



Transportation Association of Canada Sustainable Urban Transportation Award



Submitted by:
The Corporation of the City of Kitchener



1.0 PROJECT OVERVIEW

As part of the City's downtown revitalization efforts, a comprehensive municipal class environmental assessment was initiated to identify / address transportation and streetscape needs experienced in Kitchener's city centre, in particular, a six block section of King Street between Francis Street and Frederick / Benton Street. As part of the municipal class EA process, it is standard engineering practice that social, economic, environmental and cultural impacts of the project be evaluated exclusively in a transparent / traceable decision-making manner.

The original intent of this project was to improve the public's perception of downtown Kitchener by addressing safety concerns resulting from lighting deficiencies on King Street. Following a thorough infrastructure assessment, it was determined that greater deficiencies exist and a series of design elements must be taken into consideration prior to upgrading the streetlights. Given the revitalization nature of this assessment, emphasis was placed on determining the requirements of each area and developing reasonable alternatives / solutions to meet this criterion.

Some of the key design solutions and benefits from this assessment process include;

- Improved traffic functionality, intersection signalization and efficiency of parking;
- Improved sidewalk / road lighting and perceptions of public safety;
- Increased civic pride, public art and urban vitality eg. Special event space / street activity;
- Accelerated urban infrastructure renewal through private sector investment, façade improvements and developments;
- Enhanced public health through upgrades to alternative modes of transportation / transit;
- Improved accessibility for pedestrians / residents with special needs;
- Sustainable streetscape improvements through the use of recycled materials; and,
- Enhanced environment / microclimate through increased tree planting and storm water infiltration planters.

1.1 THE OPPORTUNITY

Located in the heart of one of Canada's most dynamic metropolitan economies, the opportunity for downtown revitalization has never been greater.

"Kitchener is the heart of one of Canada's fastest growing metropolitan areas, both in terms of population and economic growth"

"Economic growth in Kitchener between 2005 and 2008 is expected to consistently rank within the top four of Canada's largest metropolitan areas"

"Kitchener's population growth between 1996 and 2001 was double the national average"

"Kitchener is the largest City in the Region with a population expected to top 234,000 by 2016"

1.2 THE DOWNTOWN

Historically, downtown Kitchener has been the centre of activity and has functioned as the primary destination in town. It has been a centre for trade, transportation, entertainment, commerce and culture. At the height of its success, it was a reflection of residents' pride and prosperity.

During the early 1900's, downtown Kitchener, reflected a strong manufacturing sector, entrepreneurial spirit and architectural character. Over the course of time, Kitchener evolved as industry moved from the downtown core into business parks on the fringes of the city. People started to leave the downtown as new communities were built – changing where people live and work. In later part of the 20th century, Kitchener experienced a steady decline in downtown activity and vitality. To address this concern, the City developed a strategy to re-energize and revitalize the City Centre.

In 2004, Kitchener City Council, supported by residents, business owners and stakeholders, took a hands-on approach to diversify the local economy to ensure continued prosperity well into the future. Council approved an innovative, one-of-a-kind strategy to fund major infrastructure and economic development projects, creating a flexible \$110 million Economic Development Investment Fund (EDIF).

As a result of this approach, the community's vision for future economic growth was developed, this includes: bringing employment back to the core through the development of emerging clusters - Education and Knowledge Creation, Biotechnology and Arts and Culture; supporting the growth of the manufacturing sector through the development of new employment lands; and developing strategic partnerships to leverage municipal investment.

In the last several years, the City has taken numerous steps to improve the downtown and collectively, these steps have laid the foundation on which the City can build its future. The current strategy is intended to integrate these steps into a comprehensive plan that can serve long into the future. The basis of this strategy will always centre on the belief that it is *people* that create a downtown - and on the need to draw people back to the core.

Today, the vision for downtown Kitchener is as clear as it was 100 years ago; to make downtown a 'Place for People'
- Downtown Strategic Plan

1.3 THE PLACE

Identified as an 'Urban Growth Centre', provincial and regional growth plans anticipate intense economic and population growth. With a population of about 470,000, the Region is now the 10th largest urban area in Canada and the 4th largest in Ontario. By 2016, Waterloo Region is expected to have approximately 80,000 more non-family residents (students, young professionals, empty nesters and seniors) than it possessed in 2001.

