

Case-in-Point 2022



Figure 1. People gathering on the street.

Planning Streets for People First: From Principle to Practice Edmonton's Downtown Streetscape Design Guidelines

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1.0 Introduction

Streets make up the vast majority of public space in cities. Historically, they were places of slow mobility and commerce - places where people gathered informally and the common meeting of people was "widely acknowledged [as the] celebration of neighbourliness" (Kostof, 1992, p.195). The invention and proliferation of the automobile in the 20th century however, led to an era of city building partly characterized by the diminishing of street function to emphasize motorized accessibility (Southworth & Ben-Joseph, 2003), and concerns about flow of moving vehicles took precedent over those of walkability and communal gathering. In response, a growing number of cities are striving for more pedestrian friendly street design, all while accommodating traffic (NACTO, 2013). Edmonton

is pioneering this attitude in Canada. This Case-In-Point explores the development, outcomes and lessons learned from the implementation of Edmonton's Downtown Streetscape Design Guide and how it's transforming their streetscapes.

"The only legitimacy of streets is as public space. Without it there is no city."

- Spiro Kostof

2.0 Background and Context

As car ownership and mobility grew, streetscapes were enlarged and safety measures implemented that effectively deny pedestrians access and encourage vehicles to move faster and more freely (Southworth & Ben-Joseph, 2003). What began out of a novel endeavour to manage changes in mobility quickly led to complete monopolization by cars (Carmona et al., 2010). Particularly troublesome were the development of standards for streets that virtually dictate a dispersed, disconnected community pattern providing automobile access at the expense of other modes and the subsequent “rigid framework of current street standards that has resulted in uniform, unresponsive suburban environments that ignore the local situation.” (Southworth & Ben-Joseph, 2003, p. 2)

In the United States a significant amount of land is dedicated to vehicular infrastructure. Consensus in the literature is that the total land area in cities devoted to cars is close to 50% (Southwood & Ben-Joseph, 2003). This is a substantial amount of public space that for many decades now has not belonged to the public. A reaction to the deterioration of urban public space caused by car-oriented street planning and design has been sparked

by urbanists like Jan Gehl who urges that cities need to “reinforce pedestrianism as an integrated city policy to develop lively, safe, sustainable and healthy cities” (Gehl, 2010, p. 6). Great streetscapes are attainable by shifting perceptions towards a people/pedestrian first attitude at a city level and a “rethinking of street standards [and design], to create more cohesive [and] livable [...] metropolitan areas” (Southworth & Ben-Joseph, 2003, p.2).

One of the strategies that municipalities have implemented to do this are streetscape urban design guidelines. These serve to re-imagine the streetscape through policies, action statements, architectural detailing and limitations, and recommendations for implementation. Figure 2 illustrates leading thought in urban design and the identification four distinct zones for thinking about the pedestrian environment and its relationship to other aspects of the streetscape (Burden, 2011 & NACTO, 2013):

- Frontage zone – located adjacent to the building or property line, typically private property that can be used to support or enhance the public environment (planters, seating, patio extensions, retail displays, etc.)

