



THE CITY OF RED DEER

Ice Facilities Plan

FINAL
August 15th, 2016



THE CITY OF RED DEER

Ice Facilities Plan

FINAL
August 15th, 2016

Executive Summary

The City of Red Deer undertook the development of an Ice Facilities Plan in order to outline a future direction for indoor and outdoor ice facility provision. The Plan provided the opportunity to assess the current situation; identify areas of enhancement; analyze changing local and regional dynamics related to ice provision; and clarify future needs for infrastructure. The Plan provides The City with a planning document that can help inform and guide future decision making.

The Plan was developed using a number of research inputs, including engagement with facility users. The adjacent graphic illustrates the research inputs that were considered in the development of the Plan.

Note: The research findings are summarized in this Plan document and available in further detail in a separate Research Summary Report document.

A number of key research findings and considerations emerged and provided a basis for the development of the Plan. These include the following.

- The current of provision of indoor ice sheets in Red Deer is consistent with comparably sized urban municipalities (1 sheet for every 16,801 residents). Benchmarking confirms that it is reasonable to expect provision to decrease as the city grows.
- Analysis of utilization data indicates that peak time utilization of indoor ice sheets is 83%; non-peak utilization is 51%.
- Satisfaction levels among indoor and outdoor ice users are generally high, although room exists for ongoing improvement.
- The City provides a significantly higher quantity of outdoor ice sheets in comparison to other urban municipalities.
- Multi-sheet venues provide a number of benefits including increased operational efficiency, expanded event and competition hosting capacity, and are generally preferred by user groups.
- The City has, and will need to continue investing significant dollars to sustain current facilities. A scheduled 2019 assessment of the Kinex Arena will further clarify life expectancy and future capital investment required beyond 2020.
- The decommissioning of the Red Deer Arena is concerning in the short term for many user groups and will impact overall provision. The situation, however, will force The City and user groups to further identify efficiencies and methods to most effectively use available ice.



- A large proportion of outdoor ice users drive to their site of choice. Weather and ice quality are key drivers of use.
- Available data suggests that outdoor ice rink utilization varies greatly from site to site.

The Plan identifies a Provision Philosophy (Section 4) for ice facilities in Red Deer. The following Vision and Goals form a basis and foundation for how indoor and outdoor ice facilities may be provided in the future.

Vision for Ice Facilities in Red Deer

Ice facilities in Red Deer are inclusive, supportive, and accessible while being vibrant gathering hubs for healthy physical activity and community engagement.

The City will additionally look to provide ice facilities in a manner that is consistent with provincial and national best practices. Key aspects of Canadian Sport for Life (CS4L) and the Long Term Athlete Development model (LTAD), a Framework for Recreation in Canada 2015, and Active Alberta will help guide The City's future provision of ice facilities and alignment will be sought whenever appropriate.

Ice Facility Goals

1. Ice facilities are planned, designed, and operated in **alignment with broader strategic planning and objectives of The City of Red Deer**.
2. Ice facilities are **available and affordable to all residents** for various activities including traditional organized sport, newly emerging sports and activities, and spontaneous/unscheduled utilization.
3. Ice facilities are **operated effectively and efficiently**, considering long-term sustainability.
4. Ice facilities in Red Deer are of high quality in relation to the intended level and appropriateness of use.
5. Ice facilities are designed and operated to **balance resident and visitor interests**, enhancing quality of life and capitalizing on opportunities to create economic benefits for Red Deer.

Strategic Directions

Section 5 of the document outlines twelve indoor and five outdoor Strategic Directions (recommendations). In some instances, the Strategic Directions identified are intended to re-align aspects of ice facility provision. Others are intended to simply reinforce existing practices or strategies that have already been initiated.

Inventory Management recommendations for indoor ice facilities include the following.

- Work with indoor ice user groups to further explore opportunities to maximize the use of existing facilities (Indoor Strategic Direction #1)
- Refresh the Ice Allocation Policy and Procedure (Indoor Strategic Direction #2)
- Enhance data collection and analysis practices (Indoor Strategic Direction #3)

Recommendations identified for **Current Indoor Infrastructure** include the following.

- Establish a base level of service (Indoor Strategic Direction #4)
- Establish a more formal protocol for facility lifecycle replacement budgeting (Indoor Strategic Direction #5)
- Use of the Facility Condition Index (FCI) or similar metric to inform reinvestment vs decommission (or replacement) decisions (Indoor Strategic Direction #6)

A key objective of the Strategy is to identify **Future Infrastructure** tactics for indoor ice facilities. Recommended design principles are suggested (Indoor Strategic Direction #7) to guide future capital development of new or enhanced indoor ice facilities. Targeted provision ratios are also outlined (Strategic Direction #8) which suggest that The City should strive to provide ice facilities at a provision ratio of one indoor ice sheet for every 15,000 residents. However as the city grows, it is realistic that provision ratios will decrease. Decision making triggers are also identified (Strategic Directions #9) and should be used moving forward to help validate need for new or refreshed facilities.

The recommendations provided for future indoor ice infrastructure in Red Deer ultimately culminate in the identification of an overarching strategic approach (Indoor Strategic Direction #10). This approach reflects the need to sustain existing ice sheets at the Collicutt Centre and Kinsmen Arenas. Exploration of upgrading the G.H. Dawe ice sheet to regulation size should be undertaken and is an important variable in the suggested approach for new facility development. As reflected in the chart below, it is anticipated that The City will need to explore the development of four new ice sheets over the next decade. Two of these sheets will replace existing facilities with a net addition of two additional sheets to the inventory.

Action	Suggested Approach	Timing	Net Impact
Replacement of the Red Deer Arena	1. Replace on the same site.	2018	0
Assessment of the Kinex Arena	1. Assess in 2019 (complete assessment). 2. Replace at the G.H Dawe (if existing surface can be upgraded to regulation) or Collicutt when facility requires decommissioning.	TBD	0
Addition of New Ice Surface to the Inventory	1. Determine/measure the extent to which the new RDC arena has met community need. 2. Explore potential partnerships. 3. Preference towards adding onto existing facility (Collicutt or partner).	2021	1
Addition of New Ice Surface to the Inventory	1. Preference towards adding onto existing facility (Collicutt or partner). 2. Explore potential partnerships and new site options if required.	2026+	1

While the above chart identifies an approach based on current analysis and information, it is important to note that ice facility needs and other community and regional dynamics are continuously evolving. The Plan identifies a number of factors that should be considered and further analyzed as final decision making occurs in the future.

Recommendations are also provided to help guide **Partnerships and Collaborations** pertaining to indoor ice provision.

- Increase dialogue with user groups (Indoor Strategic Direction #11)
- Use of the suggested Partnership Framework when exploring major indoor ice facility partnerships with regional municipalities, the private sector, and public sector organizations (Indoor Strategic Direction #12)

The five **Outdoor Ice Facility Strategic Directions** provide recommendations in a number of areas pertaining to outdoor rinks and sites and are noted below.

- Work towards defining a base level of service for outdoor rink in Red Deer which clarifies service expectations related to geographic balance, amenity provision standards, maintenance protocols, and the benefits/ impact of future major “hub” sites (Outdoor Strategic Direction #1)
- Continue to prioritize the collection of outdoor rink utilization data (Outdoor Strategic Direction #2)
- Designate selected outdoor rinks for organized group bookings (Outdoor Strategic Direction #3)
- Adapt maintenance standards for boarded and lit outdoor rinks (Outdoor Strategic Direction #4)
- Focus on increasing utilization of existing outdoor rinks before considering new development (Outdoor Strategic Direction #5)

An Implementation Strategy (Section 6) is also provided which highlights key next steps and an anticipated schedule for major capital upgrades and development. Implementation tactics are also embedded through the Strategic Directions as pertinent to the recommendations identified.

Table of Contents

1: Introduction and Project Context	1
2: Research Summary	4
3: Supply and Demand Analysis	12
Indoor Ice	13
Supply	13
Demand	17
Outdoor Ice	21
Supply	21
Demand	23
4: Strategic Alignment and Provision Philosophy	24
A Strategic Foundation for Ice Facility Provision	26
5: Strategic Directions	27
Indoor Ice Facilities Strategic Directions	29
Inventory Management	29
Current Infrastructure	33
Future Infrastructure	39
Partnerships and Collaborations	46
Outdoor Ice Facilities Strategic Directions	49
Current Inventory Management	49
Future Infrastructure Planning	53
6: Implementation	54
Indoor Ice Facilities	55
Financial Considerations	55
Future Planning Considerations	56
Other Implementation Tactics	57
Outdoor Ice Facilities	58
Financial Considerations	58
Future Planning Considerations	58
Other Implementation Tactics	58



1

Introduction and Project Context

The City of Red Deer believes in the value of recreation facilities and opportunities and invests significantly in these essential services. One of the largest areas of service The City provides within the recreation realm is ice facilities (indoor and outdoor). The City currently owns and operates five indoor ice arenas (six ice surfaces). One additional indoor ice arena is operated by a local non-profit at Westerner Park and another ice arena is currently being constructed by Red Deer College. The City also owns and maintains 75 outdoor ice surfaces which include 36 boarded rinks, 35 snowbank rinks, three pond rinks and a skating oval.

Facility	Number of Sheets	Year Built
Red Deer Arena	1	1952
Kinex Arena	1	1967
Kinsmen Community Arenas	2	1975, 1988
G.H. Dawe Community Centre	1	1983
Collicutt Centre	1	2000

The importance of developing a strategic direction for ice arena infrastructure is necessitated by a number of factors which will directly impact current and future ice arena supply in the Red Deer area. These factors include the following.

- Facility assessment data has identified issues with aging facilities that will require The City to determine approaches for reinvestment and/or replacement. *An updated assessment will be conducted in 2019 to determine the future service capacity of the Kinex Arena.
- The decommissioning of the Red Deer Arena occurred at the end of the 2015/2016 ice season with the replacement facility expected to open by the fall of 2018. In the meantime The City will have one less available ice sheet than in previous years.
- In the City's current 10-year capital plan, the G.H. Dawe Community Centre has been identified as the site for an additional ice arena to be built on in 2025.
- A new single sheet facility is under construction at Red Deer College; the facility is expected to have some level of community use but the exact parameters and quantity are undefined.

THE CITY OF RED DEER PROVIDES:

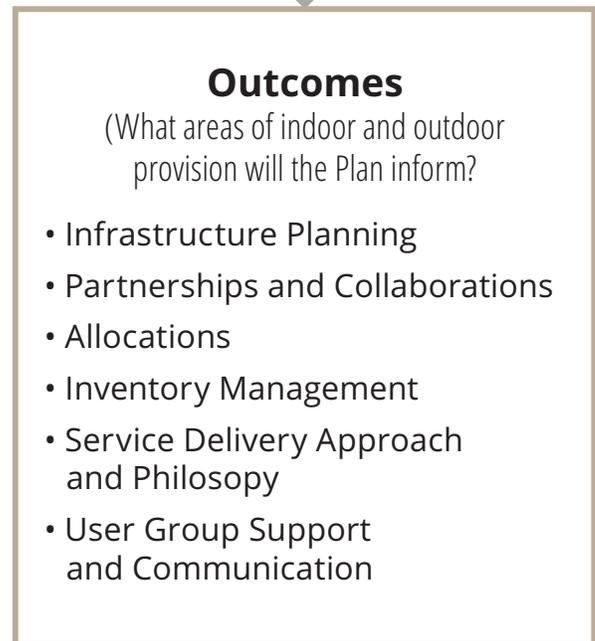
6 Indoor Ice Sheets

75 Outdoor Ice Surfaces



Broader community dynamics and strategic planning also support the need to develop a strategic plan for ice facilities. The City's 2014 Community Amenities Consultation demonstrated that recreation facilities, including ice arenas, are valued and are a future priority for many residents. Red Deer also continues to experience significant change and substantial growth which in the recent past included evolving social, economic and demographic trends. Recreation and leisure participation patterns and user expectations are also dynamic and diverse, requiring The City to have a strong grasp of future needs and priorities.

The Ice Facilities Plan was developed to help The City optimize the provision of indoor and outdoor ice infrastructure and to establish tools that can inform future decision making. Critical to developing the Plan was sound research and engagement with ice users. The information gleaned from the research and engagement helped the project team establish strategic directions for the Plan. The following graphic illustrates how the Plan was developed and the areas of planning and delivery that it is intended to inform moving forward.



2

Research Summary

Provided in this section is an overview of the key findings from the research that was conducted and which informed the strategic content of the Plan.

The detailed research and engagement findings can be found under separate cover in the Ice Facilities Plan Research Report.

Background Planning and Policy Review

Future City Investment in Indoor Ice Facilities

Not including the decommissioned Red Deer Arena (as of spring 2016), The City's Ten Year Capital Planning & Infrastructure Maintenance Plan 2016-2025 and follow-up assessment data anticipate that approximately \$6.2 million will be required to sustain existing indoor ice arenas over the next decade. The City's current 10-year capital plan and Community Asset Needs Assessment also identify twinning of the G.H. Dawe Community Centre.

\$6.2M
OVER THE NEXT
10
Years

Sustain Existing
Indoor Ice
Facilities



Outdoor Ice Planning

Background Planning and Policy Review

The City recently conducted a Covered Ice Feasibility Study in 2015 to measure the viability and costs associated with developing a refrigerated covered surface. The study provided The City with information that validated cost estimates and preferred locations, which can be used should future interest warrant proceeding with a facility. Cost estimates ranged from \$3 – 4 million dollars with the Collicutt Centre and Bower Kin Community Centre identified as the best locations for such a facility. A number of planning studies have also suggested that the outdoor skating oval be relocated from Rotary Recreation Park to Great Chief Park.



Background Planning and Policy Review

Six Core Objectives of Active Alberta

Active Albertans: More Albertans are more active, more often.

Active Communities: Alberta communities are more active, creative, safe and inclusive.

Active Outdoors: Albertans are connected to nature and able to explore the outdoors.

Active Engagement: Albertans are engaged in activity and in their communities.

Active Coordinated System: All partners involved in providing recreation, active living and sport opportunities to Albertans work together in a coordinated system.

Active Pursuit of Excellence: Albertans have opportunities to achieve athletic excellence.

A MORE
ACTIVE



Background Planning and Policy Review

A Framework for Recreation in Canada 2015: Pathways to Wellbeing

The Framework for Recreation in Canada was formally adopted by the Alberta Parks and Recreation Association in April 2015. The Framework identifies five goals for recreation in Canada, which include the need to provide “Supportive Environments” for recreation pursuits. Priorities that fall under the Supportive Environment goal area include:

- Provide essential spaces and places
- Use existing structures and spaces for multiple purposes
- Renew infrastructure
- Assessment tools
- Align community initiatives



A Framework for Recreation
in Canada 2015: Pathways to Wellbeing



RECREATION
+ **Goals**
+ **Priorities**
+ **Values**

Background Planning and Policy Review

Canadian Sport for Life (CS4L) and the Long Term Athlete Development Framework (LTAD)

The LTAD framework is built around seven stages:

- Stage 1:** Active Start (0 – 6 years)
- Stage 2:** FUNdamentals (girls 6 – 8, boys 6 – 9)
- Stage 3:** Learn to Train (girls 8 – 11, boys 9 – 12)
- Stage 4:** Train to Train (girls 11 – 15, boys 12 – 16)
- Stage 5:** Train to Compete (girls 15 – 21, boys 16 – 23)
- Stage 6:** Train to Win (girls 18+, boys 19+)
- Stage 7:** Active for Life (any age participant)

Canadian Sport for Life also identifies recommendations and suggests best practices for the allocations of recreation and sport facilities. Ensuring that allocations decisions are made based on data, alignment with LTAD, and appropriateness of activity and venue are included in the suggested practices.



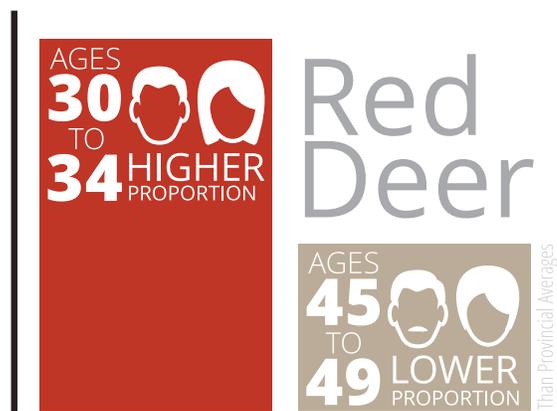
Population and Demographics

Growth projections anticipate that the population of Red Deer will be between 149,911 and 186,891 residents by 2041 based on growth rates of 1.6% (low) to 2.5% (high). Currently, 68% of the community's population lives south of the Red Deer River.



Population and Demographics

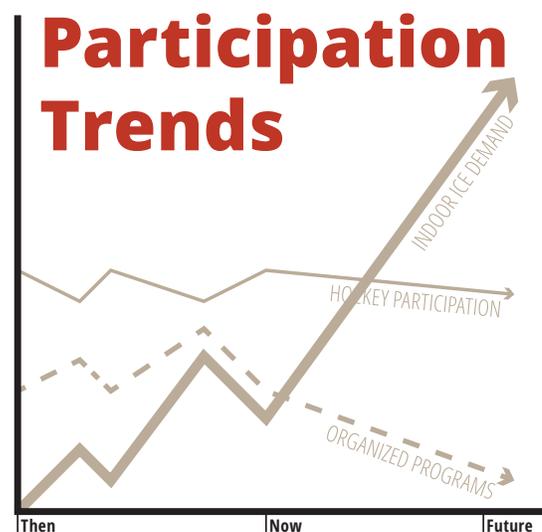
Age distribution characteristics of Red Deer are generally similar to provincial averages, with the notable exception of the 30-34 age segment (higher proportion than provincial averages) and 45 to 49 age segment (lower proportion than provincial averages).



Trends and Leading Practices

Participation Trends

- At a provincial level youth hockey participation remains relatively stable with some modest growth at the recreational levels. *The majority (approximately two-thirds) of local ice user groups expect to experience growth in coming years.
- Many urban municipalities are experiencing higher demand for indoor ice facilities than rural communities.
- Skating programs remain popular, especially at introductory levels (e.g. CanSkate).
- There continues to be a shift within recreation from organized programs to spontaneous use.
- Overall societal physical activity levels remain concerning. Many municipalities are looking at creative and new approaches to encourage recreation-based participation in sport programs.



