



Planning & Building Services

MISSION STATEMENT

"Our City is built on relationships – between citizens and their government, businesses and public institutions, city and region – all interconnected, mutually supportive, and focused on the brightest future we can create together"

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To: Mayor and Members of City Council

Subject: Response to CQ12-2017: Implementing a Policy for Complete Streets

RECOMMENDATION:

- I. THAT this Council Report responding to CQ12-2017 – Implementing a Policy for Complete Streets **BE RECEIVED FOR INFORMATION**;
- II. THAT the research findings and sample policies contained in this report **BE FORWARDED** to the City Engineer for consideration as part of the upcoming study regarding the Active Transportation Master Plan;

EXECUTIVE SUMMARY:

N/A

BACKGROUND:

At the February 21, 2017 meeting of Council, Councillor Holt asked the following Council Question:

CQ12-2017: Asks that administration report back to the Environment, Transportation and Public Safety Standing Committee on implementing a "Complete Streets" policy for the City of Windsor, highlighting how such a policy would satisfy Council's 20 Year Strategic Plan as well as any other relevant plans and studies.

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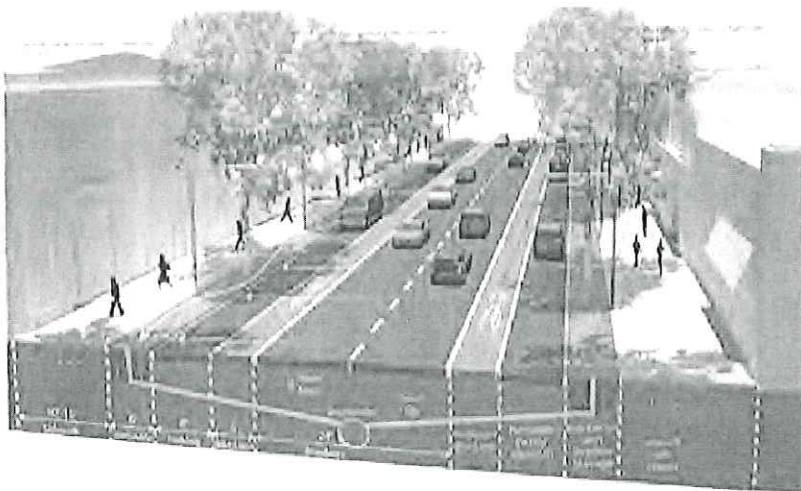
This report will begin to address CQ12-2017 with a number of definitions and identify the linkages between Council's 20 Year Strategic Plan, current policy and complete streets.

What are Complete Streets?

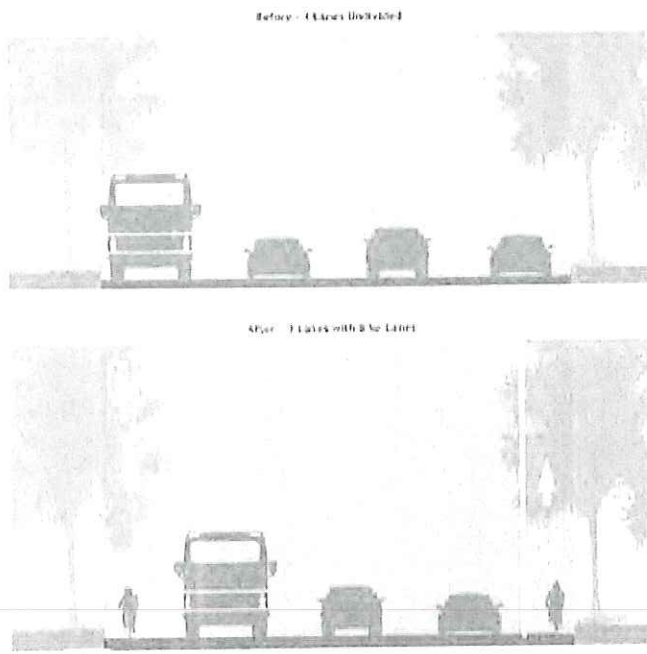
Complete streets are *multi-modal* streets that are designed, operated and maintained in order to allow for the safe, convenient and comfortable travel of all users. This includes anyone who may be using the street, including (but not limited to) pedestrians, cyclists, transit riders, and motor vehicle users, regardless of their age, ability, or income level. Street users must be able to move along a complete street *right-of-way* and across complete street designated locations at ease and barrier-free.