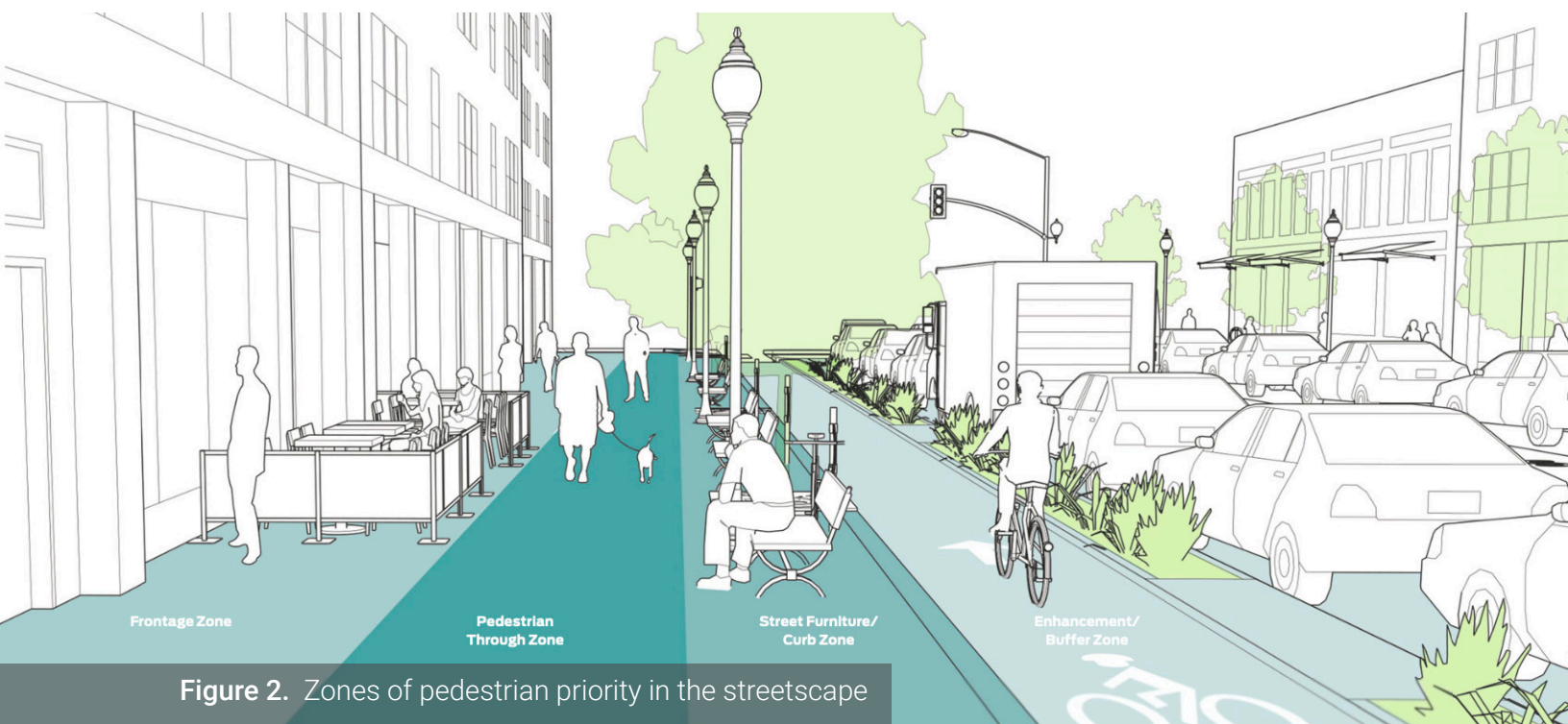


Figure 2. Zones of pedestrian priority in the streetscape

- Through zone (pedestrian zone) – provides a barrier-free area for walking and other modes of active transportation.
- Furnishing zone – located between the pedestrian zone and the curb, typically contains all street fixtures and landscaping elements (i.e. street trees).
- Enhancement zone – zone for active transit. Envisioned differently by Edmonton and swapped for an Ancillary zone, it helps to differentiate all other zones from the vehicular right of way, manages water runoff, facilitates on-street parking, provides for various temporary and/or permanent uses depending on the adaptability needs of the street.

The goal is to assist in refocusing the priority from automobiles to pedestrians by “inviting people to the most important activities underlying their use of public space – walking,

standing, sitting, seeing, talking, hearing and self-expression” (Gehl, 2010, p.238) by way of improving visual interest, safety, and comfort in the pedestrian environment.

The context within which the City of Edmonton enacted its downtown streetscape design guideline is not unlike many other urban areas across Canada. Guiding documents like The City Plan and The Capital City Downtown Plan, emphasize a priority for planning for people first, which in part encourages the development of new, and the retrofit of existing open space networks to foster inclusive, welcoming, active, accessible, playful and celebratory spaces (City of Edmonton). A typology of streets was developed as well as a hierarchy of importance based on function of the street. These street types include; Great Streets; Grand Avenues; Ceremonial Streets; Neighbourhood streets (commercial emphasis & residential emphasis); and Special conditions (lanes & alleys).

3.0 Case Summary

Consultation Process

Edmonton’s streetscape design manual is a product of consultation and collaboration with key stakeholders in the downtown area. City Planners talked extensively with Transportation Planning departments, City Operations departments, Business Improvement Areas (BIAs), Community Leagues (not-for-profit organizations that look after the interests of the community) and the development community to hear about the wants, needs and concerns of the community. The process also identified an operational need to move away from having a large variety of furnishings and fixtures in the downtown area that made it challenging to maintain over time, and the recognition that developer led design of adjacent public space results in mix and match sidewalk character that does not positively contribute to the overall feel of the Cityscape.

Edmonton’s Downtown & Quarters Streetscape Manual

Extensive analysis of transportation networks, traffic volumes, existing street functions and existing spatial form (rights of way) resulted

in the identification of street types in the downtown area (see below) based on their dominant desired function and importance. This was supported by six key goals to guide future work that supports pedestrian priority and encourages transformative use of space. The streetscape manual specifically includes provisions for ‘good sidewalk design’ modelled by Burden and adapted with clear outlines to desired streetscape furnishing and landscaping elements.