Trends and Leading Practices

Infrastructure Trends

- Multi-sheet facilities continue to be preferred when new development or major reinvestment occurs.
- Integration with other recreation facilities and convenience amenities is increasingly common.
- Leisure ice spaces (indoor and outdoor) are often included in new facilities or as part of major refurbishment projects.
- Many municipalities are looking at partnerships and collaborations as opportunities to most effectively use available resources.
- Ensuring that new facilities can accommodate expansion and future phases is a best practice that is being followed by many municipalities.
- In many urban municipalities, the operations of outdoor rinks are partially or completely the responsibility of community groups or homeowner associations. In Edmonton, The City directly maintains the majority of non-boarded skating areas while most boarded community rinks and associated amenities (e.g. skate shacks) are operated by community leagues.



Current Provision Analysis

Indoor Facility Utilization

The overall utilization of City-operated arenas in Red Deer is 83% during peak weekend and weekday hours and 51% during non-peak hours. Red Deer Arena and the Kinsmen Community A Arena had the highest levels of prime utilization while the Collicutt Centre ice surface had the highest levels of non-prime utilization.

Red Deer Minor Hockey continues to consume the most hours of any user groups (4,932 hours in 2015) followed by the Red Deer Skating Club (921 hours in 2015) and Red Deer Ringette (767 hours in 2015).

83% WEEKENDS: 8am to 10pm
WEEKDAYS: 4pm to 10pm

51% WEEKENDS: 7am to 8am
WEEKDAYS: 6am to 4pm
DAILY: 10pm to 12am

Current Provision Analysis

Drop-In Ice Opportunities

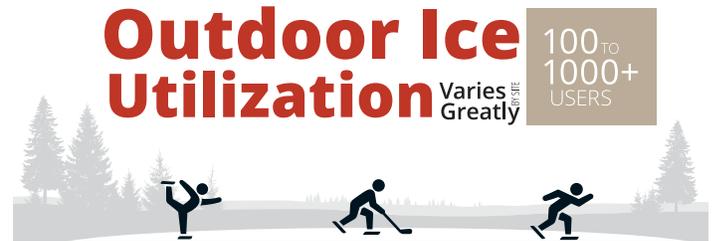
The City offered 757 public skate programs (e.g. drop-in skating, parent and tot, shinny hockey) during the 2014/15 ice season with a total of 8,388 participants.

757  Public Skate PROGRAMS
8,388 Participants
2014/2015 SEASON

Current Provision Analysis

Outdoor Use Utilization

Participant counts suggest that utilization of outdoor rinks in Red Deer varies greatly with some sites receiving over a thousand visitors during winter months while others are used by hundreds.



Current Provision Analysis

Annual Investment in Ice Facilities

The net cost (deficit) for the operations of indoor ice facilities varies between approximately \$95,000 and \$303,000 annually.

The City spends approximately \$700,000 annually on outdoor ice rinks. The Bower Ponds and Skating Oval have the highest average annual expenses (average of \$49,000) with other sites ranging between approximately \$11,000 and \$18,000 annually.

Indoor Ice Facilities



Outdoor Ice Facilities

Benchmarking

Indoor Ice Provision

The City of Red Deer provides indoor ice facilities at similar provision ratios (# of residents per ice sheet) to similar sized urban municipalities in western Canada. Benchmarking data confirms that as municipalities grow, provision ratios increase (worsen).

Indoor ice user fees at City-operated rinks in Red Deer are slightly lower but generally consistent with similar sized municipalities but 11 – 12% higher than facilities operated by other municipalities in the region.



Benchmarking

Outdoor Ice Provision

The City of Red Deer provides significantly more outdoor ice surfaces in comparison to other similar sized municipalities. There are currently 0.77 outdoor ice sheets for every 1,000 residents. None of the other benchmarked urban centres had more than 0.43 per 1,000 residents.

THE CITY OF RED DEER OUTDOOR ICE PROVISION

Significantly More outdoor ice surfaces

RED DEER: 0.77 outdoor ice sheets per 1,000 residents

OTHER SIMILAR CITIES: 0.43 per 1,000 residents



Consultation

Satisfaction with current service levels is generally high.

64% of group survey respondents were satisfied with the overall provision of indoor facilities and stakeholders generally expressed that, despite aging facilities, service levels provided are high.

95% of indoor intercept survey participants were also satisfied with drop-in ice opportunities in Red Deer.

64% OF **Satisfied** WITH
Group Survey Respondents
overall provision of indoor facilities

95% OF **Satisfied** WITH
Indoor Intercept Survey Participants
drop-in ice opportunities

Consultation

Some user groups would like to see more available indoor ice.

74% of group survey respondents would like to see provision increased beyond the current six sheets that are available. Some groups believe that a lack of access to prime time ice inhibits program growth.

74% OF **PROVISION** WOULD LIKE
Group Survey Respondents
of indoor ice sheets

Consultation

Opportunities may exist to more effectively use existing facilities.

While desire for new indoor ice facilities exists, some group representatives and stakeholders acknowledged that existing facilities could be used more efficiently. Half-rink practices and increased coordination between user groups were identified as potential efficiencies. The impending closure of the Red Deer Arena was even expressed by some stakeholders as being a “forced opportunity” that can help identify efficiencies.



Consultation

A large proportion of outdoor ice users drive to their site of choice.

53% of outdoor ice (online) survey respondents primarily drive to outdoor rinks while 67% of on-site (intercept) outdoor ice survey participants drove to the site on the day they were surveyed.



Consultation

Outdoor ice surfaces are highly valued.

Over two-thirds of outdoor intercept survey participants and outdoor public survey respondents believe that The City should maintain the current number of outdoor rinks.



3

Supply and Demand Analysis

The supply and demand analysis contained in the following section further analyzes the current situation (supply) and identifies key indicators and other factors that will influence the demand moving forward.

Indoor Ice

Supply

Local Supply Characteristics (in Red Deer)

The City of Red Deer currently operates five indoor ice facilities providing six sheets of ice. One of the single sheet facilities, the Red Deer Arena, will be replaced, with construction beginning in April 2016, rendering only four facilities and five sheets of ice available for the 2016 – 2017 and 2017 – 2018 ice seasons. Of significance, the Red Deer Arena is the only current municipally operated spectator venue with regular community accessibility. Red Deer College is also developing an indoor ice sheet which will open in 2018 and is expected to be available for community use, although specific allocation and community accessibility parameters have yet to be defined. In addition, Westerner Park operates the Enmax Centrium, a major spectator venue, which also accommodates limited community use.

Existing indoor ice facilities within City boundaries range in amenity, size, location, and age. The oldest existing facility is the Kinex Arena which was built in 1967. The newest arena, aside from the two currently being constructed, is at the Collicutt Centre (constructed in 2000). The total replacement value of City-owned ice sheets, once the Red Deer Arena is replaced, is between \$65 and \$70M. Each of the facilities operates with different revenue and expense structures, with operational cost recovery (revenue as a percentage of expenses) ranging from 54% to 83%. The City's twin facility operates significantly more efficiently than stand-alone facilities or those included in multiplex settings (83% vs. 53% – 64% respectively). In ensuring existing facilities remain operational, The City has identified over \$6.2M in required capital and maintenance investment over the next 10 years (to 2025). Of note is that The City has already invested over \$3.6M in indoor ice facilities over the past 10 years.

Summary and Key Considerations

Indoor Ice Supply

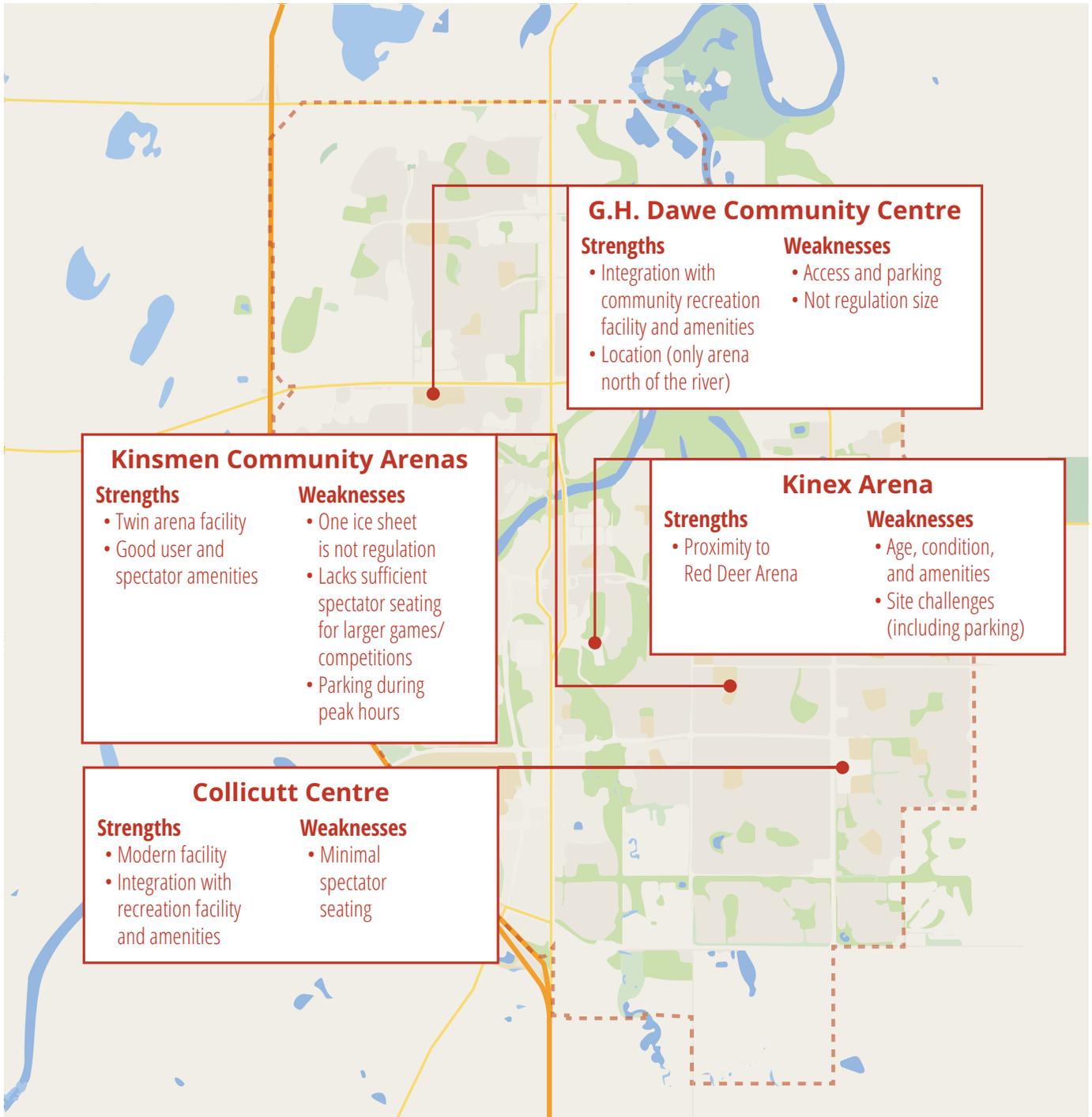
- The City owns and operates six sheets of ice at five facilities worth between \$65M and \$70M.
- The current indoor ice provision ratio of one arena per 16,801 residents is generally consistent with comparator averages and the rate of provision is expected to decrease as the city grows.
- The Collicutt Centre arena offers significantly better user, spectator, and customer experience compared to the other City-owned and operated indoor ice facilities.
- Significant investment (\$6.2M) is required to sustain existing facilities over the next 10-year period.
** The City will be conducting further assessment of the Kinex Arena in 2019 order to further clarify life expectancy and identify capital reinvestment requirements past 2020.*
- There are 23 indoor ice venues within 50 km of the city (including Westerner Park and Red Deer College).
- Multi-sheet facilities are more efficient than stand-alone or single sheets in multiplex facilities.
- Current prime time capacity at the six indoor ice facilities is 9,145 hours per season from October through March.

City of Red Deer Indoor Ice Facilities

Facility	# of Sheets	Year Constructed	Estimated Capital Reinvestment Required (to 2025)	Estimated Future Maintenance (to 2025)	Seating Capacity (Approximate)
Red Deer Arena	1	1952	N/A	N/A	1,400
Kinex Arena	1	1967	\$528,000*	\$146,600	400
Kinsmen Community Arenas	2	1975, 1988	\$3,040,000	\$896,000	400 – 500 (both ice sheets)
G.H. Dawe Community Centre	1	1983	\$379,000	\$834,500	400
Collicutt Centre	1	2000	\$252,000	\$191,000	250

* Further assessment of the Kinex Arena is being undertaken in 2019 and will help clarify capital reinvestment required beyond 2020.

This map illustrates the locations of the indoor ice facilities in Red Deer as well as high level strengths and weaknesses of each facility as identified by the project team.¹



¹ The project team conducted functional assessments of each facility and reviewed previous assessment data provided by The City.

The current provision of municipally owned indoor ice arenas in Red Deer is one ice sheet for every 16,801 residents. Benchmarking research suggests that this supply is on-par with urban municipalities of similar size. As municipalities grow in size, provision typically decrease (worsen) as reflected in the following chart. In the future, if Red Deer experiences significant growth, it is reasonable to assume that provision ratios will move towards the 18,000 to 22,000 residents per ice sheet range.

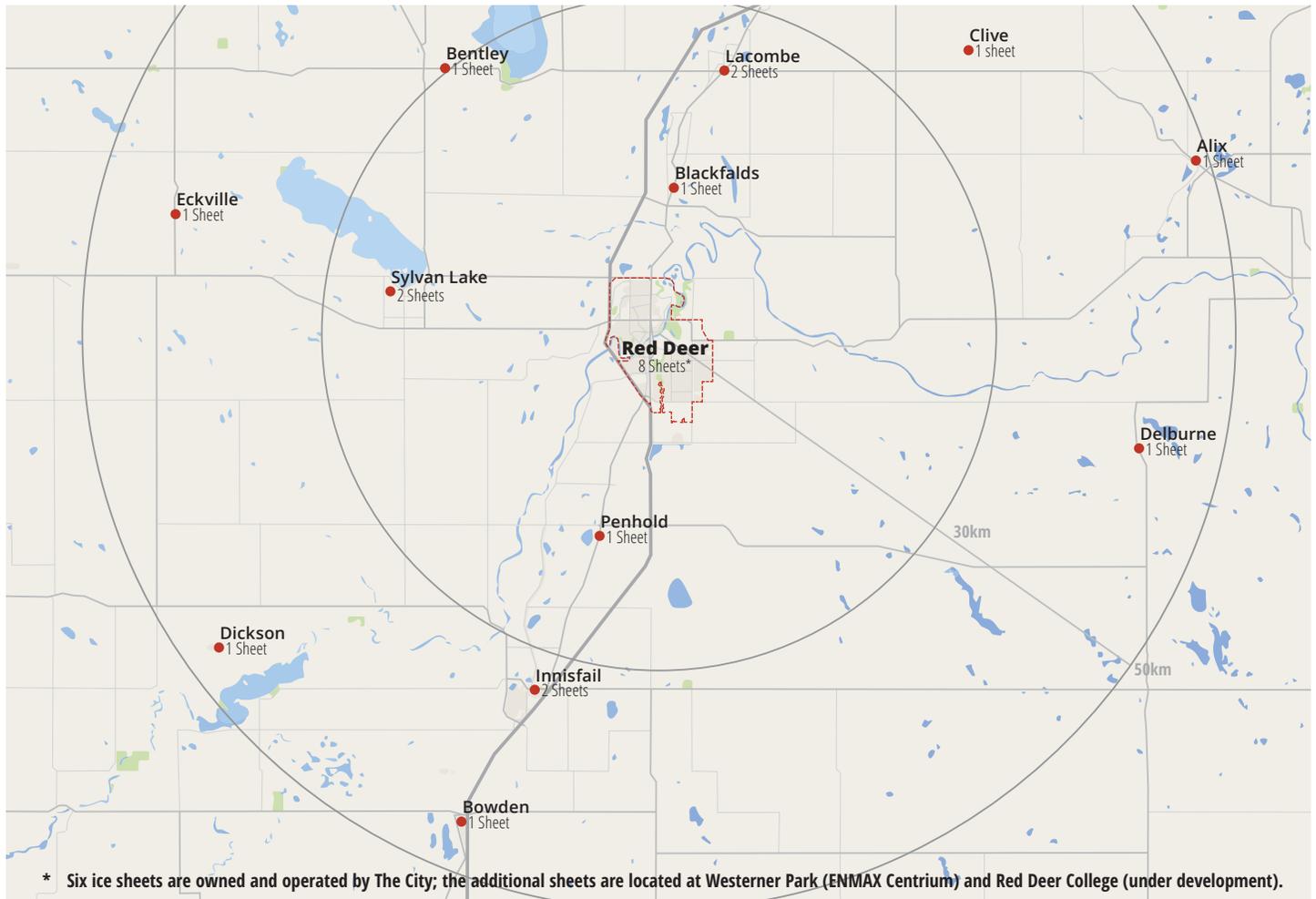
Municipality	Population	# of Municipally Provided Indoor Sheets	Provision Ratio (Residents per Ice Sheet)
Spruce Grove	26,000	4	6,500
Okotoks	24,425	3	8,142
Leduc	29,304	4	7,326
Brandon	46,061	4	11,515
Spruce Grove/Stony Plain	48,163	5	9,633
Airdrie	58,690	5	11,738
Medicine Hat	63,018	6	10,503
St. Albert	63,255	4	15,814
Grande Prairie	68,556	4	17,139
Prince George	71,273	6	11,879
Fort McMurray	76,009	4	19,002
Kamloops	85,678	6	14,280
Lethbridge	94,804	6	15,801
Strathcona County (Sherwood Park Ice Sheets Only)	95,597	7	13,657
Red Deer	100,807	6	16,801
Kelowna	117,312	7	16,759
Windsor	210,891	8	26,361
Halifax	390,096	20	19,505
Regina	193,100	14	13,793
Richmond	190,473	10	19,047
Saskatoon	254,000	11	23,091
Vancouver	603,500	8	75,438
Winnipeg	718,400	13	55,262
Edmonton	877,926	31	28,320
Ottawa	883,391	44	20,077
Calgary	1,230,915	19	64,785
Toronto	2,615,060	59	44,323

Legend

Small Urban Municipality (<75,000 residents)
Mid-Sized Urban Municipality (75,000 – 150,000 residents)
Large Urban Municipality (>150,000 residents)

Regional Supply Characteristics

The broader Red Deer region includes a number of other urban and rural municipalities that provide indoor ice. A handful of not-for-profit community organizations also operate facilities in smaller communities across the region. In total, Red Deer residents have access to a total of 23 indoor¹ ice facilities within an approximate 50km driving distance.