The concept of a complete street reinforces that the travel to and from a destination should be accessible and safe for everyone. The needs of all persons should be adequately addressed in the design of a complete street. There is no one-size-fits-all design for complete streets; complete streets are designed to suit their context. Furthermore, the concept highlights how streets can become vibrant and attractive spaces within the transportation network and support the local neighbourhood's sense of place. Complete streets may incorporate aspects of urban landscaping, comfortable street furnishing, public art, and stormwater management features to enhance the user's experience. Additional definitions of terms that support complete streets are found in "Appendix A".

Below are some diagrams illustrating complete street elements and typical compositions.



Typical cross section of a complete street (West Baton Rouge Parish, Louisiana, 2011)



Roadway conversion applying complete street principles (City of Edmonton, Alberta, 2013)



Redesign of Dearborn Street to incorporate complete streets principles (City of Chicago, Illinois, 2012)

Why Complete Streets?

Although the term has only been used since approximately 2005, the principles of “complete streets” have been discussed, implemented and evaluated for decades. With the increase in health concerns such as obesity and diabetes, and environmental concerns such as climate change and natural resource depletion, municipalities are looking at creative methods to promote healthy and sustainable communities. In realization of the impact of transportation infrastructure on human and environmental health, governments and organizations are turning more commonly to the idea of complete streets.

The redesign of streets as complete streets has been growing in popularity and momentum internationally, and has been adopted in numerous cities worldwide. Several major cities within Canada have recently adopted strategies, policies, or guidelines, or incorporated complete streets principles and language into their existing policies. The benefits of complete streets and their impacts on communities have been studied and are well documented. The complete streets movement is an important consideration for cities that seek to ensure their community is environmentally sustainable while also providing healthy alternatives for its residents.

Alignment with Council's 20 Year Strategic Vision - Vision Statements

The 20 Year Strategic Vision adopted by City Council focuses on three areas: jobs, reputation, and quality of life. Implementing a complete streets policy would align with Council's 20 Year Strategic Vision by improving the reputation and quality of life in Windsor. Complete streets are designed to be environmentally sustainable and provide long-term solutions, which meets the vision to improve Windsor's reputation. Additionally, complete streets can help to improve the quality of life for Windsorites as they promote transportation options and neighbourhood activity.

The following statements have been taken from Council's 20 Year Strategic Vision. Potential linkages between the vision statements and complete streets have also been identified:

Reputation: Windsor will be a dynamic place of civic pride and a hub for innovation, culture and creativity and attractive for people of all ages.

A Complete Streets policy can support the following "Reputation" vision statement:

- Making infrastructure decisions to ensure long-term sustainability

Quality of Life: Windsor will provide a high quality of life for all, supported by sustainable growth and a vibrant, caring community.

A Complete Streets policy can support the following "Quality of Life" vision statements:

- Planning for development to connect the city together – both green spaces and built form
- Strengthen neighbourhoods to ensure that they are safe, caring and meet the needs of residents
- Continuing to support citizens with diverse needs in all stages of life and create an accessible environment
- Promoting (transportation) choices that support a healthy environment
- Planning for integrated transit and transportation options with consideration for regional opportunities
- Promoting walking and cycling as healthy and environmentally-friendly modes of transportation

DISCUSSION:

This section of the report will provide an outline of the benefits and opportunities associated with complete streets, existing policies that support them, and examples of complete streets best practices from around North America.

Benefits and Opportunities

Complete streets offer numerous benefits, which can be classified into the following categories: people (social), placemaking (environmental), and prosperity (economic).

Complete streets help people by improving safety and perception of safety for all street users, enhancing social equity, providing options and promoting healthy living. Complete streets also facilitate placemaking by creating lively and attractive spaces, complementing the surrounding context and improving environmental sustainability. Under the category of prosperity, complete streets can support local economic vitality by attracting customers and influencing the real estate market. Additional benefits are listed in the table below:

Summary Table of Benefits:

People (Social)	Placemaking (Environmental)	Prosperity (Economic)
<ul style="list-style-type: none"> • Reduce injuries/fatalities • Reduce traffic congestion • Make all users feel safe, comfortable, and included • Provide opportunities for those who do not drive • Offer variety of choices (non-limiting) • Promote active lifestyles 	<ul style="list-style-type: none"> • Encourage social interaction • Improve urban atmosphere • Enhance community sense of place • Reduce air pollution and Greenhouse Gas emissions • Reduce energy and resource consumption • Mitigate urban heat island effect • Reduce urban runoff 	<ul style="list-style-type: none"> • Attract customers and revenue • Influence real estate market

Complete street documents from municipalities in Canada and United States were reviewed in order to compose the Summary Table of Benefits. These include guidelines, policies, and by-laws from cities such as Calgary, Alberta, Toronto, Ontario, and Reading, Pennsylvania, for example. A detailed list of the potential benefits complete streets may have is included in "Appendix B".

