



**BEAUMONT
WINTER CITY**

Background Research Report





WINTER

With spirit

HIVER

Avec esprit

“Winter is not a season, it’s a celebration.”

- Anamika Mishra

DIALOG®

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introduction

As the trees change colour and leaves fall, we prepare to welcome the winter season. Winter, with its cold temperatures, long nights, flurries, and blizzards, is part of life in Beaumont. Once, this season was something to brace for, to endure until spring arrives. However, in the last 40 years, a winter cities movement has grown across northern regions, turning this cold dark time of year into something that is celebrated, even integral to the identity of northern cities. Beaumont is joining this movement in the creation of our own Winter City Strategy.

For those of us who live in these northern cities, winter poses its own set of unique challenges. The sub-zero temperatures, short days and icy conditions can negatively impact human health and wellbeing. At the same time, wintry weather, snow, and long nights present opportunities that can make living in a winter city something truly special.

A better understanding of the issues and opportunities winter brings, and the ways other cities are navigating their own relationship with

winter will help us to identify ideas and actions to improve our quality of life during the winter season. As part of Beaumont's emerging Winter City Strategy, this document provides winter city best practices, background research, and analysis of Beaumont's current relationship with winter. Along with public stakeholder engagement, it will inform the development and implementation of the recommended actions that will be outlined in Beaumont's Winter City Strategy.





GOODERHAM & WORTS LIMITED

1 world winter cities



Saskatoon, Canada



Winnipeg, Canada

Tromsø, Norway

Umeå, Sweden

Luleå, Sweden

Copenhagen, Denmark

Sapporo, Japan

Sweden

Luleå

POPULATION: 48,728

CLIMATE: Subarctic (cold winters and cool summers)

AVERAGE WINTER TEMPERATURE: -6 °C / -10 °C High/Low (January)

AVERAGE DAYLIGHT HOURS: 5 hours (January)

Sitting just below the Arctic Circle is the city of Luleå, Sweden. Classified as sub-arctic, Luleå receives few daylight hours in the winter and can reach temperatures of -30°C⁵.

Ice Streets

The municipality takes advantage of these frigid winters by creating and managing a series of ice streets and paths on the frozen sea and river, allowing residents to go kick-sledding, walking and ice-skating¹⁵.

Wayfinding

Situated along these ice streets are places for sitting, taking shelter, fire pits and wind breaks¹⁵. Ample wayfinding and signals are also provided along the route by the municipality. The Luleå University of Technology is currently experimenting with projecting wayfinding information on to the snow and ice to make winter bicycle lanes more legible⁵. Snow is also being used as a building material to create protective walls separating bicycle lanes from vehicular traffic⁵.



Luleå's ice road on the City's southern harbour.

Luleå, Sweden, heats its sidewalks by redirecting waste heat from the local steel mill⁴⁴.



Projected information to define winter cycle lanes, Lulea University of Technology

Sweden

Umeå

The City of Umeå is the largest and fastest growing city in northern Sweden⁴⁹. Although the climate is subarctic, the Gulf Stream keeps winter temperatures relatively mild, with an average temperature of -8°C in January⁵³.

Multifunctional Design

Umeå, located in eastern Sweden is one of the country's fastest growing cities⁴⁹. The Broparken (bridge park) is located in Umeå's oldest neighbourhood and was completed in 2013⁴⁸. Trees and plants were selected to provide all season interest with focus on spring flowers, autumn colours and winter greenery⁴⁸. The park slopes down to the Umeälven river and provides a perfect opportunity for skiing, snowboarding and sledding¹⁵. To support this activity stair banisters in the park were designed to be used as snowboard rails in the winter months¹⁵.

To improve people's mood in the winter, Umeå Energi temporarily replaced bus stop advertising with artificial daylight boxes in 26 bus shelters around the city [40].

POPULATION: 130,224

CLIMATE: Subarctic (cold winters and cool summers)

AVERAGE WINTER TEMPERATURE: -4 °C / -8 °C High/Low (January)

AVERAGE DAYLIGHT HOURS: 5 hours (January)



Snowboard rails at Broparken in Umeå, Sweden.



Bus stop light therapy, Sweden.

Denmark

Copenhagen

POPULATION: 799,033

CLIMATE: Oceanic Climate Zone (mild summers relative to latitude, and cool but not cold winters)

AVERAGE WINTER TEMPERATURE: 3°C / -1°C High/Low (January)

AVERAGE DAYLIGHT HOURS: 7.8 hours (January)

Copenhagen is a city that prides itself on remaining active even in the most bitter cold. A robust winter cycling culture is made possible by prioritizing the clearing of bike lanes. To better accommodate snow clearing, the bike lanes are required to be a minimum of 1.6 meters wide³². Copenhagen has also transformed their harbor into a winter activity hub, offering visitors the chance to warm up in the harbor's saunas, spas and hot tubs.

Sports Club in a Box

Remaining active all year has now become even easier with the introduction of a novel way to access sporting equipment. Hubbster is a "Social Sports Club in a Box" that gives people of all ages the opportunity to play in any seasons. The boxes or "hubs" allow residents to rent games and sports equipment through an app and connect with other individuals who might be interested in joining a game²⁶. The design and contents of the hubs are informed by local community needs and typically installed in public open spaces, areas with existing facilities, or dense urban areas²⁷.



Norway

Tromsø

POPULATION: 76,974

CLIMATE: Subarctic (very cold winters and cool summers)

AVERAGE WINTER TEMPERATURE: -9°C / -14°C High/Low (January)

AVERAGE DAYLIGHT HOURS: 1.15 hours (January)

200 miles north of the Arctic Circle sits Tromsø, Norway. For two months, the island and its 70,000 residents experience “polar night”, when the sun is no longer visible above the horizon. Despite being plunged into darkness, the rates of depression among residents of Tromsø are on par with those in warmer climates³².

Positive Winter Mindset

Researchers at the University of Tromsø studied how residents view wintertime and found that a positive winter mindset led to greater positive emotions, life satisfaction and personal growth. Like other Scandinavian countries, Norwegians have a special word that describes “coziness” in winter. The word “koselig” refers to activities like drinking warm beverages, lighting a fire or candles and cozying up under warm blankets³³.

Studies have found that staring at a fire lowers blood pressure and warm light can boost creativity^{36,55}.



Japan

Sapporo

POPULATION: 1,973,832

CLIMATE: humid continental climate (winters are cold and very snowy)

AVERAGE WINTER TEMPERATURE: -4 °C / -10 °C High/Low (January)

AVERAGE DAYLIGHT HOURS: 7.8 hours (January)

Since establishing the World Winter Cities Association for Mayors in 1982, Sapporo, Japan, has been at the forefront of the winter cities movement²¹. Sapporo is the largest city in the northern prefecture of Hokkaido, Japan's coldest region. Despite the harsh climate and annual average snowfall of 6 meters, Sapporo still manages to attract millions of tourists during the winter⁵⁰.

Winter Festivals & Tourism

Sapporo hosts three major winter festivals, each dedicated to celebrating a different aspect of the season: The Sapporo Icicle Festival that exhibits designs created with icicles; the Sapporo Yukiterrace, a festival of lights; and, the Sapporo Snow Festival.

The annual Sapporo Snow Festival, which began in 1950, now draws over 2 million people to see its enormous state sponsored ice and snow sculptures that dominate the center of the city^{50,58}. Ice slides, snow mazes, carnivals and snowball fights are some of the many additional activities that further activate the three main festival sites⁴⁶. The city's sport dome hosts additional indoor winter activities for children and provides a place to rest and enjoy refreshments⁴⁶. Local businesses and restaurants also participate in the festival by decorating store fronts and commissioning ice and snow sculptures⁵⁸.

