

# A New Vision for Sparks Street Best Practices Catalogue

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# A New Vision For Sparks Street

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## Best Practices Catalogue

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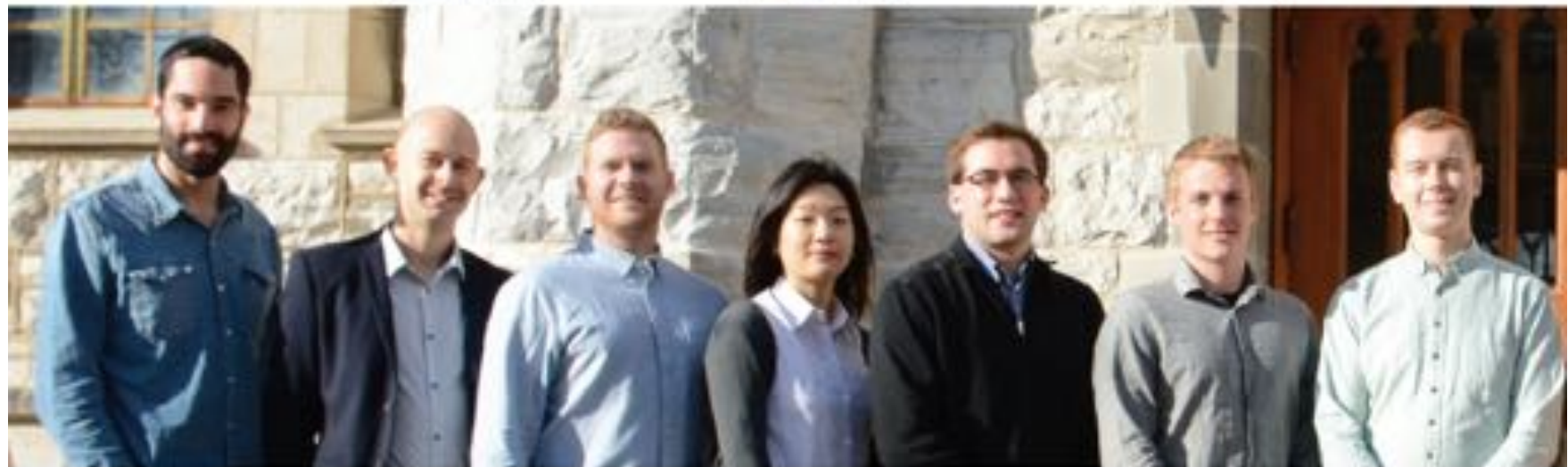
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## Best Practices and Comparative Analysis

Geographically, relevant precedents from around the world were researched but preference was given to case studies from locations that experienced similar weather variation – particularly those that experienced the harsh effects of a lengthy winter season – to the City of Ottawa. In addition, vehicle-free pedestrian malls were examined thoroughly but comparable and similar urban environments were also researched, including complete streets and general downtown areas. Places with remarkable and unique design characteristics were sought after, with a particular goal of identifying elements of these places that could inform potential solutions for Sparks Street.

The research method that the project team undertook throughout the study was based upon a comparative analysis of the existing conditions on Sparks Street and case studies that represented best practices from around the world. The case studies highlighted the best elements of strategy, design, and implementation of successful streetscapes that were determined to be relevant to Sparks Street. These best practices are grouped into specific themes that were crucial in developing an ultimate vision to revitalize Sparks Street. Included among the themes are the following:

- 1 **Accessibility**
- 2 **Greenery & Landscaping**
- 3 **Lighting**
- 4 **Paving**
- 5 **Public Art**
- 6 **Street Furniture**
- 7 **Wayfinding & Signage**
- 8 **Programming**
- 9 **Patio Policy**
- 10 **Circulation**
- 11 **Policy**

## Best Practices – Canada

Mississauga, Ontario  
Hamilton, Ontario  
Lethbridge, Alberta  
Guelph, Ontario  
Ottawa, Ontario  
Toronto, Ontario  
Milton, Ontario  
Montréal, Québec  
Québec City, Québec  
Edmonton, Alberta  
Winnipeg, Manitoba  
Calgary, Alberta  
Whistler, British Columbia  
Saint John, New Brunswick  
Victoria, British Columbia  
Vancouver, British Columbia





## Best Practices – International



Washington, D.C.  
Boulder, Colorado  
Denver, Colorado  
Portland, Oregon  
Albuquerque, New Mexico  
Iowa City, Iowa  
San Francisco, California  
Seattle, Washington  
Philadelphia, Pennsylvania  
New York City, New York  
Memphis, Tennessee  
Miami Beach, Florida  
New Orleans, Louisiana  
Berkeley, California  
Burlington, Vermont  
Boston, Massachusetts  
Minneapolis, Minnesota  
Melbourne, Australia  
Copenhagen, Denmark  
London, England  
Birmingham, England  
Sunderland, England  
Rotterdam, Netherlands  
Dundee, Scotland

# 1 Accessibility

Urban design for accessibility, otherwise known as “inclusive urban design,” is a key consideration for any project that aims to improve the public realm. Planning for the inclusion of all people should be the goal of any project and that includes people with disabilities. This can take a variety of forms; disability can be short-term or long-term, can include mobility limitations, can be attributed to auditory or visual impairments, cognitive or learning disabilities, and is often tied to age. Assistive devices can help people with disabilities including wheelchairs, canes, crutches, walkers and more. A successful public realm should be designed to not only accommodate people with any type of disability, but it should also afford them the same level of enjoyment from the space that a person without disability can experience.

The City of Ottawa’s *Accessibility Design Standards, Second Edition*, released in 2015, is recognized as a best practice in design for accessibility. It is current, detailed, and contains a significant amount of direction on how to design for accessibility for everything from public washrooms to outdoor spaces. Nevertheless, examples from other municipalities offer considerations that should also be accounted for in any revitalization effort on Sparks Street.

- *Design for Year-Round Accessibility.* Ottawa’s design guidelines are quite detailed but lack direction for how to ensure accessible public spaces when harsh winter elements are present, a consistent characteristic of the city.

- *Ensure that infrastructure projects are built with the highest standards in accessibility.* Despite the presence of Ottawa’s *Accessibility Design Standards*, Sparks Street has a number of problematic features, including uneven paving throughout the mall and a lack of wayfinding elements for those with visual impairment.

## *Rationale for Case Study Selection*

Case Studies in policy related to accessibility have been selected because they exemplify the highest standards in inclusive urban design. In particular, elements that are transferable and needed on Sparks Street, including accessibility during the winter season and the connection between accessibility and wayfinding, have been given the greatest consideration.



## Facility Accessibility Design Standards (2015) – Mississauga, Ontario

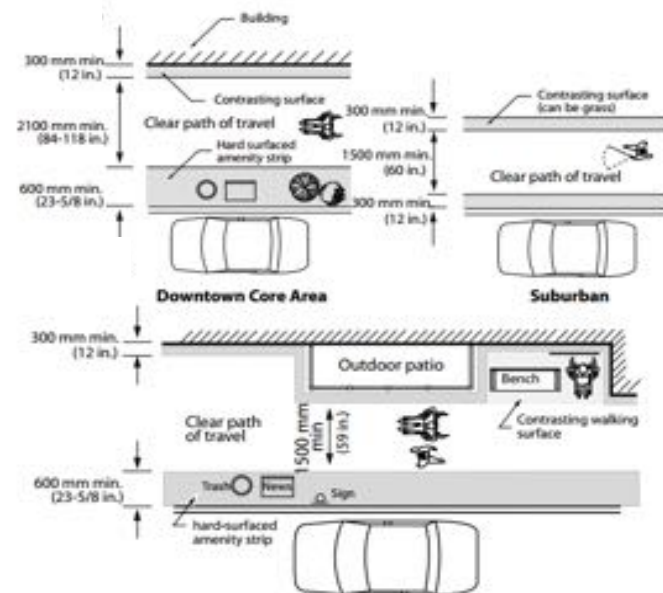
The City of Mississauga's *Facility Accessibility Design Standards* (2015) is one of the more recent efforts in accessibility design. The document contains information on design features that are not a part of Ottawa's design standards, and some of these could be transferrable to Sparks Street. Although pedestrian malls are not mentioned in this policy document, Sparks Street represents an opportunity to incorporate a variety of best practices in accessibility.

### Winterization

- Mississauga's accessibility design standards represent a best practice in placing a significant emphasis on ensuring accessibility during the winter season.
- Heated surfaces on ramps, a feature found in Ottawa's document, is found here.
- The piling of snow is to occur in designated areas located away from pedestrian routes.
- Snow accumulation must be completely removed at curb ramps after each snow fall
- Designated snow piling at exterior stairs must be provided, away from pedestrian paths
- The thorough removal of snow and ice is considered to be "essential".
- Low or ground-level lighting (ie. lights in bollards) should be placed high enough to clear snow accumulation.
- Snow storage cannot reduce the minimum width required for an accessible path.
- Catch basins and run-offs must be kept clear to facilitate quick removal of water melted from snow or ice

### Streetscapes

Newspaper boxes, trash bins, outdoor patios, bus shelters and other streetscape elements are noted to be a potential barrier to pedestrians, and these obstructions can be considered a hazard to those with visual impairment. Maintaining a clear path of travel is stated to be the primary goal in streetscape design.



Three streetscape configurations that have integrated the required accessibility considerations.

## Urban Braille System (2002) – Hamilton, Ontario

The City of Hamilton is renowned as a North American leader in their efforts to ensure accessibility for all citizens, and their most noteworthy project is one that provides a way-finding system for those with visual impairment. Their “Urban Braille System” is a set of guidelines concerning a system of tactile information serving this segment of the population. They define “Urban Braille” as the following:

*A leading edge, user driven approach to planning and design of public spaces. It is a system of tactile information serving the needs of the visually impaired. By utilizing both colour and texture contrast it provides warning signals and clues related to orientation.*

The system was a product of a collaborative effort between the City of Hamilton, McMaster University, and the Canadian Institute for the Blind. It includes a system of physical markings indicating directional changes, sidewalk boundaries, and minimum clearances for mobility device access on the City’s streets. There are three primary elements to the system:

- Sensory channels
- Tactile information
- Orientation aids

### *Sensory channels*

The Urban Braille system recognizes that not all users of a public space are able to utilize each of the five senses (sight, sound, touch, smell, and taste), and in keeping with the theme of the system, it aims to utilize the sense of touch into wayfinding schemes as an alternative to sight to aide navigation efforts.



An example of the tactile information system indicating an approaching street name.



### *Tactile Information System*

According to these guidelines, visually impaired people can distinguish 4 – 5 materials and a variety of textures with their hand or cane; using two textures can provide up to ten distinct clues located on sidewalks or other horizontal surfaces. Tactile information is identified as the most important way to guide those with disability through the built environment.





