# EXECUTIVE SUMMARY

The purpose of Complete Streets is to create more liveable neighbourhoods and to encourage people to travel by foot, bicycle and transit. Complete Streets will improve both measurable and perceived safety, provide attractive streetscapes, provide transportation options, improve universal accessibility, promote economic well-being of both businesses and residents, and increase civic space. A Complete Streets Guide (the Guide) provides The City of Calgary Administration and the development industry direction on how to incorporate Complete Streets concepts into planning (including engagement), design and construction of new, and reconstruction of existing streets.

The Complete Streets Guide will form part of a new Transportation Planning Policy. The purpose of the Policy is to embed Complete Streets principles corporately to achieve a higher level of success of the Guide's implementation. Standards, specifications, and processes spanning several business units need to be revised to achieve corporate alignment.

Concurrently, a new set of Street Capacity Guidelines encompassing all street classifications is proposed. They replace the Environmental Capacity Guidelines for Roadways Policy (TP009) and better reflect the multi-modal function of our local streets and will allow us to achieve the Calgary Transportation Plan (CTP) and Municipal Development Plan (MDP) objectives for a more sustainable transportation system and land use development.

## ADMINISTRATION RECOMMENDATIONS

Administration recommends that the SPC on Transportation and Transit recommend that Council:

- 1. Approve the Complete Streets Policy (Attachment 1) which includes the Complete Streets Guide (Schedule "A");
- 2. Direct Administration to form a "Complete Streets Implementation Working Group";
- 3. Rescind the Environmental Capacity Guidelines for Roadways Policy (TP009) (Attachment 2);
- 4. Receive for information the proposed Street Capacity Guidelines (Attachment 3); and
- 5. Defer receipt of this report (TT2014-0307) to the 03 November 2014 Council Meeting.

# **RECOMMENDATION OF THE SPC ON TRANSPORTATION AND TRANSIT, DATED** 2014 SEPTEMBER 19:

That Council:

- 1. Approve the Complete Streets Policy (**Revised** Attachment 1) which includes the Complete Streets Guide (Schedule "A");
- 2. Direct Administration to form a "Complete Streets Implementation Working Group";
- 3. Rescind the Environmental Capacity Guidelines for Roadways Policy (TP009) (Attachment 2);
- 4. Receive for information the proposed Street Capacity Guidelines (Attachment 3)

Excerpts from the Minutes of the Regular Meeting of Priorities and Finance Committee, dated 2014 September 19:

#### "5. Defer receipt of this report (TT2014-0307) to the 03 November 2014 Council Meeting."

"At the request of Administration, and with the concurrence of the Chair, the Legislative Assistant distributed copies of the following documents, with respect to Report TT2014-0307:

- Revised first four pages of Attachment 1, entitled "Council Policy, Complete Streets Policy"
- Letter dated 2014 September 18 from James Talbot, Chief Medical Officer of Health, Alberta Health
- Letter dated 2014 September 18, from Greg Hart, Safer Calgary
- Letter dated 2014 September 17, from Richard Musto, Alberta Health Services
- Letter dated 2014 September 12, from Kelly Nadeau, Chairperson Advisory Committee on Accessibility"

#### **PREVIOUS COUNCIL DIRECTION / POLICY**

Section 3.7 of the CTP contains 22 guiding policies for Complete Streets design. Development of a Complete Streets Guide was a direction of the Plan It Calgary Implementation Committee, formed at the direction of Council in 2009.

In 2010 as part of the regular (3 year) reporting back to Council regarding the status of Council Policies in Transportation Planning, the Environmental Capacity Guidelines for Roadways Policy (TP009) was identified as requiring a major revision. The proposed Street Capacity Guidelines are aligned with CTP and MDP objectives for a more sustainable transportation system and land use development.

#### BACKGROUND

In September 2009, Council approved the CTP. Section 3.7 of the CTP includes 22 guiding policies for Complete Streets design. Objective # 7 of CTP states that "Complete Streets aim to increase the attractiveness, convenience and safety of all modes of transportation by creating a new selection of multi-modal streets that emphasize walking, cycling and transit, incorporate elements of green infrastructure and function in the context of surrounding land uses." The CTP does not provide the design criteria details, nor the process to design and implement complete streets so a comprehensive Guide is required. Further, several of these new design elements do not align with the current Street Design Standards contained in the Design Guidelines for Subdivision Servicing (DGSS) used by both City Administration and the development industry.

Further direction came from the Plan It Calgary Implementation Committee (February 17, 2010) which identified "Developing and adopting a complete streets guidelines/handbook" as a key CTP implementation deliverable.

