptions:

- 1. The new facility will have approximately 238% (5,022sq.m. to 16,996sq.m.) more "wet space" and 185% (3,400sq.m. to 9,678sq.m.) more "dry space" (not including the Field House) than the existing Lawson Aquatics Centre (LAC).
- 2. The new facility is expected to be 15% (for dry space) to 25% (for wet space) more mechanically efficient than the existing LAC.
- 3. The new facility will see approximately 650,000 swim visits annually, combining usage and user fee patterns experienced at the LAC and Sandra Schmirler Leisure Centre.
- 4. The new facility will operate 50 weeks per year and will have 67 peak and 47 non-peak operating hours per week.
- 5. The new facility will require at least 24 FTE plus around 71,400 guarding hours throughout the year.

Based upon these assumptions, and a few others, the following operating budget has been developed. It is important to note that this includes costs incurred for both programming and facility services and that these costs do not include the costs associated with the operations of the Field House

	Projection	Assumption
Revenues		
Drop-in fees	\$691,350.74	Total drop-in visits x weighted drop-in fee
Passholder fees	\$1,099,710.67	Total passholder visits x revenue per visit
Registered Programs - Adult	\$196,800.00	Existing Lawson + SSLC (2021 budget) x 1.5
Registered Programs - Child	\$866,700.00	Existing Lawson + SSLC (2021 budget) x 1.5
Program Room Rentals	\$14,040.00	3 rooms, average of 3 bookings per week per room, \$30 per booking

June 23, 2022

	Projection	Assumption
Pool Rentals: Primary Competition / Training	\$313,300.00	Existing Lawson (2021 budget)
Pool Rentals: Secondary Competition / Training	\$156,650.00	Existing Lawson (2021 budget) x 50%
Pool Rentals: Leisure / Party	\$40,000.00	Average of 4 parties per week, 50 weeks per year, \$200 per party
Gymnasium Rentals	\$41,405.00	Average 35% of prime time use throughout entire year at \$35 per hour
Sponsorships	\$0.00	Assumed to be attributed to capital costs
Total Revenues	\$3,419,956.41	
Expenses		
Salary and Benefits		
Supervisor	\$80,699.00	1.0 FTE @ \$80,699 (step 3)
Facility Supervisors (casual)	\$219,600.00	6.0 FTE @ \$36,600
Sport Program Specialist	\$34,440.00	0.5 FTE @ \$68,880 (step 3)
Fitness Specialist	\$34,440.00	0.5 FTE @ \$68,880 (step 3)
Dryland Training Specialist (Fitness, Sport & Special Event)	\$50,522.00	1.0 FTE @ \$50,522 (2nd year)
Special Event Specialist – Sr Programmer	\$72,772.00	1.0 FTE @ \$72,772 (Schedule C – 4A)
Admin Clerk	\$110,814.00	2.0 FTE @ \$55,407 (step 3)
Scheduling	\$57,517.00	1.0 FTE @ \$57,517 (step 3)
Aquatic Program Specialist	\$137,760.00	2.0 FTE @ \$68,880 (step 3)
Aquatic Training Specialist	\$151,566.00	3.0 FTE @ \$50,522 (2nd year)