Shore lines, at approved dimensions, guiding a clear path of travel.

#### *Orientation Aids*

The Urban Braille system communicates the following information:

- Directional change (compass)
- Hierarchy of pathways
- Entrance to buildings
- Sidewalk / road boundaries
- Ramps and raised pedestrian crossings at intersections
- Address
- Business information
- Social activities

## Downtown Urban Design Guidelines (2016) – Boulder, Colorado

Home to the Pearl Street pedestrian mall, Boulder has a set of urban design guidelines for their downtown area. Within them, although specific accessibility policy is lacking, the City is aspirational in this regard. It is an example of strong language being used to ensure that accessibility objectives are met:

“A goal of the city is to make the Downtown as accessible as possible. All accessible design elements must conform to all applicable Federal, State and Local laws and codes. Wherever a discrepancy may arise, the higher standard shall be applied.”

This type of statement can be useful because it makes the position of the governing body clear. In particular, the ‘higher standard’ statement is quite useful in this regard.

## 2 Greenery & Landscaping

Trees, flowers, shrubs, grass, and all manner of natural plants can offer a welcome respite from the “hardness” of the urban built environment, which often features large imposing structures of glass, steel, and concrete. Although ensuring the survival of plants in an urban environment can be challenging, especially in a winter climate, there are many benefits to the presence of trees and plants in urban settings.

Greenery in an urban space contributes to an aesthetically pleasing and human-scaled space which can promote healthier lifestyles, social interactions, a strong sense of community identity, as well as emphasize direction and movement through the space. In addition, green spaces can reduce the urban heat island effect while also providing better air quality, stormwater and runoff retention, reduction in microclimate wind and temperature effects, and habitat for wildlife. From an economic perspective, greenery can improve the property value and viability of commercial areas by encouraging greater pedestrian usage and it can create an ambiance that attracts people and new business to a space (Sisman, 2013).

### *Rationale for Case Study Selection*

Landscaping and green features can provide pedestrians with a pleasant and refreshing sense of nature in an otherwise hard urban landscape. Due to Sparks Street’s unique circumstances, an emphasis was placed on finding examples that were durable, understated, and had the ability to provide multiple purposes on an urban street, including providing seating.



► Existing examples of landscaping on Sparks Street.

## Artificial Greenery – Guelph, Ontario; Denver, Colorado; Portland, Oregon



Artificial grass installation along right of way in Portland, Oregon.

Along with potentially hard environmental conditions, plants in urban environments can be subjected to vandalism, improper care, and a lack of maintenance. Consequently, the use of artificial plants and greenery can offer a low maintenance solution to keeping plants alive in an urban environment while maintaining the aesthetic of the space, although the environmental benefits brought about by legitimate plants would be absent.

Artificial turf grass can provide green spaces in areas where grass does not or cannot grow, such as in the heavily hardscaped areas of an urban environment. Creating the perception of actual greenery in a public space can be just as valuable as the real thing in adding an attractive and interesting landscaping feature to a street. The ability to customize the size and shape of the artificial grass provides the ability to easily add a patch of green to anything from a parking space to a large section of street. In combination with other elements such as furniture, planters with flowers or other plants, the placing of a patch of artificial grass in a public space can essentially create a 'pop-up park'. This is a popular form of tactical urbanism, and adds an interesting invitation for people to spend time in a public space. In addition, artificial grass can be used in the winter, thus providing the opportunity for year-round green space.



For a *Meet in the Street* (MITS) event along the 16<sup>th</sup> Street Mall, artificial turf was added to the street to create lawn areas and in addition to shading and furniture such as lawn chairs and swinging chairs, a green space was created. The interesting and seemingly out-of-place landscape created a destination for unsuspecting pedestrians who wished to rest.



► "Green" space along Québec St. in Guelph, Ontario.



► Parking Day; Portland, Oregon.



► Meet in the Street; Denver, Colorado.





## Creative Planters – Lethbridge, Alberta; Birmingham, England

The use of creative and colourful planters can add a touch of vibrancy to public spaces and attract pedestrians to an urban environment. The use of native flowers and plants also adds to this effect. The strategy also offers a measure of creativity that can contribute to public art through unique planting installations that can be implemented through public input or artistic contests.



▶ University of Birmingham's combined seating and landscaping; Birmingham, England.

◀ Guerrilla gardening in Lethbridge, Alberta.

## Parkmobile – San Francisco, California; London, UK; Copenhagen, Denmark; Washington, D.C.

Another tactical urbanism strategy, *Parkmobile*, consists of a small, mobile green space that can be moved around and is temporary in nature. Recognizing the importance that seating and vegetation can have on a pedestrian experience in a public space, some *Parkmobiles* combine seating with planters to create a unique streetscape element with less need for maintenance. The use of native plants and flowers that can withstand colder temperatures is also an important feature for keeping the plants alive and featuring the park mobile year-round.



► Removal of a parkmobile; San Francisco, California



► Temporary parklet with BIA themed seating; Washington, D.C.



ParkedBench functions as both a temporary art and seating installation; London, England.



Urban Garden offers pedestrians a comfortable green space to sit in; Denmark, Copenhagen.



## 3 Lighting

Attractive lighting can effectively make an area more inviting and user friendly. Lighting is possibly the most effective tool available for creating a strong sense of place when the sun goes down. Quality lighting does not need to be a main attraction but rather can be used to highlight and accentuate major features. Heritage buildings or key monuments utilize strategic lighting practices to highlight architectural and design features in the early evening and later at night to further promote the established character of an area.

Not only does lighting assist in creating unique areas, it also promotes safety and accessibility in the downtown by maintaining high levels of visibility. Places that are well lit become more inviting and attractive because they feel safer to the user. Upon reviewing several case studies, master plans and secondary plans specific to lighting, for central public places, several common features were evident throughout.

### *Rationale for Case Study Selection*

Main themes for lighting improvements originated in exemplary cases of lighting in central, urban places and on pedestrian-oriented streets; master plans and secondary plans for cities in which lighting is emphasized were sought after. Laudable precedents blended good engineering and pleasing urban design.

*Lighting is dynamic in nature.* While best practices exist, what constitutes “good design” is not commonly agreed upon. Poor taste or ill-functioning lighting detracts from placemaking efforts.

*Lighting and sustainability are connected.* Public lighting can be environmentally and/or socially sustainable based upon the technologies used and the application or orientation of the lighting (e.g. operationally, it can be linked to pedestrian traffic or access).

*Economic development.* Case studies suggest that strong public lighting can indirectly result in economic benefits. While this is difficult to accurately measure, an increased user base leads to overall economic growth for the area and community development.

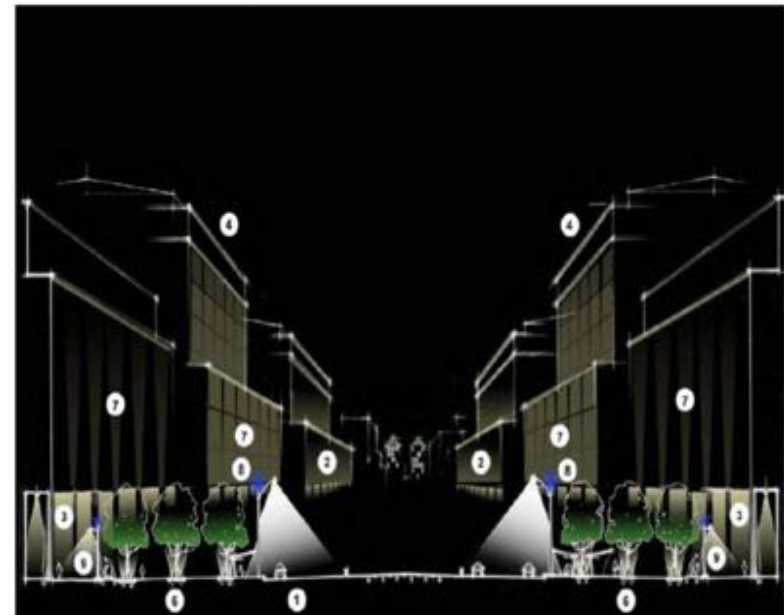
*Lighting Master Plans are beneficial.* They are critical for providing guidance on key strategies and goals focused on light as a placemaking device. Outlining lighting hierarchies or “character zones” is good practice.



## Seattle Center Master Plan (2006) – Seattle, Washington

The *Seattle Center Master Plan* (2006) may provide inspiration for Sparks Street to improve its lighting. In the plan, light fixtures are used to “reinforce a sense of place, support the programmed activities at Seattle Center and facilitate pedestrian access”. Supporting schematic documents can prove to be helpful within this type of plan, especially when depicted on a street cross-section.

- Central Boulevard illuminated using lamps within a range of 4500K-5300K (colour temperature measured in Kelvin) and a CRI (colour referencing index) of  $Ra > 85$ .
- Buildings lit according to hierarchy; Group A Buildings are to be the brightest (they are to be categorized as buildings or groups of buildings. Structures or other elements that form vista terminations, landmarks, when viewed from major distances, or are categorized as landmark buildings).
- Group B buildings are lit less brightly (to be categorized as buildings that form the street wall between Group A buildings on Central Boulevard). Colonnade unified with a consistency of colour and source.
- Roofline punctuation zone unified with consistency of colour and space.
- Trees and landscape features illuminated utilizing variations of blue and green lights.



► Schematic Lighting Diagram; Seattle, Washington.

## The Philadelphia Lighting Plan - Philadelphia, Pennsylvania

The Philadelphia Center City District (CCD) was created in the early 1990's, not only to make the city safer and cleaner but to activate it 24 hours a day rather than just during weekdays. While various aspects including street cleaning, tree planting and adding directional signage were important, the CCD aimed to emulate ambitious lighting plans seen in Paris or Lyon.

The plan's goal was to provide pedestrians with uniformly well-lit sidewalks and found that this was best accomplished by installing 1,474 pedestrian-scale lighting fixtures (16ft high) at regular intervals on 120 downtown blocks (the CCD has a total of 220 blocks). Other features of the plan included illuminating major public sculptures and lighting the façades of several prominent buildings. The lighting of the façades was deliberately simple and was mostly achieved through the use of metal halide sources but projecting light on individual buildings was more difficult and costly. After implementation of the plan, the following results were seen over 10 years:

- Downtown restaurants remaining open during evening hours increased from 65 to 192
- Outdoor cafes increased from 0 to 104
- Hotel room occupancy increased by 55%
- More than 4,000 apartment units were created in center city through the conversion of vacant buildings from 1990-2000, with 1,000 more to be built in the succeeding decade
- Employment in Philadelphia's hospitality industry grew by 30% (as a by-product, it generated \$368 in annual salaries to city residents and over \$10.5 million in wage taxes)
- 70% of residents moving into higher-end downtown apartments came from outside city

► Themed lighting in Philadelphia's City Center District; Philadelphia, Pennsylvania.