Embracing winter and marketing Sapporo as an enjoyable winter destination has created a robust tourist-based economy²⁴. However, this influx of winter tourists from around the globe also presents safety challenges. The City's Winter Life Promotion Council has created an online guide for tourists that may be unfamiliar with some of the hazards associated with winter. The guide provides information on appropriate winter clothing, winter walking tips and identifies icy locations to avoid⁶⁰.





Canada

Winnipeg

POPULATION: 749,534

CLIMATE: Humid continental climate (winters are cold and very snowy)

AVERAGE WINTER TEMPERATURE: -11°C / -20°C High/Low (January)

AVERAGE DAYLIGHT HOURS: 8.36 hours (January)

Recently listed as one of the five coldest cities in the world, Winnipeg certainly lives up to its nickname “Winterpeg”³¹. When the temperature drops and the Red and Assiniboine Rivers freeze, the city creates the longest skating path in the country. Lining the path are the winning designs from the annual Warming Huts competition³¹.

Warming Huts

This art and architecture competition challenges designers to create winter shelters that provide refuge from the harsh Manitoba winter. The competition draws teams from around the world and has had entries from notable figures such as architect Frank Gehry and sculptor Anish Kapoor¹.

The winning teams are given a one-week installation period to construct their huts, which will remain on the rivers until the end of the skating season⁵⁴. The Warming Huts competition not only encouraged people to stay outside for longer periods in the winter, it also fosters partnerships with the surrounding community and university³².



Canada

Saskatoon

POPULATION: 273,010

CLIMATE: Cold semi-arid climate (warm summers and long, cold winters)

AVERAGE WINTER TEMPERATURE: -9°C / -18°C High/Low (January)

AVERAGE DAYLIGHT HOURS: 8.18 hours (January)

In 2016, the City of Saskatoon began developing a strategy to make the city a more livable place in the winter. One of the first steps in developing the strategy was to recognize existing strengths such as activities, events and attractions already being offered¹¹.

Winter Grants

In order to move the winter city strategy forward, a community grants program was established to support 'quick win' initiatives¹¹. Funding was used to promote local activities and events, borrow warming huts from Winnipeg, and install ice sculptures in the Business Improvement Districts. The city also used the grants program to host a talk on winter lighting design, fund a lighting analysis, and a decorative lighting program¹¹. These smaller initiatives are important for building public and political support for larger, longer-term winter city goals⁴³.

Saskatoon currently holds the world record for the largest snowball fight, with **7,681** participants!



winter city programming

get inspired!

Winter Cities demonstrate that there are endless things to do during the winter. Snow and ice offer opportunities to build, play and invent new pastimes. A recent addition to the winter sporting world is the game “Crokicurl”, developed by Public City Architecture and first played in Winnipeg. Crokicurl combines the popular Canadian pastimes of crokinole and curling. Perhaps the next great winter activity will be developed in Beaumont!

The following page lists a number of winter activities that are offered in winter cities around the globe.



Concept Rendering for Crokicurl by Public City Architecture



active events

- Cook offs/ decorating contests
- Dance parties
- Hands on demonstrations
- Ice play areas
- Local breweries/ restaurant tours
- Snow/ ice sculpture contests
- Snow mazes
- Winter crafts



passive events

- Bonfires
- Cultural activities / performances
- Fireworks
- Holiday markets / vendors
- Hot tubs
- Saunas
- Sleigh rides
- Musical performances



sports & recreation

Croki curl	Snowboarding
Dogsledding	Snowshoeing
Fat bikes	Snowtubing
Hockey	Snowball fights
Ice fishing	Tobogganing
Kick sledding	Winter cycling workshops
Skating	Winter swim / polar bear dip
Skiing	

2 background research



winter equity

“There is a unique beauty intrinsic to winter, but not all urban dwellers will be able to appreciate this beauty...” – Norman Pressman

While much of the Winter Cities movement has been focused on enhancing outdoor experiences and environments, it is important to acknowledge that not everyone has the same winter experience⁴⁷. Addressing the needs of the most vulnerable residents should be a priority in any winter cities strategy^{18,47}.

In order to deliver better outcomes and services, those who are directly affected by a project must have a voice³. Including broader views and experiences in the planning process improves the chance that a project will meet the needs of the most vulnerable or marginalized in the community²³.

Why isn't winter equitable? For residents who are experiencing homelessness, have limited mobility, older age or experience gender inequality, winter is not simply a season that lacks fun entertainment and activities in public space. For certain residents winter can be perilous, even a matter of life or death⁴⁷.





winter equity

homelessness

Much of the winter cities literature assumes that all people will have access to safe and heated indoor spaces⁴⁷. However, for people without enclosed, heated shelter, winter can be a struggle for survival.

People experiencing homelessness report more adverse health effects during periods of extreme cold than extreme heat¹⁷. Wet clothes, bedding, and shoes are just some of the compounding factor that make it difficult to stay healthy during the winter¹⁷.

Substance use disorders and mental health issues can further increase injury or death related to cold weather⁶¹. Homeless populations are also at much greater risk of developing hypothermia, with one study from Central Europe showing a 13-times greater risk of death from hypothermia than the general population³⁸.

Take Action:

During the winter, shelters are often faced with capacity shortages as more unsheltered individuals seek refuge from the cold. Developing a winter response plan to address this increase in demand as well as emergency measures that come in to effect during extreme cold are key to ensuring the health and safety of homeless residents. Many cities also deploy winter warming buses which provide a safe, warm space, helping residents avoid weather-related health conditions.



low income

Talk of winter equity is quick to focus on the physical challenges associated with winter and often overlooks the social and economic issues inherent in the season⁴⁷. With winter comes increased maintenance and heating costs. While higher income households may be able to pay for repairs and energy efficient upgrades, many low-income households struggle to keep the gas and electricity on.

In Canada, 8% of households experience 'fuel poverty', defined as a household that "spends more than 10% of its income on utilities"²². Though Alberta is the least affected province, 6% of the population still experiences fuel poverty²². Many winter events and attractions are also focused on consumer activity (e.g. winter markets) or require expensive clothing and equipment which can lead to further social exclusion for lower income households⁴⁷.

Take Action:

Though the federal government energy program for low income households was cancelled in 2006, most provinces (save for Alberta) offer low-income energy efficiency assistance. For example, the Newfoundland and Labrador Housing Corporation offers qualifying households energy subsidies through their utility providers. Identifying those living in fuel poverty and assisting with offsetting energy costs is an equitable approach to mitigating fuel poverty.



winter equity

disability

Like many older people, those with physical disabilities must also cope with increased safety hazards during the winter. Those who depend on wheelchairs, mobility scooters or other ambulation aids risk slips and falls from reduced traction on ice and snow³⁵.

A survey of wheelchair users in Manitoba found that during the winter 44% of respondents reported only going outside 1-2 times per week or less³⁷. As with the elderly, withdrawal from public space in the winter can also lead to social isolation⁴⁷.

