EXECUTIVE SUMMARY

Council approved the Residential Street Design Policy in November 2012 and the Complete Streets Policy/Guide in November 2014. This combined report provides a three-year update on the Complete Streets Policy and Complete Streets Guide (the Guide) implementation and an update on the implementation and effectiveness of the Residential Street Design Policy.

A key goal of these policies and the guide is to improve safety, support community liveability and sustainability by supporting active travel such as walking, and providing green infrastructure such as trees. Progress in policy implementation has been supported through continued work with the development industry and Shallow Utility Consortium to resolve any concerns and to provide education opportunities. Policy effectiveness has been tracked through monitoring the:

- construction of increased quantity and wider sidewalks;
- planting of new public trees in the public right of way along the residential streets;
- new complete streets construction in new community developments and;
- capital corridor improvement (retrofit) and local bikeway improvement projects including Centre City Implementation projects

The majority of new communities are still at early stages of the development; without full road network connectivity and local amenities in place. It is too soon to provide a full report on the effectiveness of the multi-modal design standards included in the Complete Streets Policy and 2014 Design Guidelines for Subdivision Servicing (2014 DGSS).

Most new community developments have incorporated wider sidewalk standards along residential streets but there has been a lag in the planting of public trees in new communities. While timing of public tree plantings in development construction sequencing has created some of this lag, conflicts related to shallow utility and tree line assignments as well as narrower front drive lots are also contributing factors.

ADMINISTRATION RECOMMENDATION:

- 1. Receive this report for information
- 2. Report back to Council no later than Q4 2023 on the effectiveness and implementation of the policies.

RECOMMENDATION OF THE SPC ON TRANSPORTATION AND TRANSIT, DATED 2018 JUNE 07:

That Council that Council direct Administration to report back to Council no later than Q4 **2019** on the effectiveness and implementation of the policies.

PREVIOUS COUNCIL DIRECTION / POLICY

Council approved the Residential Street Design Policy per recommendations of Report TT2012-0322 at its 2012 November 05 Meeting.

Council approved three subsequent updates to the Residential Street Design policy in 2013 May 25 (TT2013-0226), 2014 January 13 (TT2013-0793) and 2015 November 18 (TT2015-0686) (Attachment 1)

At the 2015 November 18 meeting (Report TT2015-0686 Residential Street Design Policy – 3 Year Update) Council directed Administration to report back to the SPC on Transportation and Transit no later than November 2017 on the implementation and effectiveness of the Residential Street Design Policy as part of the Complete Streets Policy Update.

At its 2014 November 3 Meeting, Council unanimously approved the Complete Streets Policy and Complete Streets Guide.

At its 2017 July 18 Meeting, Council adopted recommendations to "...defer the Residential Street Design Policy Update to come, as part of the Complete Streets Policy Update Report 2018, no later than Q2 of 2018".

BACKGROUND

Administration has provided three updates to Council on the Residential Street Design policy since 2012 November. The Residential Street Design Policy is focused on improving safety and community liveability through design, including increasing the quantity of trees and improved pedestrian facilities along residential streets in new residential communities. Its purpose to make the neighbourhoods more accessible for people of all ages and level of mobility, to provide attractive streetscape for all road users, and to encourage slower vehicle speed through residential areas.

The Complete Streets Policy and Guide provide direction and comprehensive guidance to Administration and the development industry on how to incorporate Complete Streets concepts into the planning, design and construction of new streets as well as reconstruction of existing streets (retrofit).

The Complete Streets Policy directions form the basis of updates to the Design Guidelines for Subdivision Servicing (2014 DGSS). The guidelines are intended to be prescriptive and consistent with the Complete Streets Guide, with opportunity for the development industry to propose alternative roadway cross sections, if needed. Administration works with the development industry on a case by case basis to ensure the proposed alternative design approach still meet the intent of the Complete Streets Policy.

A framework for a Complete Streets Monitoring program is in place to track complete streets built throughout the city. It includes new construction of streets as well as reconstruction (retrofit) of existing streets.

Existing guidance for low impact development, including bio-retention areas, bio-swales and permeable pavement is provided and is available on <u>www.calgary.ca</u>. Water Resources is in the process of developing guiding documents related to soil cells and resilient landscaping practices.