In May 2010, a project charter for the Complete Streets Guide was approved by the Transportation Leadership Team (TLT). An Interim Complete Streets Guide was completed and approved by TLT in February 2012. It was at this time, that TLT also signed a Department Approval(s): Logan, Malcolm concurs with this report. Author: Olson, Joe and Samad, Abdul City Clerk's (C. Smillie)

Directive instructing all Transportation staff to apply the Guide to transportation projects and strongly encouraged the development industry to do the same. Both the Guide and Directive were published on the calgary.ca website for use by City Administration and the development industry.

After 2 years of extensive internal and external stakeholder engagement, a final Guide has been completed. In conjunction with the development of this Guide, major revisions have been made to The City's current Street Design Standards contained in the DGSS. Approval of the Complete Streets Guide and Policy will allow these design standards to be finalized and consistently applied.

The Complete Streets Policy along with the Guide and Street Capacity Guidelines were brought forward with report ALT2014-0405 to the Administrative Leadership Team (ALT) on July 15 2014, where Administration recommendations contained in the report were unanimously approved.

# INVESTIGATION: ALTERNATIVES AND ANALYSIS

## Complete Streets Guide

The project began in early 2010 with the development of a project charter and approval of that charter by a Steering Committee comprised of:

- The Transportation Leadership Team (TLT) of Directors and the General Manager
- Directors of Parks, Water Resources, and Land Use Planning & Policy

Through The City procurement process, a consultant was selected to assist Administration in the development of the Complete Streets Guide.

The original scope of the Complete Streets project was to develop detailed cross-sections around the three new multi-modal street types introduced by the CTP: Neighbourhood Boulevard, Urban Boulevard, and Parkway. With this limited scope, two things quickly became apparent:

- a) These street types make up very little (12% of the higher classification) of the street network and,
- b) Developers will continue to build new communities to our old, 'incomplete' residential, collector, and arterial street standards.

In response to this, the scope was expanded to:

- a) Include all street classifications (alley to skeletal road) and,
- b) Revise the detailed street standards at the same time as developing the Guide

The original project charter was updated to reflect this change in scope. At this time, a Communications Plan identifying stakeholders, key messages, levels of engagement, and strategies was developed and added to the Project Charter.

A key mandate given by the Steering Committee early in the process was to keep the rights-ofway width of the revised streets within 10% of the existing rights-of-way width. The driver for this being effective use of public land.

Early in the project, an international survey of other municipalities was undertaken to capture critical design elements of the street (e.g. sidewalk width, travel lane width) to begin the discussion with key internal stakeholders like Roads on the appropriate dimensions for these elements. It was determined that, compared to other municipalities, Calgary sidewalks are narrow, and travel lanes, curb & gutters and boulevards are wide.

An internal technical committee with representation spanning several business units was then formed to help develop the 2011 Interim Complete Streets Guide which focused on the higher classification streets. This was completed in early 2012 and approved at a Steering Committee level. The Transportation members of the Steering Committee also signed a Transportation Department Directive that instructed all transportation staff to apply the Guide to their work and to strongly encourage the development industry to do the same. Both the Interim Guide and Directive were published and posted on calgary.ca in early 2012.

Work on the Final Guide began in mid-2012 and continued into early 2014. During this time, a circulation of the first Draft of the guide in late 2012 produced over 600 comments. This led to significant rework through 2013 and a second draft document was circulated in late summer 2013. Addressing of internal and external stakeholder issues continued until the Final Guide was presented one final time to the Steering Committee in April 2014. Since that time, minor revisions from internal stakeholders continue to be incorporated.

#### Stakeholder Engagement, Research and Communication

#### Complete Streets Guide

Internal and external stakeholders were identified in the 2011 Communications Plan. Major internal business unit stakeholders were represented on the Technical Committee. They included:

- Roads
- Calgary Transit
- Urban Development (within Planning)
- Water Resources
- Urban Design (within Planning)
- Land Use, Planning & Policy (LUPP)
- Information & Infrastructure Services (specifically, Land Information & Mapping)
- Fire/EMS
- Transportation Infrastructure
- Transportation Planning

The Technical Committee met on several occasions through the life of the project, most of which were in 2011-12 during the development of the 2011 Interim Complete Streets Guide.

Regular Technical Committee meetings were replaced with several one-on-one meetings with internal stakeholders to resolve detailed issues. This became a much more efficient and effective approach.

Many of the internal stakeholders provided content and images for specific chapters (e.g. Chapter 3.4 Transit Design) during the development of the Final Guide.

Major external stakeholders were also identified:

- Urban Development Institute
- Shallow Utilities Consortium
- Calgary Regional Home Builders Association
- Bike Calgary

Several one-on-one meetings and presentations were held with the major external stakeholders through the 3 years of the development of the Final Guide. Formal letters and e-mails were also exchanged between the stakeholders and the project team to resolve various issues.