Take Action:

Cities and towns have an important role to play in addressing winter accessibility barriers. In many municipalities snow clearing from public pathways is the responsibility of property owners by ordinance. While this may appear effective on paper, in practice, processing violations for non-compliance is time consuming and does not address the immediate needs of residents with mobility issues. In addition to roads, municipalities should also be encouraged to take responsibility for the clearing of paths and sidewalks.



older age

Social isolation is the number one issue facing seniors in Canada today²⁸. This isolation can become more pronounced in the winter as mobility is impeded by snow, ice, slush and gravel²⁰. Moreover, current snow clearing practices often leave snow windrows that block sidewalks, and it is not uncommon to hear reports of seniors being snowed in their homes as a result⁵²⁴.

Even when conditions are favorable, finding a place to meet with other people in the winter can also prove challenging. Often seniors are limited to shopping malls and public indoor spaces²⁰.

Take Action:

Addressing social isolation in older residents requires developing partnerships between public institutions, private and non-profit organizations. Saskatchewan's "Walk on the Wild Side" program aimed to connect residents in long term care facilities with the larger community by creating community trails and gardens. Older residents became teachers and leaders, sharing their knowledge of the environment with children and young adults. This powerful form of social inclusion focuses on what seniors can offer, not simply what they need.



winter equity

gender

Canadian census data shows us that more women commute by public transit than men. While for some this may be by choice, viewing this through a gender inequality lens can help to explain the larger trend. Because of the gender wage gap, on average women have lower incomes than men, making public transportation a more cost-effective option.

The pandemic has also intensified this inequality, as women, especially mothers of young children, have either left or reduced their number of paid work hours to deal with the increased responsibilities of home schooling and family care. Women's employment in Canada has now fallen to its lowest level in 30 years.

Gender disparities in public transit ridership can also be attributed to what is known as "trip chaining." Women spend more time trip chaining, or making multiple stops during trips than men for running household errand and taking children to and from school, appointments or lessons. During the winter tasks such as pushing strollers or carrying bags of groceries home are made even more challenging when paths and sidewalks are obstructed by snow and ice.



Take Action:

Municipalities can play an important role in making winter more equitable for women. Although snow removal and gender may seem unrelated, a gender analysis in Sweden found that the way snow clearing is prioritized disproportionately disadvantages women. Like Canada, statistically women in Sweden are also more likely to take public transportation, bike or walk, while more men travel by car³⁴. The analysis also found that pedestrians are “three times more likely than motorists to be injured in single car accidents caused by icy conditions,”³² most of these injured pedestrians are women.

Conventional snow clearing practices typically prioritize clearing main roads and streets first, especially those that lead to largely male dominated workplaces. In order to address this gender inequality, a number of cities in Sweden now prioritize clearing sidewalks, bike paths and transit stops first.



the equitable winter city:

- Provides heated shelters, warming centers and a range of accessible public indoor/outdoor spaces
- Is socio-economically inclusive, offering free events and activities
- Combats social isolation
- Removes physical barriers and prioritizes clearing of sidewalks, bike paths and transit stops

winter design

“Cultures and climates differ all over the world, but people are the same. They will gather in public if you give them a good place to do it.”

– Jan Gehl

Designing a successful winter city does not have to involve major changes to the physical realm. Addressing environmental factors such as solar access and wind can substantially extend the use of outdoor spaces. Special attention must also be given to design interventions that help make the landscape safer and easier to navigate.

Designing for winter also extends beyond the built environment and encompasses actions we can take to cultivate a positive winter mindset. Fostering optimism and excitement about winter is perhaps the most effective tool for transforming our perception of the season.





"Impulse" – Interactive light and audio installation designed by Lateral Office, CS Design and EGP Group (London, UK.)

winter design

cultivating a positive winter mindset

The way we communicate and develop messaging about winter is a key factor in establishing a winter city culture. Oftentimes, simply turning on the weather report in the morning exposes us to negative or sensationalized coverage of weather events. In our culture, winter is often associated with the burden of shoveling snow, driving hazards or injury from icy conditions. This can make even the most stoic of us want to simply hibernate at home, or head for warmer climates⁴⁵. However, as the city of Tromsø, Norway demonstrated, cultivating a positive winter mindset is perhaps one of the most effective steps in creating a successful winter city.

Outdoor Play

We are not born hating winter! One of the first steps to creating a great winter city is recapturing the excitement children show in the winter⁴⁵. While young children typically view winter in a positive light, this begins to change as we age³⁹. A link between positive winter mindsets and time spent playing outdoors has also been observed, highlighting the importance of designing open spaces with winter in mind³⁹. In creating a winter culture, it is key to engage our younger population in exciting winter activities and events. Their optimism and excitement can shift the attitudes of their parents/guardians, and in turn a large portion of the population.

Positive Planning

Cultivating a positive winter mindset can also change the planning process, allowing for winter conditions to be considered in a more positive light¹⁵. When Prince George, B.C., updated its official community plan it included winter as part of its defining characteristics, integral to the identity of the city³⁰. The City considers winter an attraction and celebrates "...the cold, snow, and ice of the winter months"³⁰. Winter use is now considered in all new developments of public space, transit, streets and buildings³⁰.



winter design

improving environmental comfort

Of course, cultivating a positive winter mindset doesn't mean ignoring the challenges faced in winter. Rather, it means recognizing these challenges exist, and addressing them in planning and practice is critical for any winter city design strategy⁴³. Factors such as solar access, snow management and shelter from wind are key to improving environmental comfort in the winter¹⁹. Studies have shown that by applying micro-climatic design principles, the outdoor season may be extended by over a month¹⁶.

Solar Access

A warm ray of sun on a winter day provides welcome relief from the biting cold and encourages us to go outdoors. However, the low angle of the winter sun casts extensive shadows over the landscape⁶. One of the challenges that must be addressed in winter city design is maintaining solar penetration to public outdoor spaces⁶. Where possible it is important to consider the orientation of buildings, streets and footpaths to maximize sun exposure^{30,43}. The 2017 Official Community Plan of Fort St. John, B.C. encourages orienting new buildings, subdivisions, outdoor playgrounds and parks to “capture maximum passive solar gain”⁹.

Perhaps one of the simplest design solutions to maximize sun exposure is to provide furniture in public spaces that can be moved to seek out the sun⁴⁵. Although there are often concerns with theft of movable furniture in public spaces, places like Bryant Park in New York City demonstrate that even with hundreds of movable chairs only a few are stolen every year in the heart of Manhattan.

While providing direct solar access is a key principle of winter design, ambient light should also be considered. A large portion of ambient winter light comes from light that is reflected off snow. As the climate warms and snowfall becomes more variable, certain cities may no longer benefit from this source of ambient light, increasing the need for more outdoor lighting strategies during the winter⁶.



winter design

Winter Wind

Wind is one of the most critical factors affecting outdoor comfort and livability in the winter¹⁵. When the air temperature is low, wind reduces the thermal comfort of people outdoors². This cooling effect continues as the wind speed increases². City morphology and street orientation can both affect wind speed, and many winter cities discourage the development of highrise buildings as they can cause an increase of wind turbulence at ground level^{15, 56}. Understanding the prevailing wind direction in winter will help inform the placement of strategic wind breaks and shelters².

In winter prairie cities the wind chill can cause the temperature to drop an additional 10-20 °C²⁰. For people who disproportionately rely on transit, like seniors, bus shelters provide critical protection from the wind²⁰. Shelters and wind blocks should also be positioned in public outdoor spaces and distributed around the city to create a network of nodes linked to services like sheltered cafés⁵⁶.

Like maximizing solar access, movable street furniture is also a simple design intervention to allow people to move to more sheltered areas⁴⁵. In addition, street furniture and even signage, such as fabric banners, can be designed to act as protective wind screens⁵⁶.