INVESTIGATION: ALTERNATIVES AND ANALYSIS

Stakeholder Engagement, Research and Communication

Complete Streets Implementation Working Group:

After approval of the Complete Streets Policy, an Industry Bulletin from the Building Industry and Land Development Association (BILD) was released on 2015 January 26 to provide

stakeholders with clarity around timing of the Policy and 2014 DGSS implementation for the existing/approved and new Outline Plans and Tentative Plans.

A Complete Streets Implementation Working group was established in 2014 December to investigate/develop an understanding as to how and where the new design standards should be implemented. It included representatives from BILD, engineering consulting firms and City Administration. This group met several times between 2014 December and 2015 May.

A "Process Flowchart" for new and approved Outlined Plans was also developed in early 2015. It outlines new street design standards (2014 DGSS) application requirements and processes as well as approval timings (Attachment 2).

Complete Streets Education Program:

To support alignment across industry regarding use of the Complete Streets Policy and related guidelines, Administration delivered the following:

- Presentations to various internal departments and business units, Federation of Calgary Communities (FCC) and the development industry through the Canadian Institute of Engineers (CITE) since the approval of the Policy and Guide
- A series of Complete Street workshops delivered to planners and engineers since 2017

These presentations and workshops focused on increasing awareness of the policy and guidelines, and supporting their application in new and existing developments. Workshop activities were focused on helping practitioners understand differing perspectives among stakeholders, and planning for land use context as well as how to inform decisions about travel mode priorities when designing and retrofitting streets. The Complete Streets workshops and presentations were well received with a total of 180 people attending from the consulting and development industries and 355 people attending from Administration. Four workshops are planned for 2018.

Updated Street Capacity Guidelines in the Complete Streets Guide and 2014 DGSS include higher traffic volume thresholds for most local streets. This change has prompted an increase in collector streets and a decrease in primary collector streets proposed in new community developments. This change in road classification has resulted in a reduced need for some wider roads, which supports a more sustainable transportation and land use system.

Water Resources and its partners are actively involved in outreach and education for staff and industry related to stormwater infrastructure. On a national level Calgary's guidance is reflected in new national Canadian Standards Association (CSA) standards for bioretention. There are currently seven low impact development pilot projects in Calgary (Attachment 3).

Complete Streets Policy/Guide Implementation:

Progress has been made with implementation of the policy and guide in terms of efficient use of land. Administration will continue implementation of the new street designs, which incorporate narrower travel lanes, bike lanes, and tighter intersection corner radii for most streets. In addition, the public realm will continue to be enhanced through increased use of curb extensions at key intersection corners, increased tree plantings, wider sidewalks and more cycling facilities as well as on-street parking on most street types.

We will continue to see streets built with older standards in some new community developments where outline plans and tentative plans were approved prior to implementation of Complete Streets Policy. This will phase out over time as there will be fewer remaining undeveloped older outline plan areas.

With current outline plans in new development areas, some developers have proposed custom roadway cross sections – without details about the built form. This may create future challenges related to:

- Setback, public realm interface with buildings, driveway access configurations
- Overall traffic flow in the area
- Accommodation of design elements, such as boulevard trees and off-street active mode facilities (e.g. sidewalk, bike path, multi-use pathway), in the proposed right of way.

For this, Administration will require some additional supporting information as part of custom roadway cross sections proposed in the new community developments. Administration will monitor safety, accessibility and connectivity for all travel modes along new corridors with custom complete street cross sections in the context of surrounding land uses. This information will inform future design decisions.

The Complete Streets Guide and 2014 DGSS require burying existing overhead power lines along the streets to avoid conflicts of overhead power with boulevard tree planting/tree canopy. It also provides safety for pedestrians and cyclists as well as aesthetics in the public realm area. The development industry has raised concerns about burying overhead power lines due to significant costs. Administration met with BILD on two occasions (2017 September 18, and 2018 March 22) to discuss options for reducing costs while still meeting requirements. Administration and the development industry will continue to work towards a satisfactory resolution of this issue.

Complete Streets Monitoring Program:

Administration tracked new street construction in greenfield developments to inventory the number of complete streets (Attachment 4). A total of 148 subdivision phases in mostly new communities have been submitted since the policy has been in effect. Construction Completion Certification (CCC) for "Roads and Sidewalks" have been issued for 56 subdivision phases. Approximately 13 km of new streets (excluding Residential Streets) have been constructed to-date in alignment with complete streets standards. Various City-led corridor projects including capital corridor improvements, Centre City implementation and local corridor improvements have been constructed in alignment with complete streets standards (Attachment 5).

