

## Selected Winter City Conference Observations

- City of Tromsø, Norway
  - 350 kms north of the arctic circle with a two-month long 'polar night' (meaning the sun does not come above the horizon from November 28<sup>th</sup> to January 14<sup>th</sup>) – it is located at 69° latitude (compared to Saskatoon at 52°) but is milder than Saskatoon as a result of its location near open seas
  - Called 'Paris of the North' (much like Saskatoon may be considered 'Paris of the Prairies')
  - Researchers have completed a study focussed on determining why Seasonal Affective Disorder (SAD) is not much of a factor affecting the population of Tromsø. Findings highlighted that appreciation and mindset are key. The culture of Tromsø has a strong influence on this and can be intentionally cultivated elsewhere. Leaders in Tromsø actively promote positive mindset and optimism among several important themes:
    - 'get outside' – Civic design and infrastructure, as well as an overall focus on integration with nature creates a compelling invitation for citizens to live an 'open air life' connected to nature; a 20 minute walk is considered a normal part of a winter activity that would occur regularly (this is not unlike the principle that guided neighbourhood development surrounding an elementary school from 1963 until recently). Boot rooms at the entrances to restaurants and shops encourage arrival on-foot and getting comfortable for being indoors again.
    - 'make it special' – The overall design of the community, individual sites, and program decisions focus on creating a sense of cozy (called 'hygge') and includes incorporating fireplaces, candles, blankets and a focus on food and beverage services.



*Image courtesy: WBUR Boston Radio*

- 'appreciate' – Make a cozy ('hygge') culture a conscious focus, combatting negative perceptions of winter with conscious changes to

the tone of ‘small talk’ (the idea that people might complain about the dark or the weather was likened to racist ideas that, when heard should be challenged rather than allowed to remain in the conversation).

- ‘deal with the weather you have’ – Sometimes there is beautiful, crisp, bright snow, but mostly there is slushy, icy, brown sludge. It is important to design and plan for all conditions to make them as appealing as possible. At the individual level, there is no bad weather, only poor clothing decisions.

- <https://www.visitnorway.com/places-to-go/northern-norway/tromso/>



*Image courtesy: <http://www.traveltheworld.info/travel-destinations/tromso-norway/>*



*Image courtesy: [uponarriving.com](http://uponarriving.com)*



*Images courtesy: Tromso Northern Lights day tour*



*Image courtesy: Kari Leibewitz - Winter Cities Shake-Up 2017*

- Fort St. John, British Columbia
  - Fort St. John is a city in northeastern British Columbia. Located at Mile 47 along the Alaska Highway, the community is the oldest European-establishment in BC (1794). The winter season for Fort St. John is comparable to Saskatoon with temperature norms of -16C (Saskatoon is -19C) but more cloudy with 46% of days overcast (Saskatoon has only 32%).
  - The leaders of Fort St. John have created plans focussing on the concept of 'winter citizenship'. To gain community acceptance, plans focus on:
    - Addressing real community challenges in a manner authentic to the Fort St. John context.
    - Using 'block captains' as champions and introducing things like prizes for the best maintained property in winter.
    - Viewing snow as a resource rather than a waste.
    - Clearly articulating public and private responsibilities.
    - Changing the community relationship to winter by no longer trying to make winter streets the same as summer streets.
    - Introducing temporary shelters in parks, as collectors for snow
  - Design guidelines focussed on winter were approved in 2000.  
<http://www.wintercities.com/Resources/Fort%20St.John%20Winter%20Cities%20guidelines.pdf>. A report card on 53 micro-projects to winterize various spaces was produced in 2017.