1 Includes an ice sheet at Red Deer College which is currently under development.

Demand

Summary and Key Considerations

Indoor Ice Demand

- Consultation with user groups indicated that generally the current supply of indoor ice meets the needs of most users; however uncertainty exists if this will continue to be the case once the Red Deer Arena closes.
- Annual participation data provided by major user groups to The City reflects stable participation numbers. However consultation data indicates that many groups expect to experience growth in future years.
- Red Deer has a current population of 100,807 residents and an immediate trading area of 271,000.¹ Growth scenarios suggest the city could be between 149,911 and 186,891 by 2041.² Assuming a medium growth scenario and the present indoor ice provision ratio for the city (one indoor ice sheet per 16,801 residents) additional capacity would need to be brought online in 2021+ and again in 2026+.
- Although national and provincial trends show participation in some organized sports is decreasing, ice sports (hockey, skating) have shown stable participation rates.
- The majority of local indoor ice user groups are satisfied with current provision levels but would like to see additional ice facilities built to accommodate growth and expansion of existing programs.
- Current peak ice utilization at the five City-owned and operated indoor ice facilities is 83% of capacity.

1 <http://www.reddeer.ca/business/economic-profile/market-access/>

2 Red Deer Statistics and Economic Profile

User Demand Indicators

The following two charts identify hours allocated to major user groups over the past three fall/winter seasons as well as the number of participants reported by each group.

Population Ranges	Allocated Hours 2013/14	Allocated Hours 2014/15	Allocated Hours 2015/16
Red Deer Speed Skating	130	156	150
Red Deer Minor Hockey	5,274	5,100	4,980
Red Deer Skating Club	864	903	714
Red Deer Ringette	714	756	720
Red Deer Pond Hockey	414	390	510

Population Ranges	Number of Participants Reported 2013/14	Number of Participants Reported 2014/15	Number of Participants Reported 2015/16
Red Deer Speed Skating	50	50	50
Red Deer Minor Hockey	1,395	1,390	1,415
Red Deer Skating Club	1,400	1,400	1,500
Red Deer Ringette	290	232	248
Red Deer Pond Hockey	698	750	800

In contrast to the data in the previous chart, which reflect stable participation numbers for most of the major user groups, over two-thirds of responding User Group Survey organizations indicated that they expect to experience an increase in participation numbers.

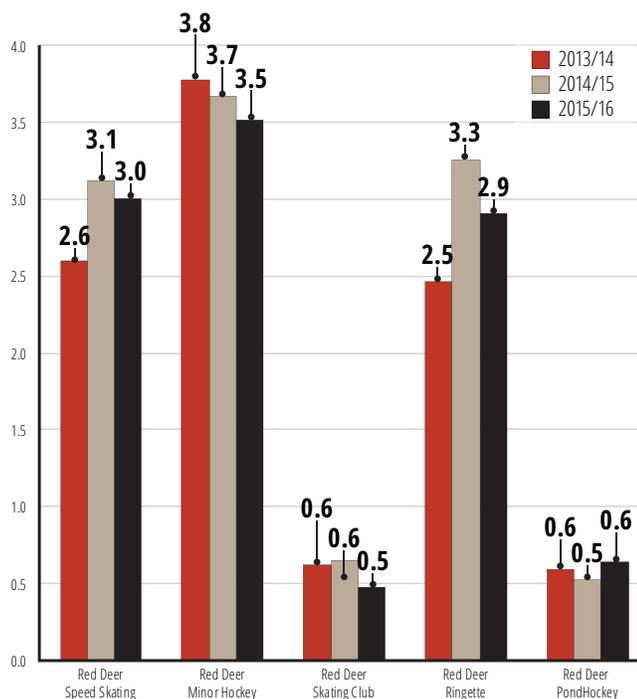
Based on the data presented in the previous charts, hour to participant ratios have also been calculated using City booking data and reported participant numbers. This analysis helps reflect the relationship between hours allocated and reported user group registration numbers. As illustrated in the accompanying graph, some minimal year to year fluctuations do occur and variations exist between some user groups.

The City has also tracked ice time requests from major user groups over the past three years. This information suggests that:

- Historical allocations (quantity and time) continue to drive allocations.
- Group demand for ice is time specific (prime time ice).
- The City has been able to adjust to some user group requests but often requires two years in order to realign allocations accordingly.

Feedback and data provided by user groups during the consultation phases of the project also help identify demand for indoor ice in Red Deer. When asked (during the User Group Survey) if their organization is able to access sufficient indoor ice time to meet current needs, 17 groups (five ice sport groups) indicated “Yes, Completely,” while nine groups (four ice user groups) indicated “Yes, Somewhat.” Six groups (three ice sport groups) indicated that “No” they are not able to access sufficient indoor ice. More access to ice during peak weekday and weekend hours was identified through the consultation process as being desired. Uncertainty over the closure of the Red Deer Arena was also flagged by a number of users and is likely to impact some groups until the replacement facility is commissioned.

Annual Hours per Participant



Facility Capacity and Utilization

For the purpose of analyzing utilization, two time categories are studied:

1. **Peak Weekday and Weekend Hours:** Weekends 8am – 10pm; and Weekdays 4pm – 10pm.
2. **Non-Peak Hours:** Weekends 7am – 8am; Weekdays 6am – 4pm; and Daily 10pm – 12am.

The first time category has a current capacity of 9,145 hours per season from October 1st to March 31st at existing City operated ice facilities.

Current utilization of City-owned and operated indoor ice facilities has been calculated at 83% during peak hours as shown below.

Indoor Ice Facility	Peak Weekday and Weekend Hours	Non-Peak Hours
Collicutt Centre	83%	57%
G.H. Dawe Community Centre	77%	50%
Kinsmen Community A	86%	50%
Kinsmen Community B	85%	48%
Kinex Arena	78%	49%
Red Deer Arena	86%	54%
Total	83%	51%

Of note is that current allotments for public skating (spontaneous) as well as times for ice resurfacing and other daily maintenance functions are included in the above calculations.

Market Demand Indicators

The City of Red Deer has a population of 100,807 residents with an immediate trade area of 271,000. Based on the growth rates shown¹, the overall population of Red Deer is expected to reach between 149,911 and 186,891 by 2041.

City Population	2016	2021	2026	2031	2036	2041
Low (1.6%)	100,807	109,134	118,148	127,908	138,473	149,911
Medium (2.2%)	100,807	112,395	125,314	139,719	155,779	173,685
High (2.5%)	100,807	114,054	129,041	145,999	165,184	186,891

Under the medium growth scenario and assuming the same level of provision (one arena per 16,801 residents) The City would need to develop an additional ice sheet between 2021 and 2026 and another between 2026 and 2031 in order to sustain existing provision ratios. However, as explained previously, benchmarking indicators support that as municipalities grow in size provision ratios generally increase (worsen).

Year	2016	2021	2026	2031	2036	2041
Projected Population (2.2% Growth)	100,807	112,395	125,314	139,719	155,779	173,685
Provision Ratio (6 ice sheets)	16,801	18,733	20,886	23,287	25,963	28,948
Provision Ratio (7 ice sheets)	14,401	16,056	17,902	19,960	22,254	24,812
Provision Ratio (8 ice sheets)	12,601	14,049	15,664	17,465	19,472	21,711

Current participation levels in The City are at 1.5% to 11.1% of the population based on input received from the ice user groups surveyed. Further breakdown based on age category is presented in the following table.

Current Population	Participants	% of Population
100,807	12,862 (including school use)	12.8%
100,807	3,178 (not including school use)	3.1%

¹ <http://www.reddeer.ca/business/economic-profile/statistics-and-economic-profile/>

Participation Trend Indicators

Participation data from provincial sources can also be used to help measure potential demand for indoor ice. The Alberta Recreation Survey, a time series survey of Albertans conducted every four to five years by the Province of Alberta, explains the following levels of activity pertaining to indoor ice arenas. If extrapolated to the current population of Red Deer, 18,448 residents in the Red Deer area are likely participating in activities that occur in indoor ice facilities (whether ice is in place or not). While findings from the Alberta Recreation Survey reflect a gradual decrease in hockey participation, it is important to note that hockey remains the second most popular “group activity” among Albertans.

Ice Activity	2013	Participants ¹	2008	2004
Ice Hockey	12.80%	12,903	14.20%	16.90%
Figure Skating	3.80%	3,831	3.30%	N/A
Ringette	1.10%	1,109	1.10%	1.00%
Lacrosse	0.40%	403	N/A	N/A
Floor Hockey	0.20%	202	N/A	N/A
Total	—	18,448	—	—

Hockey Alberta data indicated that registration numbers are generally stable with some increase experienced in female participation. Skating also continues to be popular among Albertans, especially at the recreation and participation focused levels (e.g. CanSkate). As of 2014, Skate Canada: Alberta—NWT/Nunavut was the third largest Section in the country with 24,067 member participants, 1,216 clubs and skating schools and 5,202 coaches.²

A research study, “Sport Participation 2010” published by Canadian Heritage, further identified a number of factors influencing sport participation by children, youth and adults.

- Age is a significant factor in sport participation (participation declines significantly with age).
- Education and income relate directly to participation levels (households with high incomes and education levels tend to have higher participation rates).
- The sport participation gap between Canadian-born and immigrants still exists but is narrowing.
- Among adult age groups, students are most active in sport followed by full-time workers.



Outdoor Ice

Supply

Summary and Key Considerations

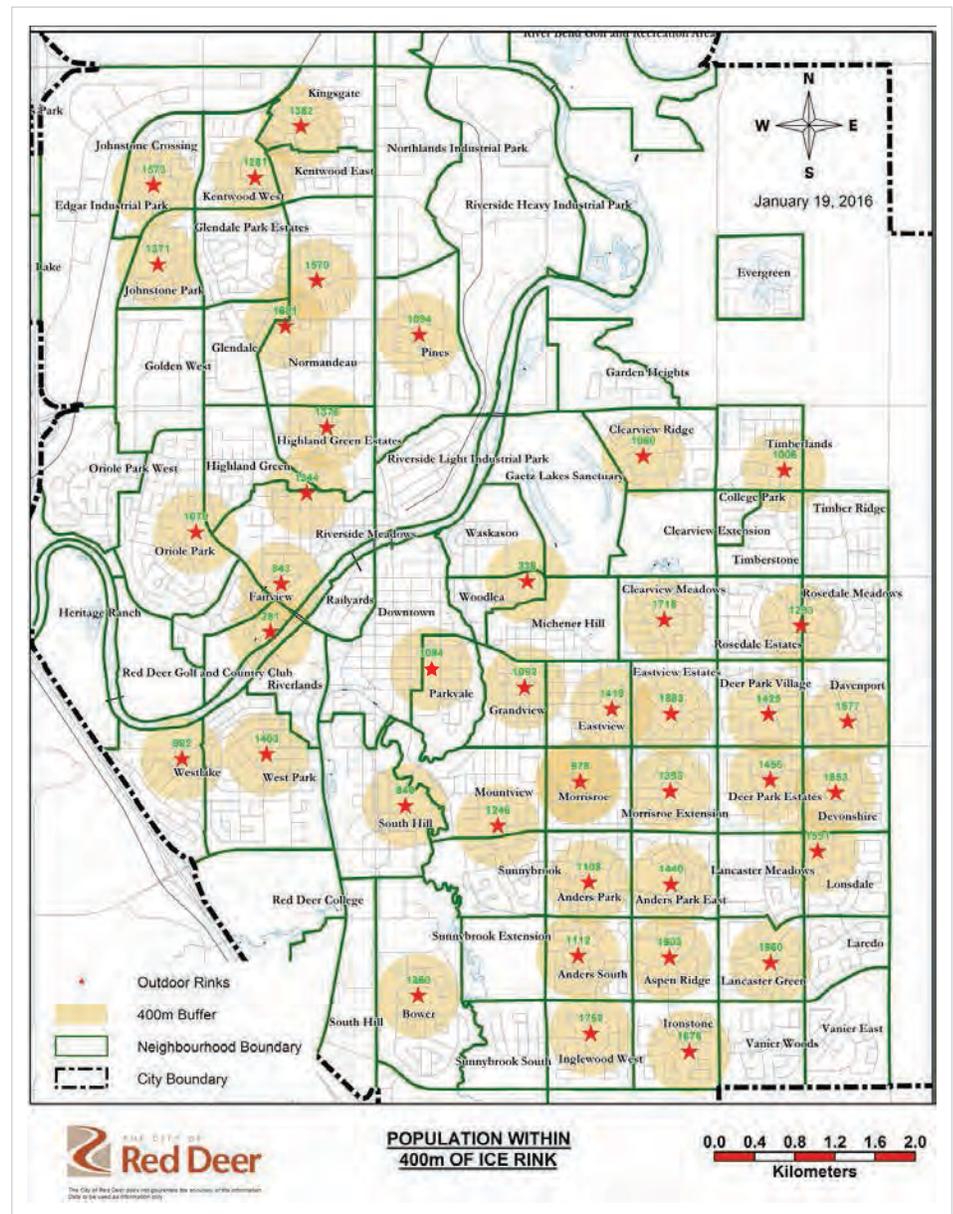
Outdoor Ice Supply

- The City owns and maintains 75 outdoor ice surfaces which include 36 boarded rinks, 35 snowbank rinks, three pond rinks and a skating oval.
- The overall provision ratio for outdoor rinks in Red Deer is one rink for every 1,344 residents (one boarded rink for every 2,800 residents).
- Benchmarking data indicates that The City of Red Deer provides significantly more outdoor skating opportunities in comparison to other urban communities.
- The City's annual investment in outdoor skating is approximately \$700,000.
- The only outdoor refrigerated surface in the region is provided by the Town of Blackfalds. Currently no covered outdoor surfaces exist.

Overall Supply Characteristics

The City owns and maintains 75 outdoor ice surfaces which include 36 boarded rinks, 35 snowbank rinks, three pond rinks and a skating oval. Outdoor rinks are well distributed throughout most areas of the city as illustrated by the following map.

Population within 400 Metres of Outdoor Ice Rinks



The overall provision ratio for outdoor rinks in Red Deer is one rink for every 1,344 residents. There is a boarded rink for every 2,800 residents. As reflected in the chart below, provision in some more densely populated neighborhoods is less (worse); however, residents in these neighborhoods generally have convenient access to sites in adjacent neighbourhoods.

Neighbourhood	Population (2015)	Number of Outdoor Rink Sites
Lancaster/Lonsdale	6,150	2
West Park	5,489	1
Oriole Park	5,300	1
Inglewood	4,586	1
Glendale	4,430	0
Kentwood	4,299	1
Deer Park/Devonshire	4,116	2
Highland Green	4,065	1
Anders South/Aspen Ridge	3,887	2
Johnstone Park	3,886	1

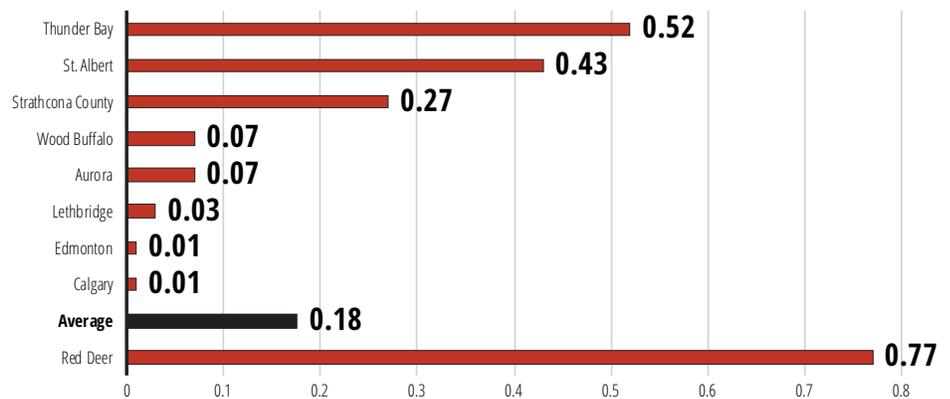


Benchmarking

The City of Red Deer provides significantly more outdoor skating opportunities in comparison to many other urban communities as illustrated in the following data from the Yardstick Benchmarks 2015 Report.

Currently, refrigerated and covered outdoor ice surfaces in the region are limited. The Town of Blackfalds operates the only refrigerated outdoor surface in the region; however, some municipalities (including The City of Red Deer) have explored potential refrigerated and covered surfaces. To date none of these projects has been confirmed.

Rinks per 1,000 Residents



Demand

Summary and Key Considerations

Outdoor Ice Demand

- Available outdoor rink utilization data is limited, but suggests that levels of use vary significantly between sites.
- Consultation data reflects that:
 - » Outdoor rinks are highly valued.
 - » A high proportion of outdoor rink users access their chosen site by driving.
 - » Shiny and leisure skating are the primary activities.
 - » Ice conditions and weather significantly impact utilization.

Demand Indicators from the Consultation

Outdoor ice demand can be difficult to assess given the spontaneous nature of the activity. However consultation conducted for the Ice Facilities Plan helps provide some insight into demand and overall user characteristics. Identified as follows are demand characteristics as identified by the outdoor ice intercept and outdoor ice public surveys.

- The majority of outdoor ice users drive to their location of choice.
- Shiny and leisure skating are the primary activities participated in at outdoor rinks in Red Deer.
- Weather and ice conditions are the primary factors which impact day to day and seasonal use.
- The majority of outdoor ice users indicated that they participate “weekly.”