Presently, the downtown core is a community amongst nine adjacent neighbourhoods with a population of approximately 27,000 and 11,000 employees. A recent analysis has indicated that the downtown and central neighbourhoods could accommodate growth of an additional 35,000 residents and 55,000 new jobs. Drawing on existing and future residents to the area is critical to the success of the downtown, and, efforts must be made to connect these central neighbourhood residents to the core. With new residential developments, such as the Regency, Kaufman, Eaton and Arrow Lofts, the downtown community is already showing signs of growth.

This current trend has created an opportunity in the marketplace that currently exists for downtown residential development. Reurbanisation and intensification of the core has already begun and will play a significant role in revitalizing downtown Kitchener, King Street and the City Centre District. Providing more attractive living options in the core will create a better concentration of people / jobs, which will contribute to the vibrancy, social activity and success of the downtown.

Kitchener's core is currently undergoing a transition as development proceeds with two university campuses, both bringing significant employment and residential opportunities to the downtown. Collectively, these universities will add 1,200 students and faculty to the core. While attracting creative minds, prospective students and new knowledge workers, downtown Kitchener has begun to shift to a knowledge-based economy. Founded on industrial manufacturing, the City and the Region have evolved into one of the leading 'knowledge and innovation' based economies in the world. By 2010, the region aspires to be known as the knowledge capital of Canada.



1.4 THE PEOPLE

Already a centre for innovation and entrepreneurship in manufacturing and services, all sectors now rely on a trained / educated workforce to drive the knowledge economy. It is important that medium sized cities like Kitchener not only attract this generation, but also retain young people who were born and raised in the city who may choose to move elsewhere to find an urban lifestyle. Specifically, creating an environment which is attractive to the next generation creates a foundation for families and communities long into the future.

Amenities such as loft style living, outdoor cafes, wireless internet, vibrant nightlife, independent, unique shops, restaurants and services available to a 24-7 work-lifestyle, all contribute to a place where young people want to live. Three out of four people between the ages of 25 and 35 already choose first where they want to live, then look for a job in their chosen field. This demographic is significant as the large baby-boom echo is graduating from post-secondary school and entering the knowledge economy, and soon to choose a community in which to begin their adult lives.

As young people move through their careers and lives, they seek more work / life balance than any other generation before them. Mobile in their careers, they look for opportunities and jobs throughout their work patterns, but will anchor in a community that offers them amenities at every stage of life. Multicultural, diverse people of all ages, occupations and social-economic stratum create a rich environment in which to start a career, raise a family, appreciate the freedom of an empty nest and find retirement living in an accessible, convenient environment.

2.0 KING STREET MASTER PLAN

The primary intent of the master plan process is to develop a long range plan and streetscape strategy that identifies the needs for the overall study area. The benefit of this planning approach allows the individual needs of the network to be defined in a much larger context. For example, the individual needs for transportation, parking, and development shall be assessed on a common ground in relation to the overall study area, rather than the needs of one specific project.

In recent years, Kitchener has conducted a number of public consultation processes; the Strategic Plan, Culture Plan, Help Design Downtown, Environics / People Plan and Healthy Kitchener. The results and initiatives identified from these processes have guided the master plan approach, and were acknowledged through the master plan public consultation process. As a result of this process, the Consultant, in conjunction with City staff, Council and the Community determined the most optimum streetscape solution for King Street and strategy for the City Centre District.

2.1 PRIMARY OBJECTIVES

To make King Street & the City Centre District; *LIVELY* & *LIVABLE*

LIVELY – by creating a great place for people with lively street activity, a wide range of residential housing options, and a safe, attractive public realm featuring places and spaces that provide for diverse and stimulating experiences.

LIVABLE – green the downtown by maximizing landscaping along street, pedestrian pathways and public / private spaces.

2.2 SECONDARY OBJECTIVES

INSPIRE CREATIVE, HIGH QUALITY DESIGN – innovation / architectural excellence is encouraged in urban development of downtown's buildings, streetscapes and public spaces to enhance street life and create local pride / public interest.

EMBRACE ART AND CULTURE – through land use, signage, architecture, streetscapes and public art, each downtown district will generate its own authentic flavour of culture, creating a diversity of cultural experiences.

EMBRACE MULTI-CULTURALISM – the physical and visual expression of various ethnic traditions, through elements such as architecture, signage and public art, shall be supported and encouraged.