## Broken Light Project (2010) – Rotterdam, Netherlands

The *Broken Light Project* was installed in Rotterdam's Katendrecht neighbourhood in 2010, and was designed by Rudolf Teunissen and Marinus van der Voorden. Broken Light is a dynamic lighting installation that appears as graffiti from above, but for the pedestrian feels like pockets of light and dark. The lighting provides a textured feeling to the street, further enhancing the pedestrian experience.

The installations were designed in a way that patterns could be modified, made more intense, or simply designed to illuminate the extent of the street to provide continuity when desired. The lighting system also projects to the building facades, further accentuating the architecture and character of the street. In total, the installation includes 18 pole fixtures along 150 metres of the street. *Broken Light* received the Radiance Award for Excellence in Lighting Design from the International Association of Lighting Designers in 2012

The street was previously filled with crime, and it has since been rejuvenated with the introduction of the Broken Light project. This installation is an example of how the character of a street can be defined by its lighting and how lighting can bring life to an area.



▶ A street in the Katendrecht neighbourhood, before and after the *Broken Light Project*; Rotterdam, Netherlands.



## Promenade of Light – London, England



► Old Street post-renovation; London, England.



The pedestrian area of Old Street in London was described as dark, uninviting, and unsafe before its rejuvenation in 2006. In order to reimagine the pedestrian area of Old Street, designers Tonkin Liu installed several upgraded features, including multiple new lighting standards and trees. The designers utilize the tree cover and other features to create unique and textured shadowing in the pedestrian realm. The *Promenade of Light* was designed with the intent of creating a celebration of walking. This case showcases how existing features of the landscape can be used to a design advantage.

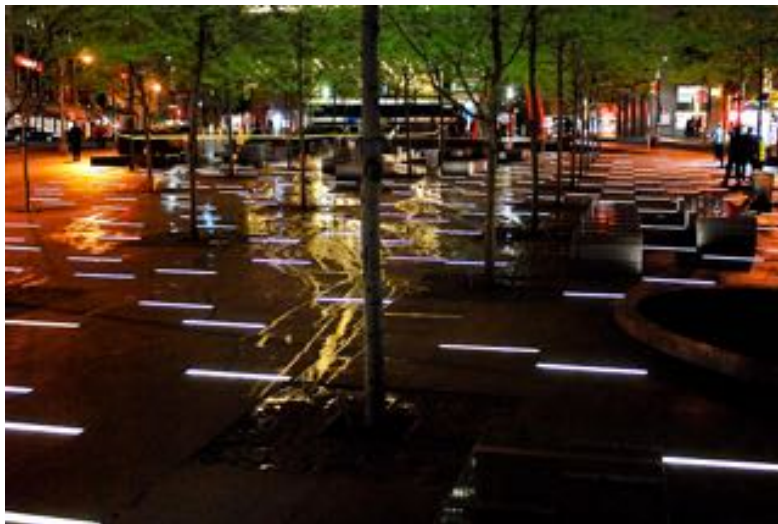


► Old Street pre-renovation; London, England.



## Zuccotti Park – New York, New York

Zuccotti Park is a privately-owned public space (POPS) in Lower Manhattan, New York, that introduced appealing lighting elements to create a unique sense of place that changes based on the time of year. The park was severely damaged following the terrorist attacks of September 11, 2001, and it was subsequently reimagined as a successful and picturesque public space. The restoration of the park in 2006 included the installation of approximately 500 fluorescent lights within the ground surface, designed in a way that makes them easily replaceable but also durable and waterproof. This high quality lighting creates a unique and interesting environment that is welcoming to visitors. In the holiday months, the trees within the park are illuminated with thousands of white bulbs.



► Zuccotti park features several themes throughout the year; New York, New York.

## The Glebe – Ottawa, Ontario



In The Glebe, the lamp posts that line the streets utilize banners that are rotated. Normally, the banners display the branding of The Glebe Business Improvement Area (BIA). This imaging promotes the brand of the neighbourhood and contributes to fostering a sense of place.

The banner space on the lamp posts have also been used to promote events that are happening in the area. This ties together programming and lighting, where lamp posts are utilized as promotional tools. Utilizing lamp posts in this manner gives a reason for a passerby to return and can create an expectation that further notice of events in the area will be included on the banner space.



► Sign posts with banners (above) and sign posts used as promotional tools in The Glebe; Ottawa, Ontario.



## Toronto Christmas Market – Toronto, Ontario

The City of Toronto's Distillery District is designated as a National Historic Site of Canada and it contains the largest collection of Victorian-era architecture in North America. The area had become increasingly derelict in the 20<sup>th</sup> century due to the winding down of distillery operations, previously the predominant use of the area. However, it was restored and reopened in 2003 as a mixed-use, pedestrian and patio district with a focus on preserving the heritage of the area while being an area where creativity could flourish.

While these efforts proved successful, the site has gained international notoriety since 2010 due to the launch of the Toronto Christmas Market. Normally, the Market is open for approximately one month prior to Christmas Day and the outdoor market is augmented by 320 live performances. Nevertheless, the most prominent feature that has arguably lead to the majority of its success is the assortment of lights that line the streets on the site. These lighting features, considered as a whole, contribute to the fostering of an iconic place.

- There are lights that line the heritage buildings, bringing attention to them during the evening hours.
- At the launch of the Market each year, a 16.5-metre white spruce Christmas Tree is lit by 18,000 lights; this tree lighting ceremony receives a large attendance each year.

- There is catenary lighting that is suspended above the street, effectively creating a sparkling Christmas light canopy on the majority of the site.
- The "Gooderham & Worts Limited" sign is an iconic logo for the Distillery District and Christmas Market. It is a reference to what was previously the most prominent use of the site, the Gooderham and Worts Distillery, and the catenary lighting is oriented towards this sign, ensuring the site has a distinct and familiar identity.



Catenary lighting surrounding the *Gooderham & Worts Limited* sign; Toronto, Ontario.

## 4 Paving

The surface on which people walk may not be the first thing that comes to mind when discussing influential urban design elements, but paving and surface materials can have an impact on the way people feel and interact within a space. For example, the patterns and materials used for road surfaces have the ability to reduce the monotony of a street and focus the attention of the pedestrian towards buildings or significant features, such as public squares and important sites, while adding to its character. In addition, introducing variations in paving materials and treatments can provide texture and visual appeal to a space and accentuate entries to areas such as pedestrian zones, making them more friendly and appealing to a passerby.

### *Rationale for Case Study Selection*

Surface treatment can be an overlooked element of the public realm but paving can have a strong influence on how pedestrians interact and feel in a space. The selected case studies exhibited unique themes, durable materials, and patterns that complemented the character of the area. In addition, the cases represent varying scales of paving projects from large scale paving themes to intersections and crosswalks.

Beyond aesthetics, the selection of particular paving materials and treatments also serve a functional purpose. For example, bands of paving can be used to align fixed objects along a street such as trees and light fixtures, and tactile strips of paving can be used to achieve greater accessibility and safety. Furthermore, surface treatment can serve as a stormwater amenity when designed as permeable paving, which is a more environmentally friendly option.



► Paving theme that reflects local culture; Denver, Colorado.



## 16<sup>th</sup> Street Mall – Denver, Colorado

Denver, Colorado's 16<sup>th</sup> Street Mall is a pedestrian friendly mall, a mile in length, that includes transit service and was unveiled in 1982. Featuring two transit stops at both ends, the mall was designed by renowned architect I.M Pei and his team as a cohesive unit with each element of its design complementing the other. The lighting was designed to enhance the honey locust and red oak trees planted throughout the mall surface, which features a three-color pattern of granite pavers inspired by the western diamondback rattlesnake skin and Navaho rug patterns. The trees are planted below the surface of the pavers in precast tree vaults, which allows them greater access to soil and water for rooting while protecting surrounding infrastructure from damage. The pavers have been recognized as an integral part of the mall by the public and are considered a hidden gem of Denver's downtown that strongly represents the indigenous culture and wildlife that is native to Colorado.

The idea of a themed paving system stretching the entirety of the mall creates a distinct character for the pedestrian zone that is separate from nearby streets. The mile-long stretch of granite tiles is not without its issues, however, as maintenance and replacement costs run at approximately \$1 million per year, mostly caused by transit buses passing over the tiles as well as the impacts of winter weather.

## Decorative Asphalt & Surface Treatments – Montréal, Québec; Memphis, Tennessee

Contemporary paving technologies provide a wealth of options in design and materials that were not available or feasible a decade ago. The use of materials such as precast pavers can be expensive and time consuming to install while plain concrete or asphalt tends to constrain design creativity. There is a range of paving and surface treatments available in Canada from creative crosswalks to themed asphalt and coatings. The use of materials such as thermo-plastic and coated asphalt creates beautiful decorative surfaces that are durable, attractive, and safe.



Pedestrian plaza with a decorative asphalt coating; Montréal, Québec.

Beale Street is a historically significant street in downtown Memphis that plays host to several blues clubs, restaurants, festivals and outdoor events. In 2002, issues had been raised about the safety of the original cobblestoned surface, which had become uneven and worn due to heaving, and a resurfacing project using stamped asphalt and asphalt coating was initiated. A brick pattern and colour coating was chosen to create the illusion of “real” brick in order to preserve the historic nature of a site listed on the US Register of Historic Landmarks. The asphalt coating provided Beale Street with a safer walking surface including increased durability to UV, chemical, and physical wear. It was also a financially feasible replacement of the cobblestones that did not compromise the historic character of the area.



► Asphalt coating along historic Beale St.; Memphis, Tennessee.

## Custom Crosswalks – Montréal, Québec; Whistler, British Columbia; Victoria, British Columbia

Special paving treatments communicate to individual users that the crosswalk is part of pedestrian space, not an encroachment by pedestrians into the roadway. Paving, texture, and color treatments are especially important in places where it is essential to make pedestrians more comfortable crossing, and products such as *TrafficPatterns* provide a safe and durable surface that can feature colourful and creative designs intended to slow traffic, better define pedestrian space, and promote a community image. The highly customizable patterns and designs are ideal for community branding and beautification efforts. Logos, images, and patterns embedded in the crosswalk that feature local or significant imagery can promote and reinforce community pride as well as complement the existing historical character of the area.



► Heritage themed crosswalk; Victoria British Columbia.



► Coated asphalt crosswalks during winter; Montréal, Québec.

The surface material for *TrafficPatterns* can be easily installed at grade; allowing snow plows to pass over without damaging the street surface. The high visibility of the crosswalk as well as the anti-skid properties of the surface material creates a safer intersection for both pedestrians and vehicles. The surfacing material is engineered for heavy usage as well as easy maintenance and repair.