City of Regina

	Projection	Assumption	
Customer Service (Cashiers)	\$203,166.00	6.0 FTE @ \$33,861 (\$16.36/hr)	
Casual Guards	\$1,392,300.00	Total estimated guard hours at average hourly rate	
Benefits	\$446,437.95	21% (same ratio as Lawson 2021 budget)	
Subtotal Salary and Benefits	\$2,992,034		
Training and Travel Expenses	\$8,200.00	Existing Lawson (2021 budget) x 2	
Office and Administrative Expenses	\$12,800.00	Existing Lawson (2021 budget) x 2	
Professional and External Services Expenses	\$66,200.00	Existing Lawson (2021 budget) x 2	
Material Goods and Supplies Expenses	\$56,000.00	Existing Lawson (2021 budget) x 2	
Other External Expenses	\$600.00	Existing Lawson (2021 budget) x 2	
nternal Expenses	\$9,600.00	Existing Lawson (2021 budget) x 2	
Facilities Operations - Wet			
Maintenance	\$725,798.37	Square foot rate from Lawson 2021 actual extrapolated to new square footage	
Operations	\$1,911,992.59	Square foot rate from Lawson 2021 actual extrapolated to new square footage	
Jtilities	\$760,049,18	Square foot rate from Lawson 2021 actual extrapolated to new square footage less 25% to account for efficiencies	
Building Services	\$69,160.64	Square foot rate from Fieldhouse 2021 budget extrapolated to new square footage	
Facilities Operations - Dry			
Maintenance	\$116,418.42	Square foot rate from Fieldhouse 2021 budget extrapolated to new square footage	
Operations	\$1,445,123.04	Square foot rate from Fieldhouse 2021 budget extrapolated to new square footage	



Assumption Square foot rate from Fieldhouse 2021 budget extrapolated to new square footage less 15% to account for efficiencies Square foot rate from Fieldhouse 2021 budget extrapolated to **Building Services** new square footage Subtotal Facilities Operations (Wet and Dry) \$5,791,250 \$8,783,284 Net Operating Surplus/(Deficit) -\$5,363,328 39% Lifecyle replacement \$3,070,200 2.1% of replacement (\$146.2M)

*not including operational costs of existing Field House facility

As can be seen the facility is expected to operate at a deficit of approximately \$5.3M and have a cost recovery of 39% (not including capital amortization of reserve budgeting). It is also important to note that for a facility like this, it would be prudent to be contributing approximately \$3.1M per year to a life cycle reserve to ensure the service can be perpetuated over time.



New Indoor Aquatics Facility

Economic Impact Analysis





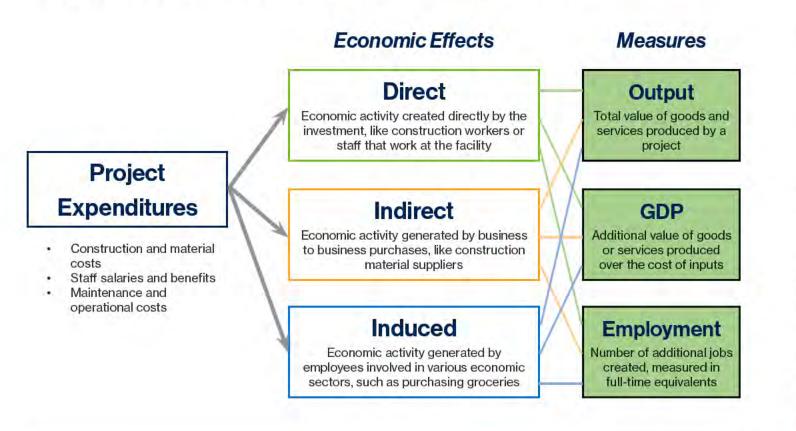
Introduction

The benefits that communities realize from investing in indoor recreation amenities are significant and wide-ranging. These benefits include creating direct employment opportunities for residents during construction and operations and supporting other businesses that provide goods and that are purchased to support facility operations. Some of the most important benefits that are realized are often impossible to quantify – these are the 'social' goods that are generated, such as supporting healthy lifestyles, providing a new and positive place to gather, and by simply bringing more people together more often.

As the City of Regina explores the feasibility of a new indoor aquatic facility, estimating the tangible economic impacts that such a project may have illustrates that such investments have wide-ranging benefits to the regional and provincial economy. Investing in a new indoor aquatic facility will provide enhanced services and opportunities for residents to lead healthy lifestyles, would better enable community groups to deliver training and programs, and would increase tourism to the City through major event and competition hosting. This analysis projects the impact that this investment may generate within Regina and Saskatchewan's economy.