3.0 THE ENVIRONMENTAL ASSESSMENT (EA)

As part of the City's downtown revitalization efforts, a comprehensive municipal class environmental assessment was initiated by Engineering Services and Economic Development to address problems experienced in Kitchener's core, denoted as the King Street and City Centre District Streetscape Master Plan. On April 24, 2007, the project team conducted a streetscape design charrette / workshop, to engage key stakeholders to identify problems and potential solutions to be considered throughout the design process. The workshop commenced with a presentation followed by a general overview and discussion approach for the stakeholder charrette. The approach encouraged stakeholders to comment on a series of questions focusing on streetscape themes developed for King Street. These themes and/or concepts are as follows;

Arts & Culture Theme - embrace arts and culture by creating a diversity of cultural experiences.

Sustainability Theme - approach sustainable and/or green design not only limited to trees and has emphasis on other forms of vegetation, permeable surfaces, storm-water technologies, renewable resources and energy sources.

Pedestrian Theme - consider pedestrians as the ultimate user of the street; respect their safety, convenience, comfort and interests first.

Business Theme - aimed at businesses, their customers, clients and staff with emphasis on service, visibility, accessibility, parking and convenience.

Status Quo - remain functionally as it is today with maintenance of roads and sidewalks.

*Following this discussion, it was later agreed by Steering Committee that sustainable design elements should be common throughout each theme as they would play a significant role in the final design of the streetscape.

On May 22, 2007, the project team presented the design themes and streetscape concepts at the first of three public consultation centres. Participants were asked to comment on streetscape themes and elements that could be added to enhance King Street. Each design concept included an image to illustrate how King Street might look based on each theme. A series of elements were listed for each theme and participants were asked to select which items they'd like to see on King Street. Based on the public's feedback and detailed review by the Steering Committee, the Pedestrian First model (Concept 3) was selected as the preferred option.

Elements of the Pedestrian First model involved narrowing King Street in the City Centre District to widen sidewalks and improve accessibility, including upgrades to both, the design and surface treatment of major / minor intersections. The area directly in front of City Hall was designated as a special civic area that could be easily closed to vehicular traffic and used for special events. Parking spaces would be converted and relocated to give way for delivery drop-off and loading zones. A barrier free or rolled curb would be introduced throughout to improve pedestrian movement and improve accessibility.

4.0 BUSINESS CASE

Based on an in-depth analysis of King Street's track record, today's marketplace and social climate, and the ability of the new streetscape to capitalize on emerging economic opportunities, the following outcomes are expected:

- Expect more outdoor cafes, increased foot traffic and increased special event attendance;
- Expect short-term private sector interest to infill developments, new merchants filling vacant space, and new land owners purchasing and improving existing buildings;
- Expect long-term interest in major infill and intensification projects from external, urban-focused developers; and,
- Expect to continue capacity building initiatives and municipal leadership initiatives, such as design guidelines, to assist existing merchants and the local development industry in playing a strong role in King Street's revitalization.

King Street's ultimate success, however, will be measured not by the appearance of the sidewalks, but by the ability of the private sector to convert economic opportunity into action (new stores, new condos, improved facades, etc.). As such, the City must use this investment as a catalyst for encouraging the private sector to invest and make quality improvements.

"Quality of life" is the most important tool for economic competitiveness – Gil Penalosa, 8-80 Cities

5.0 DEVELOPMENT AND ENHANCEMENT

5.1 SOCIAL - A Lively, Pedestrian-First Street and Vibrant Downtown Destination

A lively pedestrian street is a byproduct of facilitating multiple points of activity within each block. The more diverse the activity, the more dynamic the experience will be, the more likely the street will attract and retain large numbers of shoppers. The approved streetscape design maximizes opportunities for activity in the following ways:

- Wider sidewalks provide opportunities for businesses to use outdoor space for retailing and cafés;
- Special event areas can be used for small outdoor performances, vendor carts and public art; and,
- A revamped Civic Square to better service major special events.