Themed crosswalks with examples of community branding; Whistler, British Columbia. ◀





## Avenue of the Arts – Philadelphia, Pennsylvania

The pattern and design of intersections along a street can add a measure of artistic flair to an area and create a strong sense of identity. The *Avenue of the Arts* in Philadelphia, Pennsylvania is part of the heart and soul of Philadelphia's arts and entertainment community and provides a strong economic and cultural boost to the area. The highly creative crosswalks recently implemented by *Avenue of the Arts Inc.*, a non-profit organization that works in conjunction with local businesses and arts and entertainment institutions, enhances the streetscape and reinforces the creative identity of the street.



Philadelphia's Avenue of the Arts features several creative crosswalks that clearly delineate it from other streets and also provides a more accessible crosswalk.





## 5 Public Art

The displaying of public art is an effective way to create unique places within a city. Art can be used to enhance existing themes in an area or to help create them if none exist. Public art can be dynamic, interactive, or static, and can create interest for particular areas. Iconic art structures can draw people in and create a destination of itself. Public art structures can often act as their own advertisements for the space given the rise of social media; if the art is unique and picturesque, it will find a place on numerous social media feeds. Public art can also celebrate local talent and create local excitement adding to the enjoyment of local residents and tourists. A best practice in public art is integrating works of artistic merit with a physical purpose (e.g. artistically designed lighting arrangements).

### *Rationale for Case Study Selection*

A best practice in public art within an urban setting must serve a purpose beyond showcasing local talent for tourists and being aesthetically pleasing to those passing by. While these are primary goals, the opportunity to integrate works of artistic merit with a physical purpose must not be overlooked as it is often a more functional use of space and financing.

Pink Balls installation in Montréal, Québec.

## Pink Balls – Montréal, Québec

*Pink Balls* is an art installation located in Montréal's Gay Village and designed by landscape architect Claude Cormier. It consists of 170,000 pink balls suspended over a stretch of St. Catherine Street in the summer season when this part of the street is temporarily closed to cars and transformed into a pedestrian mall. Fastened to wires strung through trees and buildings at different heights, there is three different sized pink resin balls utilized that create a five-tone hue. Pink Balls can be seen from across arterial streets as well as from Jacques Cartier Bridge, a gateway to the city.



## High Line Pieces – New York, New York

The High Line is a public park built on a historic rail line above the streets of Manhattan's West Side. It is designed by James Corner Field Operations, Diller Scofidio + Renfro, and planting designer Piet Oudolf, and it is jointly funded by the City of New York and Friends of the High Line (a non-for-profit organization). Since an initial section opened in 2009, it has been one of New York's main tourist attractions. The space introduces plant life with a smooth and seamless surface. The project includes water features, viewing platforms, a sundeck, and gathering areas used for performances, art exhibitions and educational programs.



► Art installation along New York City's highline; New York, New York.

## The Brain Project – Toronto, Ontario



► *The Brain Project* is a public exhibition in downtown Toronto with unique sculptures of brains. It is a catalyst for discussion and awareness of brain health. They are displayed throughout the city in different areas, often in clusters. Each sculpture is inherently unique and does not require much space to create a large impact.

► Children examining the unique sculptures; Toronto, Ontario.



## Moose in the Street – Toronto, Ontario

Uniquely Canadian sculptures are painted to suit their environment, don't require maintenance and are inexpensive to produce. This type of public art fits with the *Capital Promenade* theme identified during the stakeholder engagement process of this project.

- ▶ Iconic Canadian imagery along Toronto Streets; Toronto, Ontario.



## People Waiting – Saint John, New Brunswick

Bringing new meaning to the “human scale” idea, the *People Waiting* street art series of sculptures created by John Hooper are located at a bus stop in Saint John, New Brunswick.

- ▶ People, both real and sculpted, waiting at a bus stop; Saint John, New Brunswick.



## StART Road Mural Pilot Project – Toronto, Ontario

Located on Baldwin Street in Toronto, the street mural features graphics that represent the intricate culture found within the Kensington Market neighbourhood. In this case, the inclusion of vegetables and fruits solidifies Kensington's identity of eclectic restaurants and grocery stores. This set of drawings is the first of four stages of a larger pilot project that includes street murals installed throughout the city (Condor Avenue, Lauder Avenue, Hiawatha Road and in North York).

The *StART Road Mural Pilot Project* allows local community organizations to install murals on low traffic streets during scheduled events that permit road closures. Urban advocates and City Councillors advocate in favour of road murals as a place making and community building exercise. This pilot project is an attempt to determine the feasibility, durability and safety problems associated with this type of public art; the Regal Heights neighborhood disallowed this type of public art citing these concerns.



Examples of road murals in the Kensington Market Neighborhood of Toronto, Ontario.





## The Image Mill – Québec City, Québec

Created in 2008 to celebrate the 400<sup>th</sup> anniversary of Québec City, *The Image Mill* is a projection show designed by Robert LePage and located at the Port of Québec. A story is told using images of the history of the city that are projected onto Bunge grain warehouse silos which are located above the port's Louise Basin. The viewing surface is 600 metres wide and 30 metres tall, or approximately the size of 25 IMAX screens. At the time of its launch, it was the world's largest projection show. Further, it was an exhibition that launched after dark each night during the summer, and it was a free to view with

the exception of seats located in a prime viewing location that cost \$15.00. The final year of the exhibition was 2013.

*The Image Mill* is a good example of utilizing a space that was previously overlooked or forgotten to create a public art exhibition. The projection is scaled appropriate to its potential viewing audience, and this can be done with a wide variety of building façade surfaces. Where there is a lack of active building frontages on an urban street, this type of installation can use that as an advantage to create a destination.



Projections of images onto large and underused urban space along the waterfront of Québec City, Québec.

## Cité Mémoire – Montréal, Québec

Starting in May 2016, the cobblestone streets, buildings, and trees of Old Montréal have been used as screens for projections telling stories of the history of the city every evening. Created by Michel Lemieux and Victor Pilon in collaboration with Michel Marc Bouchard, images are screened from 80 projectors (with more continually being added) located on the rooftops of buildings in the area, making this the largest installation of the world of its kind. Notably, the creators of the project had to get the permission of the owner of each building to use their walls for the project. For a pedestrian to access *Cité Mémoire*, they can download a free mobile application which allows them to call for the projections located in their vicinity, and there are soundtracks and historical contexts available in four languages. A series of new projections will be added in May 2017 in conjunction with the 375<sup>th</sup> anniversary of Montréal.

*Cité Mémoire* is a wonderful way to engage people at the street level with the heritage and culture of an urban environment. It leverages the fact that the majority of people have smartphones and that often, they are heavily used, and it can add to the effort to turn an area like Old Montréal into a destination. It works in this way equally for residents of the City and tourists visiting from outside; because of the uniqueness of the project and the national attention it received, it made people feel like they had to see it. Further, the continuous additions to *Cité Mémoire* work to make people want to return.



Pedestrians observing and interacting with projections on buildings in Montréal, Québec.

## 6

## Street Furniture

Street furniture consists of a wide variety of elements and amenities installed in the public right-of-way (ROW) for the use and convenience of the public. Familiar examples include transit shelters, benches, litter/recycling receptacles, publication structures, information/wayfinding pillars, bicycle parking and poster kiosks. Each of these features must remain in “human scale” and increase the complexity of the street. Street furniture that is disjointed, inconsistent, and that generally appears to be ad hoc results in a poor sense of place for users of the space.

Providing urban furniture and specifically urban seating is a common recommendation for activating public spaces, and several studies have verified that increases in public furniture contributes to higher pedestrian activity.

### *Rationale for Case Study Selection*

Examples of street furniture from urban environments in northern climates that experience the effects of a long winter season were preferred. Additionally, case studies of a wide variety of furniture elements, beyond seating, were examined.

Coordinated street furniture is important and the City of Toronto defines it as:

**The harmonization of design, form, scale, materials and placement of street amenities in a functional and accessible manner, including for persons with disabilities, in an attempt to reduce clutter, beautify city streets and give Toronto an identifiable streetscape.**

Combining individual uses into a common element is encouraged as a way to reduce clutter; multi-functionality is desirable, especially in downtown locations. Some principles of design include:

- Seating should be coordinated and placed under trees or shade when possible to integrate multiple elements.
- To avoid clutter, use secondary seating. Benches can be incorporated into secondary seating elements like ledges or planters.
- Opportunities for artist participation to combine public art and useable street furniture to reduce clutter and integrate functional design elements.
- Consistent placement of furniture, in parallel with other elements of the ROW (curb, frontage, street, etc.)
- Street furniture should be designed for 24-hour use, and incorporate lighting, entertainment, and seating in the night.

## Illuminated Stools – Sunderland, England



▶ Illuminated stools by artist Charlie Davidson showcasing street furniture that is engaging, creative, and functional; Sunderland, England.

## Art Inspired Street Furniture – Dundee, Scotland

Furniture created by local artists; Dundee, Scotland.







## Flexible Seating – New York, New York

Flexible seating also allows user of the space to sit as they would like and often a collection of users will find the best format for seating. Bryant park in New York City has over 4,000 moveable chairs and has become one of New York's most beloved public spaces and an attraction for residents from all over the city.



Examples of flexible seating as well as secondary seating; New York, New York.



## Winter Design Guidelines (2015) – Edmonton, Alberta

The City of Edmonton has developed a comprehensive set of design guidelines meant to leverage the harsh weather conditions as part of their WinterCity strategy, and included among these are a summary of best practices in street furnishings.

*Protection and Orientation.* Areas for outdoor seating should be comfortable, protected, and south-facing where possible to take advantage of longer periods of sun exposure. Overhead protection can provide shelter from weather elements in all seasons, promoting year-round use.

*Benches and Snow Clearance.* Snow can be cleared from around a bench with a central pedestal much easier than from around a traditional bench with four legs.

*Select the right materials.* Street furniture elements should be aesthetically pleasing, durable, and comfortable. For example, wood is preferred for seating; metal can get very cold in the winter and very hot in the summer.

*Provide fixed and flexible street furniture.* Users should have the option to take a chair and move it under a tree, and they should have the option to simply sit in seating that is set in place to be in groups.

*Incorporate heating features.* Wind screens, lighting, gas fire pits, blankets, and heated seat cushions can improve comfort on a cold street.



Round bench with wood seating; Bilbao, Spain.



Outdoor living room with heating features; Denver, Colorado.

## 7 Wayfinding & Signage

Architectural signage and wayfinding isn't merely about nicely designed signs, rather it is about aiding urban navigation and making a complex city understandable on a human scale. Broadly speaking, wayfinding is about spatial problem solving and understanding where you are in an environment, and there are a variety of urban design features that can improve and support wayfinding for users. Wayfinding should take into account how people use information, their travel mode, and it should consider many unique destinations.