Analysis Approach

The most common approach for analysing economic impacts is to multiply facility capital construction costs and ongoing operating costs by several economic multipliers developed by Statistics Canada that help to estimate the potential impact of a project on several economic measures, including output, gross domestic product, and number of jobs created. This analysis will focus on these measures and explain their impact.



The approach used for this analysis is illustrated in the diagram above. All project expenditures in the form of capital costs and ongoing operating costs have been estimated based on high level construction cost estimates and several years' worth of actual operating expenses for the Lawson Aquatic Centre and other analogous data. These expenditures are then multiplied by the direct, indirect, and induced effects for each economic sector as calculated by Statistics Canada, producing measures of impact for three economic indicators: output (total value of goods and services produced by the project), gross domestic product (additional value of goods or services generated by the project), and employment (number of additional jobs created during construction and operation).

Analysis Highlights

- Total annual swim visits: 650.000+
- Total estimated construction expenditures: \$146.2 million
- Total estimated annual operating expenditures: \$8.78 million
- Total estimated annual operating revenues: \$3.42 million
- Estimated operational cost recovery percentage: 39%
- Total construction economic output associated (direct, indirect, induced): \$235,758,983
- Total construction GDP generated (direct, indirect, induced): \$115,321,660
- Total construction employment created (direct, indirect, induced in FTEs): 886

Construction

Based on the preliminary design concept, the capital construction cost for the facility is estimated to be approximately \$146 million (Class D, +/- 20-25%). This estimate includes both construction costs and soft costs such as architectural, mechanical, and landscaping services. These expenses will be incurred by the City of Regina over a multi-year period, estimated to be two to three years at the time of writing.

Effect Level	Output	GDP	Employment (FTEs)
Direct	\$146,161,800	\$59,780,176	547
ndirect	\$60,803,309	\$36,686,612	197
nduced	\$28,793,875	\$18,854,872	142
Total	\$235,758,983	\$115,321,660	886

Note: Stats Can 'Other engineering construction' industry multiplier used to calculate impact.

The total estimated economic impacts generated by facility construction include \$146 million in direct output effect, an additional \$59.8 million in direct GDP generation, and the creation of approximately 547 jobs. The duration of these effects, particularly direct and induced, are most likely to be realized during primarily the construction phase of the project. In total, the project has the potential to generate more than \$235 million in economic output for the city and provincial economy, \$115 million in GDP, and create nearly 900 jobs.

Operations

Annual operating projections for the new indoor aquatics facility were developed based on staff input on estimated revenues, expenses on salaries and benefits, and other annual operating expenses such as maintenance, utilities, and so forth. Inputs for this analysis are derived from the Operational Budget Forecasts report presented under a separate cover (dated May 18, 2022).

ffect Level	Output	GDP	Employment (FTEs)
irect	\$3,419,956	-\$2,079,718	60
direct	\$4,803,372	\$2,790,477	26
duced	\$2,410,017	\$1,571,563	13
otal	\$10,633,346	\$2,282,322	99

Note: multiple Stats Can industry multipliers were used to calculate impact; jobs estimated per \$1 million in

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If on an average year the City were to host 6 regional events, 2 provincial events, and 2 national or international events at the new facility (based on staff estimates of future expected swim events hosted in Regina per year at 16 regional, 9 provincial, and 7 national/international respectively) the total economic impact generated by the new facility is estimated to be, based on Sport Tourism Canada visitor profiles described on the previous page:

- \$121,818 for 6 regional events at the new facility
- \$331,402 for 2 provincial events
- \$2,721,150 for 2 national / international events

While not all of this estimated \$3.2M in economic activity generated by event hosting at the new facility would go directly towards facility revenues, it can be assumed that at least some will help to support facility operations through spending on admissions, tickets, rentals, food, and other goods and services. As will be presented in the case study below, there is strong potential for a new indoor aquatics facility to host significantly more events than historical averages (i.e. the City of Regina has had to turn events away due to lack of capacity), particularly when including some of the indirect and induced economic impacts,

Case Study

Repsol Sport Centre, Calgary, AB

Repsol Sport Centre is owned by the City of Calgary and has been operated by the Lindsay Park Sports Society for more than 30 years. As a world class facility, the Centre regularly hosts swim events and competitions and is utilized by athletes of all levels - from amateur to elite - to train and achieve their goals.