*Dancing in the Snow event - Image courtesy: Northern Lights College*



*Crystal Cup Pond Hockey Tournament - Image Courtesy: Energeticcity.ca*

- The importance of Lighting to a Winter City
  - Light defines one's experience of reality and its properties affect both human biology and psychology. Living creatures (including humans) have evolved on the basis of biological and behavioural (psychological) requirements for night and day as well as seasonal cycles.
  - Light Festivals are popping up in cities in a variety of countries.
  - Many cities are creating Master Lighting Plans as an important component of the community landscape to create atmosphere and contribute to livability and identity. These plans regulate the following elements to enable the public and private sectors to co-create the city landscape:
    - Amount of light
    - Location for light
    - Lighting 'temperature' (colour spectrums)
    - Collateral effects (managing light pollution and spill-overs to ensure light goes only where it is intended)
    - Managing darkness with an emphasis on embracing darkness – recognizing that 'darkness' only exists in built environments as there is always some light in nature (i.e. moon, stars)



*Image courtesy: Darío Nuñez Salazar - Winter Cities Shake-Up 2017*



*Berlin is a low-light city - Image courtesy: BsnSCB.com*



*Image courtesy: Sabine De Schutter - Winter Cities Shake-Up 2017*



*Ghent Light Festival - Image courtesy: Travel Gifts Ideas blogpost*



*Image courtesy: AvenueCalgary.com*





*Toronto Cavalcade of Lights - Image courtesy: Wheels.ca*

- The importance of focussing on a walkable community
  - Vision Below Zero: Goal of zero accidental deaths and injuries related to urban mobility ([https://etouches-appfiles.s3.amazonaws.com/html\\_file\\_uploads/1c191cbc6e7f5d8e0d235dfbf823d4aa\\_010\\_Firth.pdf?response-content-disposition=inline%3Bfilename%3D%22010\\_Firth.pdf%22&response-content-type=application%2Fpdf&AWSAccessKeyId=AKIAJC6CRYNXDRDHQCUQ&Expires=1508708516&Signature=rE1V7FqGN4kw2EnoW9ffZsf%2B24%3D](https://etouches-appfiles.s3.amazonaws.com/html_file_uploads/1c191cbc6e7f5d8e0d235dfbf823d4aa_010_Firth.pdf?response-content-disposition=inline%3Bfilename%3D%22010_Firth.pdf%22&response-content-type=application%2Fpdf&AWSAccessKeyId=AKIAJC6CRYNXDRDHQCUQ&Expires=1508708516&Signature=rE1V7FqGN4kw2EnoW9ffZsf%2B24%3D))
  - Analysis of police and hospital data in Stockholm revealed that roadway maintenance turns out to be a 30% contributing factor to pedestrian and cyclist accidents. \$75 Million is spent on hospital visits but only \$30 Million on snow clearing, so Stockholm is looking at ways to orient their spending to the 'preventative-end' of the system.
  - Walk21 – International Charter for Walking (<https://www.walk21.com/>) is rising in popularity among cities, driven in part by Canadian Institute of Health Information findings that obesity 6% for every hour spent in a car and decreases 5% for every kilometer walked.
  - There is 'Safety in Numbers' and this relationship has proven to be true in relation to:

- People's perception of safety
- People's perception of dark
- People's willingness to walk/cycle
- The amount of attention drivers pay to pedestrians or cyclists (i.e. the more pedestrians or cyclists are encountered in the community, the more drivers will be aware of, pay attention to, and respect these people whom they share the right-of-way with)