Outdoor ice users also clearly value outdoor rinks, with the majority indicating that The City needs to sustain the current number of ice surfaces. Over 90% of respondents indicated some degree of satisfaction with outdoor rinks.



Data Indicators

In recent years The City has taken steps to try and better understand outdoor ice utilization. Six outdoor rinks with Activity Centres conducted user counts during the 2015/2016 season. As reflected in the chart, recorded attendance figures varied greatly.

Location	Days Counted	Total Recorded Attendance	Daily Average
Eastview Estates	40	1,022	26
Grandview	21	40	2
Highland Green	58	813	14
Morrisroe	23	237	10
Pines	33	318	10
Riverside Meadows	73	2,749	38

The City has also started using automated counters at selected outdoor skating sites. This will help gather further data that can be analyzed and used to create ongoing, time series data.

The sites with automated trackers were Aspen Ridge, Clearview Meadows, McLean Park, and Oriole Park School. In the 85 days of collecting data, the trail tracker at Oriole Park School was triggered 20,533 times for a daily average of 242.

Arena	Aspen Ridge	Clearview Meadows	McLean Park	Oriole Park School
Days Counted	85	85	85	85
Total Counts	9,765	4,475	7,522	20,533
Daily Average	115	53	88	242
Weekday Average	112	53	98	275
Weekend Average	122	51	65	162

4

Strategic Alignment and Provision Philosophy

The provision of indoor ice arenas enables residents to be physically active and contributes to community pride. When these facilities are being utilized, there are proven reductions to health care, social service, and justice costs; users of ice facilities are less likely to participate in self-destructive behaviours. Ice arenas also contribute to the local economy through their ongoing operations and the non-local spending they attract via tournaments and special events. The following section outlines the philosophy of provision for ice facilities in Red Deer. The importance of strategic alignment with City, provincial, and national planning and policy documents is also explained.

The City of Red Deer corporately envisions the city as a “Vibrant Community.” Recreation facilities, and more specifically indoor ice arenas, create vibrancy and can also be vehicles for “innovative thinking” and “inspired results.”

Although The City is the primary owner and operator of indoor ice facilities in Red Deer, it is also important for The City to recognize other levels of government and the broader provincial and national recreation community when defining its philosophical stance on service provision. **A Framework for Recreation in Canada: Pathways to Wellbeing¹** is a national initiative developed by a diverse cross section of recreation professionals and representatives from affiliated sectors (justice, health, education, social, etc.) to explain the state of the recreation industry and present a collective path forward. As it pertains to the provision of indoor ice facilities, the framework outlines the need to get more Canadians more active more often. It also suggests that physical literacy development in youth and activity participation throughout the life course should be of focus. Equitable access for all Canadians, promoting social inclusion through recreation, and creating capacity in the delivery system are all important goals moving forward. **Municipalities remain a critical provider and facilitator of recreational opportunities. The provision of infrastructure or “support environments” is an area that often falls on the municipal sector.**

Active Alberta was developed by the Province of Alberta in 2011. The policy was developed involving recreation and physical activity stakeholders from across the province and outlines goals, directives, and roles in a similar fashion to the national Pathways to Wellbeing document (increasing activity among Albertans, creating capacity throughout the delivery system, etc.). Specific to the provision of indoor ice facilities, **the policy states that the role of local municipalities is integral in the provision of recreation facilities.** Furthermore, it suggests that the Province will “link funding to the achievement of outcomes” outlined in the policy and thus alignment is important should The City wish to pursue provincial government grants and support.

Canadian Sport for Life (CS4L) is a movement that promotes quality sport and physical activity. It is led by the Sport for Life Society, a federal not for profit society that incorporated in September 2014, and comprises experts from sport, health, recreation and academia who are employed as independent contractors, yet work cooperatively to promote the movement’s goals. The movement introduces two important concepts that influence how recreation and sport activity should be planned, promoted, organized, and delivered. **Long-Term Athlete Development** is a seven-stage training, competition and recovery pathway guiding an individual’s experience in sport and physical activity from infancy through all phases of adulthood.

City of Red Deer Corporate Vision

City Strategic Plan 2015 – 2018

Innovative Thinking. Inspired Results.
Vibrant Community.

City of Red Deer Corporate Mission

City Strategic Plan 2015 – 2018

The City of Red Deer works together to provide leadership and sustainable municipal services.



1 A Framework for Recreation in Canada: Pathways to Wellbeing was endorsed and accepted by Federal, Provincial, and Territorial Ministers responsible for Recreation in February, 2015.

Physical literacy is the motivation, confidence, physical competence, knowledge and understanding to value and take responsibility for engagement in physical activities for life. Sport for Life, with Long-Term Athlete Development and physical literacy, represents a paradigm shift in the way Canadians lead and deliver sport and physical activity. **The movement calls on municipalities to help further these two important concepts in a variety of ways as outlined below.** As it relates to the provision of indoor ice facilities, it is important to consider these roles and the fundamentals of the two concepts as they define a broader social good that is delivered through indoor ice facilities. Ensuring that these concepts are catalyzed through the operations of indoor ice facilities, and through all municipal recreation services, will optimize the benefits and value for public investment in facilities and infrastructure.

Where municipalities can help further the CS4L movement:

1. Physical Literacy Program Development
2. Municipal Planning and Sport Strategy Development
3. Sport Councils
4. Facility Planning
5. Access and Allocation

It is acknowledged that indoor ice arenas are one of many facilities and services The City provides, all of which contribute to the quality of life that Red Deer residents enjoy. That being said, the following vision and goals for indoor ice facility provision have been developed to help guide future decision making regarding planning, design, and operations of existing and new indoor ice facilities in the city.

A Strategic Foundation for Ice Facility Provision

Identified below are a Vision and Goals that are intended to help guide the future of indoor and outdoor ice provision in Red Deer. Establishing this philosophic base can help ensure that The City and stakeholders are aligned and working towards common objectives.

Vision for Ice Facilities in Red Deer

Ice facilities in Red Deer are inclusive, supportive, and accessible while being vibrant gathering hubs for healthy physical activity and community engagement.

The City will additionally look to provide ice facilities in a manner that is consistent with provincial and national best practices. Key aspects of Canadian Sport for Life and the Long Term Athlete Development model, a Framework for Recreation in Canada 2015, and Active Alberta will help guide The City's future provision of ice facilities and alignment will be sought whenever appropriate.

Ice Facility Goals

1. Ice facilities are planned, designed, and operated in **alignment with broader strategic planning and objectives of The City of Red Deer.**
2. Ice facilities are **available and affordable to all residents** for various activities including traditional organized sport, newly emerging sports and activities, and spontaneous/unscheduled utilization.
3. Ice facilities are **operated effectively and efficiently**, considering long-term sustainability.
4. Ice facilities in Red Deer are of high quality in relation to the intended level and appropriateness of use.
5. Ice facilities are designed and operated to **balance resident and visitor interests**, enhancing quality of life and capitalizing on opportunities to create economic benefits for Red Deer.



5

Strategic Directions

Presented in this section are twelve indoor and five outdoor Strategic Directions which have been developed in order to provide planning tools and recommended approaches for ice facilities in Red Deer. The Strategic Directions provided are a product of the research, engagement and supply and demand analysis presented in this Ice Facilities Plan and detailed in the Research Summary Report (found under separate cover).

The Strategic Directions for indoor and outdoor ice have been structured under core areas of focus as illustrated by the following graphic.

While some of the Strategic Directions presented suggest a realignment in how ice is provided they also provide new tools that can inform decision making. Other Strategic Directions are intended to further embed existing practices that are successful and/or build on initiatives that have already been started.



Indoor Ice Facilities Strategic Directions

Inventory Management

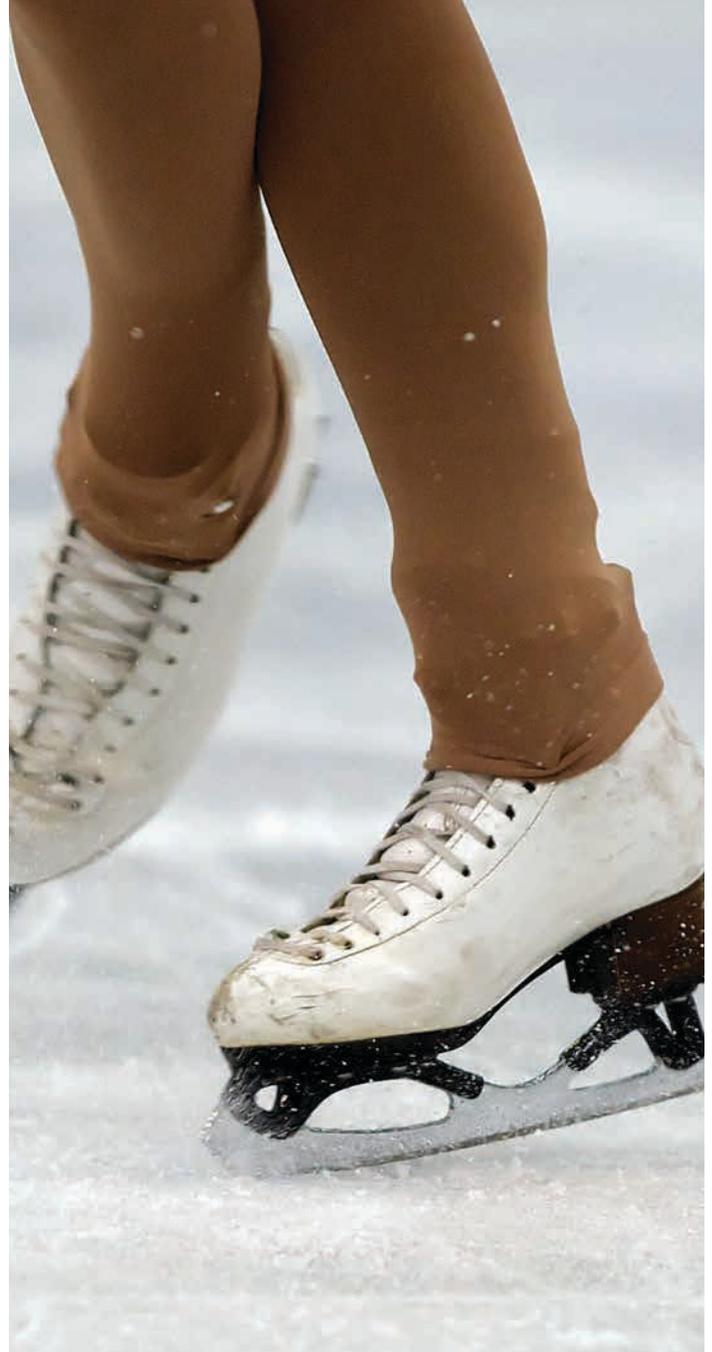
The Strategic Directions identified in the Inventory Management focus area outline approaches and recommended enhancements to how The City administers and allocates its existing inventory of indoor arenas. The City provides indoor ice facilities at a subsidized user fee. As such it is important for The City to operate these facilities as efficiently as possible and ensure that the benefits of the service are experienced by the highest possible number of residents.

Indoor Strategic Direction #1: Work with indoor ice user groups to further explore opportunities to maximize the use of existing facilities.

While new development may be needed in the future, The City and user groups will need to collaborate in order to mitigate the impacts of the Red Deer Arena closure. Exploring opportunities to more efficiently use existing inventory is also important as it will allow The City to more accurately measure future infrastructure needs.

Suggested as follows are a number of efficiencies and opportunities to maximize indoor ice in Red Deer that should be pursued.

- **Increase tracking of no shows and unused booked ice.** Enhanced tools/mechanisms for user groups to access returned ice should be put in place and communicated accordingly. Additional performance measurement metrics should also be established and used in the allocations process to the benefit of groups that use all of their booked ice
- **Encourage creative use of ice sheets, including half sheet practices.** Identify and help groups address barriers that may be limiting half ice use (e.g. participant and parent perspective, coach training).
- **Further expand the definition and allocation of prime time ice into non-traditional time slots where at all able.** Encourage increased utilization of weekday am and late pm ice times.
- **Explore opportunities to meet ice needs at outdoor rinks.** Consider allowing booking of selected outdoor venues and explore development of a refrigerated, covered surface.



Indoor Strategic Direction #2: Revise the current Ice Allocation Policy and Procedure in order to better align with The City's philosophy for ice facility provision and to ensure that the existing inventory is most effectively and appropriately utilized. The development of a renewed Ice Allocation Policy is suggested to achieve this objective.

The City's current Indoor Ice Allocation Policy and Procedure document identifies that ice will be allocated with due consideration given to the following criteria:

- Historical use (Based on each group's previous two years' allocation).
- Priorities by facility (Based on each type of group and use).
- Priorities by residence (Based on resident or non-resident users with priority given to residents).
- Priorities by group status (Based on not for profit or commercial with priority given to not for profit groups).
- Registration levels (Based on each group's previous season's final registration figures).
- New or emerging groups (Based on written applications from groups who are members of both a provincially or nationally recognized governing body, and whose program does not duplicate an existing program).
- Growth (Based on availability from reduced needs of other groups or users, use of non-prime time ice, or increased facility capacity).
- Balance (Based on not more than 10% of total ice being allocated to special events/tournaments).
- Standards of play (As per the following definition: Each sport or activity provides the basis for determining the "basic need to play" by program, number of hours, number of weeks and the number of participants).

The refreshed Ice Allocations Policy and Procedure needs to be developed in alignment with the vision and goals as outlined in Section 4 and broader City strategic planning. Consultation with stakeholders revealed that "historical rights" works well for some user groups but is a barrier for others. Development of the new Ice Allocation Policy and Procedure should consider historical practices but also ensure that the allocations process strives to provide equitable access and has maximum transparency.

The refreshed Ice Allocations Policy and Procedure should also reflect the importance of sport tourism, ensuring that ice is available for provincial and national events that foster sustainability, provide exposure for local sport organizations, and provide economic benefit to Red Deer.

Pathways to Wellbeing, Active Alberta, and the Canadian Sport for Life movement (notably the Long Term Athlete Development framework) should be used as the Ice Allocation Policy and Procedure is designed.

Canadian Sport for Life (CS4L) recommends a number of principles and practices for the allocation of facilities to sport groups.

- Allocation practices are based on "standards of play" principles in terms of the time and space required by each group.
- Allocation policies are transparent and reviewed with the groups.
- Allocation is not done by tradition, but rather on actual requirements of all groups, including the needs of emerging sports.
- Seasonal allocation meetings are held with common user groups to review their requests and try to achieve consensus on sharing available spaces and times.
- As seasons progress, groups are encouraged to be flexible in the reallocation of spaces with other groups when no longer needed, either temporarily or for longer periods.
- User fees and subsidies need to reflect community taxpayer support, and the rationale should be shared with sport organizations.

Identified as follows are criteria that should drive the refreshed Ice Allocations Policy and Procedure.

Ice Allocations Policy and Procedure Criteria:

- The age of participants affiliated with the user group (e.g. youth vs. adults).
- The overall number of participants accommodated by the user group.
- Demonstrated alignment of the user group program to The City's principles/values.
- The type of user group organization (e.g. non-profit vs. for-profit).
- Demonstration by the user group that the program provides community benefit and social good.
- The point of origin of user group participants (e.g. local vs. non-local).
- Alignment of the user group program to principles outlined by Canadian Sport For Life (LTAD) and other provincial and national sport organizations.¹
- The type of activity offered by the user group.
- The user group program's inclusiveness of all skill levels.
- The user group program's affordability and accessibility.
- The user group's length of existence (i.e. established vs. emerging).
- Historical bookings already in place for the user group.

¹ CS4L outlines specific ratios of game time to practice time for different ages. Hockey Canada outlines appropriate amounts of ice time per week for different age categories. Both of these sources of information can define and influence the appropriate amount (i.e. hours per week) and type (i.e. half ice: full ice) of ice times for user groups.

It is important to note that spontaneous/unstructured ice allocation for drop-in public skating and shinny hockey is important and should continue to be protected given observed trends in sport participation and other current demand indicators. Defining appropriate amounts for these unstructured activities can be achieved through input from current drop-in public skating participants and other means.

Included in the refreshed Ice Allocations Policy and Procedure should be an approach to managing the allocations of regional ice, if necessary. With the closure of the Red Deer Arena and the potential future need to bridge users during other arena upgrade or development projects, it is likely that some Red Deer users will need to access regional facilities. If regional ice is utilized, the following rank criteria should be considered.

1) Alignment with the overall allocations criteria:

Priority for regional facilities should be determined based on the primary and secondary allocations criteria that drive prioritization for City-operated facilities.

2) Geographic considerations:

Location of residency data should be collected from user groups and used when determining which groups might be best suited to use regional facilities.



Indoor Strategic Direction #3: Enhance data collection and analysis practices.

Pertinent and reliable facility usage information and participation data are key to understanding the supply and demand for indoor ice facilities. Relevant and accurate user statistics at facilities, participation counts from service providers (user groups), and registration information regarding programs are essential in understanding current community impact, supply and demand for facilities, and analysis regarding target markets reached. User satisfaction surveys/opportunities can also provide valuable insight into best practices and areas of improvement.

Usage and user information helps position the impact of these activities among the entire population; builds the case for sustained and continued investment in indoor ice facilities and recreation in general; and enables City staff and administration to benchmark performance on an ongoing basis. Although this information is only one consideration in measuring achievement of the indoor ice facility goals outlined herein and has to be considered in the context of other less tangible information, it is a valuable tool in building **political and community support** for these essential services.