The Centre features two 8-lane, 50 m pools, a dive tank, 1 m and 3 m springboards, 5 m, 7.5 m, and 10 m diving platforms, a teach pool, hot tub, steam room, cold tub, accessibility features, and spectator seating. As part of a larger complex, the Centre also has a fitness centre, fitness studio, two gymnasiums, two running tracks, two multipurpose rooms, food services, medical clinics, social spaces, and meeting rooms. On average, more than 325,000 swims are accommodated at the Repsol Sport Centre per year.

The Centre regularly hosts events and competitions, helping to drive economic growth in Calgary. Between 2017 and 2019, the Centre hosted between 56 and 59 events per year and around 1.5 million visitors. The percentage of prime time hours booked for sport training at the Centre is on average 95%. The Centre employs more than 300 people and helps to support 36 sport partner businesses and is home to four tenants. The Centre received approximately \$1.9 million in operating and capital grants from the City of Calgary in 2019. Due to its age, the Centre no longer meets FINA standards for high level competition and training.

Event Hosting Success: 2019 Swimming Canada Junior Championship

The City of Calgary successfully hosted the 2019 Swimming Canada Junior Championship at the Repsol Sport Centre. The Championship saw more than 550 youth swimmers from across Canada travel to Calgary to compete. The event bid was a collaborative effort between the Centre, Tourism Calgary, and the City of Calgary.

The success of the event in 2019 led to the Centre being selected once again to host the Championship in 2021. Economic impact analysis for the 2021 Championship forecast nearly \$3 million in economic impact being generated (prior to COVID). Planning is now underway to expand and enhance the Centre.





Image Credits: https://gecarchitecture.com/projects/repsol-sport-centre-master-plan-and-functional-programming/ & https://swirnalberta.ca/canadian-junior-championships-in-calgary-this-week/

Project
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¹ https://sporttourismcanada.com/value-of-sport-tourism-in-2019-tops-7-billion/

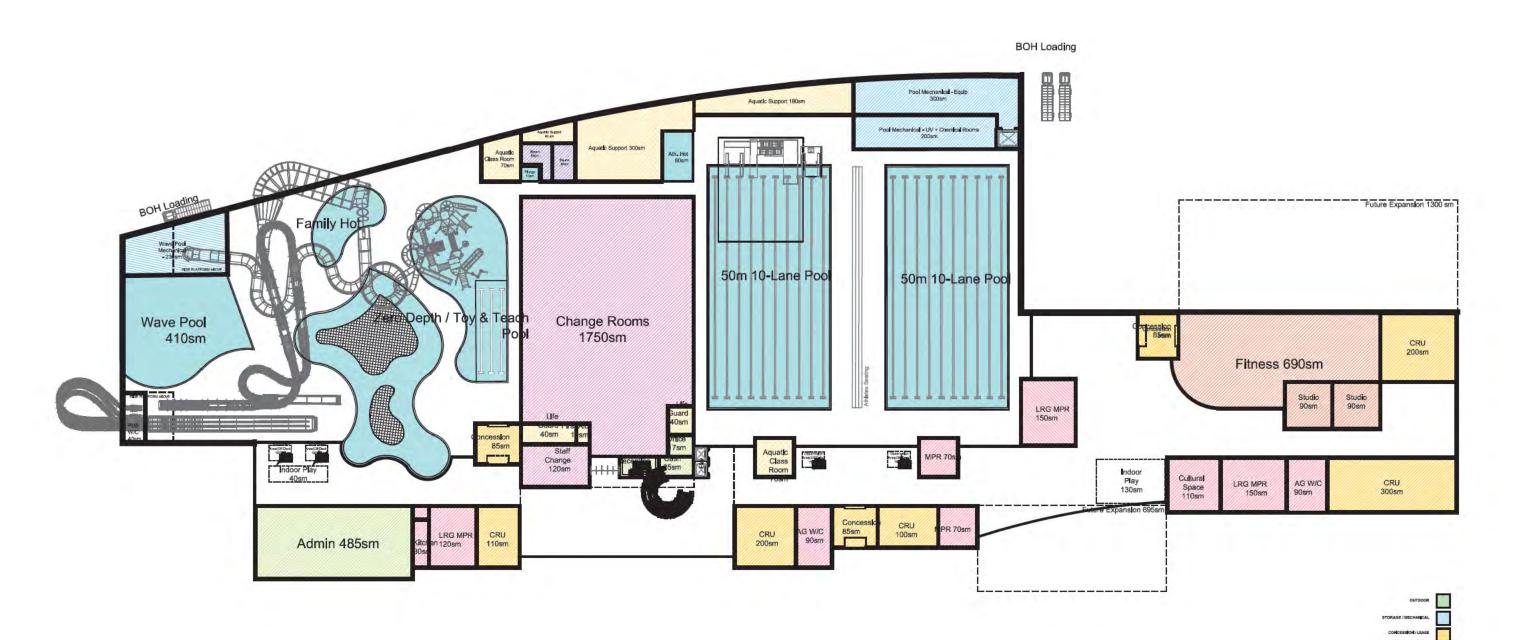
² https://sporttourismcanada.com/wp-content/uploads/2021/09/STC-Value-of-Sport-Tourism-Charts-from-2019-ENG.pdf