Safety and the Vision Zero Approach

Complete streets also complement "Vision Zero". This concept is a Swedish approach to road safety that aims to reduce all traffic fatalities and serious injuries to zero. It is based on a core ideal that no loss of life or injury is acceptable and that roads should be designed to protect all users. Since its inception in 1994, the Vision Zero approach has been adopted in numerous cities internationally, including Edmonton in 2016 and Toronto in 2017. The City of Windsor made great strides toward the Vision Zero objective when it was awarded the Safe Community Designation in 2016. Providing safe streets for everyone is a fundamental part of implementing complete streets and so the Vision Zero long-term goal could also be a consideration when looking into active transportation goals and strategies.

Alignment with Other Policy/Plan Documents

As mentioned earlier, prior to the term Complete Streets being used its principles have been applied in many policies, strategies and guidelines around the world. The City has made considerable efforts to incorporate ideals similar to those found in the Complete Streets approach in its policy documents. Numerous existing policies support the creation and implementation of a complete streets document. For example, the Traffic Calming Policy, School Neighbourhood Policy, the Pedestrian Generator Policy, Engineering Best Practices, ADOA Standards, the 2014 Provincial Policy Statement (PPS) and City's Official Plan. Primarily, the 2014 PPS and City's Official Plan both contain policies that align with the principles of complete streets without specifically referencing the term "complete streets". Listed below are the key policies from these two policy documents relating to complete streets.

Provincial Policy Statement 2014

The PPS sets out the province's land-use and development vision and aims to enhance the quality of life for all Ontarians. A Complete Streets policy would support the provincial interest in Public Spaces, Recreation, Parks, Trails and Open Space (Section 1.5), Infrastructure and Public Service Facilities (Section 1.6), Long-Term Economic Prosperity (Section 1.7), and Energy Conservation, Air Quality and Climate Change (Section 1.8).

Policies in the PPS emphasize how public streets should be safe, meet needs of pedestrians, foster social interaction, and facilitate active transportation and community connectivity. Furthermore, the PPS contains a number of goals and policies that align with the benefits of complete streets, such as:

- Promote green infrastructure;
- Encourage cross-jurisdictional multimodal transportation systems that are safe and connect various modes of transportation;
- Support long-term economic prosperity through providing an efficient, cost-effective, reliable multimodal transportation system;

- Support energy conservation by promoting active transportation and transit use.

Official Plan

A complete streets policy initiative would support Sections: 4 Healthy Community; 7 Infrastructure; and 8 Urban Design, in the City of Windsor Official Plan.

Section 4 Healthy Community policy objectives emphasize creating a healthy physical and social environment for Windsorites. By integrating complete street designs in the transportation network, the following Official Plan objectives can be achieved:

- Create a healthy and liveable city by considering community health in neighbourhood design;
- Encourage environmental sustainability through sustainable development;
- Establish a sense of community by encouraging development that integrates all residents and fosters social interaction.

Section 7 Infrastructure policy objectives emphasize the importance of managing Windsor's infrastructure to be safe, sustainable, effective, and efficient for the needs of all. Incorporation of the principles of complete streets into transportation network design can achieve the following Official Plan goals, objectives, and policies:

- Establish a safe, accessible, and efficient transportation network;
- Promote development that supports active transportation modes, such as walking, cycling, and public transportation;
- Develop infrastructure that allows for ease of pedestrian movement, meaning safe for all ages and abilities and suitable for both utilitarian and recreational purposes;
- Encourage cycling safety by separating cyclists and pedestrians wherever most appropriate.

Section 8 Urban Design policy objectives emphasize creating an attractive, livable, and sustainable city for present and future generations. By integrating complete street designs in the transportation network, the following Official Plan goals and policies can be achieved:

- Design roads, streetscapes, and right-of-ways to be comfortable, functional, safe, and attractive;
- Ensure the needs of persons of all ages and abilities are integrated into design;
- Provide integrated design in urban spaces for barrier-free pedestrian access;
- Ensure ease of orientation along streetscapes for pedestrian, cyclist, and vehicle needs (such as the provision of signs, route maps, and key views).