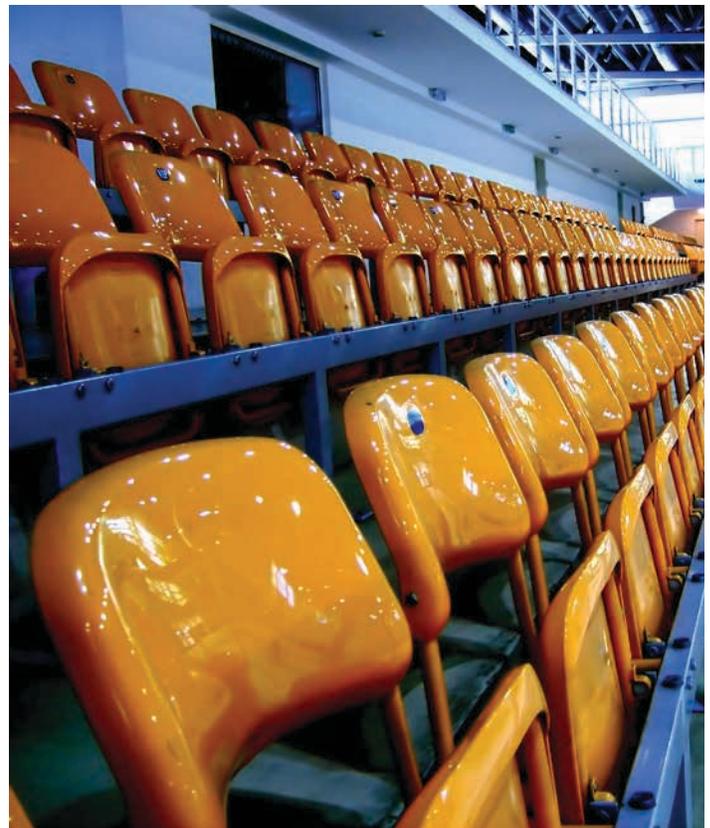
The ability to quickly and accurately analyze data is also important. The City should be able to easily determine and benchmark key indicators such as prime and non-prime ice capacity and utilization, operational costs, and type of usage.

The City currently collects some data from user groups and has used this information in the allocations process and other planning. Data collected currently from user groups include participation (registration) numbers and anticipated growth. It is suggested that The City continue this practice and put in place additional practices to collect both quantitative and qualitative data from users. Types of data that should be gathered include the following.

- Expectations for future participant numbers.
- Current satisfaction levels (related to facilities, communications, City interaction).
- Strengths and challenges.
- Use of arena amenities (frequency, satisfaction).
- Observed trends.

Through the consultation phase of the Ice Facility Plan project, surveys were conducted with user groups and spontaneous users. These survey tools could be replicated and conducted on an annual basis so that The City can collect and benchmark time series data from both organized users and spontaneous users.

Note: The City's current bookings software system is limited in its ability to undertake some of the data collection practices noted above. The capability and functionality to undertake the enhancements identified should be considered as The City procures a replacement for CLASS.



Current Infrastructure

The Strategic Directions identified for current infrastructure are intended to provide tools and guidance so that existing facilities can be provided in a manner that best meets user needs. Protocols and tools to help make future decisions on replacement and reinvestment are also provided.

Indoor Strategic Direction #4: Establish a base level of service for indoor ice facilities.

The planning, design, and operations of indoor ice facilities involve not only providing the actual ice surface, they also include the provision of amenities required or desired to improve the user and spectator experience. Enhanced sound and scoreboard systems, specialty training apparatus (i.e. lift assist for figure skating), dedicated dressing rooms, food service, and storage facilities are all examples of luxury amenities that users and spectators may desire and expect. In the event that user requests go beyond the base level of facility amenity as defined below, the onus should be on the group requesting the amenity or enhancement to fund, in part or in whole, the amenity.

Base level of user experience for each ice sheet with limited spectator capacity (under 1,000 seats):

- Standard sound and scoreboard system including digital score clock, ability to access sound system from score clock for music and public address.
- Non-dedicated change facilities for up to four teams with additional off gender change areas (at least one, ideally two).
- No dedicated storage space for groups.
- No office space for groups.
- Standard NHL size ice sheet.

Base level of user experience for ice sheets with extended spectator capacity (beyond 1,000 seats).

* In addition to base level for limited spectator capacity venues presented.

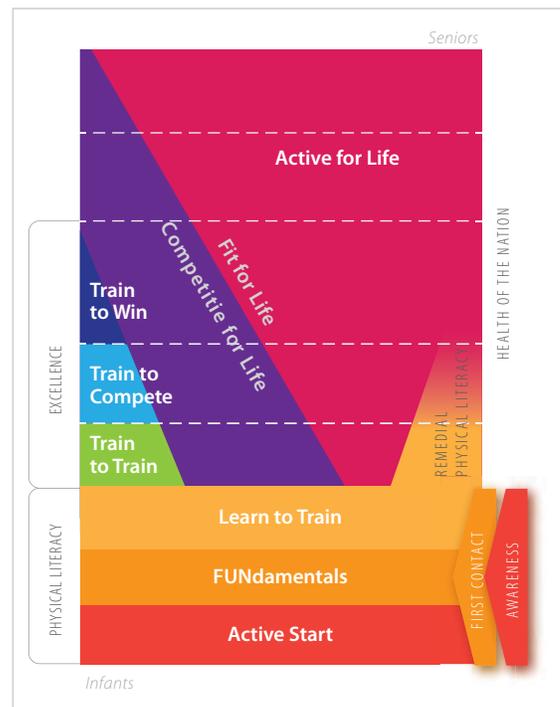
- Media area.
- Larger dressing rooms that can accommodate performance levels of hockey/ringette.



In addition to defining a base level for physical amenities in indoor ice facilities, determining a base level of service from The City's perspective related to actual participant ice time per week will also help inform future infrastructure planning and decision making. This base level of access is not meant to limit or dictate user group programming; it is meant to help define the appropriate level of indoor ice facility access. In determining a base level of service for resident access to indoor ice, the following key sources of information have been referenced.

Canadian Sport For Life/Long Term Athlete Development ²			
Stage of Development	Ages	Train : Compete Ratio	Overall activity
Active Start	Males: 0 – 6 Females: 0 – 6	N/A (Focus on plan and physical literacy.)	<i>Organized physical activity at least 30 minutes a day for toddlers and at least 60 minutes a day for preschoolers; Unstructured physical activity (active play) for at least 60 minutes per day and up to several hours per day.</i>
FUNDamentals	Males: 6 – 9 Females: 6 – 8	Fun based with some structured competition.	N/A
Learn to Train	Males: 9 – 12 Females: 8 – 11	70:30	N/A
Train to Train	Males: 12 – 16 Females: 11 – 15	60:40	N/A
Train to Compete	Males: 16 – 23± Females: 15 – 21±	40:60	N/A
Train to Win	Males: 19± Females: 18±	25:75	N/A
Active for Life (Sub Stages: Competitive for Life, Fit for Life, and Sport and Physical Activity Leaders)	N/A	Based on preference.	<i>60 minutes of moderate daily activity or 30 minutes of intense activity for adults; multisport.</i>

Further to the guidance and direction related to the different stages of athlete development regarding overall activity and train to compete ratios, the model also suggests that “Multi-sport programs for the pre-adolescent children are focused on skill development” as well as other informative guidelines around structured and unstructured play. Using the CS4L/LTAD model as a foundation, some national sport organizations have adapted the model through a sport-specific lens.

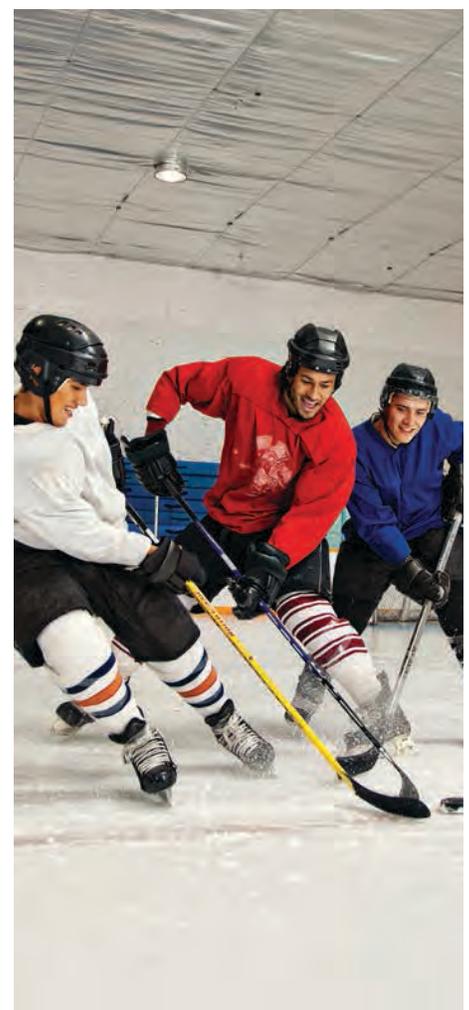
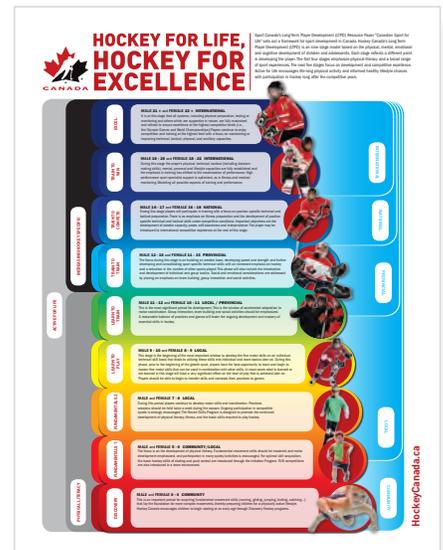


2 Long-Term Athlete Development 2.0, Canada Sport For Life.

Hockey Canada offers the following guidance around sport participation at the different stages.

Hockey Canada: Long-Term Player Development ²		
Stage of Development	Ages	Overall Activity
Discovery	Males: 0 – 4 Females: 0 – 4 <i>Community</i>	1 – 2 sessions per week; 28 – 32 weeks per season (Initiation)
FUNDamentals 1	Males: 5 – 6 Females: 0 – 4 <i>Community/Local</i>	1 – 2 sessions per week; 28 – 32 weeks per season (Initiation)
FUNDamentals 2	Males: 5 – 6 Females: 7 – 8 <i>Local</i>	2 – 3 sessions per week; 28 – 32 weeks per season (Novice)
Learn to Play	Males: 9 – 10 Females: 8 – 9 <i>Local/Provincial</i>	3 – 4 sessions per week; 34 – 38 weeks per season (Atom)
Learn to Train	Males: 11 – 12 Females: 10 – 11 <i>Local/Provincial</i>	3 – 4 sessions per week; 34 – 38 weeks per season (Peewee)
Train to Train	Males: 12 – 16 Females: 11 – 15 <i>Provincial</i>	4 – 5 sessions per week; 28 – 34 weeks per season (Bantam)
Train to Compete	Males: 16 – 17 Females: 16 – 18 <i>National</i>	4 – 5 sessions per week; 28 – 32 weeks per season (Midget)
Train to Win	Males: 18 – 20 Females: 18 – 22 <i>International</i>	N/A
Excel	Males: 21+ Females: 22+ <i>International</i>	N/A
Active for Life	N/A	N/A

These two sources of information, along with input from user groups, will form the basis for a base level of service for indoor ice to be developed by The City. Although this base level may ultimately outline a required capacity, it is important to note that groups may choose to program beyond the base level. In this case, allocation and user fees may be impacted if overall excess base level demand exists.



3 Hockey Canada Long-Term Player Development Plan: Hockey For Life, Hockey for Excellence (2013).

Indoor Strategic Direction #5: Establish a more formal protocol for facility lifecycle replacement budgeting.

The City has a significant investment in recreation facility infrastructure—an investment that requires resources to sustain. The majority of The City’s recreation facilities, and more specific to this Plan, indoor ice facilities, are in good repair due to existing lifecycle practices and maintenance programs. Recreation facilities are some of the most costly (both operational and capital) and complex of The City’s assets. Not only do these assets require extensive human resources to program and operate, they require regular repair and maintenance. **Lifecycle budgeting extends beyond regular repair and maintenance and allows for reinvestment and ultimate replacement of existing facilities and spaces.**

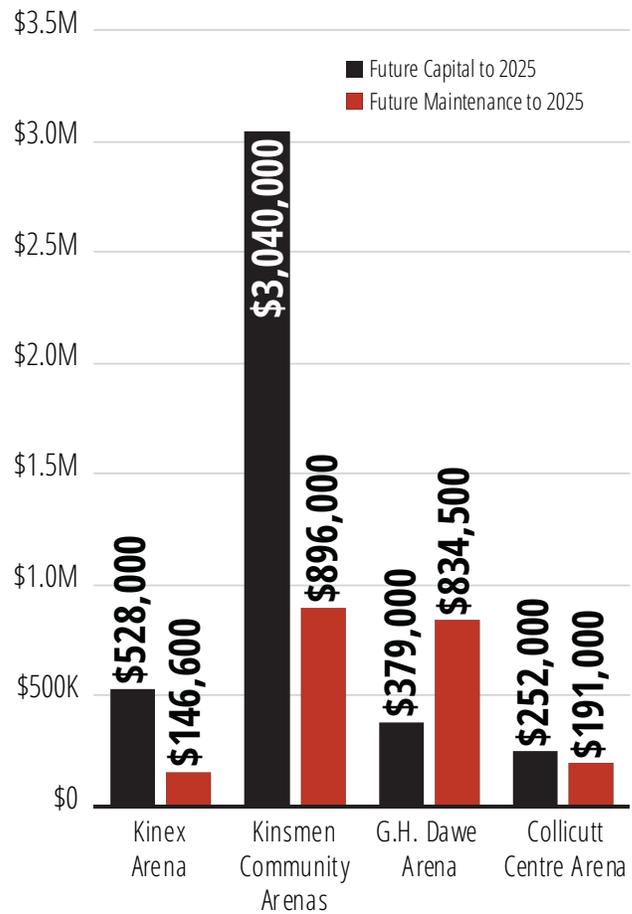
Indoor Ice Facility	Year Built	Replacement Value ¹
Kinex Arena ^A	1967	\$8,949,728
Kinsmen Community Arenas	1974/1988	\$16,675,754
G.H. Dawe Arena ^B	1983	\$12,000,000
Collicutt Centre Arena	2001	\$12,000,000
Red Deer Arena (new)	2018	\$21,000,000
Total replacement value of City Indoor Ice Facilities (2016; ±25%)		\$67,625,482

- A Need for future assessment of the Kinex Arena has been identified in order to determine expected service life.
- B Minor renovations completed in 2010 during the G.H. Dawe Centre renovation and addition.

The concept of lifecycle budgeting is becoming more commonplace throughout Alberta municipalities. The City of Red Deer plans for lifecycle replacement and repair of indoor recreation facilities through its Ten Year Capital Planning and Infrastructure Maintenance Plan. Although the Plan does not allocate a certain percentage to a lifecycle reserve as some others do, it outlines the expected maintenance and capital costs to sustain existing facilities over the next 10 years. The current iteration of the Plan (2016 – 2025) outlines \$6.2M in capital investment required at existing facilities and approximately \$2.0M in maintenance investment required over the next 10 years. In other cases, municipalities use a percentage of replacement value (typically 1% to 2%) to calculate required capital and maintenance budgets. **It is also important to note that the future investment figures identified for some facilities may increase as updated assessments occur (e.g. planned Kinex Arena assessment in 2019).**

¹ Based on internal assessment reports where available; where internal valuation is not completed for 2016, general construction market conditions have been used to determine approximate replacement value.

Future Capital and Maintenance Investments to 2025



Assuming the replacement value of existing indoor ice facilities in The City is approximately \$70M, the above graph indicates that although current planned investment is significant, it could also be increased. It is also important to note that The City has invested over \$3.6M in existing facilities over the past 10 years. Council has also anticipated future needs for an array of community facilities (including recreation facilities) and has committed to an annual contribution into a reserve to help fund future community amenities.

The City should consider increasing its annual contribution to better represent the true costs of lifecycle repair and maintenance and to account for facility amenity refreshment. For indoor ice facilities (and likely all recreation and parks facilities), The City should develop a more formally defined lifecycle budget reserve process based on a percentage of replacement value.

The concept of looking after what you have can create opportunities to meet new demand with existing facilities thereby leveraging past investment and allowing other priorities to be addressed. An important consideration in planning for future indoor ice facility service provision is the expense and appropriateness of maintaining existing facilities and service levels. If new facility components can be added to existing facilities (i.e. twinning of single sheet facilities) then significant cost savings in site acquisition, servicing and administrative, and common-area development may be achieved. Adding to existing facilities can also promote a multiplex approach at these sites and lead to operational cost efficiencies; the Kinsmen Community Arenas are by far the most efficient indoor ice facilities that The City currently owns and operates.

Facility and site lifecycle replacement budgeting includes planning to replace existing facilities when the cost-benefit analysis associated with reinvestment is not warranted and new replacement infrastructure is the most appropriate way to move forward. **Facility and site replacement budgeting would suggest that facility operating budgets should include both annual maintenance as well as capital reserve budgeting.** As the life span of recreation facilities and spaces is typically between 40 – 60 years, annual replacement planning would theoretically put smaller amounts away each year. When a facility is decommissioned and needs to be replaced, a substantial portion of the capital replacement value is already in reserves.



Indoor Strategic Direction #6: Use the Facility Condition Index (FCI) or a similar metric to inform decision making on whether to reinvest or decommission (and potentially replace) ice arena facilities.