#### Street Capacity Guidelines

In 2010 as part of the regular (3 year) reporting back to Council regarding the status of Council Policies in Transportation Planning, the Environmental Capacity Guidelines for Roadways Policy (TP009) was identified as requiring a major revision. There is a risk that this existing Policy, which limits daily traffic volumes on local streets to a certain threshold, may limit The City's ability to approve redevelopment in strategic areas as identified in the CTP/MDP. Communities, frustrated by increasing traffic volumes/speeding on their local streets, may use the policy to oppose CTP/MDP-aligned redevelopment in their communities.

Though defining a street by daily traffic volumes alone is not reflective of the many functions of a street, particularly those streets where there is greater attention to pedestrians, cyclists, transit riders (e.g. Neighbourhood Boulevard). Street Capacity Guidelines are still required for appropriate road sizing and construction (pavement structure).

#### Stakeholder Engagement, Research and Communication

Research efforts included:

- Review of City Policy and reports related to daily traffic thresholds on local streets
- Survey of the practices of other Canadian and U.S. municipalities
- Review of trends in subdivision density and car ownership over the past 30 years

The original Capacity Guidelines for Roadways Policy set thresholds for maximum daily traffic volumes on local streets of 1,000, 5,000, and 10,000 for residential, collector, and primary collector streets respectively. In response to increasing density of new communities, the corresponding maximum daily volume thresholds were revised in 2003 to 1,500, 5,500, and 12,500 for new communities. Earlier, in 2000, The City completed the Inner City Transportation System Management Strategy (ICTSMS) to address missing major roadway links in the inner city that carry significant amounts of non-community traffic. Some streets were reclassified to supporting collector streets with a daily traffic volume threshold of 15,000.

A survey of other municipalities revealed a number of things:

- Calgary is the only municipality with an Environmental Capacity Guidelines for Roadways Policy. Others have guidelines only or none at all.
- Local/residential street thresholds vary widely, from 500 to 3,000 vehicles per day
- Collector street thresholds vary widely, from 1,000 to 10,000 vehicles per day

Subdivision density has increased by 50% in Calgary over the past 30 years (from 5-6 units per acre to 8-9 units per acre). During this same period, car ownership has increased by 25% nation-wide.

This research helped develop a draft set of Street Capacity Guidelines that were discussed with key Transportation Planning staff. That engagement concluded a number of things:

- One set of city-wide street capacity thresholds for existing and new communities will be clearer to understand and easier to administer
- A set of thresholds for the local streets that do not overlap will provide clarity to the development industry when it comes to street sizing
- Higher thresholds will lower the number of kilometres of primary collector and collector streets needed in a new community and consequently reduce overall costs

Given this research and engagement, it was concluded that existing daily traffic volume thresholds could be increased by up to 75%. With this in mind, the proposed Street Capacity Guidelines in Attachment 3 were developed.

The Federation of Calgary Communities (FCC), representatives of the most impacted external stakeholder, was circulated the draft Street Capacity Guidelines in fall 2013. As there was some concern about community reaction, a strategy for engaging the community associations was developed in early 2014 and a project website and survey were launched and communicated to community members in May 2014. The survey concluded the following:

- Many were not aware of an existing policy
- The information provided on the website was useful
- About half did not support the change to the existing policy

Though the proposal will not impact the majority of existing local streets in the city, many community members still remain concerned. In response, further engagement took place in late July 2014, where The City Transportation staff presented the proposal to community members and addressed their concerns face to face. In response to the short time-frame for the survey in May, the survey has been reopened for further community member input until September 12, 2014.

# **Strategic Alignment**

The proposed Complete Streets Policy & Guide aligns with the CTP visions and policies for sustainable growth and transportation network. Specifically, the Policy and Guide:

- directly supports five of the eleven Sustainability Principles for Land Use Mobility
- directly supports five of the seven Key Directions for Land Use and Mobility, specifically #7: Create Complete Streets
- directly supports five of the seven Transportation Goals
- builds on CTP Section 3.7 Complete Streets and its 22 high level policy statements

## Social, Environmental, Economic (External)

Social: Complete Streets provide multi-modal travel options for people of all ages, abilities, and income levels. The revised street design standards consider all users and place a greater focus on the pedestrian environment, bicycle infrastructure, safety, universal accessibility and attractiveness. This will increase the opportunity for social interaction with more people. These increased opportunities for walking and cycling improve people's health. Complete Streets with enhanced public realm/civic space encourage social interaction and improve safety for all users. Better connected street networks allow all users to connect within and between neighbourhoods.