A comprehensive list of all Provincial Policy Statement and Official Plan policies relevant to complete streets can be found in "Appendix C" and "Appendix D".

Community Energy Plan, 2017

In Windsor, the transportation sector accounts for 26 percent of the energy used, 36 percent of the greenhouse gas emissions and 46 percent of the energy costs in 2014. The Community Energy Plan outlines four strategies for the transportation sector in Windsor:

1. Encourage a Modal Shift towards Public Transit;
2. Develop and Implement an Active Transportation Master Plan;
3. Foster the Adoption of Electric Vehicles; and
4. Continue to Advance Smart Energy Systems by integrating into the Land Use Planning process.

The Community Energy Plan supports the creation of linked networks of "complete streets" creating a comprehensive and attractive pedestrian, transit, bicycle and e-bike network. The objective is to maximize the connectivity of roads for pedestrians and cyclists, and ensure dedicated bike lanes, bike parking and charging infrastructure are made available in the City.

Complete communities and complete street elements encourage energy conservation in Windsor. A relatively modest estimation of 2 percent of average vehicle journeys can result in emissions reductions of about 8,000 tonnes of CO₂, or about 1 percent, of the total transportation emissions in 2041. Reduction potential may be refined through the development of the Active Transportation Master Plan and Complete Streets policies.

Best Practices and Examples

As part of the in-depth research conducted for this report, various examples of complete streets policies have been reviewed. The following examples highlight some of the successful outcomes and provide notes on what physical improvements were made. These summary notes also highlight some of the complete streets principles and municipal policies that supported their implementation. Additional details and images of each example can be found in "Appendix E".

Churchill Avenue, Ottawa, ON

As part of the "Ottawa on the Move" project, the City of Ottawa implemented complete streets designs when making improvements to Churchill Avenue, a major collector road linking the Westboro and Carlington neighbourhoods. Prior to reconstruction, there was a lack of safe sidewalks and the road was designed primarily for automobiles. After it reopened in 2014, Churchill Avenue had separated raised bike lanes, concrete curbs and sidewalks, street lighting, traffic calming measures, and traffic control signals. These improvements have helped promote cyclist and pedestrian safety. They encourage the community to use active modes of transportation now that there is proper infrastructure in place to separate the more vulnerable users (cyclists and pedestrians) from automobiles.

King Street Downtown, Kitchener, ON

King Street is a city arterial street that acts as the main downtown street in Kitchener. As a part of the downtown revitalization strategy, the City of Kitchener transformed King Street from being vacant and crime-ridden to lively and attractive. Completed in 2010, the project included low sloped curbs, flexible parking through use of bollards, vegetation strips that act as storm water management features, and widened sidewalks furnished with modern lighting and seating. This pedestrian oriented design improved the perception of safety along the street at different hours of the day, while allowing for activities and programming such as street festivals and patios.

Richmond and Adelaide Streets, Toronto, ON

Due to directions in the City of Toronto Bike Plan (2001) which identified Richmond and Adelaide, both one-way major arterial streets, as potential bike routes, the two streets underwent transformations to accommodate for increased cyclist volumes. In 2014 as the first phase of a pilot project, a road diet was applied to reduce the number of traffic lanes from four to three, install 1.5km segments of bicycle lanes, and introduce on-street parking. The results of this renovation were increases in cyclist volumes, improved safety and comfort, and reduced travel times for drivers.

Below is an example of a current, comprehensive complete streets policy from the City of Toronto's Official Plan. This policy was adopted in 2014, and is the most detailed compared to policies from the other municipalities reviewed in this section. Included for informative purposes, this policy provides guidance as to how a successful complete streets policy may be written.

From the City of Toronto Official Plan, Chapter 3 Building a Successful City:

3.1.1 (5). City streets are significant public open spaces which connect people and places and support the development of sustainable, economically vibrant and complete communities. New and existing City streets will incorporate a Complete Streets approach and be designed to perform their diverse roles by:

a) balancing the needs and priorities of the various users and uses within the right-of-way, including provisions for:

i) the safe and efficient movement of pedestrians of all ages and abilities, cyclists, transit vehicles and users, goods and services vehicles, emergency vehicles, and motorists across the network;

ii) space for other street elements, such as utilities and services, trees and landscaping, green infrastructure, snow and stormwater management, wayfinding,

boulevard cafes, marketing and vending, and street furniture; and

iii) ensuring the safety of vulnerable groups such as women, children, seniors and people with disabilities by implementing the Toronto Safer City Guidelines, or an updated version thereof;

b) improving the quality and convenience of active transportation options within all communities by giving full consideration to the needs of pedestrians, cyclists and public transit users;

c) reflecting differences in local context and character;

d) providing building access and address, as well as amenities such as view corridors, sky view and sunlight; and

e) serving as community destinations and public gathering places.