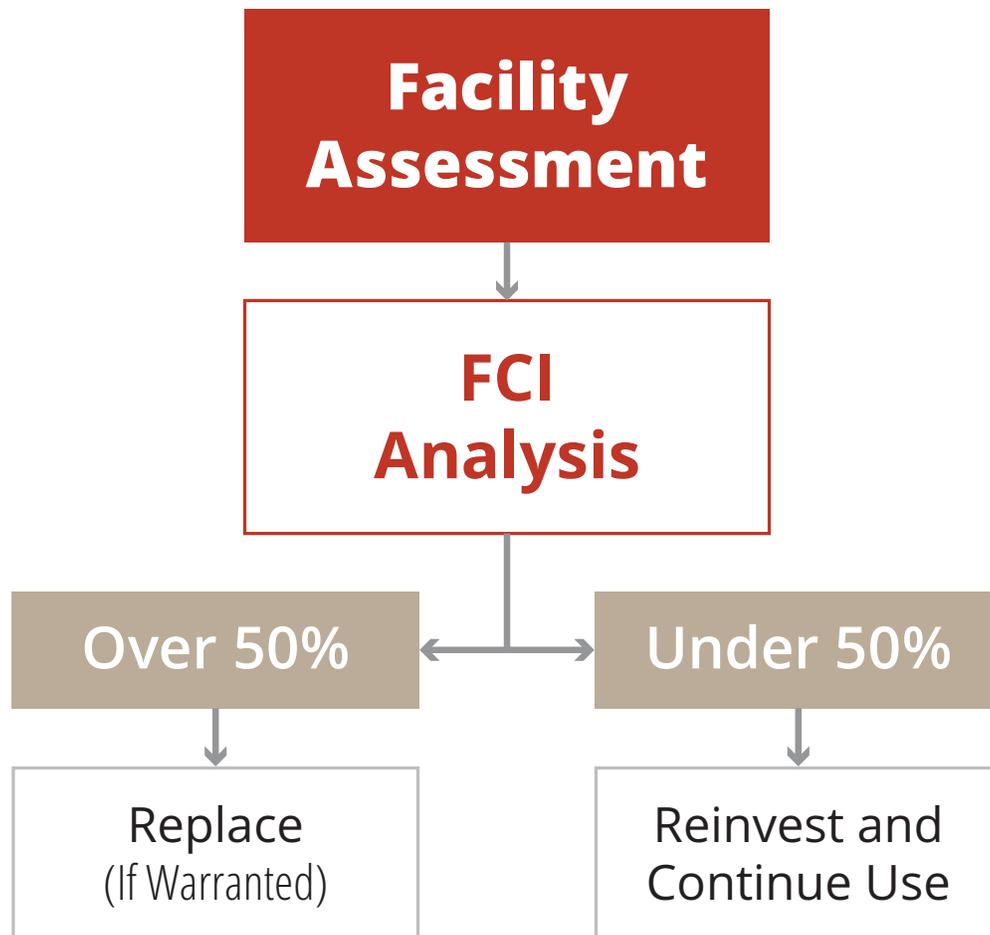
The Facility Condition Index (FCI) is used by many western Canadian municipalities to assess the potential of reinvestment in, or replacement of, publicly owned facilities and spaces. FCI measures required upgrade costs versus replacement value. Facilities or spaces with repair to replacement ratios over 50% (FCI) are candidates for replacement (or decommissioning); those with under 50% (FCI) are more likely to be candidates for reinvestment.

Although this approach is accepted, it does not account for the functionality of the facility in question. If a facility is structurally and mechanically sound, for example, the FCI may warrant reinvestment to better meet the demands of potential users for functional programming.

This issue is accentuated in recreation facilities, as many facilities and spaces have unique uses. An “amenity refreshment/modernization premium” needs to be used when calculating FCI and assessing recreation facilities for reinvestment, repurposing, or decommissioning. The amenity refreshment premium would be the added costs to bring a facility to a modern program standard, beyond ensuring structural, mechanical, and electrical sustainability.

Once the FCI determination is made, further analysis should be conducted to assess the functionality and practical need for the facility. The City may wish to develop a scoring metric to help assess some of these criteria, which could include:

- Utilization (facility and overall city)
- Alignment with user needs (does the facility serve an in-demand type of use?)
- Alignment with City strategic planning (is replacement or major reinvestment identified as a City priority?)
- Trends (does the current or potential new facility align with participation and infrastructure trends?)



Future Infrastructure

As existing facilities require replacement and the city grows, it is likely that new indoor ice arenas will need to be developed. As mentioned previously, Council has anticipated the need for new community facilities and has committed to an annual contribution to a reserve fund. The following Strategic Directions identify tools and approaches that can inform decision making and outline a roadmap for future infrastructure investment in indoor ice.

Indoor Strategic Direction #7: Strive to achieve the suggested design principles in the development of new indoor ice arena infrastructure.

The development of new indoor ice facilities or major renovation projects should, wherever possible, strive to achieve consistency of design and be done in alignment with best practices. Identified as follows are key guiding principles for consideration.

Design Principle: Multi-Purpose Venues

The development of multipurpose facilities is a clear trend in major recreation facility development throughout Alberta and Canada. Facilities like the Collicutt and G.H. Dawe Centres offer a variety of unscheduled and scheduled recreation opportunities for all ages in one convenient location. Combining multiple facilities under one roof or at one site can lead to operational cost economies of scale and can increase overall usage.

Gathering more users at one site can also enhance the attractiveness of private sponsorship, retail sales and commercial lease spaces at facilities, hence improving revenue streams. Clustering facilities can further ensure that scarce available land for recreation purposes is best utilized. The development of multiple facilities at one site or in one building envelope can also be more cost effective during the design and construction process. Cost savings can be achieved through professional services as well as other site costs such as parking and site servicing.



Facility clustering of specific facility components using the multiplex approach is appropriate due to both operational economies of scale and complementary uses. Some examples of appropriate clustering in arena facilities and other recreation facilities include:

- Indoor ice arenas and leisure ice amenities;
- Fitness and wellness spaces with scheduled use facility spaces (e.g. arenas, field houses, etc.);
- Community arts program spaces and art gallery spaces;
- Fitness and wellness spaces with child minding facilities;
- Library amenities and community centre or arts spaces;
- Fitness and wellness spaces with indoor aquatic venues;
- Outdoor playgrounds and picnic areas;
- Fitness and wellness spaces and indoor walking track facilities;
- Ice facilities with indoor aquatic venues (energy sharing); and
- Indoor ice arena and adjacent outdoor rinks (sharing of dressing rooms).

Design Principle: Multiple Ice Sheets

Indoor ice facilities with multiple sheets also offer enhanced opportunities for tournament and event hosting. Multiple sheets are more convenient for volunteer groups and organizations that host tournaments, organized competitions and academies, and host events that require more space (dry land/ice out or ice in) than a single sheet of ice can offer. The sport tourism marketplace is competitive, even at the regional level. Having multiple sheet venues with appropriate user and spectator amenities can help to better position a community to attract a variety of tournaments and competitions that bring in non-local spending and boost community profile.

The development of multiple sheet indoor ice facilities, either through new development or by adding to existing single sheet facilities, should be considered in the future. In order to ensure appropriate access for public skating the inclusion of leisure ice spaces (non-boarded, non-programmed) should also be explored when new facilities are developed. It is important to note that twin ice facilities are most effective in achieving efficiencies if they include regulation sized ice sheets (for intended purposes).

Design Principle: Physical Accessibility

Physical accessibility is also a very important consideration. Universal design considerations for users with disabilities must be considered as well as concepts such as age-friendly, and designing spaces and program areas to promote physical literacy. Accessibility as it relates to geographic location and adjacency to transit options (including active transportation) is important in promoting healthy lifestyles and reducing barriers to participation.

Design Principle: Balancing Uses

Future indoor ice arena facilities need to ensure that a variety of uses is considered in the design process. Considering leisure ice surfaces and outdoor surfaces as complementary elements to new indoor development may help ensure that spontaneous and structured activities can be balanced.

Design Principle: Crime Prevention Through Environmental Design

CPTED (Crime Prevention Through Environmental Design) principles need to be considered in facility design and development. CPTED is a set of design considerations that are intended to deter criminal activity in facilities of all types and sizes. As community facilities are accessible to a variety of populations and generate public traffic, these considerations need to influence the design of new or enhanced infrastructure.

Design Principle: Revenue Generation

Opportunities to optimize cost recovery and generate facility revenues should be considered during the design process. Public gathering spaces should be designed to include concession and other support spaces as deemed necessary through the facility feasibility and planning process.

Design Principle: Environmentally Friendly Design

Designing facilities in the most environmentally friendly way possible can lead to significant reduction of the environmental impacts of construction and operation. It can be more costly in terms of capital. Therefore, detailed cost-benefit analysis may be required prior to ultimate decision making on some mechanical and facility design decisions. The sentiment of ensuring new facilities are designed to minimize the impact on the environment was clear in the stakeholder discussions facilitated and is also clear in broader City strategic direction.

Other green design principles, such as ensuring facility patrons have transportation options (e.g. mass transit, active transportation) and associated support amenities (e.g. bike racks) and design to promote physical activity (i.e. making stairwells more appealing alternatives to elevators) should also be considered in community facility provision.

Design Principle: Best Practice Identification

Through The City's longstanding operation of ice arenas, lessons have been learned and expertise has been accrued amongst City staff and the Recreation, Parks, and Culture department. This expertise should be leveraged moving forward as capital ice facility projects are conceptualized and conducted. Facility operators and management staff should be engaged when appropriate in discussions to identify optimal design characteristics and operational efficiencies. Ongoing engagement with users can also help identify opportunities to optimize functionality and user/spectator experience.

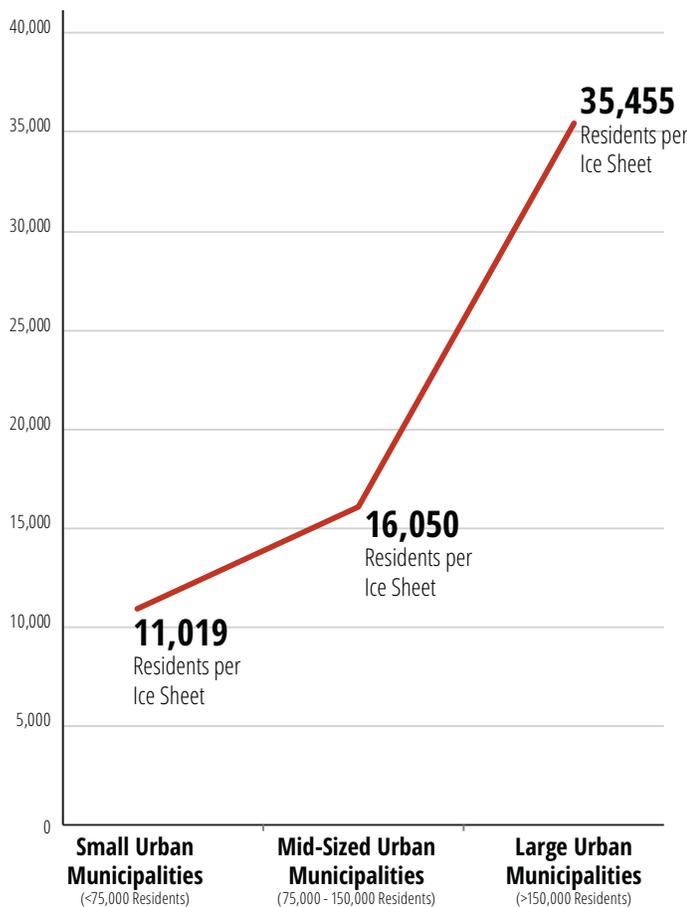
During the development of the Ice Facilities Plan, a preliminary "functional assessment" template was developed and used to assess current City owned indoor ice facilities. Further refinement of this template may be a warranted exercise as it could provide The City with an ideal functional state to which new or significantly enhanced arenas are designed.

Indoor Strategic Direction #8: Strive to achieve the following target provision ratios for indoor ice facilities.

Population Range	100,000 – 250,000	250,000 – 500,000	500,000+
Current Provision Ratio (1 Arena/# Population)	16,801	N/A	N/A
Target Service Level (1 Arena/# Population)	15,000	20,000	40,000

As municipalities grow in population, it is reasonable to expect that provision ratios will worsen. The following graph illustrates benchmarking research from small, mid, and large urban municipalities which further reflects how provision ratios expand in lockstep with population ranges.

Ice Arena Provision



The following chart further identifies the number of arenas that will be required to meet the target provision ratios as the community grows over the next 10 years based on population projections. As reflected in the chart, it is anticipated that an additional ice sheet (net of existing inventory) will be required in approximately 2021 with another ice sheet required in 2026 or beyond.

Year	2016	2021	2026
Population Projections (2.2% Growth)	100,807	112,395	125,314
Provision Ratio with Current Approved Facilities (6 sheets)	1/16,801	1/18,733	1/20,885
Target Service Level at 1 Arena/15,000 Population (High)	6.7 sheets	7.5 sheets	8.4 sheets
Surplus/Deficit at High (1/15,000)	-0.7 sheets	-1.5 sheets	-2.4 sheets
Target Service Level at 1 Arena/20,000 Population (Moderate)	5.0 sheets	5.6 sheets	6.3 sheets
Surplus/Deficit at Moderate (1/20,000)	+1.0 sheets	+1.6 sheets	-0.3 sheets

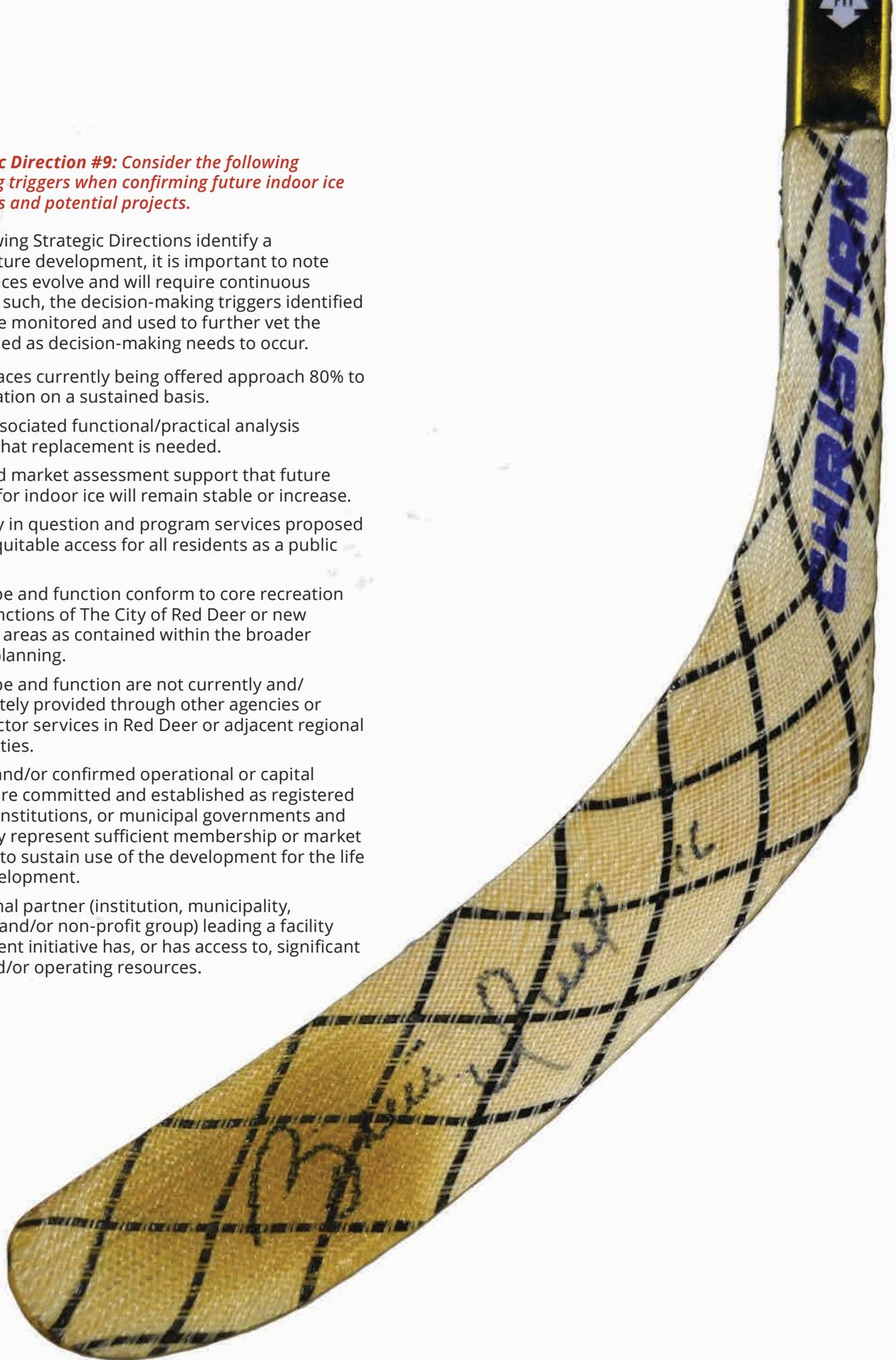


2 City of Red Deer 2011 Medium Growth Scenario projections (www.reddeer.ca).

Indoor Strategic Direction #9: Consider the following decision-making triggers when confirming future indoor ice facility priorities and potential projects.

While the following Strategic Directions identify a roadmap for future development, it is important to note that circumstances evolve and will require continuous assessment. As such, the decision-making triggers identified below should be monitored and used to further vet the projects identified as decision-making needs to occur.

1. Facility spaces currently being offered approach 80% to 90% utilization on a sustained basis.
2. FCI and associated functional/practical analysis supports that replacement is needed.
3. Trends and market assessment support that future demands for indoor ice will remain stable or increase.
4. The facility in question and program services proposed provide equitable access for all residents as a public service.
5. Facility type and function conform to core recreation service functions of The City of Red Deer or new functional areas as contained within the broader strategic planning.
6. Facility type and function are not currently and/or adequately provided through other agencies or private sector services in Red Deer or adjacent regional municipalities.
7. Potential and/or confirmed operational or capital partners are committed and established as registered societies, institutions, or municipal governments and collectively represent sufficient membership or market segments to sustain use of the development for the life of the development.
8. The external partner (institution, municipality, volunteer and/or non-profit group) leading a facility development initiative has, or has access to, significant capital and/or operating resources.



Indoor Strategic Direction #10: Utilize the suggested approach to meet future indoor ice infrastructure needs.