### *Rationale for Case Study Selection*

Case studies in wayfinding and signage were chosen from urban environments with comparable features to Sparks Street. Specifically, examples of engaging signage and strategies for creating a distinct and identifiable sense of place were selected.

Eight general principles for best practices in wayfinding are as follows (Foltz):

- Create an identity at each location, different from all others.
- Use landmarks to provide orientation cues and memorable locations.
- Create well-structured paths.
- Create regions of differing visual character.
- Don't give the user too many choices in navigation.
- Use survey views (give navigators a vista or map).
- Provide signs at decision points to help wayfinding decisions.
- Use sight lines to show what's ahead.



Gateway wayfinding in Miami Beach, Florida and wayfinding integrated with a lamppost; Albuquerque, New Mexico .





## Pavement Markings – Berkeley, California

Berkeley, California has experimented with pavement markings on their bike lanes to create well-structured and clearly identifiable routes throughout the city. Even when there are no distinct bike lanes separate from the street, the pavement markers take up almost the entire street and clearly signify to the user that they are still connected to a broader network and sense of place.



▶ Marked bike lanes along a street in Berkeley, California.

## Preston Street (Little Italy) – Ottawa, Ontario



▶ Gateway to Little Italy; Ottawa, Ontario.

Ottawa's Little Italy contains several wayfinding features, including gateway features and signage, that advance the interest and brand of the neighbourhood.

### *Gateway Feature*

Vehicles approaching (and travelling through) Little Italy on Preston Street are greeted with a gateway feature that is notable for how large it is. The size of the signage provides a presence that orients new visitors and serves as a reminder of the neighbourhood's history.



### *Street Signage*

Located at entry points to the neighbourhood and within it, Preston Street features distinct signage that serves multiple purposes. It signals to the pedestrian that they have entered a unique area because the street signage is unique. In addition, directions to various amenities on Preston Street are shown allowing the pedestrian to orient themselves. These street signs are functional because they help pedestrians make decisions about where they will walk, and they are also significant contributions to the effort to maintain an identity for the neighbourhood.

- ▶ Little Italy in Ottawa, Ontario features wayfinding that provides direction within the area as well as to the surrounding neighborhoods.





## Somerset Street West (Chinatown) – Ottawa, Ontario

Another example of a gateway feature that adds to the sense of place for pedestrians is some variation of a Northern-royal-style Chinese arch which is often found in Chinatowns in large cities in the western world. Somerset Street West in Ottawa, where the City's Chinatown is located, contains this noteworthy amenity. It was jointly built by the City of Ottawa

and the City of Beijing and it was awarded the “Project of the Year Award” by the North America Public Works Association in 2011. As a gateway feature, it is grand and is an attraction in its own right. It is clear when approaching it that the pedestrian or driver is entering the City's Chinatown.



Large and easily identifiable gateway features let the user know they are in a unique space; Ottawa, Ontario.





## 8

## Programming

Because Sparks Street is a vehicle-free pedestrian promenade, it is a logical choice for the location of various efforts in programming, including anything from daily activities to special events. All programming efforts serve to bring pedestrian traffic to the mall with the hope that they will be impressed by their surroundings and activities, and will be motivated to return. Whether it is the physical characteristics, the selection of stores and restaurants, or the various activities and the vibrancy along the street that bring visitors, the goal for programming is to continually attract new visitors while ensuring that existing patrons are retained.

While much of this report is concerned with improving the urban design of the mall, it is also important to consider whether the variety of programming that is being offered is providing year-round benefit to Sparks Street. All programming efforts must be seasonally appropriate and they also must work well with existing uses along the street including the retail, dining, and entertainment businesses. This section provides a review of best practices in programming from other public urban environments with a focus on those of similar geographic context and scale.

Events such as the Discover Jazz Festival in Burlington, Vermont create opportunities for people to enjoy the street and boost the local economy and activity in the area.



### *Rationale for Case Study Selection*

Precedents provided in this section were selected to highlight the opportunities for Sparks Street to enhance existing programming efforts within a flexible framework. The sites and areas selected were limited to pedestrian malls, public spaces, and areas that experience similar winter weather, to directly address concerns that Sparks Street lacks vibrancy across the entire year.



## Church Street Marketplace – Burlington, Vermont

Situated in downtown Burlington, Vermont, Church Street Marketplace is an open-air shopping mall that features year-round entertainment including festivals and street performances within a historic setting. While visitors are attracted to the mall due to the presence of over 100 shops and dining locations, this four-block site area also attracts visitors through strategic year-round programming, among which there are several prominent events that are featured.

### *Discover Jazz festival*

Founded in 1983, the *Discover Jazz Festival* is a 10-day event that ran from June 3 to June 12 in 2016, and featured a mix of local and international jazz artists. The event is supported by local community actors through donation and civic investment to keep the event free throughout all performances. This highlights a success in event planning, as keeping the event free allows for greater drawing power and allows for attendance from all members of a community. This event is hosted not only within the Marketplace, but is connected to all major performing arts centres in the downtown core, such as the Flynn Centre, the waterfront, and various clubs and restaurants. In effect, the *Discover Jazz Festival* is a draw not only for the Marketplace, but acts as a connecting venue for the entire downtown.

### *Fashion and Small Business Events*

Church Street's annual fashion showcase, *Fashion's Night Burlington*, is a one-day event held on the pedestrian mall that features live models and promotions from local and international designers. This event provides a varied use for the street, and temporarily transforms it into a red carpet runway.

Also hosted at the Church Street Marketplace is the week long *Sidewalk Sale*, which ran from August 3 to August 7 in 2016. During this event, local merchants take their products from within their stores and set up along the pedestrian mall. By effectively turning Church Street into a street market, pedestrian activity is significantly increased. Further, for any street, it can be a challenge to have active retail activity translate into a vibrant public realm. This type of event directly confronts this problem and it has been successful in Burlington.

Another retail event is the *Small Business Saturday*, where the sixth annual iteration of the event was held on November 26, 2016. A series of local retailers that make up 70% of the total retailers located on the mall are featured to the public as a way to connect the local community with smaller local businesses and their products. This weekend is identified as the busiest shopping weekend of the year and Burlington leverages this by putting a spotlight on the local businesses of the street. This allows the local community to become connected to the distinctive character of the Church Street Marketplace.

### *All Age Event – Festival of Fools*

The *Festival of Fools* was a 3-day event hosted between July 29 and July 31 in 2016 that focused on community engagement for family audiences through street theatre. The event features a mix of local and international performers, and is sponsored by Burlington City Arts, a city program that operates as a pseudo non-profit organization to spread art to all members of the community regardless of economic, social or physical barriers. The event is an example of successful programming as it integrates programmed activities for a variety of ages, draws activity to the street, and is integrated with existing agencies which help support the annual event.

### *Seasonal Design Programming – Summer and Winter Lights*

An ongoing winter event at the Church Street Marketplace is *Winter Lights*, a program that oversees new light installations in early February that last until April. The event begins over the first weekend in February, *Burlington Winter Weekend*, where several new light installations catered towards the winter season are launched. To accompany the lighting ceremony held in the evening, the weekend also features key

attractions including an all-day ice sculpture garden, and various business promotions that help attract people during the winter for long duration stays. The event is sponsored by *Citizens Bank*.

Similarly, the Church Street Marketplace also features a *Summer Lights* event, where seasonally appropriate lighting is put up creating an illuminated canopy for visitors to enjoy during the evening hours. This event is also supported by several restaurants and businesses offering evening promotions to attract visitors at off-peak hours. These events represent good programming efforts in selecting seasonally appropriate design features, having the events supported by local businesses and sponsors, and attempting to create a 24-hour destination.

The Church Street Marketplace combines design and programming through festivals and large events such as Summer Lights; Burlington, Vermont.





## The Forks – Winnipeg, Manitoba

The Forks is a mixed-use destination situated in downtown Winnipeg that experiences four million visitors annually, and offers a variety of uses including shopping, dining, entertainment, as well as a wide range of activities for their diverse visitors. The site is home to the Forks Market, which is housed in an adapted historic building, and features 300 vendors offering food, arts, and crafts. The site also hosts Manitoba's Children's Museum, the Canadian Museum for Human Rights, the Inn at the Forks, which is a five-story 116-room hotel, as well as outdoor features including three public skating rinks, and the Broadway Promenade that features the Festival Park and Scotiabank Stage that hosts major festivals and performances.



### *Festival of Fools*

The *Festival of Fools* (different than the festival with the same name in Burlington, Vermont) is a family-focused free showcase featuring various performances by jugglers, clowns, and acrobats among others, which offers workshops and additional interactive showcases. This event is programmed to occur during Spring Break to draw their target family audiences during free time and leverages a connection with the Winnipeg International Children's Festival's (WICF) Circus Arts (C.A.M.P.) programs in the City. The Forks and the Winnipeg Arts Council came together to create the event, which was had considered success through scheduling during spring break, targeting an audience of all ages for the event, and connecting to existing community networks to draw an attraction.



The Forks Market (above), winter activities at The Forks (top right); Winnipeg, Manitoba.



Several examples of Warming Hut entries featured along the Forks; Winnipeg, Manitoba.



### *Warming Huts*

A major challenge for public spaces in Canada is planning for the harsh conditions of the winter season. A strategy to help maintain streets as desirable locations during winter months is to employ design features that create wind protection. A programmed event that serves as a precedent for winter planning is the *Warming Huts: An Art + Architecture Competition on Ice* within the Forks. This design competition is open for entry during the fall where competitors seek to create

a desirable warming hut or public art display to be situated within the winter skating rinks, interactive ice castle, or other featured events. This event serves as a precedent as the winning design structures are implemented, which draws attention to the site area and creates excitement for the new design and art amenities arriving annually. Additionally, *Warming Huts* fit a need to create shelter from the elements, while also providing attractive public art and design elements for the public areas.

## Pop Up Picnics – Calgary, Alberta

Once a week during the summer, downtown Calgary hosts a picnic day in selected areas throughout the downtown core. The event runs for an hour between 12-1 pm, and is free for visitors. Specific programming includes providing all the seating, chairs, and tables, as well as entertainment such as giant chess boards and a giant Jenga set-up. The event has a low-entry threshold that has great potential to draw visitors into an area and provide additional business for dining, entertainment, and retail businesses; local storefronts are not physically blocked off during the picnic days.

This model for programming and street planning involve flexible and mobile design features that can be moved with ease, effectively transforming urban places into urban parks. Various options for street furniture, seating, planters, design, public art, and entertainment stages can be utilized. These features are examples of the adaptive quality of urban environments because these activities can happen on existing streetscapes without permanent changes to the existing urban form.