Many of the design strategies for mitigating winter wind found in the City of Edmonton's Winter Design Guidelines focus on using trees, and plants as a wind blocks. Dense evergreen vegetation is particularly effective at serving as a wind block and can also be used as a "living snow fence" to protect paths and seating areas from snow drifts⁵⁶.





winter design

Snow Management

Effective snow management is essential to improving winter livability⁴⁵. As demonstrated by Sweden's recent changes to their snow clearing policy, prioritizing the clearing of pedestrian and bicycle routes has had major benefits, from reducing injuries to improving gender equality.

In Canada only one-quarter of civic policy documents recognize snow clearing as a responsibility of the city³⁵. This practice presents challenges for the elderly and individuals with mobility or other health issues who are unable to shovel the sidewalk independently³⁵. The City of Saskatoon's Snow Angel Program encourages neighbours to help clear snow for those that are unable¹². Snow Angels can be nominated through the city web site and are officially recognized by the City of Saskatoon for their service.

Individuals also play a role in helping to manage snow and ice in Sapporo, Japan. Vending machines located at major intersections in the downtown dispense bags of gravel for pedestrians to scatter when crossing intersections. This small solution to managing winter hazards gives individuals the power to make the city safer for themselves and others, restoring a sense of control when navigating icy streets⁵⁹.

Zoning bylaws also play an important role in reducing the accumulation of snow and ice. In Prince George, B.C., the zoning bylaws were updated to require snow management plans for all large buildings, covered walkways to minimize snow accumulation and safety protocols to mitigate falling ice and snow from building³⁰. As many winter cities demonstrate, snow can also be a resource, not simply viewed as nuisance that must be trucked off to melting yards. Snow is a flexible building material that can be used in countless creative ways to design shelters, sculptures, games, furniture and more⁷.





winter design

improving the visual environment

Creating a year-round active built environment must also address seasonal changes in perception. Winter fundamentally affects how we perceive our city, and the visual appearance of our neighborhoods can change dramatically from day to day. During the summer, we perceive the different spaces in our neighborhood as separate. However, the winter causes these same spaces to merge, becoming one area of white space⁵. Chapman (2019) describes this as the 'whiteout effect,' which creates difficulty understanding the public realm in winter.

An accumulation of snow and ice also alters the network of streets and pathways and reduces the amount of usable space in the public realm⁵. Routes that were relied on by pedestrians may disappear completely, forcing people on to the road or to seek out new paths. Conversely, the presence of snow and ice can increase the perception of new informal routes for soft mobility through more visible desire lines⁵. A winter city strategy should address ways to combat the winter 'white-out' effect and improve our ease of understanding the townscape⁵.

key considerations:

- Use light and projections to better define areas^{5,43}
- Use ice and snow as landmarks and to define pathways^{5,43}
- Use bold colours on buildings and in public art to provide contrast from the snow⁴³
- Plant more evergreen trees and shrubs, and select deciduous plants with interesting winter features (e.g. berries that persist into winter, colourful twigs and stems, or ornamental bark)
- Select street furniture that is visually appealing and enlivens the streetscape⁴³
- Embellish outdoor spaces with graphic displays (e.g. flags, banners, signs and sculptures) that animate the public realm⁴³



winter community

Winter Culture Shift

Creating a winter city is more than just the design of the physical realm, it also needs to integrate social, political and economic spheres⁹. While the top down planning approach, driven by public authorities has its place, a successful winter city requires a grassroots, citizen-embraced culture shift. Municipalities can encourage this culture shift through collaborative and integrative community engagement. This process involves creating spaces and opportunities where the public is not only invited to participate, but empowered to lead²⁹.

Supporting Existing Community Actions

One of the most powerful community development tools a municipality has is to identify and support existing strengths and assets, rather than creating new ones. Creativity, invention and entrepreneurship already exists in the community, and by identifying existing community actions, initiatives and assets, the city can build on what already exists. When developing Saskatoon's Wintercity YXE Strategy, the City produced an inventory of existing winter assets and looked for ways to promote and support these initiatives¹⁰.

Support is often in the form of small grants, such as the City of Edmonton SNOW FUNd. The grant program was developed to defray some of the costs associated with winter networking and community outdoor events. Small grants of up to \$500 were made available to non-profit organizations, community leagues and clubs. Grants were used to purchase items such as, picnic tables, sports equipment, new signage, fire pits and wood⁵⁷.

“The day you pull support for the winter city strategy is the day everyone will go back inside!”

Daniel Cournoyer
Executive Director, La Cité Francophone



Community Engagement

There is no one prescribed path for community engagement. Effective engagement requires a variety of avenues to encourage a process that gets the attention and participation of a range of groups and people that are reflective of the community. Each community is made up of a range of stakeholders from local community and cultural groups to volunteer and even virtual groups¹⁴. Determining what community networks are in place and who represents specific interest groups is a key first step in the engagement process¹⁴.

Community engagement can also serve to connect key players and organizations with similar goals. An important role municipalities can play in shifting towards a winter city culture is connecting businesses, organizations and community leaders with a common interest in creating a winter city culture.



Edmonton WinterCity Engagement

Throughout the development of the Edmonton WinterCity Strategy there was extensive community consultation. A Winter Design Working Group, supported by City of Edmonton staff, was assembled to implement the actions outlined in the Winter Design Pillars.

The Working Group was composed of volunteers representing a diverse range of perspectives, from community leagues and other not-for-profit organization, to public and private sector, and educational institutions⁵⁶. Three primary workshops or “Design Dens” were held to allow the community volunteers to discuss winter city ideas, strategies and actions⁵⁶.

winter community

Championing Citizen Leaders

Every community has the internal capacity to devise solutions to their problems. Having strong citizen leaders, whether elected officials or community members, can help to mobilize others in the community. Instead of simply playing the role of spectator, citizen leaders are actively engaged in the civic or public sphere⁴². Municipalities can support citizen leaders by providing mentorship, resources, access to networks or space to innovate²⁵. Community leaders, when supported properly, can spur a winter city culture shift in their local areas through the organization of outdoor events, establishment of neighbourhood snow removal teams, 'winterization' of their front yard and more.



Play Streets

The City of Edmonton currently has a “Play Streets” program, that allows community leaders to temporarily close a street in their neighbourhood to host a block party. The program assists the leader with the road closure and other permits. Activities such as games and firepits are also provided to assist with programming⁸.

Winterscapes

The City of Edmonton “Winterscapes” program, encourages residents to design and create a compelling, vibrant and publicly-viewable space on their property. The designs can incorporate color, lights, snow, ice and horticultural features. Nominations are submitted online annually, with the winners decided through an online vote.

Inclusive Community Engagement

Meaningful community engagement must identify and overcome any barriers to involvement¹⁴. Common reasons that people do not participate in the planning process range from economic or transportation barriers, to childcare needs and distrust of government. Feeling unwelcome or not seeing your identity or culture reflected in the project also contributes to low rates of participation²³.

Engaging Local Businesses

Like support for community actions, businesses too can benefit from funding to defray the additional costs of winter projects, or tools and education to better operate in the winter months. The City of Toronto's Winter Activation Grant encourages businesses to play a more active role in their community, even during the coldest times of the year. The grant funds 50 percent of eligible cost such as marketing, snow clearing and winter lighting¹³.

During the development of the Saskatoon WintercityYXE strategy, funding was set aside early on for businesses and local organizations to support the strategy goals. Business Improvement Districts used the funding to commission a number of ice sculptures and installations.