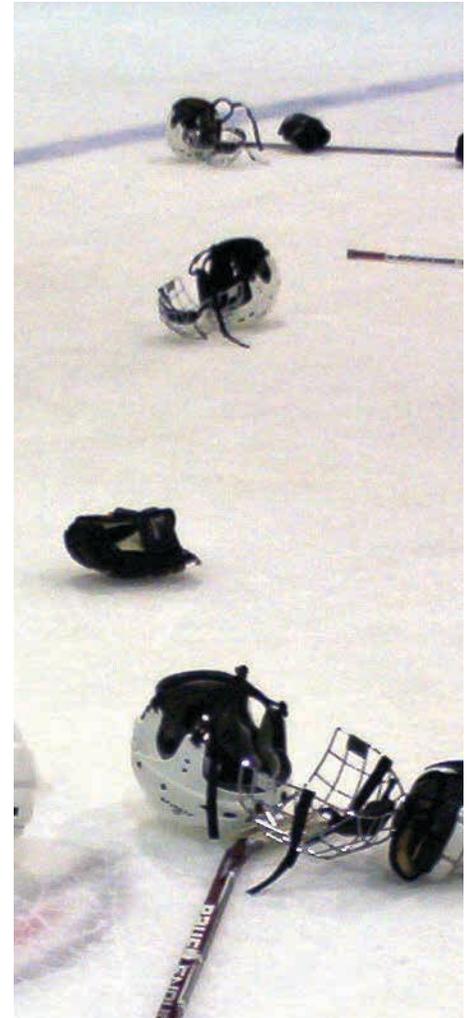
The previous Strategic Direction indicates that Red Deer will need to increase the inventory by one arena in the next five years with an additional sheet required beyond that time frame in the next five to 10 years. However in the meantime, replacement of the Red Deer Arena will occur and it is probable that the Kinex Arena will also need to be replaced (to be confirmed by an assessment that is scheduled for 2019). Other factors may also contribute to future needs and required service levels.

- Community use of the new Red Deer College arena (has not yet been fully clarified).
- Market impact of the replaced facility in Sylvan Lake coming back online.
- Ice facility projects undertaken by other municipalities in the region.
- Life expectancy of other aging arenas in the market area.
- Private sector provision (private sector provision in Alberta remains limited; however, this could evolve over time).

The previous factors have varying levels of impact on ice arena provision in Red Deer. While the Ice Facilities Plan, and specifically this Strategic Direction, outlines a move-forward approach for ice arena facilities, it will be important for The City to continuously monitor these other factors and ensure that appropriate planning is undertaken when specific projects are being contemplated.

If sufficient community use can be secured or demonstrated to exist at a partner-operated facility and/or through a regional partnership, these ice sheets should be counted as part of the public inventory, which may mitigate the need to undertake the development of a new ice sheet to meet desired provision ratio thresholds.

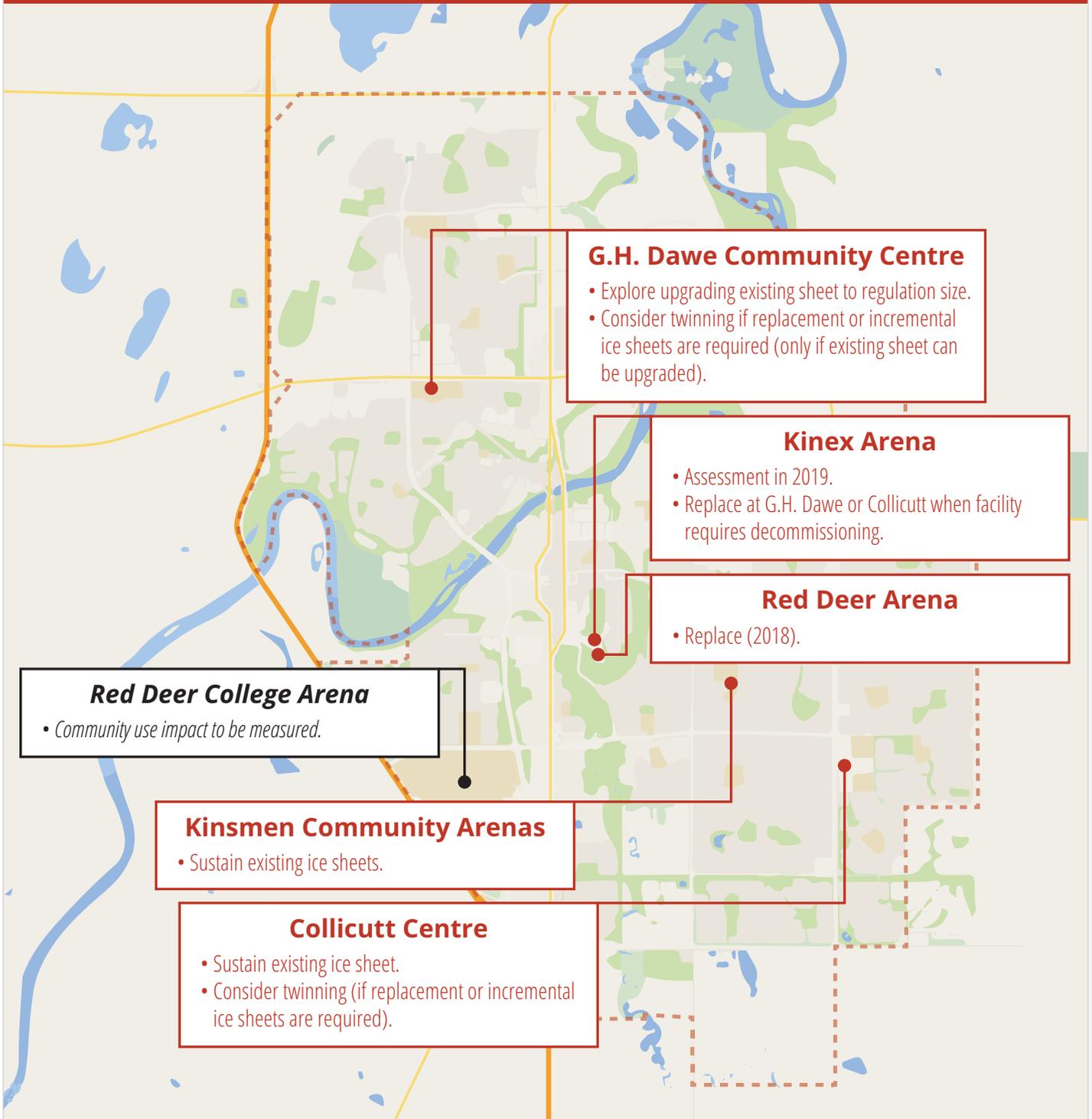
The following chart and map outline the suggested move-forward approach for indoor ice facilities in Red Deer. Two existing sites (G.H Dawe and Collicutt) are identified as being preferred locations for future ice sheet development. With the existing Red Deer Arena being replaced on the same site, it is likely that The City will require one additional site to be identified for future development. **The development of a refrigerated and/or covered outdoor ice facility may warrant consideration if financial limitations prohibit the development of the indoor facilities noted in the chart below.** Further analysis and engagement with user groups would also be required to confirm that this type of facility can reasonably meet latent demand.



Action	Suggested Approach	Timing	Net Impact
Replacement of the Red Deer Arena	1. Replace on the same site.	2018	0
Assessment of the Kinex Arena	1. Assess in 2019 (complete assessment). 2. Replace at the G.H Dawe (if existing surface can be upgraded to regulation) or Collicutt when facility requires decommissioning.	TBD	0
Addition of New Ice Surface to the Inventory	1. Determine/measure the extent to which the new RDC arena has met community need. 2. Explore potential partnerships. 3. Preference towards adding onto existing facility (Collicutt or partner).	2021	1
Addition of New Ice Surface to the Inventory	1. Preference towards adding onto existing facility (Collicutt or partner). 2. Explore potential partnerships and new site options if required.	2026+	1

Inventory of Ice Sheets (2016 – 2026)

Now	Requiring Replacement	To Be Assessed	Incremental Ice Sheets Required	Total Future Ice Sheets (2026)
6 Sheets	1 Sheet	1 Sheet	2 Sheets	8 Sheets



The following site and provision factors should be considered as potential sites and arena projects are confirmed.

- Site needs to be large enough to accommodate future additions (ice or other recreation components).
- Geographic balance is moderately important, moreso for new facility development; achieving geographic balance should not circumvent economy of scale rationale.
- Event and competition hosting needs should be assessed on an ongoing basis and considered as new facilities are planned. This assessment should consider capacity, multi-sheet facility requirements, and support amenities that can be beneficial to the City's event and competition hosting capability. However as future projects (Red Deer College Arena, Red Deer Arena replacement) will take place after a number of venues are constructed with the Canada Winter Games in mind, it is reasonable to assume that event and competition hosting capacity may be sufficient for a number of years.



Partnerships and Collaborations

Strong relationships and ongoing collaborations with user groups is important in the future delivery and planning of indoor ice infrastructure. The City owns and operates indoor ice facilities. The animation of these facilities occurs primarily through rental agreements with user groups that provide opportunities for residents to participate in a number of different activities and at a variety of different skill levels.

As the region continues to grow, so will broader regional needs for indoor ice. The Strategic Directions presented under this focus area are intended to help guide The City in the exploration, evaluation, and formalization of partnerships. Opportunities to increase collaborations with user groups and stakeholders are also identified.

Indoor Strategic Direction #11: Increase dialogue with ice user groups.

The opportunities that **user groups provide help The City achieve its strategic goals** around the provision of recreation services, and more specifically those indoor ice facilities. For this reason, it is vital that user groups understand why The City invests in indoor ice. It is also important for The City to understand the current and expected future state of programs offered by user groups (e.g. participation rates, trends in activities, changes to service levels, etc.) so that it can plan and operate facilities appropriately.

During the development of the Ice Facilities Plan, a number of groups and individuals were consulted. There was nearly 100% participation in the group engagement effort and it was clear that user groups appreciated the opportunity to be engaged in planning for future indoor ice facilities. Aside from bi-annual allocation meetings, the level of engagement with ice user groups is limited.

Identified as follows are key touch points that should be used to further engage ice user groups.

- Annual user survey (as identified by Strategic Direction #3).
- Minimum of one annual meeting (outside of traditional ice allocation meetings) to gather local trends data and create dialogue. This meeting could also be positioned as a best practice sharing or training opportunity.

As increased user group engagement and collaboration occurs, other opportunities may come to light which can further increase dialogue. Should new facility projects occur in the future, it is also suggested that user groups' knowledge of best practices and trends be leveraged.



Indoor Strategic Direction #12: Utilize the suggested Partnership Framework (illustrated on Page 48) when exploring partnerships to provide indoor ice facilities.

The City is currently involved in a variety of partnerships in the provision of recreation services. More specifically to the provision of indoor ice facilities, **the development of the new Red Deer College facility represents a provision partnership;** The City provided project funding and has a Memorandum of Understanding in place with the College that outlines "...the general public and community organizations will have access to the Ice Surface and the Squash Courts."³ The partnership between The City and Red Deer College is a good example of leveraging public funds to provide community access to indoor ice facilities; the extent to which the community benefits will be better known after the facility is in operation.

The City should **expect other partnership opportunities to present themselves** as new indoor ice facility development is contemplated. Private sector interest in indoor ice facility development and operations is increasing and regional municipalities are contemplating future investment into indoor ice infrastructure.

Regional partnerships are arguably more likely to garner external funding (the Provincial and Federal government promote regional collaboration) than independent ventures. Arena representatives (facility operators and/or municipal staff) from Lacombe, Blackfalds, Penhold, Sylvan Lake, Delburne, and Spruce View were engaged through stakeholder discussions. Key findings and points of interest from these discussions are noted as follows.

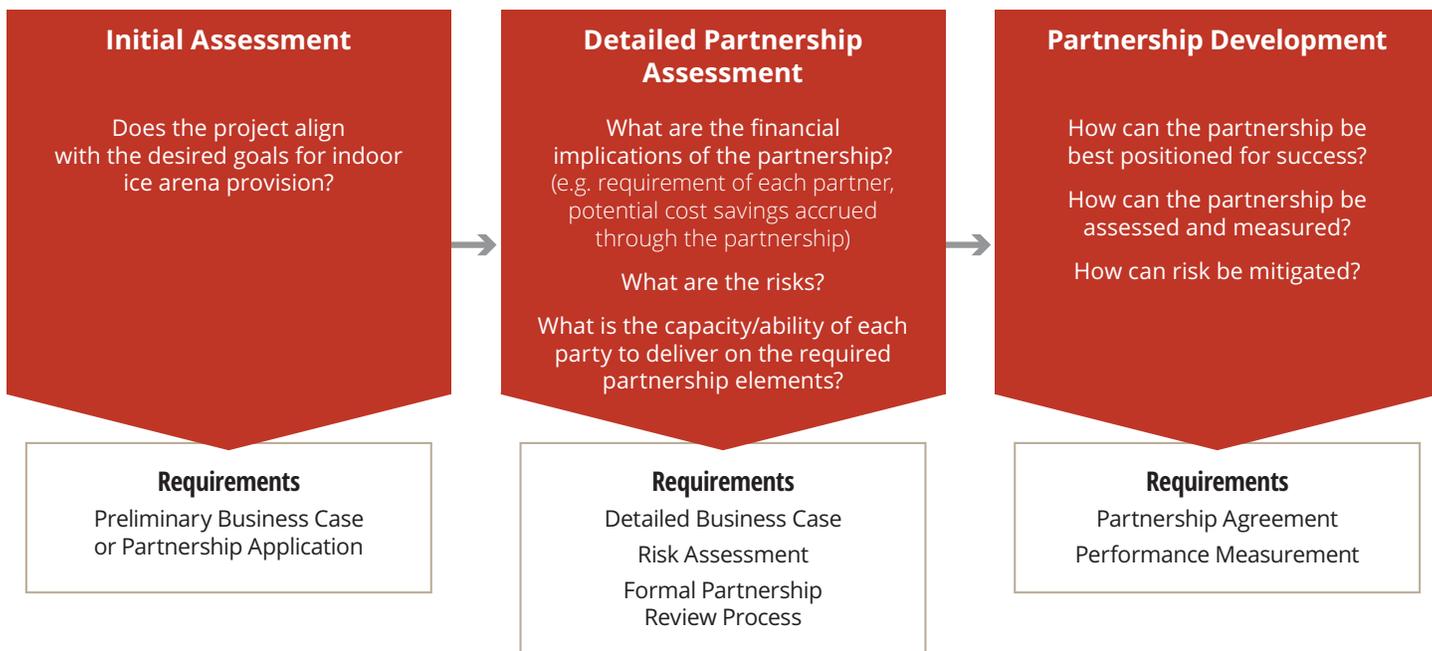
- Although limited ice time is available in regional facilities, there is a willingness to accommodate Red Deer user groups.
- Regional facilities are not overly concerned or expected to be impacted by the loss of the Red Deer Arena and other potential facility situations.
- Flexibility in local vs. non-local rates may be considered to host Red Deer user groups.
- "No-shows" by Red Deer groups are a concern and will impact the desire to accommodate city users in the future.



3 Memorandum of Understanding between The City of Red Deer and the Red Deer College regarding the development of the G. W. Harris Centre for Sport and Wellness

Partnership Framework (Strategic Direction #12 Continued)

Before The City engages in partnerships to provide indoor ice facilities, the following framework is proposed to ensure that, from a broad perspective, the partnership arrangement makes sense and best positions The City.



The chart below also identifies potential risks and mitigating strategies for specific types of partnerships that may be explored by The City in the future to provide indoor ice facilities to user groups. Ensuring that the partnership exploration phase adequately considers and addresses these potential issues will help ensure that partnerships are aligned with resident and group needs.

Potential Partner	Potential Issues	Mitigation Strategies
Regional Municipalities	<ul style="list-style-type: none"> Conflicts over proportion of use by respective residents Level of responsibility of each municipality for future repairs, maintenance, refreshment and replacement 	<ul style="list-style-type: none"> Clearly identify access parameters in partnership agreements (e.g. % of use by users from each municipality). Ensure that appropriate lifecycle and amenity refreshment budgeting is outlined in agreements and is followed.
Private Sector	<ul style="list-style-type: none"> Differing provision philosophies and financial requirements Community access 	<ul style="list-style-type: none"> Ensure partnership agreements clearly outline public access requirements and parameters. Ensure potential partner has conducted adequate business planning and feasibility analysis.
Public Sector Partner (e.g. post-secondary, not for profit organization)	<ul style="list-style-type: none"> Differing mandates and objectives Financial limitations 	<ul style="list-style-type: none"> Ensure potential partner has conducted adequate business planning and feasibility analysis. If significant public funds are contributed to the project, ensure that MOU outlines specific community access requirements.

Outdoor Ice Facilities Strategic Directions

Current Inventory Management

The Strategic Directions identified as follows are intended to help provide direction to The City in the management of outdoor ice facilities. Opportunities to realign how the inventory is managed and accessed are identified to meet broader resident and ice user needs.

Outdoor Strategic Direction #1: Define a base service level for outdoor rinks in Red Deer.

Research indicators reflect that The City currently provides outdoor rinks at a high service level both in terms of quantity and ongoing maintenance. Engagement conducted as part of the Ice Facilities Plan revealed that satisfaction levels are relatively high and that quality of ice and site amenities are key factors that impact utilization. Outdoor rink users also utilize a number of transportation methods to access outdoor rinks. Just over half of users drive to their outdoor rink of choice while just under half use other methods (e.g. walk, public transit).

While current investment levels in outdoor ice may be sustained, it is prudent for The City to clarify a base level of service so that investment can be optimized and aligned with resident needs and usage patterns. The base level of service will also help guide future decision making as it pertains to existing sites, service levels, and new development. The base level of service should provide clarity around the following aspects of outdoor ice provision.

- Geographic Balance—Is 400 metres an appropriate target?
- Amenity Provision—What amenities should exist at each type/level of outdoor ice site?
- Maintenance—What levels of maintenance should be targeted?
- Major Outdoor Ice “Hubs” and Facilities (e.g. covered, refrigerated surfaces)—What impact could these sites have on the need for neighborhood level provision? Could “hub” or higher quality sites better serve certain user/usage types?

A number of inputs should be used by administration and Council when determining the base level of service. These inputs include trends and leading practices, benchmarking, financial analysis and considerations, and utilization data.



Outdoor Strategic Direction #2: Continue to prioritize the collection of outdoor rink utilization data.

In recent years The City has worked at enhancing the collection of utilization data at selected outdoor ice rink sites. Community Associations have assisted in these efforts by conducting regular counts and providing this information to The City. Available data shows that utilization at outdoor rinks varies greatly; however comprehensive data are needed to confirm this. It is suggested that The City continue to enhance the collection of outdoor rink data so that accurate information can be analyzed and databased over time. The following mechanisms should be used to capture user data.