³ https://sporttourismcanada.com/wp-content/uploads/2021/09/2019-Sport-Tourism-Chart-by-province-and-city-ENG.pdf

Appendix E - Test Fit Floorplans





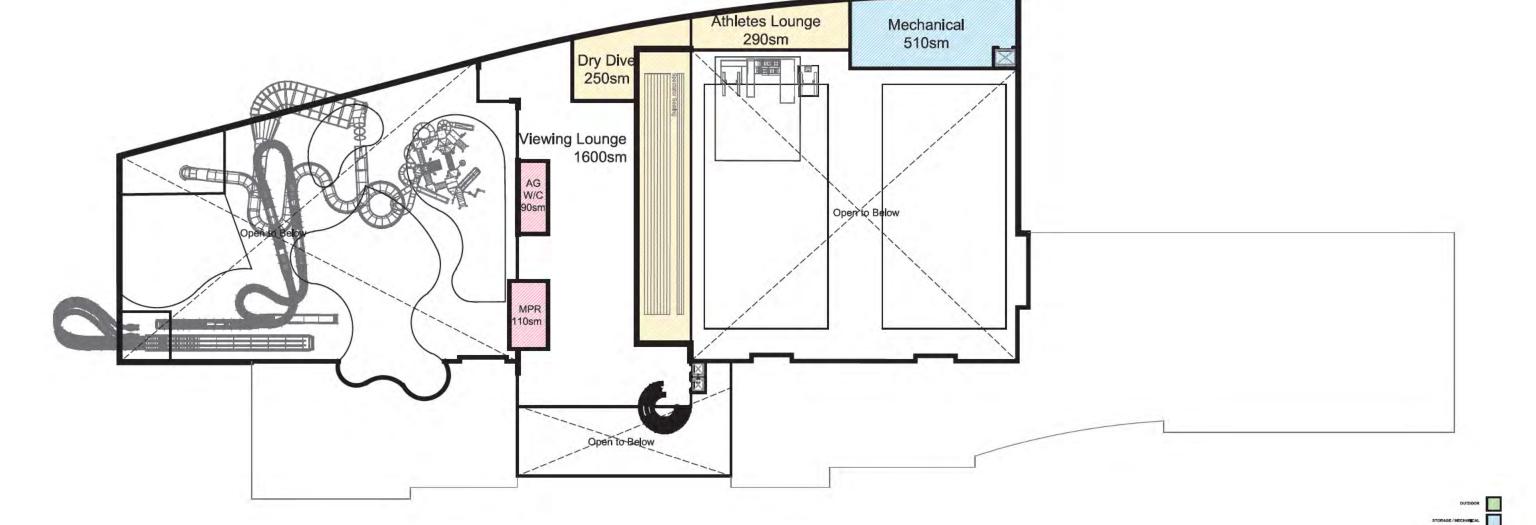