COVID-19 has given cities the opportunity to promote and explore new uses for outdoor space in the winter months. To mitigate the pandemic's negative impact on indoor dining, some municipalities like Edmonton and Winnipeg are encouraging longer patio seasons that extend into the winter. Cities can further support these initiatives by assisting in the design and permitting of these spaces.



3 local analysis



policy

CURRENT WINTER

Strengths

- Beaumont is a demonstrated leader in incorporating new technologies and practices in improving community wellbeing (e.g. 3D sidewalks, tactical urbanism practices, potential new de-icer pilot project).
- Beaumont's Centre-Ville Urban Design Guidelines already include winter city planning principles (e.g. the Four-Season Livability, Snow Storage and Entrance Canopy categories)
- Centre-Ville already has a strong design basis for a winter-friendly area, and will continue to improve as development continues.
- A Winter City Strategy supports each of the six principles of the Our Beaumont Strategic Plan

Challenges

- Winter design principles could be further incorporated into other sections of the Centre-Ville Urban Design Guidelines, including:
 - a more comprehensive approach to recommending materials, finishes and colours that provide visual interest in the winter season
 - an approach to site design and building massing that minimizes wind impact on street level
 - an all-seasons planting palette that provides a list of species and planting strategies to provide visual interest and promote pleasant microclimates in all seasons
 - recommendations to create warm and welcoming winter patio spaces to activate the streets within Centre-Ville
 - Illustrations demonstrating design approaches in a winter setting.
- Beaumont currently does not have sufficient development controls on the neighbourhood-scale and building scale to encourage Winter design strategies outside of Centre-Ville.

FUTURE WINTER

Opportunities

- Every development application could require that winter design/all-season considerations be included (e.g. provision of all-season programming and infrastructure for open spaces, providing walkable and local destinations for the community).
- Develop measures for success that provide evidence of a winter culture shift (e.g. track the number of people participating in activities and events)
- The Beaumont MDP supports the creation of complete communities and smaller community centres, that when enforced during subdivision can contribute to winter-friendly communities.
- Revise Beaumont's engineering design standards / LUB to require a higher percentage of coniferous trees in the landscaping requirements.

Threats

- Beaumont is currently the fastest growing municipality in the Edmonton Region and requires greater development control tools to encourage greenfield development and infill to follow all-season design practices. This includes at the subdivision, site, and development scale.
- The City of Beaumont currently does not have any language in their MDP about winter-related emergency management. This should include identification of emergency warming shelters during cold-snaps, and identification of vulnerable areas in the event of a large snowfall.

infrastructure & mobility

CURRENT WINTER

Strengths

- Beaumont's primary bus stop offers a heated shelter.
- The City has included on-demand transit service in their budget, which offers a winter-friendly approach to public transportation.
- The existing trail network is well maintained and accessible in winter.
- Beaumont's Centre-Ville Urban Design Guidelines includes snow removal and snow storage guidelines.
- Sand to distribute on sidewalks is available for residents to take at the community centre

Challenges

- Beaumont does not have any physically-separated bike infrastructure, would allow for a reliable mobility lane for pedestrians and cyclists in the winter season.
- Few people commute to work during the winter using active modes of transportation.
- Current standards have drainage swales running over top of sidewalks, resulting in ice accumulation on walkways during freeze-thaw cycles.

FUTURE WINTER

Opportunities

- Explore opportunities to improve the winter condition of sidewalks. This should include:
 - Redesigning road standards so drainage swales do not cross over sidewalks
 - Public sidewalk clearing considerations
 - Neighbourhood sidewalk clearing program considerations
- Summer-focused outdoor amenities (e.g. spray parks) should be designed for year-round use (e.g. spray parks capable of being skating pads in the winter).
- More trail and open space lighting should be included to support winter evening activities.
- Consider creating a winter city network throughout the city that groups public space, activities and events.
- Assess different materials to promote snow melt and evaluate the cost-benefit.
- Continue to think of ideas to transition from a car-dependent lifestyle in the winter.
- Have city-wide challenges or games that focus on active means of transport to make it fun and motivational.
- Track the number of times people chose alternative modes of transport to help the City see if trends are altering over time .

Threats

- As winters get warmer in Beaumont, the freeze-thaw time of year lengthens, resulting in damage to infrastructure, particularly roads and sidewalks.
- Other impacts to winter weather from climate change need to be considered when thinking about future programming and development in Beaumont.
- As Beaumont's public transit grows, it's important to note that public transportation service that is not frequent and does not offer appropriate shelter will not be well utilized in the winter.
- As in most other Canadian communities, Beaumont's senior demographic is growing, and will require special consideration with winter mobility and preparation.

recreation

CURRENT WINTER

Strengths

- Beaumont has many toboggan hills that are popular among residents.
- Skating rinks are well distributed throughout the park system.
- Cross country ski trails are groomed at the local high school.
- Snow shoes are available to rent from the community centre.

Challenges

- Running in the winter isn't as common as in other metro-Edmonton communities, which may be the result of the community culture and accessibility to trails that receive snow clearance.
- While there are many cross-country skiers in Beaumont, the City lacks trails to support this activity.
- The City currently does not have any joint-use agreements in place with local golf-courses for winter use.

FUTURE WINTER

Opportunities

- Beaumont has an opportunity to use the new ball diamonds at the west recreation lands for winter activities, as well as the remaining agricultural lands for groomed cross skiing
- Find opportunities to bring winter sports outdoors again (e.g. curling and hockey).
- Provide choice! Offer a variety of activities and options for people to choose to do in the winter.
- Create a Rideau Canal like experience in Beaumont (large skating trail with frequent stops to gather and warm up).
- Offer an equipment sharing program for those who do not have the required equipment to participate in winter activities.
- Build on existing opportunities for winter outdoor fire pits.
- Open spaces should be designed for both active uses (skating, snow shoeing) and passive uses (warming areas with seating) to provide choice for all users.

Threats

- Climate change will extend Beaumont's shoulder seasons which are already difficult to program for.
- Alberta winters do not always provide the snow or temperature required for specific winter events, backup activities are crucial in this area.
- More extreme temperatures will reduce the number of people wanting to go outside. This emphasizes the importance of microclimate design in outdoor spaces and having available indoor recreation.

community

CURRENT WINTER

Strengths

- The city has a young population, children are often more willing to experience new things which is essential to creating a winter culture.
- FCSS provides winter gear to adults and children in the community through the “Coats for Kids” program.

Challenges

- Property owners are required to clear snow from sidewalks which can create broken links for pedestrians when snow is not cleared in a timely manner.
- FCSS and local schools stopped the Snow Angels program several years ago because of liability issues.
- Beaumont does not currently have any community leagues.

FUTURE WINTER

Opportunities

- The winter city strategy should engage with and incorporate other cultures, especially Indigenous cultures.
- Develop partnerships with community groups and empower them to create winter activities and events.
- Make winter knowledge more accessible to new Canadians (e.g. winter car maintenance, how to walk on ice, appropriate winter clothing etc.)
- Identify more ways for people to participate in events and activities (e.g. online participation has been successful).
- Encourage winter block parties! Beaumont has many cul-de-sacs that would be great spaces for these events.