Environmental: Complete Streets provide the opportunity for Low-Impact Development (e.g. source control practices for storm water run-off) features while minimizing additional right-of-way requirements. This will reduce street water runoff into watersheds; maximize infiltration and reuse of Stormwater. Complete Streets with narrow lanes will reduce the total amount of paved area. The emphasis on green infrastructure (including street trees) will reduce air pollution and mitigate greenhouse gas emissions associated with vehicle use and other air pollutants.

Economic: The new Street Capacity Guidelines will reduce the number of kilometres of wider higher order streets. Enhanced public realm and multi-modal infrastructure will encourage walking, cycling which support local businesses. The user cost for walking, cycling, and transit modes is significantly lower than auto travel. Walking and cycling regardless of age, gender, income level and physical ability will improve health, and reduce the financial burden on the strained health care system. Maintaining on-street parking on most streets will continue to benefit retail businesses along the street. The new streets standards make the most efficient use of land while providing facilities for all users. In addition, as the detailed drawings are prescriptive, they will allow for the timely and consistent review of new community development applications.

#### **Financial Capacity**

# **Current and Future Operating Budget:**

Additional future Transportation operating budget will be required for the lifecycle/maintenance of complete streets where there is more hard surface area (asphalt and concrete), street furniture, and street lights. Parks and Water Resources will require additional future operating budget for the lifecycle/maintenance of green infrastructure (e.g. street trees) and low impact development features within the public road right-of-way. Often, in higher density environments, these additional operating budgets are offset by levies charged to adjacent businesses (e.g. Stephen Avenue).

## **Current and Future Capital Budget:**

New Streets (Greenfield Areas):

The cost of construction of the revised new street standards is estimated to be about \$1,000 per new home. Developers typically construct most of our new community streets, so there is no impact on capital budget to The City.

#### Retrofit (Established Areas):

Reconstruction (or retrofit of existing streets) costs can vary greatly. Costs depend on the extent of public realm improvements, additional street trees, landscaping, street furniture, low impact development features, and the complexity of existing underground utility relocation. These capital projects are usually undertaken by The City, so there are capital budget implications. Many established areas require lifecycle replacement, and redevelopment of activity nodes (e.g. Transit Oriented Development Areas) and corridors (e.g. Urban Boulevards) usually involve new or revised street networks. Complete Street components can be incorporated as these new, replaced or revised roads are implemented.

The Council approved Investing in Mobility (2015-2024 Transportation Infrastructure Investment Plan) proposes allocation of 40% (or \$2.2 billion) of the estimated \$5.6 billion required for transportation infrastructure projects and programs over the next 10 years toward mobility hub and transit corridor projects and programs. The majority of complete streets with an enhanced public realm are situated within mobility hubs and corridors, so the allocation of funds is aligned to implement Complete Streets.

There are other potential funding sources including partnerships with Calgary Municipal Land Corporation, Calgary Parking Authority (CPA) and Business Revitalization Zones (BRZs). Savings will continue to be realized by integrating multi-modal facilities into the early project design phases which folds costs for these enhancements into the costs for the overall project.

#### **Risk Assessment**

The implications of not approving this Policy are:

- Continued development of new streets with little or no accommodation of pedestrians and cyclists, requiring the need for complex and expensive future retrofit
- Continued barriers for the young, old, and mobility challenged population to travel along and cross streets
- Less cycling and walking has been shown, to contribute to higher rates of obesity, diabetes, and high blood pressure
- Potential increase in vulnerable road user collisions
- Inability to meet several CTP core indicators (e.g. transportation mode split targets)
- Continued large asphalt widths for vehicles and less space dedicated to walking, cycling, and green infrastructure (e.g. street trees)
- Less attractive streetscapes in and near activity centers / transit stations where more pedestrians and transit customers are expected

The implications of not approving the proposed Street Capacity Guidelines:

• Smart growth redevelopment (higher density, mixed use) in strategic established areas will be challenging to achieve

#### **REASONS FOR RECOMMENDATIONS:**

To request Council's approval of the Complete Streets Policy to achieve a higher level of success of the Guide's implementation. The Policy directs business units to revise Standards, specifications, and processes to achieve corporate alignment. Reallocation of road right-of-way with reduced travel lane width will improve conditions for pedestrians and cyclists and provide more space green infrastructure. Forming a "Complete Streets Implementation Working Group" will help Administration, the development industry and engineering consulting firms to implement the new street design standards.

Replacing the Environmental Capacity Guidelines for Roadways Policy (TP009) with proposed Street Capacity Guidelines will allow us to achieve the Calgary Transportation Plan (CTP) and Municipal Development Plan (MDP) objectives for a more sustainable transportation system and land use development in strategic areas.

#### ATTACHMENTS:

- 1. **Revised** Complete Streets Policy including the Complete Streets Guide
- 2. Environmental Capacity Guidelines for Roadways Policy (TP009)
- 3. Proposed Street Capacity Guidelines