Community Association Tracking Protocol. The City should develop a standardized utilization tracking system for rinks located at Community Association sites. Associations should be required to provide data as per the tracking system as a requirement of the existing funding agreement.

On-site counters. The City should continue to install counters as resources permit at selected sites. Sites should be prioritized based on the following criteria.

- Sites with high levels of use.
- Permanent sites which have been identified for potential reinvestment.
- Sites which have frequent capacity or other user issues/conflicts.

In addition to utilization data, The City should also look to capture user experience feedback and data. The public and intercept survey tools used as part of the consultation process for the Ice Facilities Plan could be fielded on an annual basis to collect this data, which could then be tracked over a number of years to identify participation trends and benchmark satisfaction levels.



Outdoor Strategic Direction #3: Designate selected outdoor rinks to be made available for organized group bookings.

Currently outdoor rinks are not available for bookings by organized ice user groups or individuals. While outdoor ice serves primarily spontaneous and unstructured activities, it is suggested that a handful of sites be included in The City's bookings system in order to achieve the following key benefits.

- Mandating organized users of outdoor ice to formally "book" ice will help mitigate potential conflicts and ensure appropriateness of use.
- The City will have a better understanding of structured outdoor ice use which can assist with future planning and delivery.
- May help meet some latent indoor ice demand.

Initially, a select number of site(s) should be piloted and made available for bookings. Identification of these site(s) should occur based on the following factors.

- **Geographic Distribution:** Sites available for bookings should be distributed in different areas of Red Deer.
- **Quality and amenity provision:** Sites available for booking need to be of higher ice quality and provide access to a participant change area (permanent or seasonal), parking, and other basic site amenities. Sites located adjacent to indoor recreation facilities may be best suited.
- **Spontaneous user impact:** Designated bookable sites with minimal impact to spontaneous users should be prioritized. The City may wish to establish percentage capacity parameters for these piloted site(s) as they pertain to booked vs. spontaneous use.

Ongoing user engagement, collaboration with Community Associations, signage and website communications (e.g. schedule of booked times) and ongoing monitoring will be important as sites are identified and piloted.

Piloting outdoor rink sites for bookable use may also present the opportunity to expand dry-floor capacity in the city. Board installations at piloted sites could be left in place during the summer months and made available to organized user groups, rentals, and spontaneous users. Doing so could help The City further analyze dry-floor potential for a future covered outdoor rink surface.



Outdoor Strategic Direction #4: Consider adapting the current maintenance system to create two service level categories for boarded and lit outdoor rinks.

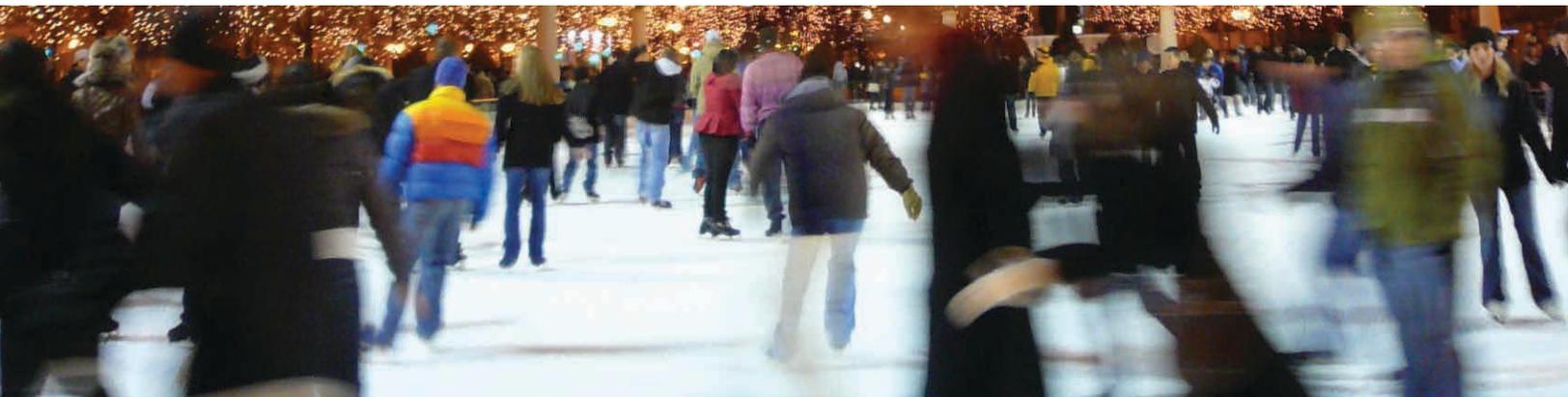
The City currently utilizes three service level categories as outlined by the chart below.

Level of Service	Description	# of Sites	Annual Expense (per site)	Annual Expense (per service level)
Performance Sites	Large ice surfaces; Bower Ponds and Ice Oval.	2	\$49,000	\$98,000
Daily Maintenance Sites	Typically sites with a boarded rink with lighting, an adjacent snowbank rink, and an Activity Centre.	20	\$18,025	\$360,500
Weekly Maintenance Sites	Typically an ice surface without lighting and no on-site Activity Centre.	21	\$11,639	\$244,419
Total Annual Expenses				\$702,919

It is recommended that the boarded rinks that fall within the current Daily Maintenance Site category be further differentiated as explained in the following chart. This adaptation ensures that rinks with high levels of use and organized group bookings will be serviced appropriately without requiring The City to incur additional expenses above the current investment level of ~\$700,000 annually.

Category	Level of Service	Types of Rinks To Be Included
A	High priority. Continue to receive daily maintenance. Weather conditions and bookings may require maintenance to occur twice daily.	<ul style="list-style-type: none"> High use sites (as verified by utilization data). Rinks that are available for bookings.
B	Medium priority. May still receive daily based on staff availability. At minimum serviced every three days.	<ul style="list-style-type: none"> All other boarded rinks that currently fall in the Daily Maintenance Category.

Note: Overall maintenance protocols should be further analyzed and refined during the base level of service review (Outdoor Strategic Direction #1)



Future Infrastructure Planning

Outdoor Strategic Direction #5: The City should focus on maximizing utilization of existing outdoor rinks.

A number of factors and research inputs suggest that current outdoor ice provision in Red Deer is sufficient.

- Benchmarking data (Red Deer provides significantly more outdoor skating sites than comparators).
- Geographic analysis (current sites in Red Deer are well distributed and easily accessed by residents in most areas).
- Transportation methods (consultation findings reveal that many users drive to their site of choice).
- Satisfaction (consultation findings reveal that satisfaction levels are generally high).

Even though the spontaneous nature of outdoor rink use makes capacity hard to measure, it can be reasonably assumed that a number of outdoor rinks in Red Deer have capacity to accommodate new users and residents. Enhanced collection of user data will help identify those rinks for which capacity may be an issue during certain times or be abundant. The City should then develop communications and marketing strategies accordingly.

While provision of outdoor ice in Red Deer is deemed appropriate, it is possible that projects may come forward in the future from a community group or developer. If City investment in and outdoor ice project is requested, it is suggested that The City require the interested party to develop a business case which includes full market assessment, justification, engagement, and financial implications for the project.



6

Implementation

The following section outlines implementation considerations pertaining to the Strategic Directions identified in Section 5.

Indoor Ice Facilities

Financial Considerations

The City's investment in ice facilities continues to be significant. While ice facilities and opportunities are valued by residents, resources are finite and ice arenas are in competition with other important recreation and municipal services and projects. Moving forward, The City will need to be creative in exploring efficient and collaborative approaches to meeting ice facility infrastructure needs.

Timelines

The following chart outlines potential timelines for the recommended facility projects.

Project	Suggested Location (If Required)	Short Term (2018)	Medium Term (2021)	Long Term (2026+)
Replacement of the Red Deer Arena	Red Deer Arena Site	✓		
Assessment of the Kinex Arena (Planned for 2019 to determine future lifespan.)	G.H Dawe Community Centre ^A or Collicutt Centre	✓		
Upgrade of the G.H Dawe to Regulation Size ^B	G.H Dawe Community Centre		✓	
Addition of New Ice Surface to the Inventory	Collicutt Centre or existing facility ^C		✓	
Addition of New Ice Surface to the Inventory	Collicutt Centre or other location (TBD)			✓

New indoor ice arena development is projected to cost between \$15 – \$20M per sheet (2016 dollars) depending on the type of facility and other site factors. Should a covered and refrigerated outdoor venue be developed, it is expected that costs could range between \$3 – \$4M.

A If viable to upgrade existing sheet.

B If deemed viable.

C New RDC arena may provide sufficient capacity (TBD).

Maintenance and Facility Reinvestment

The following chart outlines expected facility reinvestment costs as determined by The City's most recent assessment and facility planning.

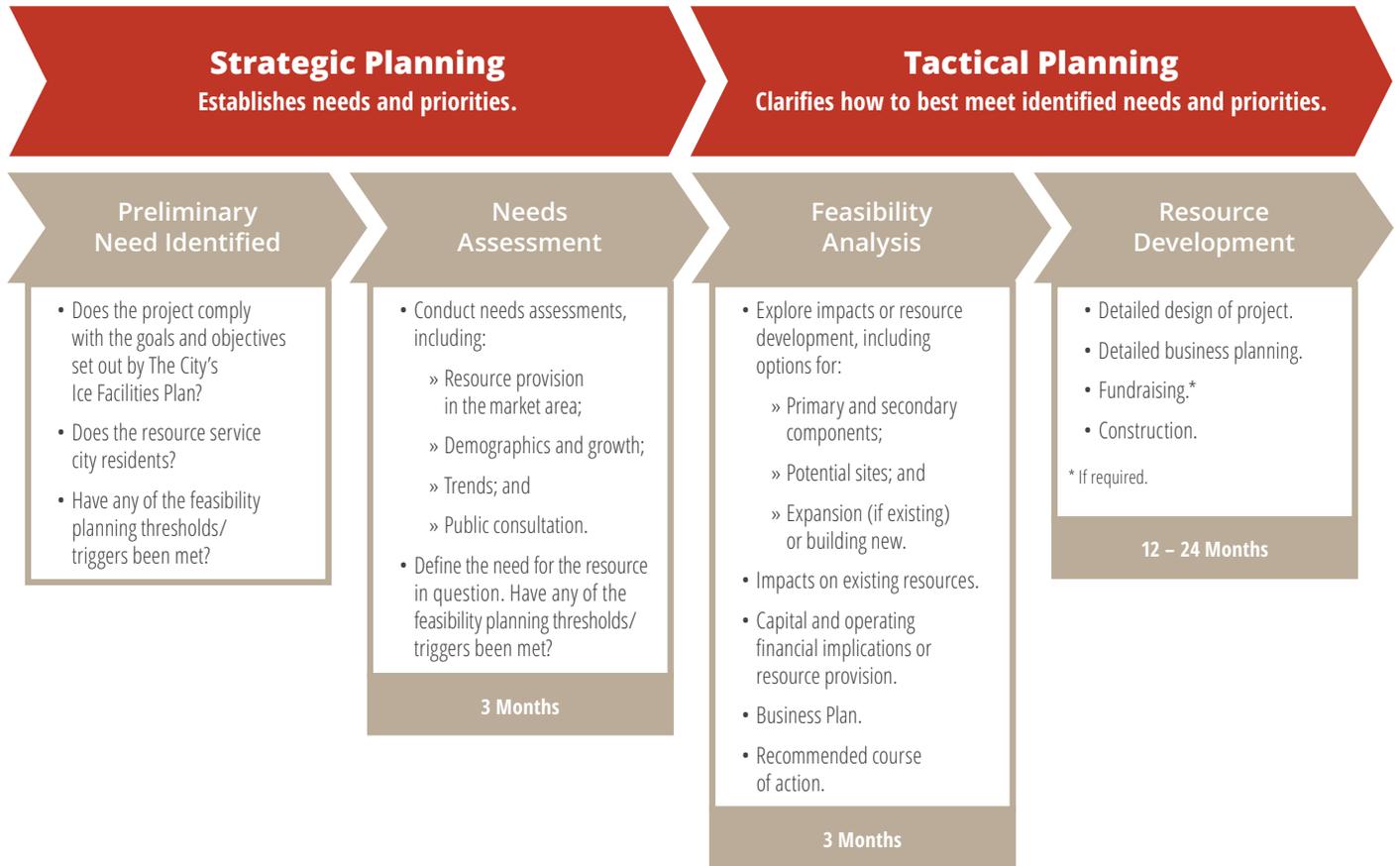
Indoor Ice Facility	Year Built	Replacement Value ¹
Kinex Arena	1967	\$8,949,728
Kinsmen Community Arenas	1974/1988	\$16,675,754
G.H. Dawe Arena	1983*	\$12,000,000
Collicutt Centre Arena	2001	\$12,000,000
Downtown Arena	2018	\$21,000,000
Total replacement value of City Indoor Ice Facilities (2016; ±25%)		\$67,625,482

* Minor renovations completed in 2010 during the G.H. Dawe Centre renovation and addition.

Future Planning Considerations

While the Ice Facilities Plan contained herein presents a roadmap for future indoor infrastructure development as indicators suggest at present, it will be important for The City to undertake further planning in the future to reaffirm the need for these facilities and ensure that the scope of the project is aligned with the community and market characteristics that exist in the future.

The following graphic illustrates a recommended planning framework that should occur as major indoor ice infrastructure projects are evaluated and planned.

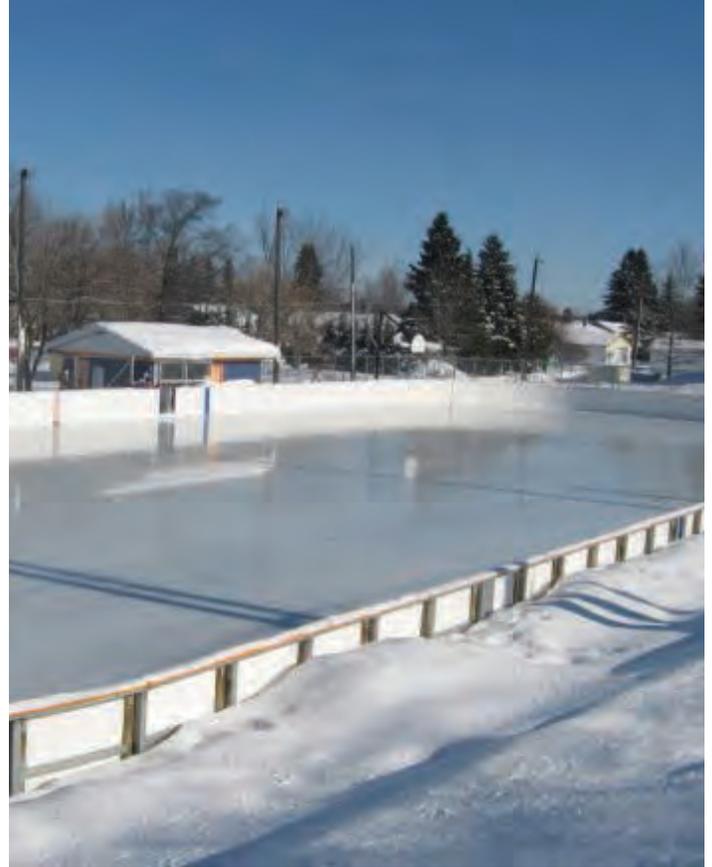


Other Implementation Tactics

A number of the Strategic Directions provided will require input and participation from existing user groups and stakeholders in order for successful implementation to occur. As such, The City may wish to establish an Ice Facilities Plan Implementation Working Group that is led by City administration with representation from user groups, and sport stakeholders.

Key areas of focus for the Group should include (but are not limited to) the following.

- Further explore opportunities to maximize utilization of existing facilities (Indoor Strategic Direction #1).
- Establish preliminary parameters and guiding principles for the refreshed allocations policy (Indoor Strategic Direction #2).
- Inventory current data collection methods and further identify specific mechanisms to address gaps (Indoor Strategic Direction #3).
- Develop a communications strategy to share key themes and directions of the Plan with user groups and residents.



Outdoor Ice Facilities

Financial Considerations

While the outdoor strategic directions provided do not suggest an incremental investment in outdoor ice infrastructure, City staff resources will be required to implement the strategic directions outlined.

Timelines

The following chart identifies expected timelines for the recommended outdoor strategic directions.



Outdoor Strategic Direction	Implementation Timing
Define a base service level for outdoor rinks in Red Deer (#1).	2016 – 2020
Continue to prioritize the collection of outdoor rink utilization data (#2).	Ongoing
Designate selected outdoor rinks to be made available for organized group bookings (#3).	2016 – 2020
Consider adapting the current maintenance system to create two service level categories for boarded and lit outdoor rinks (#4).	2016 – 2020
The City should focus on maximizing utilization of existing outdoor rinks (#5)	Ongoing

Future Planning Considerations

Future capital and operational investment in outdoor ice infrastructure will be further clarified once the base level of service is defined (as per Outdoor Strategic Direction #1). This base level of service will guide the level of maintenance provided to existing outdoor ice sites and will also provide a foundation from which future decisions can be made on infrastructure projects and initiatives.

Should capital investment in outdoor ice infrastructure occur in the future, it is recommended that The City utilize an approach similar to the planning framework presented on Page 56. Utilizing this or a similar process will ensure that decisions are adequately informed and aligned with overall community needs and City goals for outdoor ice provision. As mentioned in Strategic Direction #5, while the City's focus should be on maximizing existing facilities, it is possible that new outdoor ice projects could come forth from the community and request City support. Should this occur, it is reasonable for The City to request that a business case be developed.

Other Implementation Tactics

Successful implementation of the Outdoor Strategic Directions will require input and participation from stakeholders and the public. As implementation occurs, The City may wish to engage with outdoor ice stakeholders at key points in time as the following action items occur.

- Review of the draft base level of service (Outdoor Strategic Direction #1).
- Data collection implementation (e.g. expanded head counts at rinks located next to Community Association buildings) (Outdoor Strategic Direction #2).
- Identification of pilot sites for bookable outdoor ice (Outdoor Strategic Direction #3).
- Review and implementation of the refreshed outdoor ice service levels (Outdoor Strategic Direction #4).



