CRAFTING A WINNIPEG WINTER PLANNING STRATEGY WITH LESSONS FROM OTHER CITIES

by Steve Nuttall - University of Manitoba - Department of City Planning

BACKGROUND

Not all cities are built equally. Many concepts used in urban design and city planning are borrowed from warmweather climates. This leaves cities which experience freezing temperatures and snow with an urban environment that does not meet the needs of citizens yearround. Some winter cities approached this issue through the creation of winter city planning strategies, that is, a series of policies designed to negate the challenges of winter while celebrating the benefits of the season. This capstone report reviews precedent strategies, distills them to their essential elements, and suggests eight steps the City of Winnipeg can take to create its own strategy.

Winnipeg, Canada

The central focus of this study is Winnipeg, MB. Winnipeg has a reputation for long, cold, and snowy winters. At times, this reputation has caused the city to be viewed negatively by locals and outsiders alike. Winnipeg

does not currently have a winter city planning strategy. The policies which direct Winnipeg's long-term development are OurWinnipeg 2045, Complete Communities 2.0, and a series of targeted guiding documents.

The Precedent Cities

The precedent cities in this study are Edmonton, AB, Saskatoon, SK, and Buffalo, NY. Each were selected for their creation of a winter city planning strategy and the availability of documents. As North American cities, the precedents feature a similar car-centric urban form as Winnipeg. In addition to their comparable populations and climates, these three cities offer a series of lessons Winnipeg can learn from when creating a winter city planning strategy.

LITERATURE REVIEW

Foundational Research

Much of the defining literature in the realm of winter city planning was written by Norman Pressman in the 1980s and 1990s, and this represents much of the

knowledge available on the subject today (Stout et al., 2018). Pressman's work focuses on common-sense solutions such as providing protection from wind and maximizing exposure to natural light (Pressman, 1987). Pressman also argued effective interventions in winter cities must take a holistic approach by targeting four distinct domains: The physical environment, local culture, human bio-physiology, and the economy (Pressman, 1996). Many of Pressman's ideas have been expanded upon and his overall work has stood the test of time.

Contemporary Research

Winter city planning literature is said to have peaked with Pressman (Chapman

et al., 2019). There has however been a renaissance of research in the 2010s, with a significant volume of work emerging from Asia. The objective has shifted from generalist research to determining best practice, with several researchers using modern technology to test and improve older ideas (Paukaeva et al., 2020). Winter city planning literature is broad but shallow, and could benefit from higher connectivity and collaboration between topics and researchers respectively. A notable gap in the literature is climate change, a topic which may drive research forward in coming years.

RESEARCH QUESTIONS & METHODS

Research Questions

This report sought to answer two questions:

Q1: To what extent do Winnipeg's policies currently address planning for winter liveability?

Q2: What can Winnipeg learn from how other cities have approached winter liveability in their planning policies?

These questions required the use of multiple research methods to answer: A policy review & SWOT analysis, a policy precedent study, and a conventional approach to knowledge synthesis.

Policy Review and SWOT Analysis

In answering Q1, a policy review of OurWinnipeg 2045, Complete Communities 2.0, and the guiding documents was conducted. This process involved reading the documents for mentions of winter planning principles, both explicit and implicit, and coding them for analysis. SWOT analysis, the process of determining strengths. weaknesses, opportunities, and threats as they relate to an organization or a plan, was used to assess the City of Winnipeg's policies (Gurel & Tat, 2017).

Policy Precedent Study

In answering Q2, a precedent study was carried out to determine what Winnipeg could learn from Edmonton, Saskatoon, and Buffalo. Precedent studies collect and synthesize information from

compatible projects to facilitate the creation of new ideas in different contexts (IGI Global, n.d.). For each precedent city, the winter city planning strategies and supporting documents were reviewed and distilled to highlight big ideas and takeaways, offering lessons for Winnipeg.

A Conventional Approach to Knowledge Synthesis

This research method ties together the findings from the first two methods. Knowledge synthesis is defined as the "approaches to combining, aggregating, integrating, and synthesizing primary research findings (Schick-Makaroff et al., 2016, p. 174). Application of this method involved using the points of success from the precedent cities to address the perceived weaknesses in Winnipeg's current approach to policy.

KEY FINDINGS

Winnipeg's Policy Documents

- The City's master planning document contains no references to winter
- o Few supporting documents show evidence of planning for winter liveability
- While some policy decisions are consistent with winter city planning principles, this
 is rarely the stated intent
- There is a lack of attention paid to how climate change will impact approaches to winter recreation
- Creating a winter city strategy would be a worthwhile investment if the City wishes to address these issues

KEY FINDINGS

Precedent Winter City Strategies

- Each city showed the value of creating a winter city strategy to improve winter liveability
- Edmonton has the most mature and complete strategy, receiving awards and earning international praise from the planning community
- Saskatoon demonstrates the ability of a city smaller than Winnipeg to successfully adapt Edmonton's plan
- Buffalo offers a cautionary tale on the importance of integrating municipal leadership to oversee implementation, as progress on their strategy stalled after the report was handed to the City by the non-profit who wrote it
- All three cities emphasize the importance of community engagement, the necessity of partnering with public and private stakeholders, and the need for a holistic approach

APPLICATION

Eight Steps Toward a Winnipeg Winter Strategy

To assist Winnipeg in creating a strategy of its own, eight steps were generated based on the research findings. These steps form a framework, seen in Figure 1, which is informed by the precedent cities and localized to the Winnipeg planning context:

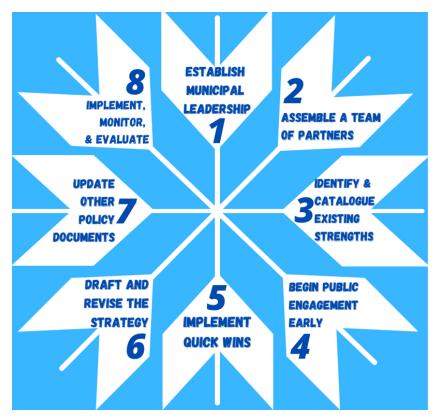


Figure 1: Eight steps toward a Winnipeg winter strategy

- Step 1: Establish Municipal Leadership ...to oversee the project from conception through implementation
- Step 2: Assemble a Team of Partners ...to include a variety of perspectives and craft a holistic approach
- Step 3: Identify and Catalogue Existing Strengths ...to start from a place of positivity and promote civic pride
- Step 4: Begin Public Engagement Early ...to gather community-driven ideas and shape the direction of the strategy with public input
- Step 5: Implement Quick Wins ...to build excitement about the strategy and create early returns
- Step 6: Draft and Revise the Strategy ...to achieve Winnipeg's winter planning goals as defined by the community and project partners
- Step 7: Update Other Policy Documents ...to reflect a holistic commitment to implementing the strategy across the City's policies
- Step 8: Implement, Monitor, and Evaluate ...to ensure the plan is carried out successfully and to allow for course-correction when necessary

RECOMMENDATIONS

The City of Winnipeg should seriously consider following these eight steps to create a winter city planning strategy. Regardless of whether these specifics steps are followed or not, the strategy creation process must do three things:

- 1. Engage the public early and often
- 2. Place community input and needs at the centre of the process
- Practice a holistic approach targeting the built environment, the sociocultural realm, and the economy

If Winnipeg wishes to combat its icy reputation, informed and actionable policy is the recommended way forward.

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