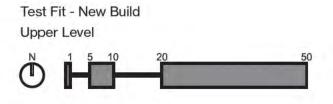
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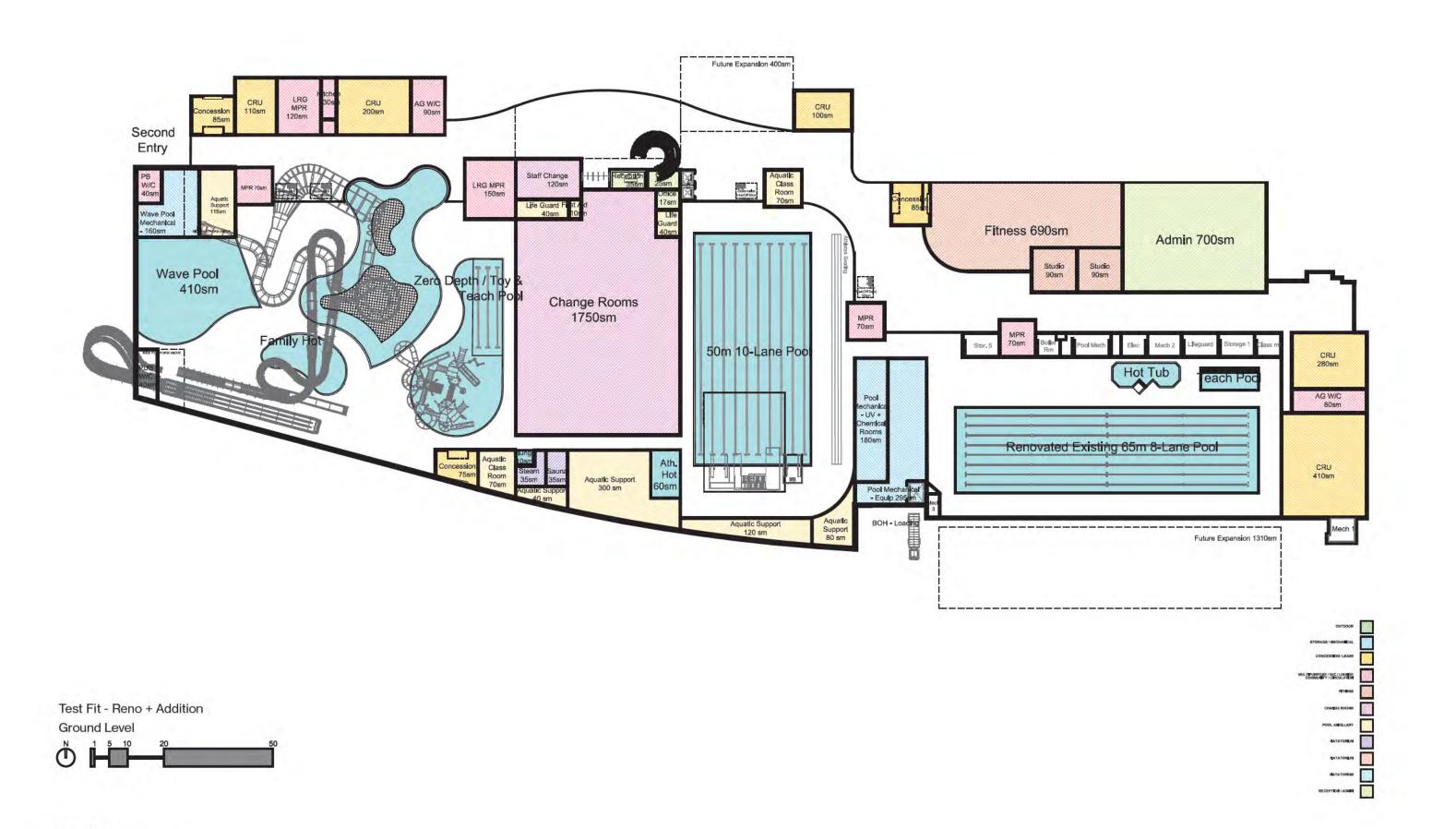
RECEPTION / ADAPS Test Fit - New Build Ground Level