Threats

- The City experiences difficulties in recruiting volunteers. Some potential reasons for this include Beaumont’s primary demographic of young families, who frequently do not have evenings or weekends available.
- Beaumont, like most Canadian cities, does not have a population of people with generations of winter experience, many residents are new to northern climates. Winter education is essential, especially to new Canadians.

events

CURRENT WINTER

Strengths

- Winter events in Beaumont have typically been successful in terms of participation and satisfaction.
- *Winter Events:*
 - Brighten-up Beaumont, November
 - Carnival, February
 - Family Day Event, February
 - Planning Department Event, March
 - Franco-Albertian Flag Raising, March
- *Other Municipal Events:*
 - Volunteer Appreciation Evening, April
 - Spring Kick-off Pancake Breakfast & Community Fair, May
 - Spring Community Awareness
 - Town & Country Daze, June
 - Canada Day celebrations
 - Culture Days, September

Challenges

- Currently there are few event opportunities outside of central Beaumont locations.

FUTURE WINTER

Opportunities

- Beaumont's rich Indigenous and Francophone history provide ages of winter experiences to build events around (e.g. Flying Canoe in Edmonton).
- Consider event locations that don't require a car to get there.
- Measure how many people attend events and make use of outdoor spaces in the winter as a metric to track the city's culture shift towards a Winter City.
- Find synergies with regional activities.
- Explore the idea of Beaumont becoming an auxiliary site for winter events happening in Edmonton.
- Host a winter fashion show to demonstrate that winter clothing can be stylish.
- Host a winter kick off community event to compliment the Spring Kick-off.
- Explore opportunities to have a winter street festival like the summer street party along 50th Street.
- Recognize good winter Samaritans at the annual Volunteer Appreciation Evening.
- Host an annual Winter Community Awareness event.
- Beaumont can look into creating a 'winter block party kit' that allows residents to close a street or laneway for winter activities.

Threats

- Beaumont's previous difficulty in recruiting volunteers will need to be considered when planning events.
- Beaumont should seek to empower and mobilize existing organizations into creating their own events, rather than taking on the cost and effort or leading.

operations

CURRENT WINTER

Strengths

- Snow-clearing methods were changed last year, resulting in the city receiving compliments on their efforts!
- Instead of pushing snow to the curb and sidewalk, snow was pushed to the middle of the road and ploughed when the piles became too high.
- The level of traffic determines snow clearing priority. P1s and P2s are cleared first, followed by P3s and P4s which are residential.
- Beaumont is currently using salt on their roads as a de-icer, Beaumont is looking at partaking in a pilot project to test a more environmentally friendly option in the City.

Challenges

- Operations would like to be more informed about the location of future events to better coordinate efforts.
- Residential walkway snow clearing is the responsibility of the property-owner, therefore walkway conditions are unreliable in winter.
- There is only one publicly available grit bin in the City.

FUTURE WINTER

Opportunities

- Consider providing community grit bins.
- Test more environmentally friendly options for snow melting.
- Consider ways to improve communication between Events and Operations.
- Consider ways that the prioritization of snow clearance can reflect the needs of vulnerable groups (pedestrians, cyclists, children, elderly people).

Threats

- Lack of funds for maintenance and operations (winter seen as low-hanging fruit for budget cuts)

design & accessibility

CURRENT WINTER

Strengths

- Beaumont's walkable downtown and unique character are both strengths for a winter-friendly urban realm.
- New neighbourhoods in Beaumont are designed for walkability and include neighbourhood centres.
- The Centre-Ville Urban Design Guidelines suggests the use of street parking stalls for patios or decks and incorporating public art in the site design.

Challenges

- There is too much deciduous vegetation in the City and not enough evergreens to provide visual interest in the winter.
- The public library is currently oriented away from the nearby public space.
- The current built-form in Beaumont is missing the incorporation of colour and vertical interest to minimize the winter 'white-out' effect.

FUTURE WINTER

Opportunities

- Design spaces that are bright, magical, social and warm.
- Plant vegetation that provides four season interest (e.g. focus on texture and colour)
- Create comfortable microclimates and focus on creating wind breaks.
- Consider more public art and landmarks to create a legible winter landscape.
- Consider the environmental impact of all winter city strategies (e.g. selecting energy efficient lighting, low impact road ice treatments).
- Find opportunities to connect the upcoming way-finding signs with the winter design practices and winter recreational opportunities. (e.g. QR codes that link to activities and opportunities in the area).
- Provide public indoor space that can be used in extreme weather events.
- Activate open spaces through nearby public buildings, or private development with active frontages.
- Accent and strengthen the French character of Beaumont through winter design.
- Beaumont's experience with tactical urbanism can be applied in using snow, ice and light to create temporary installations in the winter.

Threats

- There is a current lack of incentive or design opportunities to improve the winter vibrancy of residential neighbourhoods. Programs similar to "Winter Front Yards in Bloom" from Edmonton can be explored, or other 'tactical urbanism' approaches.
- New development needs to be situated to maximize sunlight and provide wind shelter to outdoor spaces.

business & partnerships

CURRENT WINTER

Strengths

- The community of Beaumont has a culture that is supportive of local businesses
- Markets in Beaumont include the Centre Ville Market and annual Night Market.
- A number of local businesses are already interested in participating in winter city initiatives

Challenges

- Local golf courses have been reluctant to enter into discussions about the winter use of their lands (such as cross-country skiing) because of liability issues and concerns about protecting the grass.
- Local businesses do not typically set up patios or other outdoor services in the winter.

FUTURE WINTER

Opportunities

- Involve the business community in winter city planning.
- Encourage businesses to provide winter patios.
- Winter patios don't have to be completely outdoors (e.g. bubble dining rooms).
- Explore the possibility of extending Beaumont's summer farmer's market to the winter.
- Approach Eagle Rock and Coloniale Golf Course to gauge interest in partnership opportunities
- Beaumont's rapidly growing Indigenous population presents an opportunity to engage with Indigenous peoples on how Beaumont can develop a winter mindset from traditions, and how the winter season can be used to celebrate Indigenous cultures.
- Other potential partners could include: Beaumont Society for the Arts, Beaumont Library and Metis ALIVE

Threats

- Burnout from participants
- Turnover of residents or businesses

marketing & promotions

CURRENT WINTER

Strengths

- FCSS provides winter education to New Canadians
- The City of Beaumont has an established brand and communications presence in the city, both online and physical.

Challenges

FUTURE WINTER

Opportunities

- Keep the social media dialogue positive about winter.
- Encourage local media to reframe their language about winter to focus on the positive.
- Provide information in multiple languages.
- Ensure winter activities and opportunities are promoted with clear information on ways to participate.
- Engage in viral place making by creating something that is worthy of an Instagram photo (e.g. art installations, lighting or murals etc.)

Threats

covid 19

CURRENT WINTER

Strengths

- People now feel more comfortable gathering outside than indoors during the winter.
- There is now broader acceptance of winter patios and other outdoor winter activities.
- There has been an increase in foot traffic with more people taking walks in the community.

Challenges

- The pandemic has made it difficult to host events.

FUTURE WINTER

Opportunities

- Increase in foot traffic presents opportunities for more passive recreation and the creation of additional pathways.
- The cancellation of winter travel plans should be seen as an opportunity to change the minds of Beaumont residents about winter at home.
- Develop flexible, adaptable strategies to program and event delivery.

Threats

- Future lockdowns and interruptions to daily life.
- Interruption of the supply chain

4 interviews



interviews

Interviews with Winter City Champions

One of the key aspects of a successful Winter City Strategy is the identification and empowerment of Winter City Champions. As part of the background research for the Beaumont Winter City Strategy, the project team interviewed three individuals who have helped transform and have studied Winter Cities. These individuals were:

Isla Jackson Tanaka, City of Edmonton

Isla Jackson Tanaka is a Winter City Planner for the City of Edmonton, whose experience in Winter Cities comes from the inception of Edmonton's Winter City Strategy through to executing it in its current state as a multifaceted program.