Picnic areas as part of Picnic Day in Calgary, Alberta.



## Roundhouse Craft Beer Festival – Toronto, Ontario

The Winter Craft Beer Festival is a winter beer market hosted outdoors at Roundhouse Park in downtown Toronto in February, regardless of the blustering winter conditions. The event also features food trucks and activities for attendees including winter themed promotional materials, such as toques and winter accessories, as well as prizes for best group outfits which adds a unique and fun element to the festival.

Though beer markets and festivals are common event and programming efforts, this festival has been selected as a precedent because it embraces the winter season, and has worked to create excitement regardless of tough Canadian winter conditions. This example not only showcases consideration for a beer festival, but the theme and direction could be applied to various specialty drink events including Canadian Whiskey festivals during winter, or iced wine and cider to match seasonal themes.



Heating elements and a snowsuit theme provided for a warmer experience; Toronto, Ontario.



## Whiskey Ottawa – Ottawa, Ontario

Whiskey Ottawa is a festival hosted in the fall featuring nearly 100 distinct distillers at the Canadian War Museum. Master tasting classes are offered for guests, as are serviced food provisions. While the space provided by Sparks Street makes it an ideal venue for such an event, its proximity to the Canadian War Museum make it a natural location to host satellite event connected through this festival. Concerning the latter point, a smaller number of distillers could be featured on Sparks Street as an extension of Whiskey Ottawa in a pop-up market style, perhaps on weekends.



▶ Drawing from existing successful events can bolster programming on Sparks Street.

## Public Outdoor Spaces – Boston, Massachusetts; San Francisco, California

Large public outdoor spaces that are either publicly or privately owned can provide much needed open space in a densely urban environment and complement the City's overall open space network. The ability to access large open spaces such as courtyards, plazas or pedestrian ways even though they are privately owned (also known as POPS or privately owned public spaces) contributes to a more continuous and welcoming environment. Public spaces can provide an area for programming and events such as small concerts and outdoor events as well as an opportunity for showcasing public art installations, engaging in outdoor recreation, or simply providing a comfortable space for people to relax and enjoy the day.





## The Lawn on D – Boston, Massachusetts

*The Lawn On D* is a POPS located along Boston's waterfront that was designed to engage the public and provide a unique space for events, outdoor art installations, and enjoying food and beverage. Owned by Citizens Bank, it features several outdoor games such as lawn bowling and ping pong tables in addition to two tent spaces with the ability to host live music and shows. Currently, an interactive art installation, *Swing Time*, is featured on the grounds, which lights up the swings at changing light levels and colours depending on how fast the person is swinging. The combination of attractive visual elements and engaging amenities makes this public space a popular destination in Boston.



Evening and day time events and programming make for an engaging space at all time of the day; Boston, Massachusetts.



## Market Street – San Francisco, California

Market Street is regarded as San Francisco’s “main street” and features several types of public outdoor spaces ranging from plazas and parking spaces to sidewalks and street corners. As part of a re-design project for Market Street, one of the main goals was to create a street that is more than just a transit spine; the goal was to transform it into a destination.

To accomplish this, the *Market Street Prototyping Festival* was launched. The idea behind a prototyping festival is to try out many different kinds of activities, events, and programming all at once to gauge how the public reacts and interacts with the installations and then use feedback and data to select those activities that provided the most engagement between users and the urban environment, developed networks, and built capacity for change in the area.

The festival featured many engaging activities and installations including:

- Guerrilla museums informing passersby of social issues
- Interactive seating and landscaping
- A tag tunnel for impromptu graffiti
- An outdoor gym
- A quiet meditation space
- Pop-up washrooms
- Outdoor performance spaces and instructional areas
- Humorous street furnishings and signage

The benefit of this type of model for testing out ideas for engaging the public realm comes in the flexibility of the installations and ability to bring larger groups of people out to the space all at once. Based on the data collected and the evaluation criteria for each prototype, the most successful ideas were implemented into the design and programming of Market Street.



▷ peepSHOW, an art installation in San Francisco, California.



- ▶ Bench-Go-Round is an dynamic seating display that encourages the users to interact with one another; San Francisco, California.



- ▶ Artist designed ping pong tables (above) and interactive landscaping (below) entertain pedestrians; San Francisco, California.





## Temporary Business Licences – Ottawa, Ontario

There are types of programming that present themselves as opportunities to garner revenue with an improved Sparks Street. Examples include charging or increasing the rate of temporary business licenses (pop-ups, food carts) and a collection of fees for busking licenses. For example, the City of Ottawa's street food vending program, initiated in 2013, has expanded the City's licensing for food carts and trucks across the city.

Currently there are no licenses for any trucks or carts directly on Sparks Street. While there are some that are within a short walk from the mall, a similar program to promote other temporary businesses on Sparks Street could be initiated. The fees for food vendors in Ottawa range from \$1,372 to \$2,178 for a cart and from \$4,703 to \$6,748 for a truck, depending on size and location. Similar revenue streams could be established from increased pop-up businesses (ie. other than food vendors) and could contribute to the ongoing maintenance and redevelopment of Sparks Street.



Lunch goers enjoying the variety of food trucks on Sparks Street, Ottawa, Ontario.



## 9

## Patio Policy

Sparks Street is home to several outdoor patios, particularly on the south side of the mall, and the City of Ottawa already has *Outdoor Patio Design Guidelines*, produced in 2006. The document is quite comprehensive and in some cases, represents best practices in patio design. In particular, there is a section of the document that specifies that patios (otherwise referred to as outdoor cafés) must allow for at least six metres of width throughout the street for pedestrians and emergency vehicle traffic. Patios bring vibrancy to urban streets but if they are designed in a haphazard manner, they become impediments to circulation. After extensive research of similar policies in other cities, the project team can confirm that Ottawa's requirement of a six metre, straight clear path is in fact the largest required clear path; Ottawa's guidelines are a best practice in this case.

Nevertheless, other elements of the outdoor cafés on the mall could use improvement and after a scan policy in other jurisdictions concerning patios, several themes were identified.

### *Rationale for Case Study Selection*

Strong consideration was given to seeking out policy that focused on placemaking during the entire year, including the winter months. In addition, that policy that used clear and direct language was considered to be best practice and in particular, policy that made use of visual aids as a form of communication were valued.

- *Respect heritage properties and culturally significant locations.* The patio itself should not be elaborate in its design when it is connected to or located in front of a heritage building. Patrons likely want a place to sit where they can enjoy the surroundings and an elaborate or distracting patio design can detract from this goal.
- *Outdoor patios can facilitate social inclusion.* Patios can be more than a place to get food and drinks; they can be places where those with mobility impairments stop for a rest, and they can be excellent locations for people-watching. As a result, physical barriers should be minimized; overbearing fencing or even an enclosure that effectively turns an outdoor café into a private space defeats this purpose.
- *Clustering outdoor patios creates a destination.* A string of establishments with outdoor café arrangements allow visits to the area without making particular plans to go to one establishment; it allows for spontaneity. Further, it is often the case that one side of a street receives more sunlight than the other. Therefore, it is practical to cluster patios to benefit from the sunlight conditions of the street.

## Outdoor Café Guide (2007) – Melbourne, Australia

By 1990, Melbourne was being colloquially referred to as the ‘the donut’ because the central area was essentially devoid of activity. One of the City’s primary strategies for bringing life to their downtown streets was to heavily promote the addition of outdoor cafés for restaurants in the area. As a result, the number of outdoor patios grew from 50 to 600 over a 15-year period although this growth was somewhat haphazard. In reaction to the issue, the City of Melbourne developed the *outdoor café guide* that sets out guiding principles for the management of outdoor patios. Simply put, the document is among the most detailed and expansive of its kind. There are numerous best practices that have been identified by the project team found within Melbourne.

### *Design and Heritage Consideration in Patio Design*

A significant principle of the *guide* is that outdoor patios cannot detract from existing trees, public art, city decorations and most importantly, cannot force heritage elements to be removed, relocated or modified. The goal is for them to be unobtrusive in style, appearance, materials, finishes, and colours. For example, contemporary and brightly-coloured seating is deemed to be appropriate on a street that has a predominantly modern feel. In contrast, heritage-dominated streetscapes are to include high quality street furniture and more traditional materials. Further, outdoor cafés placed in front of heritage buildings should not replicate the historical style of the building but rather should be simple in design. Spaces in front of culturally significant places are meant to be kept open and only temporary furniture is allowed in front of them.



Excerpt from the Outdoor Café Guide (2007); Melbourne, Australia.

Another unique idea is that umbrellas are only permitted on patios where there is a lack of built or natural (tree) canopies present. Even advertising is relegated; they are allowed on every alternative panel of café screens or umbrella, although the size of the advertisement cannot be larger than 33% of the size of the panel it is situated on.

### *Outdoor Cafés as a Facilitator of Inclusion; Minimize Physical Barriers*

A common theme found throughout the document is that outdoor patios contribute to the social and cultural identity of the City because they provide a venue for people of all ages and incomes to participate in urban street life. In this vein, patios are to be designed with minimal physical barriers, include minimal fencing and boundaries that can lead to a public space feeling privatized.



Object	Minimum clearance from object
Fire hydrants	1000mm
Exit doors	
Litter bins	
Public seats	
Payphones	
Bicycle hoops	
Parking meters	
Tram stop shelters	
Bus stop Shelters	
Other infrastructure used by the public:	500mm
Tree plots	
Ballards	
Poles	
Other similar objects	
Platform tram stop access point	1500mm

► Setback requirements Outdoor Café Guide; Melbourne Australia.

### *Unique Patio Guidelines for Specific Streets*

In addition, a series of locationally-focused outdoor café guidelines have spun off of the original document including one for *central city main streets*. The specific streets where the guidelines apply are noted and in fact, there are exceptional dimensional requirements for outdoor patios on each street based upon the context of the street. Aside from the typical setback requirements, there are setback requirements from street furniture.

► Barrier and screening design guidelines; Melbourne, Australia.



## 16<sup>th</sup> Street Urban Design Plan (2010) – Denver, Colorado

Concentrating outdoor patios is viewed as an “Activation Strategy” in the 16<sup>th</sup> Street Mall Plan. On a map, specific areas are identified as places where patios should be clustered, a strategy that makes it clear that these cafés are to be a significant part of the streetscape on the pedestrian mall.

Another consideration for patio design is solar access. Larger patios should be designed to be located in areas with strong solar exposure, according to the 16<sup>th</sup> Street Mall Design Plan. These areas of the street are allocated for patios because of this factor alone.



16th Street Mall Activity Framework

### Activation Strategies



This diagram illustrates a strategy to activate the Mall throughout its length through deployment of a coordinated street vending program, provision of amenity areas, programming of adjacent open spaces and potential redevelopment and storefront revitalization. The goal is to provide a variety of experiences for Mall users and a variety of opportunities for commercial uses on the Mall.