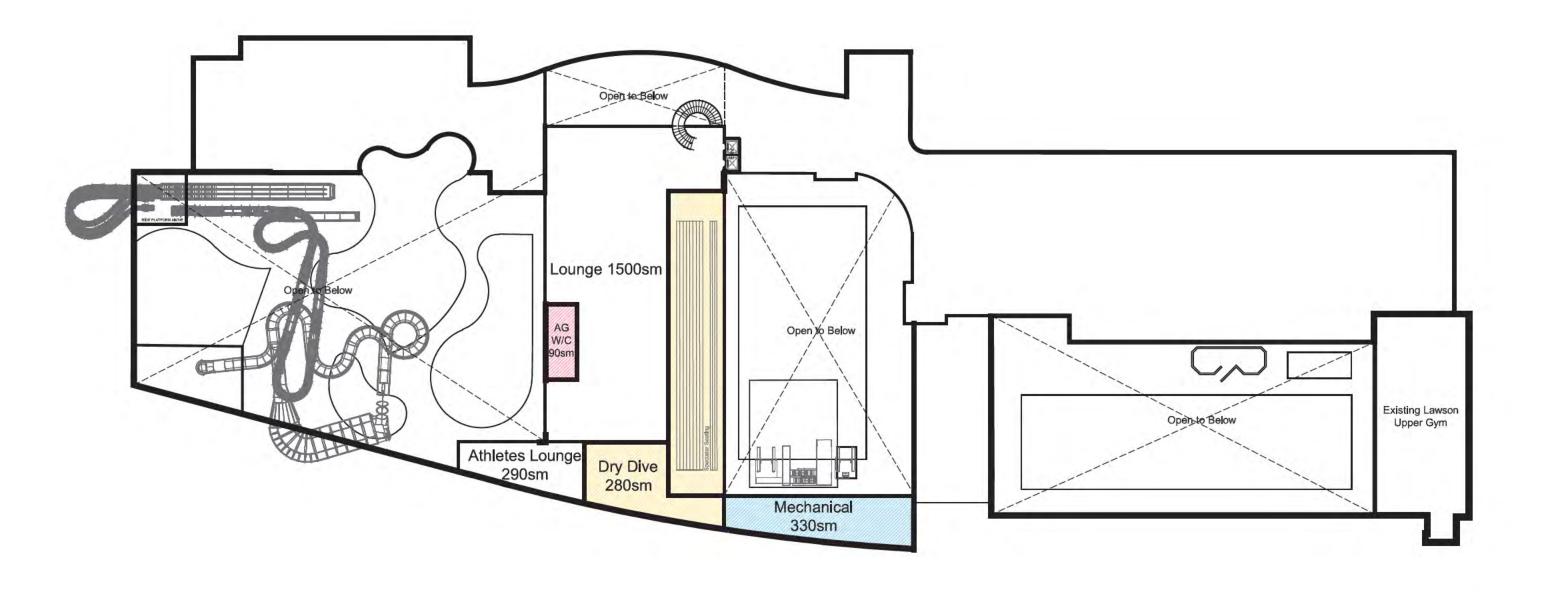






MULTPURPOSE/WC/LOUNCE COMMUNITY/CIRCULATION





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Test Fit - Reno + Addition





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