The approved streetscape design provides the platform for event organizers and downtown businesses to encourage vibrant street activity, helping to establish King Street as a viable commercial destination. With the emergence of lifestyle retailing, refurbished suburban shopping malls and new power centres, King Street merchants are increasingly challenged to compete for consumer spending in Waterloo Region. The new streetscape aims to assist businesses to compete through the following features:

- Tremendous curb appeal, with a sleek contemporary look, that should age gracefully over time;
- Quality finishes (sidewalk patterns, curbing, bollards, etc.) to attract new stores and urban spenders;
- An flexible street arrangement that maximizes space for on-street parking during cold months, and maximize space for street activity (outdoor retailing, café space, etc) during warmer months;
- Abundant tree plantings will provide shade and comfort for customers; and,
- An overall design that allows King Street to become distinguishable from other forms of retail.

5.2 ECONOMIC

Downtown Kitchener has struggled economically for the past 40 years. Currently, more than 30 storefronts sit vacant. As many as 40 additional storefronts and buildings require some form of enhancement or repair to allow businesses to remain competitive. In addition, in excess of 1.5 million square feet of new retail space is proposed throughout Waterloo Region. This will only add to the challenge downtown Kitchener businesses have when competing for local consumer spending, and challenge the Business Improvement Association to attract new businesses.

But the future is looks bright! Economic conditions are beginning to favour downtown Kitchener. Firstly, the number of young professionals, empty nesters and seniors will grow significantly over the next ten years. These demographics are often considered the most likely support urban retail and restaurant markets, and together comprise significant spending power. But without an enhanced King Street, it is likely this retail market will continue to gravitate to suburban alternatives.

Secondly, recent investments in downtown Kitchener are increasing the urban population, both employment and residential. For example, the City of Kitchener, the University of Waterloo and McMaster University recently partnered in the development of a downtown health sciences campus, including a School of Pharmacy and School of Medicine. Private sector investments over the past five years have created 500 new residential units and added over 1,500 new employees.

Future investments, such as a \$300 million consolidated provincial and regional courthouse, a \$100 million digital media business development centre ("The Hub"), a \$40 million renovation to the Kitchener Public Library, and the development of two new residential condominium towers, all have the potential to add new downtown consumers. In the past, the state of King Street (downtown's main street) has adversely impact the ability of downtown businesses to capture these growing markets.

Economic opportunity clearly exists to finally overcome downtown Kitchener's inability to compete in the regional retail market. The challenge ahead is to stimulate the necessary private sector investment needed to create a successful urban environment. To help the downtown compete, investments in the physical shape and appearance of King Street are critical to the core's success. Streetscape enhancements are essential to achieve this economic growth.

5.3 ENVIRONMENT - A Liveable and Sustainable Street

The approved streetscape design has established King Street as an urban green street by incorporating livable and sustainable design elements. By doing so, the project steering committee and design team have ensured King Street caters to all modes of transportation; vehicular traffic, pedestrians, cyclists and public transit riders through the following:

- A substantial number of new street trees planted in sufficient soil volumes with irrigation to promote vegetative growth. These trees will provide shade, wind protection and reduce urban heat effect, while offsetting a portion of the carbon emissions from automobile traffic. By improving the micro-climate, the street should be much more comfortable and inviting for pedestrians;
- Opportunities for distinct transit shelters (that did not exist prior) and amenities along the King Street corridor, installed and maintained by the Region of Waterloo, Grand River Transit;
- New bike racks strategically placed throughout the street to provide better service and increased parking locations for cyclists. Improvements to cycling routes and connections will be considered on adjacent right-of-ways;
- Improved street lighting, such as, decorative street lights, tree accent lights, recessed planter lights and bollard lights, to provide consistent illumination levels, reduce dark areas and improve vehicular / pedestrian safety;
- Improved surface treatments and custom curb design to improve barrier free accessibility;
- Storm water infiltration planters which absorb and filter storm water from the road;
- The use of recycled materials, such as, aluminum / stainless steel for street furnishings, crushed concrete for roadbase aggregates and in-place road rehabilitation strategies / techniques; and,
- Strategic alignment with many corporate initiatives, for example, the Pedestrian Charter which promotes walkable communities, safe and comfortable walking conditions, and the development of a walking environment that meets the travel needs of pedestrians.

6.0 DEGREE OF INNOVATION

During the concept development phase of the project, all applicable modes of transportation (vehicular traffic, cyclists, pedestrians and public transit) were analyzed in terms of overall functionality, suitability, economic impact, safety and public service. As part of a comprehensive Communications Plan, businesses, property owners and key stakeholders directly or indirectly affected by this project were consulted on many occasions through a wide range of mediums, such as, surveys, design workshops and Public Information Centres (PIC), .