Major Streets (mixed-use & residential) are highly connected, have higher traffic volumes, may have public transit and most importantly anticipate higher pedestrian activity. Neighbourhood Streets (mixed-use & residential) have lower levels of connectivity, commercial and pedestrian activity. Signature Streets are identified for their unique opportunities to have a clear and purposeful pedestrian priority. Streets like Jasper Ave (main commercial street) and LRT (light rail transit street) have their own existing distinct character. The streetscape zones within each street typology are given different priorities of importance to allow the appropriate allocation

of space when roads are redeveloped. These are also further integrated into character area sections within the downtown to guide the aesthetic treatment of street elements to reinforce or develop distinct neighborhoods.

Outcomes

The Document

The main outcome was a design manual that, according to Kevin Dieterman (consultant on the project) is “prescriptive enough that it sufficiently limited the range of products and materials implementable, but open ended enough to allow designers to create great spaces and respond to site specific conditions”. The manual was completed and enacted in 2019.

Work done to date

The manual is new, so it has not undergone extensive trialing. The City has several projects in various stages of implementation where the manual has been applied.

97th Street (Figure 3) - Redevelopment of two blocks immediately north of Jasper Avenue. Most completed to date, featuring significantly reduced road right of way and the addition extensive landscaping elements.

Construction of a short block of 103rd Avenue connecting City Hall to the Ice District is underway and will be completed in 2022. Concept designs are in place for 106th and 107th Streets - two new street redevelopment projects.

Shifting attitudes

Transportation departments are realizing that streets can be more than just conduits for moving vehicles. Though this is still the primary focus of such departments the City of Edmonton is beginning to recognize the value of prioritizing people first and making streets places that people want to be. This change is a combination of changing attitudes, changing policy in governing documents and a new political strategic direction.

4.0 Lessons Learned

There is a demand

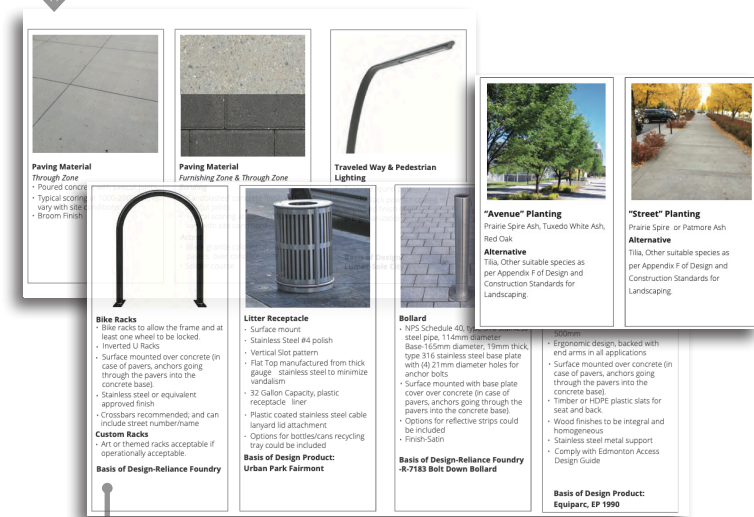
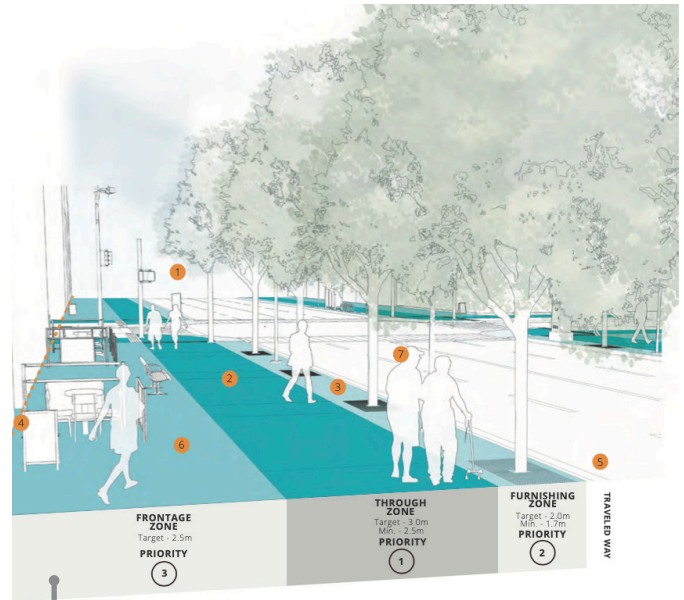


Figure 3. Streetscape design parameters for 97th St.