## 10 Circulation

### *Rationale for Case Study Selection*

The precedent review in circulation has taken into consideration good examples of how pedestrian malls have been successfully integrated into downtown environments. This includes the way the pedestrian mall is conceptualized as a part of a larger downtown fabric and its functional elements, including maintaining the right-of-way (ROW) as an emergency service route.

The context that a pedestrian mall is situated in – generally a downtown area – can often be just as important to its success as the features found within it. The streets surrounding a vehicle-free promenade should be attractive and functional for their own benefit, but their pedestrian infrastructure should facilitate walking towards the pedestrian mall.

Where there is a vehicle-free street, it is critical for vehicle, pedestrian, and cycling traffic to continue to circulate efficiently. In the United States, a survey was conducted of local authorities where pedestrian malls had not succeeded. Many indicated that the need for downtown accessibility had been underestimated and many did not properly test their circulation plans before implementing the vehicle-free street; this resulted in the failure of the pedestrian mall in many cases (Onibokun, 1975).

In addition, adequate and functional parking must be provided in the area surrounding the mall; this allows people to drive in to shop on one of these streets or to attend an event that may be held on it. The latter point is especially true in cases where transit infrastructure supporting the area is inadequate.

### **Intersections Downtown 2025 Plan (2011) - Minneapolis, Minnesota**

The plan found within the *Intersections Downtown 2025 Plan* is to have a frequent and free downtown transit circulator operating within their downtown by 2025. Several streets are identified (including Nicollet Street, which is a transit zone along with being a pedestrian mall) and key destinations within the downtown are identified as the suggested routes and stops of the circulator. The plan leaves open the idea of a bus or streetcar being utilized, and the accessibility of the circulator to all users is identified as a necessary component.

A bus circulator is worth considering for Sparks Street. The pedestrian promenade stretches across five City blocks and ideally, each of the five will be vibrant and noteworthy in the future. Not all segments of the population will be able to walk across the entire mall because of its length and because of its natural slope. With the introduction of the Confederation Line one block south on Queen Street – and the two stations at Lyon and O'Connor Streets – a bus circulator that picks up and drops off at these stations could be a sensible solution for mobility within Ottawa's downtown.

## Downtown and Pedestrian Mall Streetscape Plan Update (2014) – Iowa City, Iowa

Known as the “Ped Mall,” Iowa City’s pedestrian mall is a prominent feature of Iowa City’s downtown and it is also a primary focus of the City’s downtown streetscape plan. Within it, streetscape improvements for all relevant modes of transportation are included, and these are graphically depicted on a map making it clear where they are intended to go.



In addition, streets within the downtown are categorized in a non-traditional hierarchy, and a picture is included of each street juxtaposed with a vision for what it could become. This is a clever way of describing a series of streets in an area according to what the municipality aspires for them to become, rather than what they are. In addition, it places the focus on the intended pedestrian usage of the street as opposed to the intended vehicle usage of the street (e.g. arterial road, collector road, etc.).



▶ Map of circulation and transportation enhancements (left) and corresponding renderings of actual streets (above); Iowa City, Iowa.

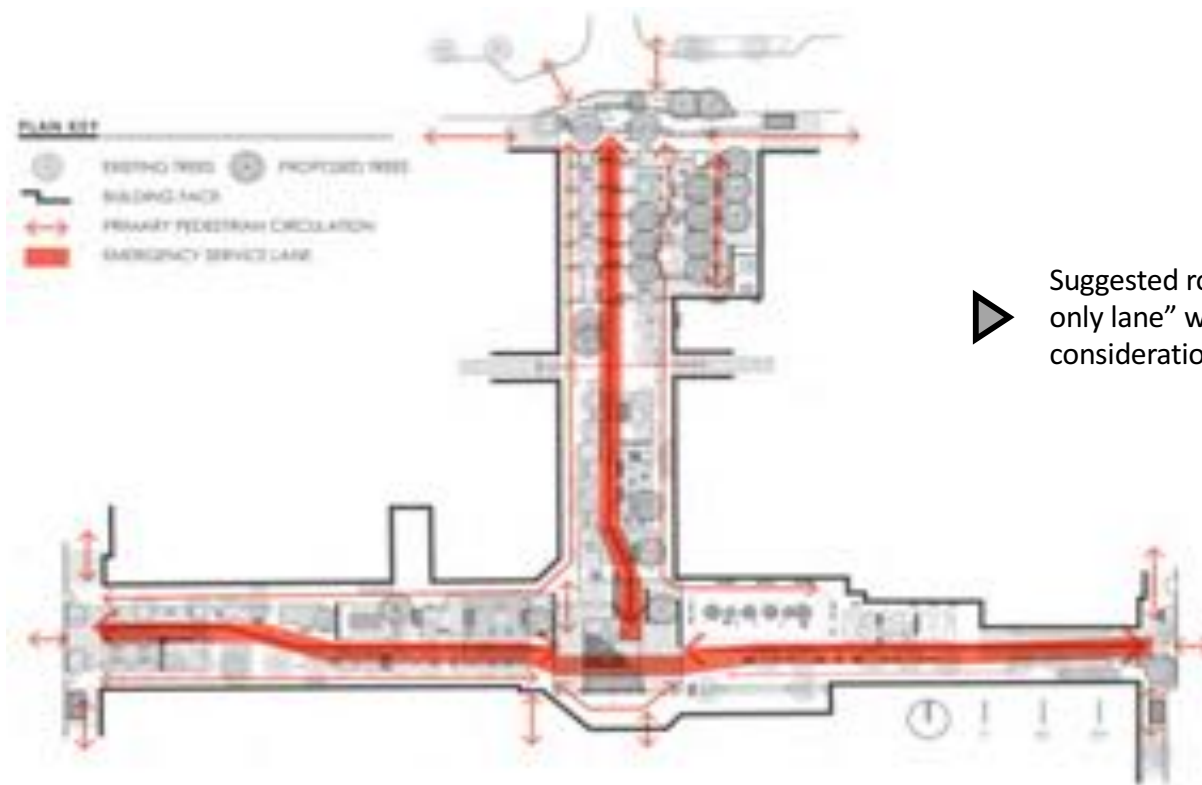


### *Emergency Service*

The plan includes provision for an “emergency service use only” lane which is centrally located along the corridors of the pedestrian mall and is 14 feet wide (4.27 metres). City maintenance vehicles and mobile vendor carts are also permitted to use the lane. Normally, the lane would be a normal part of the mall intended for pedestrians. It is a requirement for this lane to be maintained for emergency

vehicle use in all future plans for the improvement of the pedestrian mall.

Including this information within urban design guidelines is perhaps less exciting than other elements but it is a crucial element. Not planning for emergency routes, even on a pedestrian promenade, is the type of oversight that can derail such a project.



Suggested route for the “emergency service use only lane” with appropriate ROW taken into consideration; Iowa City, Iowa.

## 16<sup>th</sup> Street Urban Design Plan (2010) – Denver, Colorado

Home to the 16<sup>th</sup> Street Mall, Denver's 2010 plan update for the mall is another example of an unusual street classification system. Of note, the pedestrian mall is classified as a "transformative street" while most of the streets that it intersects are referred to as "priority streets". The classification system found within this plan is more hierarchical than what was utilized in Iowa City's plan, although in this case, the hierarchy appears to be based upon the amount of maintenance and work that is required. This could also be a useful way of classifying a downtown street network.

Proposed unique street hierarchy system where the City's pedestrian mall is categorized as a "Transformative Street"; Denver, Colorado.



### PEDESTRIAN HIERARCHY FRAMEWORK

- **Transformative Streets:** premiere public spaces and marquee features (16th Street Mall, Anapahoe at Skyline Park, Wynkoop)
- **Transformative/Priority Intersections along 16th Street:** Broadway, Court, Tremont, Glenasm, California, Stout, Curtis, Anapahoe, Lawrence, Larimer, Wazee, Wynkoop
- **Equity Streets:** majority of Downtown street network; balance diverse mobility needs (Cleveland, Welton, Champa, Lawrence, Market, Blake)
- **Community Streets:** provide the highest level of comfort, security for all pedestrian activity (Court, Tremont, Glenasm, California, Stout, Curtis, Larimer, Wazee, Welton)
- **Community:** intersections, sidewalks, public spaces, land use, and architecture

## 11 Policy

### *Rationale for Case Study Selection*

Strong consideration was given to seeking out policy that focused on placemaking during the entire year, including the winter months. In addition, that policy that used clear and direct language was considered to be best practice and in particular, policy that made use of visual aids as a form of communication were valued.

In most cases, urban design initiatives take their direction from official policy documents. Parameters are established, often as guidelines or standards, and in either case, the documents are legally binding. As a result, it is critical that policy related to urban design is direct with its ambition; if a municipality wants to accomplish a specific goal with a particular project, their first consideration should be to outline it in official policy. Although design is artistic in nature and room for creativity should be allowed in policy documents, the real objective in writing about urban design in policy is to provide clarity and direction.

With this in consideration, a review of successful work done in other municipalities allowed the project team to identify the following techniques as best practices in producing urban design policy:

- *Be very clear with language.* If a pedestrian mall is to remain vehicle-free, a strong statement should be made to this effect. In addition, if the guidelines are written to solve a problem, the document should clearly outline the nature of the problem. This tactic can effectively set the context and purpose for the document.
- *State goals and provide detail about how they will be reached.* One way for a municipality to follow through on a policy intention is to provide detail about how it will be implemented. Expected budget requirements, the stakeholders that will be responsible, projected timeframes are all examples of detail that can be included. The inclusion of each adds to the accountability of the document as it raises expectations for goals to be reached.
- *Utilize visual aids to help describe policy intention.* Urban design is visual in nature and yet much of the policy that can be found about the subject only utilizes words in attempting to communicate the intent of the policy. Visual aids can include pictures from other locations, renderings of proposed changes, and more.
- *Plan for all seasons.* Cities that experience highly variable weather conditions emanating from changing seasons are well-served to take this into consideration when creating their policy. Efforts to make a project vibrant throughout the entire year should begin with urban design considerations, and this includes the utilization of hardy materials that can withstand harsh winter conditions.



## For the Love of Winter, WinterCity Strategy Implementation Plan (2013) – Edmonton, Alberta

The City of Edmonton aims to be an international leader in adapting to the winter and benefitting from it rather than being hindered by it. A significant piece of their strategy is their *WinterCity Strategy Implementation Plan*, passed by City Council in 2013. The document outlines 64 action items intended to affect tangible change and to facilitate a cultural shift in how residents and visitors interpret the winter season. The action items fall under the 10 goals of the *WinterCity* strategy. The City's strategy of utilizing a series of goals and action items that stem from the goals is easy to understand and is replicable for a variety of different policy initiatives.