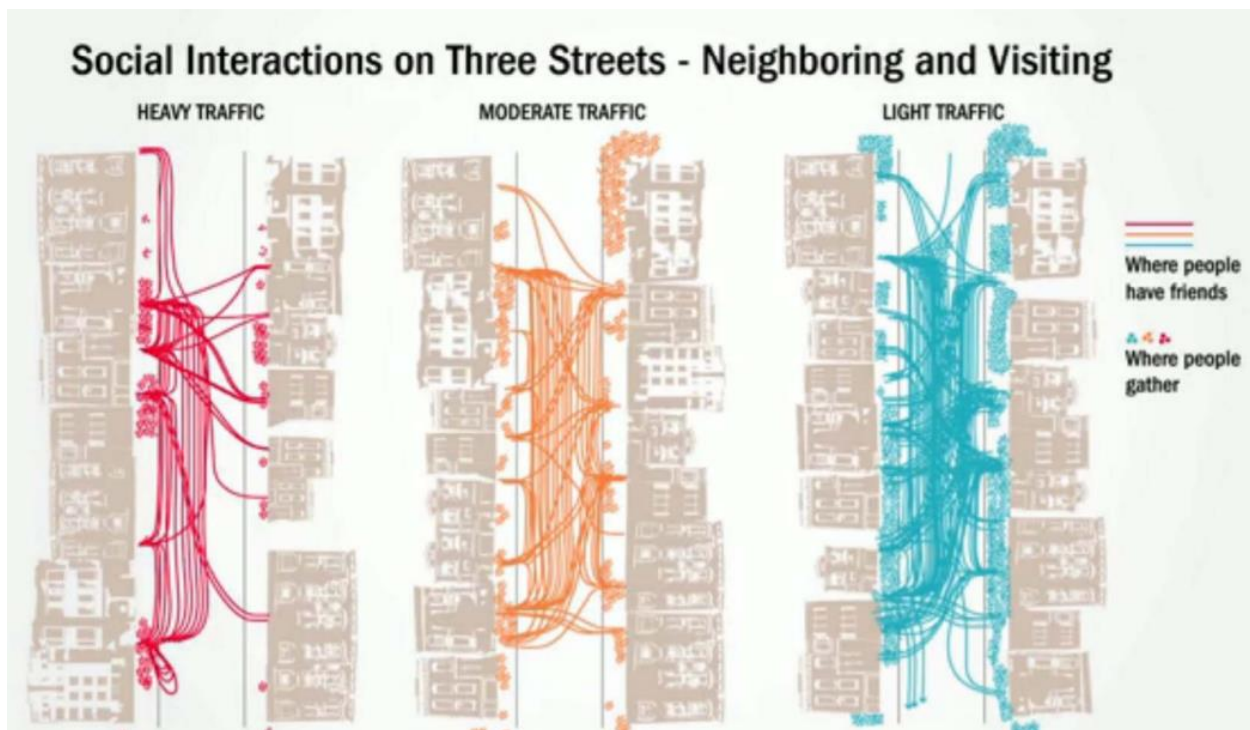


Image courtesy: Livable streets, Donald Appleyard (1981)

- Examples of community winter events
  - Ice lantern festivals
  - School art installations
  - World snow day (a celebration of various cultural experiences of the winter season - like a winter Folkfest)
  - Long-john jamboree
  - Ice castles or hotels
  - Food focus
  - Winter or Christmas markets



*Image courtesy: Festivals Toronto*



*Yellowknife castle of the snow king - Image courtesy: Frozentrini.com*



*Canmore Winter Carnival - Image courtesy: FestivalSeekers.com*



*Image courtesy: Notey.com*



PEI Burger Love & Prince Edward Island Burger Love, and all design elements are trade-marks of Fresh Media Inc