David Holdsworth - Senior Planner and project lead on Edmonton's downtown street design guide – described Edmonton's streetscape as a mosaic of design and ideology. Throughout history developers, architects and landscape architects each had their own visions of how Edmonton's streets should look and feel. A consequence of this was a patchwork of designs for public spaces with unique streetscaping elements and desired function. Although attractive, the overall streetscape was incohesive and created challenges in procurement costs, maintenance and design (City of Edmonton, 2019). Initial concerns about parking and development flexibility were by the local business and development communities looking to make their own mark, but, according to Holdsworth, "clear direction in the Downtown Plans and the demonstration maintenance challenges of mixed mosaics on a corridor paved the way for the conversation and led to little objection overall."

Functional change

The manual allows for a comprehensive reassessment of the function of a whole block or more. Initial trial projects have revealed that it is possible to make structural changes to streets by having a supporting document that clearly identifies goals, functions and priorities.

Example - Parking is a big issue and is hard to eliminate or reduce, regardless of actual demand. Providing flexibility for this in the Ancillary zone presents the greatest opportunity to make long term changes if integrated into the overall sidewalk characteristics. This zone offers

opportunities to demonstrate that the space can accommodate other functions at minimal detriment to real parking needs (Figure 4).

Start Small

Choosing where to pilot a project such as a streetscape design guide is critical. Selecting a small geographic area makes trialing a manual and determining what works and doesn't less risky. In Edmonton, "the downtown comprises less than 1% of the landmass (of the city) but draws 10% of the city's revenues" says Holdsworth. It's also a place of cultural and historic significance meaning many of the neighbourhoods already have a sense of place architecturally, and they generate a fair amount of attention and investment - all of which could benefit from a plan that guides the development of the spaces between the buildings to further enhance the place and improve the pedestrian realm. Additionally, there is an existing appetite for development and investment that will garner immediate and significant results. This is evident in that 4 major street redevelopment projects have been initiated within just 3 years of the implementation of the design guide.

Strategic Partnerships

Consulting with key stakeholders early in the process is important for generating buy-in. The City of Edmonton identified two stakeholders in particular that were seminal for the ongoing and continued success of the project: the City Operations and the Transportation Design & Construction departments.

City Operations is responsible for the maintenance and management of urban infrastructure. Bringing them into the project early on and in a participatory manner, meant that they were able to help develop the design guide, determine the guiding framework for streetscape elements and standardize the process of implementation, procurement, installation, management and ongoing maintenance. Choice of urban furnishings should be timeless (regardless of being traditional or contemporary), but with some flexibility to make areas distinct. Furnishings should also be generic enough to allow for various models or for suppliers to match and



Figure 4. Park(ing) day public space installation

ensure long term availability of the elements sought. When implemented properly, the maintenance of downtown streetscapes will be easier, cost less and last longer.

The Transportation Design & Construction Department is responsible for the physical development and construction of streets in downtown Edmonton. Holdsworth emphasized that the primary concern for them is the movement of vehicles and safety of drivers and so the messaging around the streetscape design guide is critical. The goal with the guide is not “get rid of streets and vehicular travel entirely, but to prioritize pedestrians in a way that fosters safer environments for both pedestrians and cars.” Holdsworth continued to explain that ensuring regular and on-going consultation (as well as negotiation) has helped to “shift mindsets, allowing for the recognition that streets are more than simply conduits for

moving cars, rather they are public space, and places where people can come first.”

Limitations

The design guide is geared for long-term implementation and not very effective at enabling smaller scale changes on a development-by-development basis. As a result, there can be some confusion on the part of developers when addressing the streetscape. In response, the City encourages developers to restore sidewalks to ‘as was conditions’ allowing for minimal wasted capital and resources until the city rebuilds the street and space can be properly reallocated. If rebuilding is many years away, space allocation is encouraged according to the manual.

5.0 Conclusion

For many decades, urban street design has prioritized automobile travel. This is changing with a global trend for re-envisioning how streetscapes should function, look and feel. Through the implementation of official guiding documents with properly aligned policies and an informed design guideline, converting roads to spaces can be done effectively, and efficiently - establishing place and saving maintenance costs long term. Early success in Edmonton is proving that shifting attitudes and transforming streets can be possible and is a step in the right direction towards recreating streets as public space in Canada.

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Figure List

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