Each action item contains an objective, sponsor and partner information, projected time frames for implementation and a brief cost estimate. In particular, several of the items are

Edmonton's 10 WinterCity Goals, each of which have a series of Action Items that will help the effort to achieve the goal; Edmonton, Alberta.



directly related to planning and urban design, including one that indicates the City's need for urban design guidelines suitable for the winter season. Edmonton's Winter Design Guidelines would be published in 2015, making this a successful example of a municipality publicly stating an urban design goal utilizing an implementation plan, and adhering to it according to their schedule.

### The 10 WinterCity Strategy Goals

#### WINTER LIFE

##### Goal L1

Make It Easier to 'Go Play Outside':  
Provide More Opportunities  
for Outdoor Activity

##### Goal L2

Improve Winter Transportation  
for Pedestrians, Cyclists and  
Public Transit Users

#### WINTER DESIGN

##### Goal D1

Incorporate Urban Design  
Elements for Winter Fun,  
Activity, Beauty and Interest

##### Goal D2

Design Our Communities for  
Winter Safety and Comfort

#### WINTER ECONOMY

##### Goal E1

Increase the Capacity and  
Sustainability of Edmonton's  
Winter Festivals

##### Goal E2

Develop a Four-Seasons Patio Culture

##### Goal E3

Enhance the Social and  
Economic Vibrancy of Our  
Streets and Public Places

#### OUR WINTER STORY

##### Goal S1

Celebrate the Season and Embrace  
Daily Living in a Cold Climate

##### Goal S2

Promote Edmonton's Great  
Northern Story Locally,  
Nationally and Internationally

##### Goal S3

Kickstart and Lead Implementation  
of Edmonton's Winter City Strategy:  
Apply a "Winter Lens" to Our City

## Winter Design Guidelines (2015) – Edmonton, Alberta

In recognition of the importance and prominence of the winter season in Edmonton, the City has created a set of guidelines that strictly focus on adapting urban design decisions to the local climate, and to turn the winter into an advantage. It is the City's intention that the guidelines found within the document will be integrated into land use policies, including zoning by-laws, to spur design excellence in all seasons.

The *Winter Design Guidelines* utilize a combination of graphical illustrations, models and images from other cities to provide practical advice and inspiration to planning and design efforts in the City. For example, the five core principles are visually described using a model of an urban park in the city. Examples of urban design techniques that work toward achieving these goals are depicted in the model and in each case, the ideas are expanded upon within the document. The model is essentially a collection of best practices in urban design for the winter season and makes the City's aspirations clear.

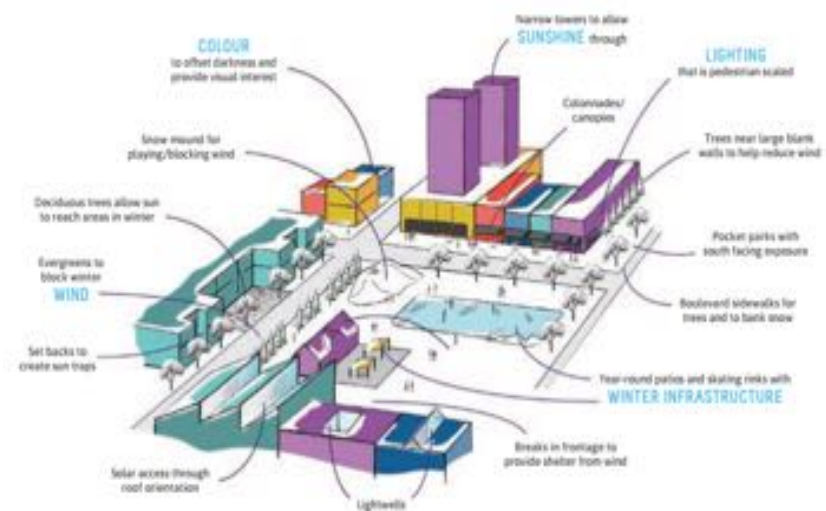
Collection of best practices in winter design; Edmonton, Alberta.



Although it is not necessary to create a document entirely devoted to urban design for winter conditions, Edmonton's *Winter Design Guidelines* is an excellent example of a city that is making an effort to create effective public spaces throughout the year.

In summary, five principles are to be applied to future considerations of streetscapes and open spaces:

- Strategically use design to block wind
- Consider orientation and design to maximize exposure to sunshine
- Enliven the winterscape using colour
- Create visual interest with light
- Design infrastructure to provide comfort and a desired winter life





## planBTV, Downtown & Waterfront (2013) – Burlington, Vermont

Home to the successful Church Street Marketplace, city council in Burlington, Vermont passed the *planBTV – Downtown & Waterfront Plan* in 2013. It is similar in scale to a Secondary Plan in Ontario and further, it contains a section about Church Street (also a pedestrian mall) of similar size to the section of the City of Ottawa's *Central Area Secondary Plan* about Sparks Street. Taking these factors into consideration, the plan is comparable and there are two features within it that represent best practices in policy (both are visible in Figure X).

Policy objectives (referred to as 'elements') are connected to a map that displays where the desired outcome is. This tactic leaves the reader with little doubt about the geographic elements of each objective or target. Further, it allows the reader to imagine the location in its current form and then to read the policy and imagine how the intervention would manifest itself. In short, it makes the policy easier to understand.

The second notable feature is how each 'element' contains information about the next steps required to implement the specific objective and the stakeholders who are the responsible lead party (or parties). The wrench symbol signifies the former while the person symbol notifies the latter. The reader is able to create expectations based upon this information, rather than relying on an abstract goal.



Policy ideas are connected to specific locations on a map and information about implementation; Burlington, Vermont.



## Downtown Urban Design Guidelines (2016) – Boulder, Colorado

The Pearl Street Mall in Boulder, Colorado has been referred to as the “Happiest Place in the United States” by CBS Sunday Morning; it is a wonderfully designed pedestrian mall with a wide array of programming functions. In the City’s *Downtown Urban Design Guidelines*, there is strong language that makes clear that the four blocks that comprise the pedestrian mall will remain as they are:

“The Downtown Boulder pedestrian mall, which encompasses Pearl Street from 11th to 15th Streets, is the most intensely used pedestrian zone in the area. As a shopping, festival, and public gathering place it will remain a vehicle free area with a unified brick paving design. Elaborate landscape treatments, including seasonally-varied plants and coordinated street furniture, add to the pedestrian ambiance.”

The tone of the language ensures that the Pearl Street Mall will remain vehicle-free. This characteristic can be contrasted with Ottawa’s *Central Area Secondary Plan* which includes contradictory information about the mall’s vehicle-free status. In addition, the statement makes a number of clear statements of intent in regards to various design features, including where it alludes to the consideration of seasonal variation.

### Policy Clarity

The design guidelines are very clear in visually depicting guidelines (refer to Figure X). Written policy can appear abstract if the reader is less familiar to the subject; the use of visual

aids, especially when policy is discussing dimensional requirements, can provide a significant amount of clarity to the intention of the policy.

### Streetscape Design

Another design element that is found within the guidelines is the idea of utilizing the material found in the majority of the buildings as influence for the design of the streetscape. In Boulder’s case, that is brick near the Pearl Street Mall, and they are specific in listing materials that are complementary including sandstone, scored grey concrete, and black enamel street furniture and utility elements.

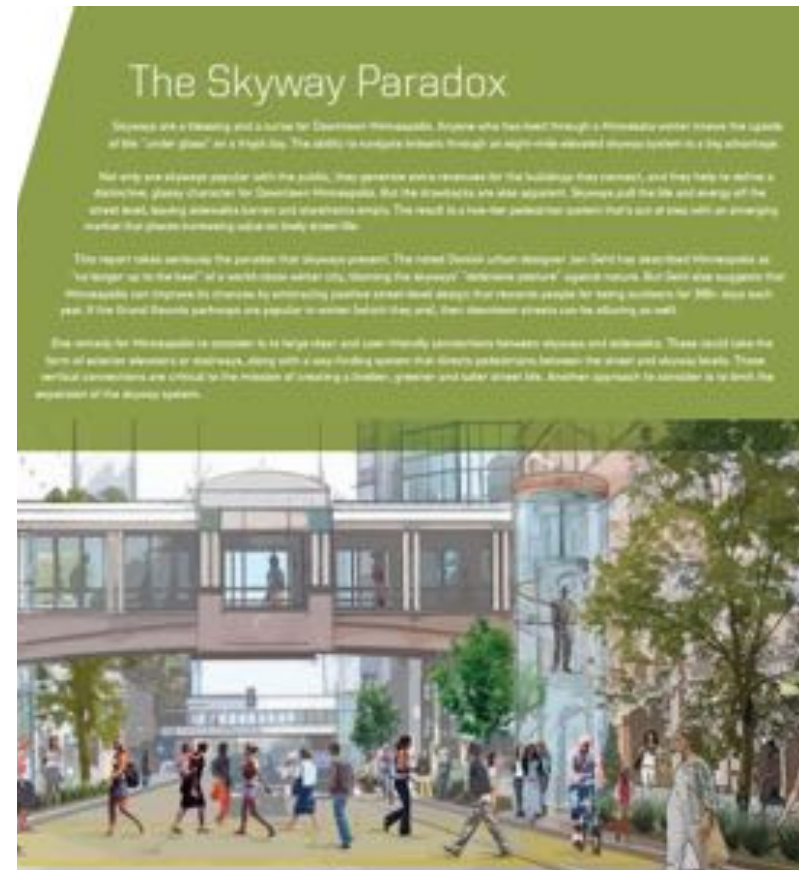


Dimensional requirements; Boulder, Colorado.

## Intersections Downtown 2025 Plan (2011) – Minneapolis, Minnesota

Minneapolis has one of the more lively downtowns in its region of the United States and the Nicollet Mall, part of which is a pedestrian mall, is located within it. It is the city's premier shopping street although it also features a skyway system that detracts from pedestrian life at the street level. The *Intersections Downtown 2025 Plan* details the problem and sets up this theme as an aspect that large sections of the document aim to solve (refer to Figure X). It explains how and why the skyway system has been beneficial to the City while also hindering pedestrian activity on the mall.

Importantly, it uses clear language to identify this issue as a problem: "This report takes seriously the paradox that skyways present" (Minneapolis Business Council, 2011, page 23). Because one of the major initiatives of the plan is to transform the Nicollet Mall into the premier walking experience within the region, the skyway paradox is identified as a clear obstruction to this goal, and allows future efforts to focus on alleviating the problem.



- An example of Minneapolis clearly stating an issue with the City's downtown and briefly outlines options that are available to fix it; Minneapolis, Minnesota.

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