Residential Street Design Policy

Administration monitored the planning and development of new subdivisions to determine progress in implementing the Residential Streets Policy. Although a substantial amount of wider sidewalk has been built since the previous policy implementation update in 2015, few trees have been planted. Administration has tracked sidewalk and tree planting inventory since the policy in effect (Attachment 6 and 7).

In summary:

• 161 subdivision plans in mostly new communities involving new residential street design standards have been submitted to date

- CCC for "Roads and Sidewalks" have been issued for 65 subdivision phases
- Over 35 km of the new residential street standard has been constructed to-date
- Over 70 km of new and wider sidewalks on both sides of residential streets have been constructed to-date
- Over 600 public trees have been planted
- CCC for "Public Tree Planting" have only been issued for 16 subdivision phases with only 7 phases receiving subsequent Final Acceptance Certification (FAC)
- The remaining 96 subdivision phases, still at early stages of the development, are expected to introduce more public trees in the communities.

Subdivision plan approvals require approximately six months. Once approved, underground utilities are installed first and this typically requires one construction season. Consequently, street construction and tree planting work often follows a year and a half after construction drawing approval.

Emerging issues and concerns related to public tree planting along the residential streets include:

- Tree line assignment conflicts with street light cable line assignments;
- Housing products and resulting lot widths are becoming narrower and this provides fewer opportunities for planting of trees in public rights of way or in front yards

Administration continues to meet with BILD and Shallow Utility Consortium to discuss emerging issues and concerns to develop satisfactory resolutions. Most recently, Administration met with BILD and Shallow Utility Consortium on 2018 February 5.

Strategic Alignment

The Complete Streets and Residential Street Design Policies align with the Calgary Transportation Plan (CTP) visions and policies for sustainable growth and transportation network, Municipal Development Plan (MDP), Safer Mobility and Council priorities # 2, 3 and # 4 "A city of Inspiring Neighborhoods", "A city that moves" and "A Healthy and Green city"

Social, Environmental, Economic (External)

Social:

Complete Streets design standards provides safety and multi-modal travel options for people of all ages and abilities and income levels. Active mode travel and enhanced public realm fosters social interactions, provide safety and improves the people's health. Residential streets with improved pedestrian facilities (wider sidewalks) and public trees create more accessible neighbourhoods for all people.

Environmental:

Complete Streets provide the opportunities for Low Impact Development (LID) features, while minimizing additional right-of-way requirements. Complete Streets with narrower travel lanes reduce the amount of paved area. Multi-modal travel and green infrastructure (trees) decreases air pollution and greenhouse gas emissions associated with vehicle use.

Economic:

Transportation Report to SPC on Transportation and Transit 2018 June 07

Complete Streets Policy and Residential Street Design Policy – Three Year Update

Complete Streets promotes the economic well-being of both businesses and residents. . Walking and cycling and transit modes are more affordable. Active mode infrastructure is more affordable to build, operate and maintain long term. Maintaining on-street parking on most streets will continue to benefit retail businesses along the street.

Research indicates that walkable and bikeable communities have increased residential property values, attract businesses and visitors to Calgary.

There have been no reported increased costs associated with utility installation since the policy has been in effect, however the Shallow Utility Consortium does have concerns about the potential increased costs to access utilities in the future within the reduced easement width adjacent to public trees.

Financial Capacity

Current and Future Operating Budget:

Current and future capital budgets are not impacted by the report. However, additional operating budget will be required for Parks for the lifecycle/maintenance of more public trees over time. Parks is not planning to make a specific budget request in the next 2019-2022 business cycle, but if development increases in the future and substantially more trees are planted, then future business cycles may require additional funding.

Current and Future Capital Budget:

Current and future capital budgets are not impacted by the report.

Risk Assessment

None

REASON(S) FOR RECOMMENDATION(S):

Progress has been made with implementation of the policies. Most new community developments are still being developed. Administration and development industry will continue to work towards the satisfactory resolution of those emerging issues related to public tree planting along residential streets.

ATTACHMENT(S)

- 1. Attachment 1 Reports Timelines
- 2. Attachment 2 Process Flowchart
- 3. Attachment 3 Low Impact Development Pilot Projects
- 4. Attachment 4 Complete Streets Inventory (Greenfield Development)
- 5. Attachment 5 Complete Streets Inventory (Retrofit Projects)
- 6. Attachment 6 Sidewalk and Public Tree Planting Inventory
- 7. Attachment 7 Community Photos (Residential Streets)