Dr. Kristof Van Assche, University of Alberta

Dr. Kristof Van Assche is a Professor with the School of Urban and Regional Planning at the University of Alberta. His experience ranges in cities spanning many continents and has a focus on Planning Theory. Dr. Van Assche is currently teaching a class on Winter Cities.

Daniel Cournoyer, La Cite Francophone

Daniel Cournoyer is the executive director of La Cite Francophone, a hub for Francophone organizations known for Café Bicyclette and its year-round patio and the annual Flying Canoe festival which takes place during the winter. Cournoyer is the executive director of the Flying Canoe as well.

Key takeaways from each interview are summarized on the following pages.



KEY TAKEAWAYS

Infrastructure and Design

- Design standards should default to work in winter conditions. Infrastructure and public spaces that are designed to work in the winter will also work in the summer.

Community Culture-Shift

- It is essential that the Winter City Strategy team remains flexible and responsive to the changing needs of the community when encouraging a culture-shift to a winter city mindset.
- A key strategy in generating community buy-in for the winter city concept is to tap into their emotions – the goal should be seen as helping people fall in love with winter.
- A City can assist in the winter city culture shift by creating a central hub of information, including winter events, activities and other ideas to enjoy the season.
- A City should seek to empower and provide resources to existing champions and initiatives before trying to start winter city programs and events themselves.
- Starting a winter-culture shift is easier to do in the early spring rather than the late fall. While the temperatures are similar, many feel the spring is much warmer than autumn.
- Communicating and showing enjoyable winter activities is important, take lots of winter photographs and share them widely.
- Promote inclusion by showing people of diverse cultural backgrounds in winter photos—winter can be for everyone!
- Capture people’s stories as the winter city culture shift begins, stories are powerful when it comes to selling ideas.

Winter Mobility

- Planning for safe and effective mobility in winter is not just

about accessibility and safety, its also about maintaining the dignity of more vulnerable populations.

- It’s not the cold temperatures that stop people from attempting to cycle in the winter, it’s the perception of safety (darkness, ice, snow etc).
- Dedicated and separated bicycle infrastructure that is routinely and reliably snow cleared is a benefit for pedestrians, cyclists and those with mobility devices alike. In winter, bicycle lanes become people pathways.

Winter Patios

- Winter patios can be successful when cities assist by providing education and resources for business owners.
- Some key strategies for successful winter patios are:
- Utilizing awnings to trap heat produced by warming elements.
- Investing in smart warming elements that provide heat to where people are sitting, the traditional 6’ patio heaters do not effectively reach people at a sitting height.
- Providing colourful blankets is a cheap and effective option at providing warmth and creating a visually welcoming environment.

Maintaining a Successful Winter City Strategy

- Creating buy-in with upper City administration members and City Council is essential in creating a strategy that will turn into a well-supported program for years to come.
- The Winter City Strategy should come with loose performance metrics, that when utilized, can demonstrate the Strategy’s success in transforming the resident’s relationship with Winter.

KEY TAKEAWAYS

Winter Urban Forms

- There is no overall formula for success in Winter Cities, each city is different and requires a unique approach. However, you can take lessons from other cities to apply to your local context.
- Car-dependent urban forms and transportation networks do not lend themselves to pleasant winter environments. Retrofitting for walkable, transit-orientated complete communities will benefit the winter experience for residents.
- When designing a winter-city, it is useful to think of it as creating a network of 'fractals' (smaller complete communities). These fractals should have spaces with a variety of sizes, forms, and uses, encouraging a functioning and pleasant winter environment.
- These 'fractals' need to be connected by fast (car and transit) and slow (active modes) networks. Slow networks need to offer fast, direct and convenient access to destinations, with easy transfers to fast networks.
- Laneways are a largely unexplored winter city opportunity, that can be easily retrofitted as slow network connectors, while also serving as a destination and gathering place.

Albertan Winter Culture Shift

Edmonton-area municipalities require a cultural shift to effectively implement a Winter City strategy, some key factors to consider include:

- Edmonton-area populations are more diverse than other winter cities, much of the population does not have generations of experience in cold winters.

- Current institutions, both in administration and in the community, make implementing winter-friendly design and city-building practices difficult as they tend to uphold the status-quo.
 - This highlights the importance of communicating the various benefits (health, community, economic) of creating a better winter city.
- Edmonton-area communities need to develop its 'outdoors culture', this can be done by transitioning from car-dependent urban forms and into more multi-modal/mixed-use forms where the urban outdoors is more desirable.

Mitigating Whiteout Effect

Landscape architecture is an effective discipline that can combat the winter 'whiteout' effect. By integrating landscape architecture more completely into the development process, rather than inserting it after the building is designed, will lead to more attractive urban areas in winter. Currently landscape architecture is typically reserved after the building footprint has been decided.

- Effective winter landscape architecture will create visual interest on the vertical plane. Our current car-orientated developments leave spaces very flat with no visual distinction. Stairs, hills, low walls and planting are all vertical elements that can create visual interest after a snowfall.

The Future of Winter Cities

- Many winter cities may see some benefit from climate change (long shoulder seasons with more manageable temperatures).
- Winter cities must recognize the importance of mixed-use, density, and variation in place.
- Locally available green space that is designed for winter is key.

Daniel Cournoyer – La Cité Francophone

KEY TAKEAWAYS

Utilizing Winter's Assets

- The long winter nights need to be viewed as an asset, as they are an opportunity for unique and creative lighting installations that allow us to celebrate winter.
- Darkness is the biggest reason people do not typically access natural areas in the winter, lighting has proven to change this as seen with the Flying Canoe festival, which attracts thousands of visitors to the Mill Creek ravine with programming and light installations.
- Snow is another resource of winter (although it is not always available in big quantities in Edmonton), it can be 'harvested' to create play features, artwork and structures.

Winter Patio Design

- Don't put away patio furniture in the winter, just use it differently. When selecting patio furniture, think about materials that retain heat and do not get cold easily.
- Encourage innovation through assistance in funding and permits, Café Bicyclette is debuting benches with built-in heaters this year that were partially funded by Winter City Edmonton.
- Outdoor private space for businesses allows for easier patio design, as permits are not required to take up public right-of-way.
- There is an element of corporate training that comes with winter patios, many serving staff do not have experience serving outdoors in winters or tending to firepits.
- Café Bicyclette's patio is sunken, this provides excellent protection from the wind.

Flying Canoe Festival

- The Flying Canoe Festival is intended to be a beacon that welcomes people to experience the Francophone, Indigenous and Metis cultures, rather than to stand outside and observe.

- Using the Francophone tale of the Flying Canoe has been very successful in creating a cohesive event that blends traditions (what is seen in Mill Creek Ravine) with the contemporary (what takes place in and around La Cite).
- The story of the Flying Canoe is the story of the Francophone, Indigenous and Metis people, successful events need to tell their own stories, that are reflective of the people who live and have lived there.
- The Flying Canoe has been growing rapidly both in scale and attendance each year, demonstrating the desire for people to attend winter events in their city

Partnerships and the Flying Canoe Festival

- Getting community organizations directly involved is essential to a successful festival. The Flying Canoe sends out lantern-making kits to schools and community leagues and the finished product will be featured in the festival. Some University partnerships create lighting installations as well. This results in the festival being a community effort, and members from these organizations often attend to see their work.
- The Flying Canoe Festival features an area with tipis, this is programmed by Native Counselling Services every year.
- The City of Edmonton's Winter City Strategy has a fund for Winter Festivals to help offset some of the costs of doing production in the winter. As with construction, events are more costly to put on in the winter. Without the support from Winter City Edmonton, it is likely that Edmontonians will once again return to staying inside during the winter.
- There is a potential opportunity to bring the Flying Canoe team to Beaumont for an installation – they are currently working with Spruce Grove on a similar project.