Hillsborough Street, Raleigh, NC

Hillsborough Street is a major arterial road in Raleigh, North Carolina which serves as a key connection to historic neighbourhoods. It was identified as the highest priority roadway requiring bicycling improvement, as it contained the highest number of recorded bicycle collisions in the city. Phase 1 of the renewal project was completed in 2010, and included a road diet to reduce four travel lanes to two, roundabouts, raised medians, bicycle lanes, brick paver sidewalks, pedestrian crossings with median refuge islands and on-street parking. These improvements resulted in increased customer traffic to the businesses, reduced pedestrian-related car collisions, reduced motorist speeds and increased sense of security and beauty along the corridor.

Future Considerations

Numerous municipalities other than those listed above are developing and implementing complete streets policies. These municipalities are of varying sizes and are located across Canada. For example, complete streets policies were adopted in Kelowna, BC in 2011, Peterborough, ON in 2012, Ajax, ON in 2013, and Airdrie, AB in 2014. Complete streets approaches, guidelines, and policies are very current and relevant responses to addressing roadway safety and community health. They can be incorporated into Official Plans, Transportation Master Plans, design guidelines, and other municipal planning documents. There are numerous of examples from municipalities across Canada that can be used as best practises for the development of a complete streets policy in Windsor. This future research can be integrated into the

upcoming Active Transportation Master Plan, as the principles of complete streets are parallel with those of active modes of transportation.

RISK ANALYSIS:

There is no risk associated with receiving this report for information.

FINANCIAL MATTERS:

Every street is different; opportunities for complete streets projects would need to be considered as streets need to be repaired or rebuilt. The difference in the capital cost (and ongoing maintenance) of putting a street back the way it was versus creating a complete street would depend on the features of the new design. Depending on the location and goals of the changes, some streets could be enhanced at a higher cost to provide for beautification, street trees, storm water management, and placemaking. Some straightforward complete street projects could have low costs, like changing the width of lanes or creating curb extensions with pavement markings, while making streets safer.

There are no financial impacts associated with the recommendations in this report. Should Council direct Administration to pursue any of the options outlined in this report, the matter would be brought back to Council with recommended implementation measures. Further, it is anticipated that any financial matters associated with the implementation of recommendations within the forthcoming Active Transportation Master Plan will be included in that report.

CONSULTATIONS:

Staff from the Planning, Transportation Planning, Engineering, and Parks Departments were consulted in the preparation of this report.

CONCLUSION:

Complete streets contribute to a vibrant community, as they serve the dual function of facilitating safe and convenient travel and being destinations for gatherings and celebration. A complete streets policy can meet the Council's 20 Year Strategic Vision by improving Windsor's reputation and quality of life through infrastructure that animates communities through providing social interactions, connects people of all ages and backgrounds, and strengthens neighbourhoods to be healthy and sustainable. Adoption of a complete streets policy brings social, environmental and economic benefits, and can be supported by the goals, objectives and policies within the Official Plan and Provincial Policy Statement. Complete streets policy can also be incorporated further within other existing corporate plans including the Environmental Master Plan and Bicycle Use Master Plan.

Administration recommends that Council receive this report for informative purposes, and that the research presented be utilized in the upcoming study on active transportation.

PLANNING ACT MATTERS:

N/A

APPROVALS:

Name	Title
Michael Cooke	Manager of Planning Policy
Thom Hunt	City Planner/Executive Director
Wira Vendrasco	Deputy City Solicitor
Shelby Askin Hager	City Solicitor
Jeff Hagan (on behalf of Josette Eugeni)	Policy Analyst, Transportation Planning
Dwayne Dawson	Deputy City Engineer, Operations
Mark Winterton	City Engineer
Onorio Colucci	Chief Administration Officer

NOTIFICATIONS:

Name	Address	Email
Windsor Bicycling Committee		

APPENDICES:

- 1 Appendix A: Additional Definitions
- 2 Appendix B: Detailed List of Benefits
- 3 Appendix C: Relevant Provincial Policy Statement (2014) Policies
- 4 Appendix D: Relevant City of Windsor Official Plan Policies
- 5 Appendix E: Best Practices/Case Studies