Image courtesy: DiscoverCharlottetown.ca



Image courtesy: MommaOnTheMove.ca

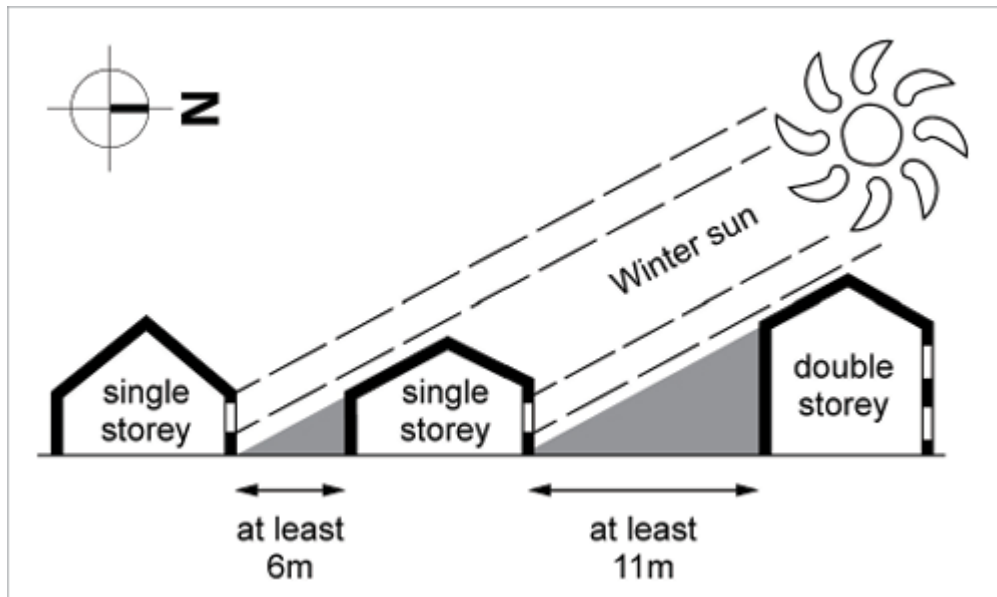
- Heated sidewalks
  - Examples of cities with installations can be found in Sapporo, Holland, Michigan, and Reykjavik
  - Emerging technology: conductive concrete contains 20% steel fibre or carbon material (making it a good end-use for scrap metals) and is applied as a top-coat
    - While a number of cities are starting to heat highly pedestrian-oriented areas of their downtowns using hydronic heating, this new technology is emerging that can be used in wider applications because of its higher strength, cheaper cost (approximately 50% cheaper to install and 90% cheaper to operate, with no risk associated with leaks) and longer life
    - Concrete features can be heated prior to a weather event and left on well past to avoid snow accumulation and icing
  
- Creating micro-climates (i.e. pedestrian-oriented areas providing comfort in winter)
  - Thermal comfort – strategies for reducing effects of wind, maximizing exposure to sun, or simply providing heating elements such as heaters or blankets



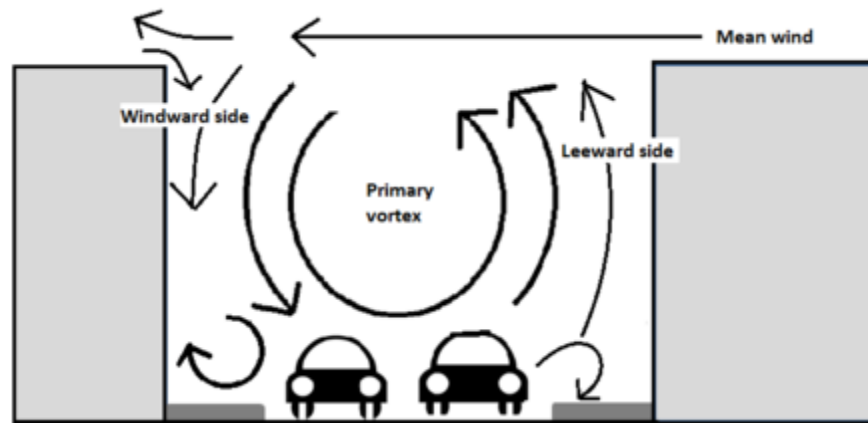
*Images courtesy: Urban Traveler*



- Solar radiation – design guidelines or standards to protect solar penetration to the sidewalk



- Wind protection - using awnings or other design elements to prevent winds from tunnelling to the sidewalk; it is recognized (through evidence) that Winter Cities gain more from a focus on wind protection than solar penetration



- Humidity – protecting pedestrians from rain and snow
- Human activity level – designing areas where pedestrians are encouraged to sit and/or linger with greater thermal comfort and protection, considering wind-breaks and other sheltering along areas where people are encouraged to walk or cycle
- Communicating the importance of proper seasonal clothing
- Place-making principles
  - Cozy places – pedestrian orientation and scale
  - Desired paths – pedestrian priority culture and areas

- Comfortable streets and ‘urban rooms’ – sometimes these are outdoor plazas and patios, sometimes these are street-level windows with active uses where people can see other people
- Delightful distractions – visual interest and unique views and vistas
- Luminous life – paying attention to lighting as a means for creating an ambience of welcome
- Worthwhile outings – programming (public and/or private spaces – i.e. the more private spaces are programmed to attract people, sometimes the less need there is for public programming)

### Sample warming huts



*Image courtesy: Inhabitat.com*



*Image courtesy: University of Manitoba*





*Image courtesy: University of Manitoba*