Through public consultation, stakeholder meetings and analysis, the preferred streetscape concept included a model that placed priority on 'pedestrians' when considering various aspects of the project design (known as the Pedestrian First theme or model). Throughout these discussions, the project team encountered an unusual problem where, key stakeholders were requesting street parking to be maximized throughout the entire length of the project, contrary to the pedestrian first model which catered to wider sidewalks and enhanced landscaping. As a result, this problem required an innovative design solution to balance stakeholder requests with overall guiding principles.

To address a problem with on-street parking and sidewalk space, an innovative, flexible streetscape was developed consisting of unique traffic engineering techniques and parking design in a dense, urban environment. The solution included an innovative, flexible design space that could be transformed from parking to pedestrian sidewalks at any time of the year, through the elimination of barrier curbs and installation of movable traffic control devices (such as, steel bollards and regulatory street signage). Based on market demand / business needs, the new downtown streetscape can be altered to include a maximum of 75 flexible parking spaces or converted to sidewalk space to allow for special events, business retailing (eg. sidewalk sales) and restaurant patios / cafes.

Inspired by European urban design concepts such as, "[Shared Space](#)" and "[Living Streets](#)", the flexible design solution for King Street, Kitchener, has provided an unconventional design approach for all users and functions of the street. An approach that has attracted interest from planners, engineers, urban designers and architects at municipalities all over southern Ontario, and could benefit the broader transportation community in Canada.

7.0 TRANSFERABILITY TO OTHER CANADIAN COMMUNITIES & ORGANIZATIONS

Constrained with competing interests from a variety of stakeholder groups, specific design objectives and a narrow right-of-way corridor, the King Street Master Plan project contains many similarities that municipalities encounter when upgrading streetscape infrastructure in a downtown environment. The new streetscape is an example of “thinking out of the box” when faced with challenging problems and limited solutions. The alternative is a hybrid of industry initiatives and unique transportation engineering concepts that could benefit many communities and organizations across the country.

The optimum design solutions and elements create a flexible streetscape that provides downtown businesses with the opportunity to expand onto the sidewalks with outdoor uses. These design elements create a modernized shopping environment with great curb appeal which creates one of the highest quality streetscapes in the region, and likely the province. And equally important, these features create a more desirable community to attract new residential / commercial developments and revitalize the core, while providing leadership in environmental sustainability.

2.0 ADDED VALUE

In addition to the social, economic and environmental opportunities identified in this report, the new streetscape can contribute and help produce the following community benefits:

Increased Civic Pride – Kitchener residents have been generally dissatisfied with the overall appearance and quality of Downtown since the 1960s. Improving the physical appearance of King Street is a key part to reclaiming community pride.

Increased Urban Vitality – Foot traffic on King Street will be generated largely by stores, restaurants, outdoor cafes and events. The street has been designed to allow businesses to fill King Street with as much activity and street life as possible.

Improved Perceptions of Safety – A more attractive appearance, more foot traffic and better lighting are three of the most basic methods of making a space feel safer. Improving storefronts, eliminating recessed entryways over time, and improving maintenance levels would further reduce perceptions that King Street is unsafe.

Talent Attraction & Retention – Highly skilled workers typically want to live in a city with thriving urban streets that offer a diversity of activity, street life, nightlife and cultural experiences. The new design, if activated accordingly by merchants, can help Downtown Kitchener become a magnet for a talented workforce, and help transform students into community stakeholders who may choose to remain after graduation.

Improved Accessibility – By designing a flat sidewalk and parking zone, and eliminating barrier curbs, the King Street design improves accessibility for residents with mobility challenges. All parking stalls are more accessible and the uneven walking surface has been eliminated.

Global Environmental Leadership – The proposed plan strives to make it easier for Kitchener residents to live a green, urban lifestyle. Higher levels of transit usage, cycling and walking can help counteract global warming. Collectively, this community can become a shining example of environmental leadership.

Improved Public Health – Providing an urban environment that allows residents to drive less, and walk or cycle more, has been proven to enhance overall public health. The streetscape master plan would result in a series of improvements that better enable alternative modes of transportation.

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