5 **key findings & next steps**

key findings & next steps

This background research report looked at examples of Winter Cities from across the world and gathered research on winter equity, design, community and mindset. An analysis of local, present and future conditions that impact the City of Beaumont's relationship with winter was conducted, as well as interviews with Winter City experts. Our primary key findings are summarized below:

The Winter City Strategy needs to approach transforming winter in Beaumont from many angles, including:

- Winter design
- Winter mobility
- Winter recreation
- Winter community-building
- Winter equity

Design

- A successful winter city approach relies on many factors both physical and social. However, the foundation to any good winter city is well designed places and communities. Some key design aspects Winter Cities need to consider include:
 - Walkable destinations in all neighbourhoods
 - Building designs that mitigate wind and maximize sunlight penetration
 - The use of colour, architecture and planting to create visual interest
 - Neighbourhoods that are connected effectively by active and public transportation networks

- Utilize snow, ice and darkness as opportunities for unique designs and activities, rather than treating them as undesirable aspects of the winter season. This thinking should be extended to how we communicate about winter, intentionally framing things positively with optimism.
- Designing parks and open space with facilities that are built to be operational in winter, does not negatively impact their use in the summer. For example, designing a splash pad to be used as a skating rink in the winter.

Mobility

- Investing in separated cycling infrastructure that is regularly cleared of snow benefits pedestrians and cyclists alike and will decrease reliance on automobiles in the winter.
- Prioritizing sidewalks, trails and cycling infrastructure for snow clearing is an equitable approach that supports the most vulnerable road users. An example would be the city of Syracuse, New York, which recently has begun a pilot program which will clear private sidewalks deemed to be "priority" by residents, while Bloomington, Minnesota clears all of the sidewalks in the city.
- Providing frequent and convenient public-transportation service, with facilities that are sheltered from the elements, is even more important in attracting and retaining ridership in the winter.

key findings & next steps

Winter Community-Building

- Many residents in the City of Beaumont may not be as experienced with winter as people in other northern cities. Providing winter education and access to equipment for winter activities is important in encouraging a thriving winter culture.
- Any outdoor winter-initiative is more expensive than a summer equivalent, community-leaders need support from volunteers, officials, and grants to help offset these additional costs and provide great events and activities for the community.
- It is often more effective for a City to support existing community initiatives and leaders in creating winter events and programs, rather than leading initiatives themselves. Support can come in the form of streamlined permitting processes, equipment (e.g. block party starter kits), promotion through City communication channels, and grants.
- Beaumont's history as an important place for Indigenous and Francophone peoples is an excellent opportunity to create winter events and programming around.
- Beaumont's young population, with a high proportion of children, is an excellent opportunity to build a winter culture, as children are more likely to try new things and consider new ideas – all while taking their parents/guardians with them.
- Opportunities to activate public spaces with food and beverage vendors, balanced with events, in the winter months on a consistent basis should be explored to create opportunities to provide a community winter gathering place.

Winter Recreation

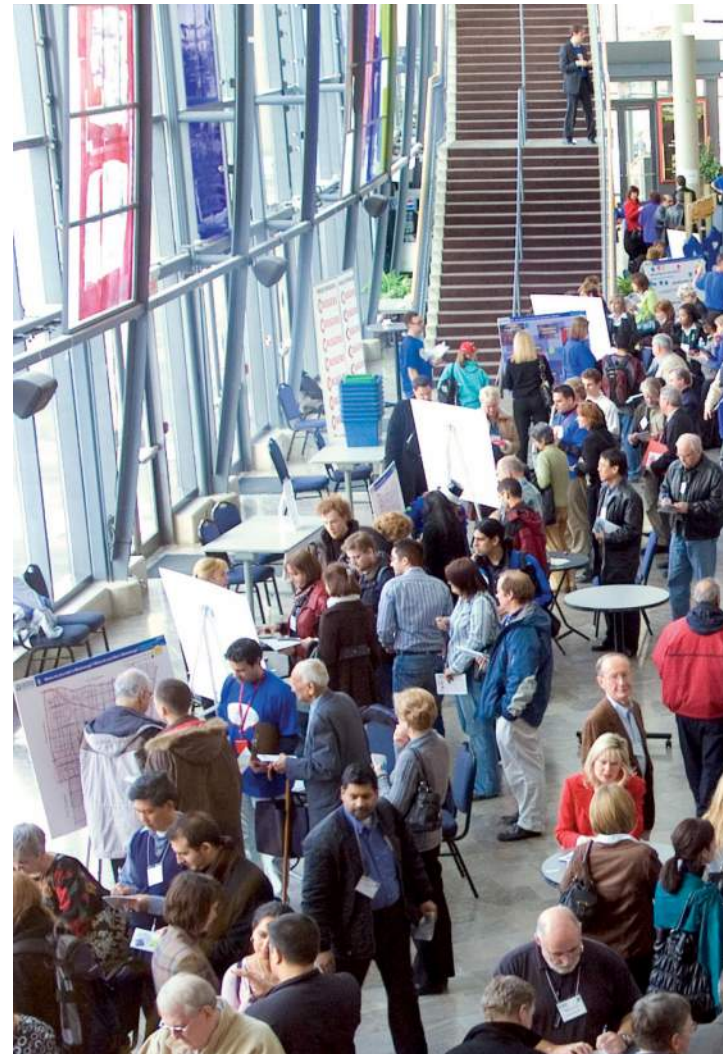
- Beaumont's many skating rinks and sledding hills provide excellent opportunities for winter recreation and can be enhanced by adding opportunities for passive recreation (benches and firepits) and facilities (change rooms and warming shelters).
- Most winter activities require specialized equipment. Providing affordable and accessible equipment to the community helps reduce barriers to entry in winter activities, especially to people who are new to winter.
- Programming outdoor space in winter, with both active and passive activities, is essential to keep these spaces populated and thriving. Activities such as skating and tobogganing should be balanced with benches and fire pits.

Winter Equity

- Maintaining continuous engagement and communication with the community on winter issues and concerns is an important first step in identifying and addressing the needs of those who are more negatively impacted by winter than others.
- The provision of public heated spaces, washrooms, and shelters is essential for equitable winter cities, particularly in addressing the needs of those facing homelessness, and those with limited mobility.
- Providing greater access to public transportation, and reliable and safe active transportation connections is important for those who cannot rely on private automobiles as a form of transportation.

next steps

The Background Research Report, along with the Step 1 What We Heard Report under a separate cover, cumulate the information-gathering activities completed for this stage of the Winter City Strategy. These findings will serve as the foundation and background for the Winter City Strategy document, which will outline key focus areas, objectives, and action items to meaningfully transform Beaumont's winter experience.



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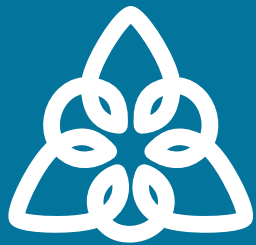
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